

**OPERATIONS MANUAL PART A**

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# MANUAL ADMINISTRATION AND CONTROL

## Record of Temporary Revisions

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## Record of Revisions

Retain this record in front of this manual. On receipt of amendments, insert amended pages in the manual and enter amendment number, date, insertion date, name and signature of person incorporating the amendment in the appropriate block.

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| **003** | **011** | **01/08/2022** |
| **003** | **012** | **01/06/2023** |
| **003** | **013** | **01/03/2024** |  |  |  |  |  |  |
| **003** | **014** | **01/05/2024** |  |  |  |  |  |  |
| **004** | **000** | **1/12/2024** |  |  |  |  |  |  |
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## Document Approval

The Auric Air Services Operations Manual Part A is prepared and controlled by Director of Operations including amendments and/or revisions, along with the amended list of effective pages, shall be submitted to the Authority through the Quality Manager for acceptance and approval.

This manual was prepared in compliance with the:

* Tanzania Civil Aviation Regulations (Operation of Aircraft Commercial Air Transport)
* Tanzania Civil Aviation Regulations (Rules of Air) 2017 and (Amendment) Regulations, 2023
* Tanzania Civil Aviation Regulations (Rules of Air) Regulations, 2017
* Tanzania Civil Aviation Regulations (Transport of Dangerous Goods by Air) 2024
* Tanzania Civil Aviation Regulations (Air Operator Certification and Administration) 2017 and

(Amendment) Regulations, 2023

* Tanzania Civil Aviation Regulations Civil Aviation (Fatigue Risk Management) Regulations, 2024

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| Company Internal Approval | Signature & Stamp |
| Accountable Manager |  |
| Name: SAJID HUSSEIN Date: 01/12/2024 |  |
| Director of Operations Name: NAVID ANARAKI Date: 01/12/2024 |  |

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## List of Effective Pages

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Page # | Issue # | Rev# | Rev Date |  | Page # | Issue # | Rev# | Rev Date |
| 3-1 | 004 | 000 | 1/12/2024 |  | 5-13 | 004 | 000 | 1/12/2024 |
| 3-2 | 004 | 000 | 1/12/2024 |  | 5-14 | 004 | 000 | 1/12/2024 |
| 3-3 | 004 | 000 | 1/12/2024 |  | 5-15 | 004 | 000 | 1/12/2024 |
| 3-4 | 004 | 000 | 1/12/2024 |  | 5-16 | 004 | 000 | 1/12/2024 |
| 3-5 | 004 | 000 | 1/12/2024 |  | 6-1 | 004 | 000 | 1/12/2024 |
| 3-6 | 004 | 000 | 1/12/2024 |  | 6-2 | 004 | 000 | 1/12/2024 |
| 3-7 | 004 | 000 | 1/12/2024 |  | 6-3 | 004 | 000 | 1/12/2024 |
| 3-8 | 004 | 000 | 1/12/2024 |  | 6-4 | 004 | 000 | 1/12/2024 |
| 3-9 | 004 | 000 | 1/12/2024 |  | 6-5 | 004 | 000 | 1/12/2024 |
| 3-10 | 004 | 000 | 1/12/2024 |  | 6-6 | 004 | 000 | 1/12/2024 |
| 3-11 | 004 | 000 | 1/12/2024 |  | 6-7 | 004 | 000 | 1/12/2024 |
| 3-12 | 004 | 000 | 1/12/2024 |  | 6-8 | 004 | 000 | 1/12/2024 |
| 3-13 | 004 | 000 | 1/12/2024 |  | 6-9 | 004 | 000 | 1/12/2024 |
| 3-14 | 004 | 000 | 1/12/2024 |  | 6-10 | 004 | 000 | 1/12/2024 |
| 4-1 | 004 | 000 | 1/12/2024 |  | 6-11 | 004 | 000 | 1/12/2024 |
| 4-2 | 004 | 000 | 1/12/2024 |  | 6-12 | 004 | 000 | 1/12/2024 |
| 4-3 | 004 | 000 | 1/12/2024 |  | 7-1 | 004 | 000 | 1/12/2024 |
| 4-4 | 004 | 000 | 1/12/2024 |  | 7-2 | 004 | 000 | 1/12/2024 |
| 4-5 | 004 | 000 | 1/12/2024 |  | 7-3 | 004 | 000 | 1/12/2024 |
| 4-6 | 004 | 000 | 1/12/2024 |  | 7-4 | 004 | 000 | 1/12/2024 |
| 4-7 | 004 | 000 | 1/12/2024 |  | 8-1 | 004 | 000 | 1/12/2024 |
| 4-8 | 004 | 000 | 1/12/2024 |  | 8-2 | 004 | 000 | 1/12/2024 |
| 4-9 | 004 | 000 | 1/12/2024 |  | 8-3 | 004 | 000 | 1/12/2024 |
| 4-10 | 004 | 000 | 1/12/2024 |  | 8-4 | 004 | 000 | 1/12/2024 |
| 4-11 | 004 | 000 | 1/12/2024 |  | 8-5 | 004 | 000 | 1/12/2024 |
| 4-12 | 004 | 000 | 1/12/2024 |  | 8-6 | 004 | 000 | 1/12/2024 |
| 4-13 | 004 | 000 | 1/12/2024 |  | 8-7 | 004 | 000 | 1/12/2024 |
| 4-14 | 004 | 000 | 1/12/2024 |  | 8-8 | 004 | 000 | 1/12/2024 |
| 4-15 | 004 | 000 | 1/12/2024 |  | 8-9 | 004 | 000 | 1/12/2024 |
| 4-16 | 004 | 000 | 1/12/2024 |  | 8-10 | 004 | 000 | 1/12/2024 |
| 4-17 | 004 | 000 | 1/12/2024 |  | 8-11 | 004 | 000 | 1/12/2024 |
| 4-18 | 004 | 000 | 1/12/2024 |  | 8-12 | 004 | 000 | 1/12/2024 |
| 4-19 | 004 | 000 | 1/12/2024 |  | 8-13 | 004 | 000 | 1/12/2024 |
| 4-20 | 004 | 000 | 1/12/2024 |  | 8-14 | 004 | 000 | 1/12/2024 |
| 4-21 | 004 | 000 | 1/12/2024 |  | 8-15 | 004 | 000 | 1/12/2024 |
| 5-1 | 004 | 000 | 1/12/2024 |  | 8-16 | 004 | 000 | 1/12/2024 |
| 5-2 | 004 | 000 | 1/12/2024 |  | 8-17 | 004 | 000 | 1/12/2024 |
| 5-3 | 004 | 000 | 1/12/2024 |  | 8-18 | 004 | 000 | 1/12/2024 |
| 5-4 | 004 | 000 | 1/12/2024 |  | 8-19 | 004 | 000 | 1/12/2024 |
| 5-5 | 004 | 000 | 1/12/2024 |  | 8-20 | 004 | 000 | 1/12/2024 |
| 5-6 | 004 | 000 | 1/12/2024 |  | 8-21 | 004 | 000 | 1/12/2024 |
| 5-7 | 004 | 000 | 1/12/2024 |  | 8-22 | 004 | 000 | 1/12/2024 |
| 5-8 | 004 | 000 | 1/12/2024 |  | 9-1 | 004 | 000 | 1/12/2024 |
| 5-9 | 004 | 000 | 1/12/2024 |  | 9-2 | 004 | 000 | 1/12/2024 |
| 5-10 | 004 | 000 | 1/12/2024 |  | 9-3 | 004 | 000 | 1/12/2024 |
| 5-11 | 004 | 000 | 1/12/2024 |  | 9-4 | 004 | 000 | 1/12/2024 |
| 9-6 | 004 | 000 | 1/12/2024 |  | 9-53 | 004 | 000 | 1/12/2024 |
| 9-7 | 004 | 000 | 1/12/2024 |  | 9-54 | 004 | 000 | 1/12/2024 |
| 9-8 | 004 | 000 | 1/12/2024 |  | 9-55 | 004 | 000 | 1/12/2024 |
| 9-9 | 004 | 000 | 1/12/2024 |  | 9-56 | 004 | 000 | 1/12/2024 |
| 9-10 | 004 | 000 | 1/12/2024 |  | 9-57 | 004 | 000 | 1/12/2024 |
| 9-11 | 004 | 000 | 1/12/2024 |  | 9-58 | 004 | 000 | 1/12/2024 |
| 9-12 | 004 | 000 | 1/12/2024 |  | 9-59 | 004 | 000 | 1/12/2024 |
| 9-13 | 004 | 000 | 1/12/2024 |  | 9-60 | 004 | 000 | 1/12/2024 |
| 9-14 | 004 | 000 | 1/12/2024 |  | 9-61 | 004 | 000 | 1/12/2024 |
| 9-15 | 004 | 000 | 1/12/2024 |  | 9-62 | 004 | 000 | 1/12/2024 |
| 9-16 | 004 | 000 | 1/12/2024 |  | 9-63 | 004 | 000 | 1/12/2024 |
| 9-17 | 004 | 000 | 1/12/2024 |  | 9-64 | 004 | 000 | 1/12/2024 |
| 9-18 | 004 | 000 | 1/12/2024 |  | 9-65 | 004 | 000 | 1/12/2024 |
| 9-19 | 004 | 000 | 1/12/2024 |  | 9-66 | 004 | 000 | 1/12/2024 |
| 9-20 | 004 | 000 | 1/12/2024 |  | 9-67 | 004 | 000 | 1/12/2024 |
| 9-21 | 004 | 000 | 1/12/2024 |  | 9-68 | 004 | 000 | 1/12/2024 |
| 9-22 | 004 | 000 | 1/12/2024 |  | 9-69 | 004 | 000 | 1/12/2024 |
| 9-23 | 004 | 000 | 1/12/2024 |  | 9-70 | 004 | 000 | 1/12/2024 |
| 9-24 | 004 | 000 | 1/12/2024 |  | 9-71 | 004 | 000 | 1/12/2024 |
| 9-25 | 004 | 000 | 1/12/2024 |  | 9-72 | 004 | 000 | 1/12/2024 |
| 9-26 | 004 | 000 | 1/12/2024 |  | 9-73 | 004 | 000 | 1/12/2024 |
| 9-27 | 004 | 000 | 1/12/2024 |  | 9-74 | 004 | 000 | 1/12/2024 |
| 9-28 | 004 | 000 | 1/12/2024 |  | 9-75 | 004 | 000 | 1/12/2024 |
| 9-29 | 004 | 000 | 1/12/2024 |  | 9-76 | 004 | 000 | 1/12/2024 |
| 9-30 | 004 | 000 | 1/12/2024 |  | 9-77 | 004 | 000 | 1/12/2024 |
| 9-31 | 004 | 000 | 1/12/2024 |  | 9-78 | 004 | 000 | 1/12/2024 |
| 9-32 | 004 | 000 | 1/12/2024 |  | 9-79 | 004 | 000 | 1/12/2024 |
| 9-33 | 004 | 000 | 1/12/2024 |  | 9-80 | 004 | 000 | 1/12/2024 |
| 9-34 | 004 | 000 | 1/12/2024 |  | 9-81 | 004 | 000 | 1/12/2024 |
| 9-35 | 004 | 000 | 1/12/2024 |  | 9-82 | 004 | 000 | 1/12/2024 |
| 9-36 | 004 | 000 | 1/12/2024 |  | 9-83 | 004 | 000 | 1/12/2024 |
| 9-37 | 004 | 000 | 1/12/2024 |  | 9-84 | 004 | 000 | 1/12/2024 |
| 9-38 | 004 | 000 | 1/12/2024 |  | 9-85 | 004 | 000 | 1/12/2024 |
| 9-39 | 004 | 000 | 1/12/2024 |  | 9-86 | 004 | 000 | 1/12/2024 |
| 9-40 | 004 | 000 | 1/12/2024 |  | 9-87 | 004 | 000 | 1/12/2024 |
| 9-41 | 004 | 000 | 1/12/2024 |  | 9-88 | 004 | 000 | 1/12/2024 |
| 9-42 | 004 | 000 | 1/12/2024 |  | 9-89 | 004 | 000 | 1/12/2024 |
| 9-43 | 004 | 000 | 1/12/2024 |  | 9-90 | 004 | 000 | 1/12/2024 |
| 9-44 | 004 | 000 | 1/12/2024 |  | 9-91 | 004 | 000 | 1/12/2024 |
| 9-45 | 004 | 000 | 1/12/2024 |  | 9-92 | 004 | 000 | 1/12/2024 |
| 9-46 | 004 | 000 | 1/12/2024 |  | 9-93 | 004 | 000 | 1/12/2024 |
| 9-47 | 004 | 000 | 1/12/2024 |  | 9-94 | 004 | 000 | 1/12/2024 |
| 9-48 | 004 | 000 | 1/12/2024 |  | 9-95 | 004 | 000 | 1/12/2024 |
| 9-49 | 004 | 000 | 1/12/2024 |  | 9-96 | 004 | 000 | 1/12/2024 |
| 9-50 | 004 | 000 | 1/12/2024 |  | 9-97 | 004 | 000 | 1/12/2024 |
| 9-51 | 004 | 000 | 1/12/2024 |  | 9-98 | 004 | 000 | 1/12/2024 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9-100 | 004 | 000 | 1/12/2024 |  | 12-1 | 004 | 000 | 1/12/2024 |
| 9-101 | 004 | 000 | 1/12/2024 |  | 12-2 | 004 | 000 | 1/12/2024 |
| 9-102 | 004 | 000 | 1/12/2024 |  | 12-3 | 004 | 000 | 1/12/2024 |
| 9-103 | 004 | 000 | 1/12/2024 |  | 12-4 | 004 | 000 | 1/12/2024 |
| 9-104 | 004 | 000 | 1/12/2024 |  | 12-5 | 004 | 000 | 1/12/2024 |
| 9-105 | 004 | 000 | 1/12/2024 |  | 12-6 | 004 | 000 | 1/12/2024 |
| 9-106 | 004 | 000 | 1/12/2024 |  | 12-7 | 004 | 000 | 1/12/2024 |
| 9-107 | 004 | 000 | 1/12/2024 |  | 12-8 | 004 | 000 | 1/12/2024 |
| 9-108 | 004 | 000 | 1/12/2024 |  | 12-9 | 004 | 000 | 1/12/2024 |
| 9-109 | 004 | 000 | 1/12/2024 |  | 12-10 | 004 | 000 | 1/12/2024 |
| 9-110 | 004 | 000 | 1/12/2024 |  | 12-11 | 004 | 000 | 1/12/2024 |
| 9-111 | 004 | 000 | 1/12/2024 |  | 12-12 | 004 | 000 | 1/12/2024 |
| 9-112 | 004 | 000 | 1/12/2024 |  | 13-1 | 004 | 000 | 1/12/2024 |
| 9-113 | 004 | 000 | 1/12/2024 |  | 13-2 | 004 | 000 | 1/12/2024 |
| 9-114 | 004 | 000 | 1/12/2024 |  | 13-3 | 004 | 000 | 1/12/2024 |
| 9-115 | 004 | 000 | 1/12/2024 |  | 13-4 | 004 | 000 | 1/12/2024 |
| 9-116 | 004 | 000 | 1/12/2024 |  | 13-5 | 004 | 000 | 1/12/2024 |
| 9-117 | 004 | 000 | 1/12/2024 |  | 13-6 | 004 | 000 | 1/12/2024 |
| 9-118 | 004 | 000 | 1/12/2024 |  | 13-7 | 004 | 000 | 1/12/2024 |
| 9-119 | 004 | 000 | 1/12/2024 |  | 13-8 | 004 | 000 | 1/12/2024 |
| 9-120 | 004 | 000 | 1/12/2024 |  | 13-9 | 004 | 000 | 1/12/2024 |
| 9-121 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 9-122 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 9-123 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 10-1 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 10-2 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 10-3 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 10-4 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 10-5 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 10-6 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-1 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-2 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-3 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-4 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-5 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-6 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-7 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-8 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-9 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-10 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-11 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-12 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-13 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-14 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-15 | 004 | 000 | 1/12/2024 |  |  |  |  |  |
| 11-16 | 004 | 000 | 1/12/2024 |  |  |  |  |  |

## Distribution List

|  |  |
| --- | --- |
| **Copy No.** | **Holder** |
| 001 | Tanzania Civil Aviation Authority |
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| 002 | 5H-AAC |
| 002 | 5H-AAE |
| 002 | 5H-AAF |
| 002 | 5H-AAG |
| 002 | 5H-AAH |
| 002 | 5H-AAJ |
| 002 | 5H-AAK |
| 002 | 5H-AAL |
| 002 | 5H-AAN |
| 002 | 5H-AAP |
| 002 | 5H-AAQ |
| 002 | 5H-DTS |
| 002 | 5H-KKC |
| 002 | 5H-MFH |
| 002 | 5H-AAU |
| 002 | 5H-AAV |
| 002 | 5H-MHN |
| 002 | 5H-AAX |
| 002 | All staff |
| 002 | 5H-NAR |

## Manual Structure

1. **Chapter 0**: Manual Administration and Amendment Procedures
2. **Chapter 1**: General
3. **Chapter 2**: Organisation and Responsibilities
4. **Chapter 3**: Operational Control and Supervision
5. **Chapter 4**: Crew Composition
6. **Chapter 5**: Qualification Requirements
7. **Chapter 6**: Crew Health Precautions
8. **Chapter 7**: Accident Prevention, Flight Safety, and Emergency Response
9. **Chapter 8**: Fatigue Risk Management System
10. **Chapter 9**: Operating Procedures
11. **Chapter 10**: Dangerous Goods and Weapons
12. **Chapter 11**: Rules of the Air
13. **Chapter 12**: Handling of Accidents, Incidents, and Occurrences
14. **Chapter 13**: Instruments and Equipment
15. **Chapter 14**: Appendices

## Table of Contents

[Chapter 0 MANUAL ADMINISTRATION AND CONTROL 0-1](#_Toc186542931)

[0.1 Record Of Temporary Revisions 0-1](#_Toc186542932)

[0.2 Record Of Revisions 0-2](#_Toc186542933)

[0.3 Document Approval 0-3](#_Toc186542934)

[0.4 List Of Effective Pages 0-4](#_Toc186542935)

[0.5 Distribution List 0-7](#_Toc186542936)

[0.6 Manual Structure 0-8](#_Toc186542937)

[0.7 Table Of Contents 0-9](#_Toc186542938)

[0.8 Definitions 0-15](#_Toc186542939)

[0.9 Abbreviations 0-18](#_Toc186542940)

[Chapter 1 GENERAL 1-1](#_Toc186542941)

[1.1 Management Commitment 1-1](#_Toc186542942)

[1.2 Purpose and Scope of Manuals 1-2](#_Toc186542943)

[1.3 Control And Amendments Of Manuals 1-2](#_Toc186542944)

[1.4 List of Manuals Comprising the Operations Manual 1-3](#_Toc186542945)

[1.5 Manuals to be Carried on Aircraft 1-3](#_Toc186542946)

[1.6 Accessibility of Documentation Received from External Sources 1-3](#_Toc186542947)

[1.7 Format of Operational Documents 1-3](#_Toc186542948)

[Chapter 2 ORGANISATION AND RESPONSIBILITIES 2-1](#_Toc186542949)

[2.1 Management Personnel 2-1](#_Toc186542950)

[2.2 Organization Structure 2-2](#_Toc186542951)

[2.3 Roles and Responsibilities of Management Personnel 2-1](#_Toc186542952)

[2.4 Other Key personnel Roles and Responsibilities 2-4](#_Toc186542953)

[2.5 Fleet Captains 2-5](#_Toc186542954)

[2.6 Cabin Crew 2-6](#_Toc186542955)

[2.7 Authority, Duties, and Responsibilities of the Pilot-in-Command (PIC / Commander) 2-6](#_Toc186542956)

[2.8 Duties and Responsibilities of the First Officer (On Two-Crew Flights) 2-8](#_Toc186542957)

[2.9 Duties and Responsibilities of Crew Members Other Than the Commander 2-8](#_Toc186542958)

[2.10 Crew Regulations 2-9](#_Toc186542959)

[2.11 Violation of Regulations in the Interest of Safety 2-11](#_Toc186542960)

[2.12 Change Of Particulars on Licence or Authorization 2-12](#_Toc186542961)

[2.13 Display and Availability of Air Operator Certificate (AOC) and Associated Documents 2-12](#_Toc186542962)

[Chapter 3 OPERATIONAL CONTROL AND SUPERVISION 3-1](#_Toc186542963)

[3.1 Supervision Of the Operation 3-1](#_Toc186542964)

[3.2 Flight Operations Supervision 3-1](#_Toc186542965)

[3.3 Aspects Of Supervision 3-2](#_Toc186542966)

[3.4 Flight Authorization 3-8](#_Toc186542967)

[3.5 Flying Hours for Management Personnel 3-8](#_Toc186542968)

[3.6 Promulgation Of Additional Instructions And Information 3-8](#_Toc186542969)

[3.7 Use and Updating of AFM and POH 3-9](#_Toc186542970)

[3.8 Manuals, Software and Jeppesen Charts 3-9](#_Toc186542971)

[3.9 Control Of Approach Plates on Board The Aircraft 3-10](#_Toc186542972)

[3.10 Operational Control for An Individual Flight 3-10](#_Toc186542973)

[3.11 En-Route Navigational Facilities 3-11](#_Toc186542974)

[3.12 Pilot Recruitment Policy and Procedure 3-11](#_Toc186542975)

[3.13 Sub Chartered Operations / Dry Lease/ Wet Lease. 3-12](#_Toc186542976)

[3.14 Operations For Bars Member Organisations (BMOs) 3-14](#_Toc186542977)

[3.15 Mandatory Insurance 3-14](#_Toc186542978)

[Chapter 4 CREW COMPOSITION 4-15](#_Toc186542979)

[4.1 GENERAL 4-15](#_Toc186542980)

[4.2 Designation Of PIC 4-16](#_Toc186542981)

[4.3 Responsibilities and Authority of the Pilot-In-Command (PIC) 4-16](#_Toc186542982)

[4.4 Training and Check Flights 4-17](#_Toc186542983)

[4.5 Flight Crew Incapacitation 4-17](#_Toc186542984)

[4.6 The relief of PIC and other flight crew 4-19](#_Toc186542985)

[4.7 Operations On More Than One Type or Variant 4-19](#_Toc186542986)

[4.8 Inexperienced Flight Crew Members 4-19](#_Toc186542987)

[4.9 Flightdeck Seating 4-19](#_Toc186542988)

[4.10 Flying While Undergoing Conversion Training 4-19](#_Toc186542989)

[4.11 Family Members 4-20](#_Toc186542990)

[4.12 Exchange of Controls In Case Of Two Pilot Operation 4-20](#_Toc186542991)

[4.13 Carriage Of Flight Safety Inspectors from the TCAA 4-20](#_Toc186542992)

[4.14 Carriage Of Quality Auditor 4-20](#_Toc186542993)

[4.15 Cabin Crew Composition 4-20](#_Toc186542994)

[Chapter 5 QUALIFICATION REQUIREMENTS 5-1](#_Toc186542995)

[5.1 Description Of License, Qualification & Training 5-1](#_Toc186542996)

[5.2 Personal Flying Logbooks 5-1](#_Toc186542997)

[5.3 Flight Crew Minimum Qualifications 5-2](#_Toc186542998)

[5.4 Recency Requirements 5-4](#_Toc186542999)

[5.5 Instrument Rating Qualifications 5-4](#_Toc186543000)

[5.6 Pilot Under Supervision 5-4](#_Toc186543001)

[5.4 Management Pilots 5-4](#_Toc186543002)

[5.7 Maximum Age Limitation for Pilots 5-5](#_Toc186543003)

[5.8 Route and Airport Qualification 5-5](#_Toc186543004)

[5.9 Route Familiarization Methods 5-7](#_Toc186543005)

[5.10 Promotion From First Officer To Captain 5-7](#_Toc186543006)

[5.11 Qualifications Of Checking and Supervisory Personnel 5-7](#_Toc186543007)

[5.12 Crew Resource Management 5-8](#_Toc186543008)

[5.13 Dangerous Goods Training 5-8](#_Toc186543009)

[5.14 Recurrent Training And Checking 5-8](#_Toc186543010)

[5.15 Inexperienced Crew 5-10](#_Toc186543011)

[5.16 Other Flight Crew Proficiency 5-10](#_Toc186543012)

[5.17 Cabin Crew 5-11](#_Toc186543013)

[5.18 Operations Personnel 5-13](#_Toc186543014)

[5.19 Eligibility for BMO Flights 5-13](#_Toc186543015)

[5.20 Tracking and Recording of Crew Qualifications and Recurrent Training 5-13](#_Toc186543016)

[5.21 Eligibility Period 5-14](#_Toc186543017)

[5.22 Emergency Equipment Training 5-14](#_Toc186543018)

[5.23 Flight Operations Officer Training Requirement 5-14](#_Toc186543019)

[5.24 Synthetic Flight Training Devices 5-15](#_Toc186543020)

[5.25 Flight Operations Officer Requirements 5-15](#_Toc186543021)

[5.26 Simulator Flight Instructor Requirements 5-15](#_Toc186543022)

[5.27 Indoctrination 5-16](#_Toc186543023)

[Chapter 6 CREW HEALTH PRECAUTIONS 6-1](#_Toc186543024)

[6.1 Fitness for duty 6-1](#_Toc186543025)

[6.2 Psychoactive Substances, Narcotics And Drugs 6-1](#_Toc186543026)

[6.3 Alcohol 6-2](#_Toc186543027)

[6.4 Medication 6-3](#_Toc186543028)

[6.5 Immunization 6-3](#_Toc186543029)

[6.6 Other Precautions 6-3](#_Toc186543030)

[6.7 Immunization 6-4](#_Toc186543031)

[6.8 Malaria Prophylaxis 6-5](#_Toc186543032)

[6.9 Classes Of Medical Certificates. 6-5](#_Toc186543033)

[6.10 Fatigue 6-6](#_Toc186543034)

[6.11 Spectacles 6-6](#_Toc186543035)

[6.12 Humidity 6-6](#_Toc186543036)

[6.13 Hydraulic Fluid 6-7](#_Toc186543037)

[6.14 Pregnancy 6-7](#_Toc186543038)

[6.15 Tropical Diseases and Tropical Medicines 6-7](#_Toc186543039)

[6.16 Health Regulations 6-7](#_Toc186543040)

[6.17 Tropical Diseases 6-7](#_Toc186543041)

[6.18 Diseases Contracted Through The Skin 6-8](#_Toc186543042)

[6.19 Cholera 6-8](#_Toc186543043)

[6.20 Amoebic Dysentery 6-8](#_Toc186543044)

[6.21 Dysentery 6-8](#_Toc186543045)

[6.22 Malaria 6-8](#_Toc186543046)

[6.23 Plague 6-9](#_Toc186543047)

[6.24 Smallpox 6-9](#_Toc186543048)

[6.25 Typhoid And Paratyphoid 6-9](#_Toc186543049)

[6.26 Typhus 6-9](#_Toc186543050)

[6.27 Yellow Fever 6-10](#_Toc186543051)

[6.28 Communicable Diseases H1n1 (Swine Influenza) 6-10](#_Toc186543052)

[6.29 Infections Disease Handling Procedures On Board 6-10](#_Toc186543053)

[6.30 First Aid Kit 6-11](#_Toc186543054)

[6.31 Sleeping Tablets 6-11](#_Toc186543055)

[6.32 Sickness And Injury Reporting 6-11](#_Toc186543056)

[6.33 Drug Policies of Contracting Companies 6-11](#_Toc186543057)

[Chapter 7 ACCIDENT PREVENTION, FLIGHT SAFETY, POWERS OF THE AUTHORITY AND GENERAL REGULATIONS 7-1](#_Toc186543058)

[7.1 Accident Prevention & Flight Safety 7-1](#_Toc186543059)

[7.2 Power Of The Authority 7-1](#_Toc186543060)

[7.3 Authority Inspection Procedures 7-2](#_Toc186543061)

[7.4 General Regulations 7-3](#_Toc186543062)

[7.5 List Of Publications 7-3](#_Toc186543063)

[7.6 Last Minute Changes (LMC) 7-4](#_Toc186543064)

[Chapter 8 FATIGUE RISK MANAGEMENT SYSTEM 8-1](#_Toc186543065)

[8.1 Fatigue Risk Management Policy 8-1](#_Toc186543066)

[8.2 FRMS Definitions 8-2](#_Toc186543067)

[8.3 Introduction 8-5](#_Toc186543068)

[8.4 Objectives of the Fatigue Risk Management Program (FRMP) 8-5](#_Toc186543069)

[8.5 Fatigue Risk Management Processes (FRMP) 8-5](#_Toc186543070)

[8.6 Knowledge or Suspicion of Crew Fatigue 8-10](#_Toc186543071)

[8.7 Fitness for Duty 8-10](#_Toc186543072)

[8.8 Fatigue Reports 8-10](#_Toc186543073)

[8.9 Flight Duty And Flight Time General 8-11](#_Toc186543074)

[8.10 Duty Period Limitations 8-13](#_Toc186543075)

[8.11 Maximum Rostered Flight Duty Hours 8-18](#_Toc186543076)

[8.12 Rest Periods 8-19](#_Toc186543077)

[8.13 Flight and Duty Records to be Maintained 8-21](#_Toc186543078)

[8.14 Operations Department Communication with crewmembers 8-22](#_Toc186543079)

[Chapter 9 OPERATING PROCEDURES 9-23](#_Toc186543080)

[9.1 Operating Considerations and Facilities 9-23](#_Toc186543081)

[9.2 PIC Flight Preparation Requirements 9-23](#_Toc186543082)

[9.3 Operating Altitudes 9-25](#_Toc186543083)

[9.4 Suitability Of Aerodromes 9-27](#_Toc186543084)

[9.5 Aerodrome Operating Minima (VFR) 9-29](#_Toc186543085)

[9.6 Reserved For Future Use 9-31](#_Toc186543086)

[9.7 Reserved For Future Use 9-31](#_Toc186543087)

[9.8 Reserved For Future Use 9-31](#_Toc186543088)

[9.9 Reserved For Future Use 9-31](#_Toc186543089)

[9.10 Reserved For Future Use 9-31](#_Toc186543090)

[9.11 Non –Precision Approach 9-31](#_Toc186543091)

[9.12 Precision Approach-Category I Operations 9-33](#_Toc186543092)

[9.13 Circling Approach 9-35](#_Toc186543093)

[9.14 Visual Approaches 9-35](#_Toc186543094)

[9.15 Conversion of Reported Meteorological Visibility to RVR 9-35](#_Toc186543095)

[9.16 En Route Operating Minima for VFR Flights Or VFR Portions of a Flight 9-36](#_Toc186543096)

[9.17 Flight Over Built-Up Areas and Open-Air Assemblies 9-36](#_Toc186543097)

[9.18 Weather Reporting and Forecasting for Flight Operations 9-36](#_Toc186543098)

[9.19 Determination of Quantities of Fuel and Oil Carried 9-38](#_Toc186543099)

[9.20 Mass and Centre of Gravity 9-44](#_Toc186543100)

[9.21 ATS Flight Plan 9-48](#_Toc186543101)

[9.22 Operational Flight Plan 9-51](#_Toc186543102)

[9.23 Technical Log 9-52](#_Toc186543103)

[9.24 Responsibilities of the Commander 9-53](#_Toc186543104)

[9.25 Responsibilities of Maintenance Personnel 9-54](#_Toc186543105)

[9.26 Responsibilities of the Personnel entering Deferred Defects 9-55](#_Toc186543106)

[9.27 Documents, Forms and Additional Information to be Carried in Flight 9-55](#_Toc186543107)

[9.28 Ground Procedures 9-57](#_Toc186543108)

[9.29 Aircraft, Passengers and Cargo Handling Procedures - Loading general 9-59](#_Toc186543109)

[9.30 IFR / VFR Flight Procedures 9-67](#_Toc186543110)

[9.31 Navigation Procedures 9-72](#_Toc186543111)

[9.32 Navigation Equipment 9-73](#_Toc186543112)

[9.33 Ground Proximity Warning System (EGPWS) 9-78](#_Toc186543113)

[9.34 Traffic Collision Avoidance System (TCAS) 9-78](#_Toc186543114)

[9.35 Hazardous Atmospheric Conditions 9-78](#_Toc186543115)

[9.36 Flight Crew Members at Duty Stations 9-86](#_Toc186543116)

[9.37 Access to Auric Air Aircraft 9-87](#_Toc186543117)

[9.38 Admission To Flight 9-87](#_Toc186543118)

[9.39 Cabin Safety Requirements 9-88](#_Toc186543119)

[9.40 All Weather Operations 9-95](#_Toc186543120)

[9.41 Non Revenue Flights 9-108](#_Toc186543121)

[9.42 Oxygen Requirements 9-111](#_Toc186543122)

[9.43 Basic Standard Operating Procedures 9-111](#_Toc186543123)

[9.44 Minimum Equipment List (MEL) 9-113](#_Toc186543124)

[9.45 Authorization to Operate with Inoperative Instruments and Equipment 9-115](#_Toc186543125)

[9.46 Refueling Log 9-115](#_Toc186543126)

[9.47 Tyre Pressures 9-116](#_Toc186543127)

[9.48 Flight Following Procedures 9-116](#_Toc186543128)

[9.49 CFIT And CFIT Avoidance Techniques 9-117](#_Toc186543129)

[9.50 Aircraft Registration Markings 9-117](#_Toc186543130)

[9.51 Operation Near Laser Beams or Directed High-Intensity Lights 9-117](#_Toc186543131)

[9.52 Runway Braking Action Reporting 9-118](#_Toc186543132)

[9.53 Reporting Hazardous Flight Conditions 9-118](#_Toc186543133)

[Chapter 10 DANGEROUS GOODS AND WEAPONS 10-1](#_Toc186543134)

[10.1 General 10-1](#_Toc186543135)

[10.2 Carriage Of Dangerous Goods By Passengers 10-3](#_Toc186543136)

[10.3 Dangerous Goods Not Permitted In Passenger Baggage 10-3](#_Toc186543137)

[10.4 Types Of Baggage That May Contain Dangerous Goods 10-4](#_Toc186543138)

[10.5 Risk Assessment of Items Transported In The Cargo Compartment 10-4](#_Toc186543139)

[10.6 Mitigation of Cargo Compartment Fire Risk 10-4](#_Toc186543140)

[10.7 Carriage of Weapons, Ammunition, and Munitions of War 10-5](#_Toc186543141)

[10.8 Dangerous Goods Training 10-6](#_Toc186543142)

[10.9 Reporting and Investigating Dangerous Goods Incidents 10-6](#_Toc186543143)

[Chapter 11 RULES OF THE AIR 11-1](#_Toc186543144)

[11.1 Visual Flight Rules 11-1](#_Toc186543145)

[11.2 Instrument Flight Rules 11-2](#_Toc186543146)

[11.3 Territorial Application Of Rules Of The Air 11-3](#_Toc186543147)

[11.4 Communication And Communication Failure Procedures 11-3](#_Toc186543148)

[11.5 Interception Of Civil Aircraft 11-5](#_Toc186543149)

[11.6 Geodetic Reference Datum 11-7](#_Toc186543150)

[11.7 ATC Clearances, Adherence to Flight Plan and Position Reports 11-8](#_Toc186543151)

[11.8 Visual Signals 11-9](#_Toc186543152)

[Chapter 12 HANDLING OF ACCIDENTS, INCIDENTS AND OCCURRENCES 12-1](#_Toc186543153)

[12.1 Accidents 12-1](#_Toc186543154)

[12.2 Pilot Post Accident Procedures 12-2](#_Toc186543155)

[12.3 Accident Reporting Procedures 12-3](#_Toc186543156)

[12.4 Responsibility for Accident Reporting 12-3](#_Toc186543157)

[12.5 Reporting Accidents by Fax/Telex 12-4](#_Toc186543158)

[12.6 Incidents 12-6](#_Toc186543159)

[12.7 Incident Investigation 12-7](#_Toc186543160)

[12.8 Incident Reporting Procedures 12-7](#_Toc186543161)

[12.9 Mandatory Occurrence Reporting Scheme 12-8](#_Toc186543162)

[12.10 Special Notification Requirements in the Event of an Accident or Occurrence when Dangerous Goods are being Carried 12-10](#_Toc186543163)

[12.11 Operational, Medical or Security In flight Emergencies 12-12](#_Toc186543164)

[Chapter 13 INSTRUMENTS AND EQUIPMENT 13-1](#_Toc186543165)

[13.1 Introduction 13-1](#_Toc186543166)

[13.2 Required Equipment 13-1](#_Toc186543167)

[13.3 Operational Equipment Requirements 13-1](#_Toc186543168)

[13.4 Flight Crew Equipment Installation 13-1](#_Toc186543169)

[13.5 Shared Flight Crew Equipment 13-1](#_Toc186543170)

[13.6 Required Documentation on Board 13-1](#_Toc186543171)

[13.7 Minimum Equipment List (MEL) 13-2](#_Toc186543172)

[13.8 First Aid Kit Requirements for Auric Air Aircraft 13-2](#_Toc186543173)

[13.9 Portable Fire Extinguishers 13-2](#_Toc186543174)

[13.10 Seat, Berth, and Safety Equipment 13-2](#_Toc186543175)

[13.11 Passenger Information and Instructions 13-2](#_Toc186543176)

[13.12 Lavatory Fire Extinguisher minimum performance standards 13-3](#_Toc186543177)

[13.13 Operating and Flight Documentation 13-3](#_Toc186543178)

[13.14 Marking of Break-In Points 13-4](#_Toc186543179)

[13.15 General Guidelines for Flight Recorders and Cockpit Voice Recorders 13-4](#_Toc186543180)

[13.16 Equipment Requirements for Aircraft Operated as Visual Flight Rule (VFR) Flights 13-5](#_Toc186543181)

[13.17 Aircraft Operated at Night 13-5](#_Toc186543182)

[13.18 Aircraft Operated in Accordance with Instrument Flight Rules 13-6](#_Toc186543183)

[13.19 Equipment Requirements for Aircraft Operated by a Single Pilot under IFR or at Night 13-6](#_Toc186543184)

[13.20 Instrument Meteorological Conditions (IMC) Equipment Requirements 13-7](#_Toc186543185)

[13.21 Equipment Requirements for Aircraft on Flights Over Water 13-7](#_Toc186543186)

[13.22 Equipment Requirements for Flights Over Designated Land Areas 13-7](#_Toc186543187)

[13.23 Oxygen Equipment Requirements for High-Altitude Flights 13-7](#_Toc186543188)

[13.24 Aircraft in Icing Conditions 13-8](#_Toc186543189)

[13.25 Pressurised Aircraft – Weather Radar Requirement 13-8](#_Toc186543190)

[13.26 Aircraft Equipped with Ground Proximity Warning Systems (GPWS) 13-8](#_Toc186543191)

[13.27 Aircraft Carrying Passengers - Cabin Crew Seats 13-8](#_Toc186543192)

[13.28 Microphones for Flight Crew Communication 13-8](#_Toc186543193)

[13.29 Communication Equipment Requirements 13-8](#_Toc186543194)

[13.30 Navigation Equipment Requirements 13-8](#_Toc186543195)

[13.31 Electronic Navigation Data Management 13-9](#_Toc186543196)

[Chapter 14 APPENDICES 14-1](#_Toc186543197)

[14.1 APPENDIX 1 Nominated Post Holders 14-2](#_Toc186543198)

[14.2 APPENDIX 2: Master List of all Operational Documentation 14-3](#_Toc186543199)

[14.3 APPENDIX 3: NAVIGATION LOG 14-4](#_Toc186543200)

[14.4 APPENDIX 4: TECHNICAL LOG 14-5](#_Toc186543201)

[14.5 APPENDIX 5: Weight and Balance Documentation 14-6](#_Toc186543202)

[14.6 APPENDIX 6 : CHARTER AND SCHEDULE MANIFEST 14-7](#_Toc186543203)

[14.7 APPENDIX 7: AURIC AIR TOLD CARD (AASL/TOLD 1.0) 14-8](#_Toc186543204)

[14.8 APPENDIX 8: Unaccompanied Minor Form 14-9](#_Toc186543205)

## Definitions

1. **Accelerate-stop distance available (ASDA)**: The length of the take-off run available plus the length of stop way, where provided.
2. **Act**: The Civil Aviation Act.
3. **Acts of unlawful interference**: Acts or attempted acts aimed at jeopardizing the safety of civil aviation and air transport, including unlawful seizure of aircraft, hostage-taking, forcible intrusion, introduction of hazardous devices, and communication of false information.
4. **Advanced aircraft**: An aircraft with equipment in addition to that required for a basic aircraft for a given take-off, approach, or landing operation.
5. **Advisory airspace**: Airspace of defined dimensions or designated routes within which air traffic advisory service is available.
6. **Aerodrome**: As defined in the Civil Aviation Act.
7. **Aerodrome operating minima**: The limits of usability of an aerodrome for take-off, 2D instrument approaches, and 3D instrument approaches.
8. **Aircraft**: A power-driven heavier-than-air aircraft deriving its lift from aerodynamic reactions on fixed surfaces during flight.
9. **Air operator certificate (AOC)**: A certificate authorizing an operator to conduct specified commercial air transport operations.
10. **Air traffic service (ATS)**: A generic term covering flight information service, alerting service, air traffic advisory service, and air traffic control service.
11. **Aircraft**: Any machine that can derive support in the atmosphere from the reactions of the air.
12. **Aircraft operating manual**: A manual containing procedures, checklists, and other operational details.
13. **Aircraft tracking**: A process established by the operator to maintain and update a ground-based record of the four-dimensional position of individual aircraft in flight.
14. **Airworthiness directive**: Continuing airworthiness information that applies to products like aircraft, engines, and propellers.
15. **Airworthy**: The status of an aircraft, engine, propeller, or part when it conforms to its approved design and is in a condition for safe operation.
16. **Alternate aerodrome**: An aerodrome to which an aircraft may proceed if it becomes impossible or inadvisable to land at the intended destination.
17. **Altimetry system error (ASE)**: The difference between the altitude indicated by the altimeter display and the corresponding pressure altitude.
18. **Area navigation (RNAV)**: A method of navigation permitting operation on any desired flight path within the coverage of navigation aids.
19. **Automatic deployable flight recorder (ADFR)**: A flight recorder capable of automatic deployment from the aircraft.
20. **Cabin crew member**: A crew member assigned to safety duties during flights.
21. **Certificate of Release to Service**: A document certifying the satisfactory completion of maintenance work.
22. **COMAT**: Operator material carried on an operator’s aircraft for the operator’s purposes.
23. **Commercial air transport operation**: An aircraft operation involving the transport of passengers, cargo, or mail for remuneration or hire.
24. **Competency in civil aviation**: Technical qualification and management experience acceptable to the Authority for a given position.
25. **Configuration deviation list (CDL)**: A list identifying external parts of an aircraft that may be missing for a flight.
26. **Contaminated runway**: A runway with significant portions covered by substances like water, snow, or slush.
27. **Continuing airworthiness**: The processes by which an aircraft, engine, or propeller complies with airworthiness requirements and remains safe for operation.
28. **Crew member**: A person assigned by an operator to duty on an aircraft during a flight duty period.
29. **Decision altitude (DA) or decision height (DH)**: A specified altitude or height in a 3D instrument approach operation at which a missed approach must be initiated.
30. **Destination alternate**: An alternate aerodrome where an aircraft could land if landing at the intended destination is impossible or inadvisable.
31. **Dry runway**: A runway surface free of visible moisture and not contaminated.
32. **Duty period**: A period from when a flight or cabin crew member is required to report for duty until they are free from all duties.
33. **Emergency locator transmitter (ELT)**: Equipment broadcasting distinctive signals on designated frequencies, activated by impact or manually.
34. **Engine**: A unit used for aircraft propulsion, excluding the propeller and rotors.
35. **Enhanced vision system (EVS)**: A system displaying electronic real-time images of the external scene.
36. **En-route alternate**: An alternate aerodrome where an aircraft could land during an en-route diversion.
37. **Fatigue**: A physiological state impairing mental or physical performance due to factors like sleep loss or extended wakefulness.
38. **Fatigue risk management system (FRMS)**: A process to monitor and manage fatigue-related safety risks.
39. **Flight crew member**: A licensed crew member essential to the operation of an aircraft during a flight duty period.
40. **Flight duty period**: A period including a flight or series of flights, finishing when the aircraft finally comes to rest.
41. **Flight manual**: A manual containing airworthiness limitations and instructions for safe operation.
42. **Flight operations officer**: A person controlling and supervising flight operations.
43. **Flight plan**: Information provided to air traffic services units related to an intended flight.
44. **Flight recorder**: A recorder installed in the aircraft for accident or incident investigation.
45. **Flight safety documents system**: Interrelated documentation necessary for flight and ground operations.
46. **General aviation operation**: Aircraft operation other than commercial air transport or aerial work.
47. **Ground handling**: Services for aircraft arrival and departure, excluding air traffic services.
48. **Human factors principles**: Principles applying to design, certification, training, and operations to ensure safe human-system interaction.
49. **Instrument approach procedure (IAP)**: Predetermined flight manoeuvres using instruments for navigation.
50. **Landing distance available (LDA)**: The length of runway declared available for an aircraft's ground run.
51. **Maintenance**: Tasks required to ensure the continuing airworthiness of an aircraft, including inspection and repair.
52. **Master minimum equipment list (MMEL)**: A list identifying items allowed to be unserviceable for a specific aircraft type.
53. **Minimum equipment list (MEL)**: A list prepared by an operator for items allowed to be unserviceable, subject to specified conditions.
54. **Modification**: A change to the type design of an aircraft, engine, or propeller.
55. **Night**: The hours between the end of evening civil twilight and the start of morning civil twilight.
56. **Operational control**: Authority over flight initiation, continuation, diversion, or termination.
57. **Pilot-in-command (PIC)**: The pilot designated as being in command of the flight.
58. **Runway visual range (RVR)**: The range over which the pilot can see runway surface markings or lights.
59. **Safety management system (SMS)**: A systematic approach to managing safety, including structures, policies, and procedures.
60. **Wet runway**: A runway surface covered by visible dampness or water up to 3 mm deep.

## Abbreviations

**AASL** Auric Air Services Limited

**AGL** Above ground level

**AIC** Aeronautical Information Circular

**AIP** Aeronautical Information Publication

**AIP SUP** AIP Supplement

**AIRAC** Aeronautical information regulation and control

**AFM** Aircraft Flight Manual

**AGL** Above Ground level

**ALT** Altitude

**AMC** Acceptable Means of Compliance

**AMSL** Above Mean Sea level

**AOC** Air Operator Certificate

**APU** Auxiliary Power Unit

**AP** Autopilot

**ASL**  Air Service License

**ATC** Air Traffic Control

**ATIS** Automatic Terminal Information Service

**ATPL** Airline Transport Pilot License

**ATS** Air Traffic Service

**ATZ** Aerodrome traffic zone

**BAT** Battery

**BARS** Basic Aviation Risk Standard

**BMO** Bars Member Organization

**CARS** Civil Aviation Regulations, as amended

**C** Celsius, Centigrade

**C of G** Centre of Gravity

**C/B** Circuit Breaker

**CAT** Commercial Air Transport

**Cat 1** Landing Category 1

**CBT** Computer Based Training

**CRM** Cockpit Resource Management

**CDL** Configuration deviation list

**CTA** Control Area

**CTR** Control Zone

**DH** Decision height

**DA/H** Decision altitude/height

**DAME** Designated aviation medical examiner

**DME** Distance Measuring Equipment

**DOM** Dry Operating Mass

**EFIS** Electronic Flight Instrumentation System

**ELT** Emergency locator transmitter

**EROPS** Extended range operations

**ETA** Estimated Time of Arrival

**ENG** Engine

**FL** Flight level

**F** Fahrenheit

**F/O** First officer

**FAA** Federal Aviation Administration

**FAF** Final Approach Fix

**FAR** Federal Aviation Regulations

**FCL** Flight Crew Licensing

**FD** Flight Director

**FDP** Flight duty period

**FDR** Flight Data Recorder

**FDT** Flight Duty Time

**FIR** Flight Information Region

**FLIR** Forward Looking Infra-Red

**FLT** Flight

**FMS** Flight Management System

**FT** Flight Time

**Ft** Foot/feet

**FTL** Flight Time Limitation

**FWD** Forward

**Gen**  Generator

**GMT** Greenwich Mean Time

**GPS** Global Positioning System

**G/S** Glide Slope

**HP** Handling Pilot

**HDG** Heading

**HF** High Frequency

**Hg** Mercury

**HI** High Intensity

**IAS** Indicated Air Speed

**IAIP** Integrated Aeronautical Information Package

**IFR** Instrument flight rules

**ILS** Instrument landing system

**IMC** Instrument meteorological conditions

**ISA** International Standard Atmosphere

**ISO** International Standards Organization

**JAA** Joint Aviation Authority

**JAR** Joint Aviation Regulations

**Kg** Kilogram

**Khz** Kilohertz

**Km** Kilometer

**KTS** Knots

**L/G** Landing gear

**Lbs**  Pounds

**LDA** Landing Distance Available

**LH** Left Hand

**LLZ** Localize

**LOFT** Line Oriented Flight Training

**M** Meter

**MAX** Maximum

**Mb** Millibars

**MCC** Multi Crew Cooperation

**MCM** Maximum certificated mass

**MDA/H** Minimum descent altitude/ height

**MEL** Minimum equipment list

**MHz** Megahertz

**MIN** Minimum

**MLS** Microwave Landing System

**MLW** Maximum Landing Weight

**MMEL** Master minimum equipment list

**MNPS** Minimum navigation performances specifications

**MOCA** Minimum Obstruction Clearance Altitude

**MORA** Minimum Off-Route Altitude

**MSA-** Minimum Safe (or Sector) Altitude

**MSL** Mean sea level

**MTOM** Maximum Take-Off Mass

**NAV** Navigation

**NDB** Non-directional radio beacon

**NHP** Non-Handling Pilot

**NM** Nautical mile

**NOTAM** Notice to Airmen

**NVG** Night Vision Goggle

**NVIS** Night Vision Imaging System

**OAT** Outside air temperature

**OPs** Operations

**PA** Passengers Address System

**PANS** Procedures for Air Navigation’s

**PAPI** Precision Approach Path Indicator

**PAR** Precision Approach Radar

**PAX** Passenger

**PIREP** Pilot Report

**PNR** Point of No Return

**PPR** Prior Permission Required

**PSI** Pound per Square Inch

**PBE**  Portable breathing equipment

**PIB** Pre-flight Information Bulletin

**PIC** Pilot-in-command

**PPI** Plan Position Indicator

**QDM** Magnetic Bearing to Facility

**QDR** Magnetic Bearing from Facility

**QFE** Actual Atmosphere Pressure at the Aerodrome Datum

**QNE** Sea Level Standard Atmosphere (1013hPa or 29.92 Hg)

**QNH** Actual Atmospheric Pressure at Sea Level Based on Local Station pressure

**RADALT** Radar Altimeter/Altitude

**REF**  Reference

**RH** Right hand

**RPM** Revolutions per minute

**RNP** Required navigation performance

**RVR** Runway visual range

**RWY** Runway

**SB** Service Bulletin

**SID** Standard Instrument Departure

**SIGMET**  Information concerning En-Route Weather which may affect the safety of aircraft operations

**SPECT** Aviation selected special weather report

**SRA** Surveillance Radar Approach

**STAR** Standard termination arrival route standard

**T/O** Take off

**STOL** Short take-off and landing

**TACAN** Technical Air Navigation

**TAF** Terminal Aerodrome Forecast

**TAS**  True airspeed

**TCAA** Tanzanian Civil Aviation Authority

**TCAS** Traffic Collision Alert System

**TDP** Take off decision point

**TEMP** Temperature

**TOC** Top of climb

**TOD** Top of Descent

**TODA** Take- off distance available

**TOM** Take off mass

**TMA** Terminal control area

**U/S** Unserviceable

**UHF** Ultra high frequency (300-3000 MHz

**UTC** Co-ordinate universal time

**VASI** Visual approach slope indicator

**VDF** Very high frequency direction finding station

**VFR** Visual flight rules

**VHF** Very high frequency

**VMC** Visual meteorological conditions

**VOR** VHF Omni directional radio range

**VSI** Vertical speed indicator

WX Weather

Z Zulu Time (UTC)

# GENERAL

## Management Commitment

This manual has been prepared in compliance with the requirements of Tanzania Civil Aviation Regulations (TCARs) and in conformity with the Air Operators Certificate requirements. It provides the policy for aircraft operations in accordance with regulatory requirements and approvals by the Director General –Tanzania Civil Aviation Authority.

The aim of the Operations Manual is to show the administrative procedure for the issue, renewal and validation of the Air Operator Certificate. It also indicates the requirements to be met by operations personnel in respect of equipment, organization, staffing, training and other matters for safe operation of aircraft.

In order to keep the manual updated and because of the dynamic nature of the aviation industry, users of this manual may recommend amendments. Discrepancies or any conflict with existing regulations and/or procedures should be communicated as well. Additional rules, regulations and other requirements will be added whenever it is found necessary. Thus, amendment of the Operations Manual is an on-going process based on experience, evolvement, and development of the aviation industry.

This manual has been compiled for the use and guidance of the operations personnel in the safe and orderly performance of their duties. It contains information, instructions and procedures relative to the manner in which the operations of **AURIC AIR SERVICES LIMITED** are to be conducted. All personnel concerned with the conduct of operations must keep themselves informed on policies and procedures laid down in this manual and apply them as required. Compliance with its contents will assure compliance with the requirements of the Tanzanian Civil Aviation Regulations and the operation of aircraft to the highest standard of safety and efficiency.

There is nothing contained in this manual that is intended to contravene the authority vested in the Pilot-In-Command during flight and his right to apply higher standard than the minima presented in the OPERATIONS MANUAL. The Operations Manual is to be used in conjunction with other authorized documents like the Tanzania AIP, TCARs, Approved Aircraft Flight Manual/Approved Pilot Operating Handbook and other manuals which form an integral part of the Operations Manual.

Should any information contained in this Operations Manual contradict manufacturers’ approved documents or CAA publications, the latter will supersede.

Signed:

Sajid Hussein

Accountable Manager

Date: 1 December 2024

## Purpose and Scope of Manuals

The Company Operations Manual is developed in compliance with the latest Tanzania Civil Aviation Regulations (TCARs). It is intended to inform personnel of their individual responsibilities and outline the policies and procedures required to safely and effectively perform their duties.

Strict compliance with the recommended practices and procedures outlined in this manual is required. However, the application of these policies, procedures, and information shall be carried out with good judgment and common sense.

This manual is not intended to replace training or prior operational knowledge but serves as a reference document for staff during the discharge of their duties. All personnel involved in the operation of company aircraft shall have a thorough knowledge of the relevant contents of this manual.

### Scope of the Operations

The company operates Caravan 208B, 208B EX, DHC8 and PC12 aircraft from its Operations Bases in Mwanza, Dar es Salaam and Arusha covering Tanzania, other Eastern, Central and Southern African countries.

## Control And Amendments Of Manuals

### Proposing Amendments

Proposed amendments to the manual can be submitted by any employee in writing to the Quality Department, including a clear justification for a change as well when there is any change of nominated post holders or Civil Aviation Regulations or base of operation. The proposed amendment shall include description of the change, and supporting references if applicable. The Quality Department will review the proposal for validity, relevance, and compliance, consulting with subject matter experts or department heads as necessary. The Quality Manager has the final authority to approve, reject, or modify the amendment. If approved, the change will be processed in line with the manual amendment procedure, ensuring proper documentation, distribution, and communication to all manual holders. This process ensures the manual remains accurate, compliant, and operationally effective.

### Responsibility for maintaining, amending, and modifying manuals

The Quality Manager shall be responsible for maintaining, amending, and modifying all manuals. In the absence of the Quality Manager, the responsibility shall be assumed by the Director of Flight Operations. Auric Air shall ensure that any proposed policy or procedure is submitted to the Authority at least thirty days before the intended implementation date, in compliance with the requirements for AOC holders

### Manual Amendment Procedures

The Quality Manager (QM) will update the electronic master copy of the manual on the company’s electronic drive. As part of the amendment process, the QM will make changes to the text of the manual requiring amendment, ensuring that all amended text is denoted by a vertical line in the left-hand margin. Updates will also be made to the List of Effective Pages (LEP), Table of Contents, Record of Amendments, and Record of Temporary Amendments.

Once the updates are completed, the QM will submit a formal request to the TCAA for approval, attaching Copy 1, Copy 2, and the updated LEP for each individual page requiring amendment. Handwritten amendments are not permitted, except in cases where immediate changes are required in the interest of aviation safety.

Upon TCAA approval, the QM will:

1. Instruct the Archives Department to replace the amended pages in the Master Library Copy.
2. Update the electronic version of the manual.
3. Ensure physical copies are replaced through the Heads of Departments responsible for manual distribution, such as Maintenance for AMO copies and Flight Operations for aircraft copies.

A list of amendment records will be maintained in the front of each manual, documenting the insertion date, effective date, and the individual responsible for incorporating the amendment. Manual holders must return the Notice of Amendment to confirm that their copy has been updated. Any discrepancies between the updated manual and the LEP must be reported to the QM as soon as possible.

### Temporary, Supplementary and Urgent amendments

Amendments required urgently for flight safety or as supplementary updates to the manual shall be issued via Internal Memorandums. Such amendments may be incorporated temporarily using yellow paper to signal an operational policy change, pending approval from the Authority. Once approval is granted, these changes will be permanently integrated into the manual. Temporary amendments will be cancelled as soon as they are no longer relevant. These updates may also be distributed electronically to ensure prompt dissemination.

### Obsolete Manuals

A manual shall be considered **obsolete** once a newer version has been uploaded to the electronic software system. Obsolete versions of manuals and documents must be destroyed upon receipt of the new version. If an old version is retained for any reason, it shall be clearly marked as **“OBSOLETE”**.

### Manual Issues and Revisions

Once an issue has been approved by the **TCAA**, the issue number will remain valid until a total of 10 different amendments have been made. Upon reaching this threshold, a new issue of the manual will be created, consolidating all amendments into a single updated version.

### Manual Review

All manuals shall be reviewed:

1. Every two years or sooner if regulatory changes occur.
2. The Quality Manager, in coordination with relevant department heads, shall conduct the review.
3. A record of the review, including an attendance register, shall be retained.

### Control of Manuals:

All manuals are company property, and manual holders are responsible for their upkeep and prompt amendment. The company shall maintain an up-to-date list of all manual copies, including:  
Copy numbers, holders, and locations.  
Amendment records with effective dates.

### Electronic Manual Copies

An electronic version of each approved Copy 2 of the manuals shall be retained on a suitable software system. These electronic copies shall be clearly marked as “Electronic Copy” on the cover page, and each page shall include a footer stating, “NOT CONTROLLED ONCE PRINTED.”

## List of Manuals Comprising the Operations Manual

Refer to Appendix 2 for list

## Manuals to be Carried on Aircraft

The following manuals shall be carried on board company aircraft:

1. The General Operations Manual – Part A
2. The General Operations Manual – Part B
3. The General Operations Manual – Part C
4. The General Operations Manual – Part D training flights only (can be electronic copy)
5. The Aircraft MEL

Any additional manuals may be specified by the company or regulatory authority.

## Accessibility of Documentation Received from External Sources

All documentation received from external sources shall be stored on a suitable **electronic software system** accessible only to authorized personnel.

## Format of Operational Documents

### All company operational documents shall follow a standardized format:

1. Record Of Temporary Revisions
2. Record Of Amendments
3. Document Approval
4. List Of Effective Pages
5. Distribution List
6. Manual Structure
7. Table Of Contents

### Document Body:

* Heading 1: ARIAL, BLACK,, 16
* Heading 2: ARIAL, BLACK,, 14
* Heading 3: ARIAL, BLACK,, 13
* Heading 4: ARIAL, BLACK,, 12 / 11
* Body Text: ARIAL, BLACK, 12 /11

### Manual headers

Each page shall include a **header** with:

Auric Air logo, manual title, copy number, amendment number, date, and page number.

#### Sample header

|  |  |  |  |
| --- | --- | --- | --- |
| “LOGO” | **“COMPANY NAME”**  **“MANUAL NAME”** | Copy #  Issue/Rev:  Date:  Page: | AAA  AAA/AAA  “DATE”  AAA |

# ORGANISATION AND RESPONSIBILITIES

## Management Personnel

The management of Auric Air Services Ltd consists of qualified personnel with proven competency in civil aviation, serving in the following key positions or their equivalent:

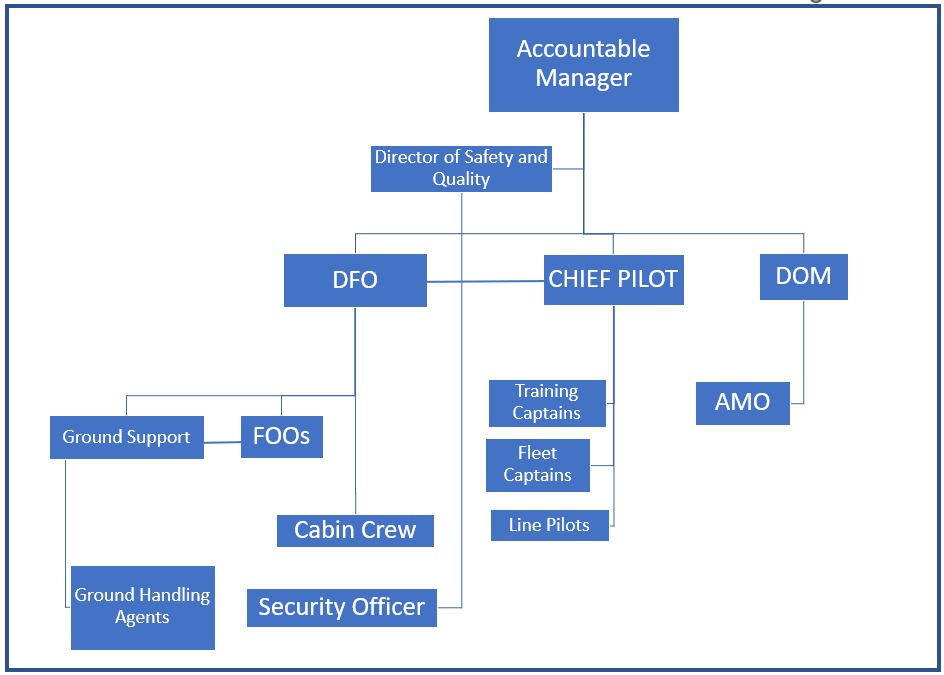
### Postholders

* 1. Accountable Manager
  2. Quality Manager
  3. Director of Safety
  4. Director of Maintenance
  5. Director of Operations
  6. Chief Pilot

### Other Managers

* 1. Security Officer
  2. Check Pilots
  3. Safety Manager
  4. Station Managers

## Organization Structure

****

## Roles and Responsibilities of Management Personnel

### Managing Director

**Roles**

* Accountable to the Board of Directors.
* Ensures that all financial requirements are met to support the company’s operations.
* In his absence, the Accountable Manager assumes his responsibilities.

**Responsibilities**

* Ensuring the company’s financial stability to withstand operational demands.

**Qualifications**

The Managing Director shall possess:  
i. A background in the management of commercial air transport.  
ii. Knowledge of the TCARs and other materials published by the Authority.  
iii. Knowledge of the operational requirements of the AOC holder.

### Accountable Manager

**Roles**

* Ensures that all operations and maintenance activities are financed and conducted in compliance with the TCARs and to the highest safety standards.
* Responsible for the safety and quality oversight of the organization.
* Reports to the Managing Director.
* In his absence, the Quality Manager or Director of Operations assumes his responsibilities.

**Responsibilities**

* Overseeing efficient execution of operations and maintenance activities.
* Ensuring compliance with regulatory and safety requirements.

**Qualifications**

The Accountable Manager shall possess:  
a) A background in the management of commercial air transport.  
b) Knowledge of the TCARs and other materials published by the Authority.  
c) Knowledge of the operations and maintenance requirements of the AOC holder.

### Director of Operations

**Roles**

* Responsible to the Accountable Manager for the overall management of the company’s operations.
* Ensures operations are conducted safely, efficiently, and in compliance with the company’s AOC.
* In his absence, the Chief Pilot assumes his responsibilities.

**Responsibilities**

1. **Strategic Leadership and Planning:**
   * Develop and implement long-term operational strategies aligned with company goals.
2. **Policy Development and Compliance:**
   * Maintain operational manuals, policies, and procedures to ensure regulatory compliance.
3. **Safety Management and Oversight:**
   * Oversee safety systems, risk assessments, and safety audits.
4. **Operational Efficiency:**
   * Optimize flight scheduling, crew utilization, and resource allocation.
5. **Training and Development:**
   * Develop and monitor training programs for operational staff.
6. **Emergency Response Preparedness:**
   * Develop and maintain emergency plans and conduct drills.
7. **Stakeholder Communication:**
   * Coordinate with internal and external stakeholders, including regulatory bodies.
8. **Financial Management:**
   * Manage budgets, monitor expenses, and ensure cost optimization.
9. **Record Keeping:**
   * Maintain accurate training and documentation records for crew members.

**Qualifications**

The Director of Operations shall possess:

1. An Airline Transport Pilot License (ATPL).
2. Three years’ experience as PIC in commercial air transport of large aircraft.

### Chief Pilot

**Roles**

* Accountable to the **Director of Operations** for managing the company’s flying operations.
* Coordinates all **training programs** using internal and external instructors/examiners.
* In his absence, a **Training Captain** will assume his responsibilities.

**Responsibilities**

1. **Flight Crew Supervision:**
   * Supervise flight crew, assign duties, and ensure adherence to company policies.
2. **Safety and Compliance:**
   * Ensure compliance with flight safety regulations, including FDL, FDTL, and recurrency requirements.
3. **Flight Planning:**
   * Oversee flight plans, assess weather, and ensure safe operations.
4. **Training and Proficiency:**
   * Develop and monitor crew training programs and conduct proficiency checks.
5. **Emergency Preparedness:**
   * Develop emergency procedures and conduct readiness drills.
6. **Operational Efficiency:**
   * Optimize crew scheduling and minimize operational disruptions.
7. **Continuous Improvement:**
   * Identify process improvements and mentor flight crew for professional development.
8. **Record Keeping:**
   * Maintain accurate training records, signed by the crew member concerned.

**Qualifications**

The Chief Pilot shall possess:  
i. A CPL with ratings for at least one type of aircraft operated by Auric Air.  
ii. Three years’ experience as PIC in commercial air transport operations.

### Director of Maintenance

**Roles**

* Responsible for the continued airworthiness of the Auric Air fleet and overall maintenance systems.
* Reports to the Accountable Manager.
* In his absence, a nominated technician assumes his responsibilities.

**Responsibilities**

Monitor changes in the maintenance system affecting the AOC.

1. Establish and maintain TCAA-approved aircraft maintenance programs.
2. Ensure timely completion of all maintenance activities.
3. Verify personnel qualifications and competence for maintenance tasks.
4. Coordinate maintenance with the AMO and supervise subcontracted providers.
5. Ensure Certificates of Release to Service are issued upon completion of maintenance.
6. Maintain all technical records and comply with retention requirements.
7. Ensure MEL compliance for defect deferrals.
8. Update maintenance systems, such as Cescom and ECTM analysis.

**Qualifications**

1. A licensed maintenance engineer with appropriate airframe, powerplant and avionics

ratings

1. Three years’ experience in maintaining the same category and class of aircraft used by

the AOC holder including one year in the capacity of returning aircraft to service

1. Must have completed a company indoctrination course

### Director of Safety

**Roles**

* Reports to the Accountable Manager and oversees the company’s Safety Management System (SMS).
* Chairs the company’s Safety Committee.
* In his absence, a Safety Officer assumes his responsibilities.

**Responsibilities**

1. Develop and maintain the **SMS Manual** and safety procedures
2. Facilitate **hazard identification, risk assessment, and mitigation** processes.
3. Conduct safety audits, incident investigations, and compliance monitoring.
4. Stop or prohibit any unsafe action or operation.
5. Promote safety awareness through meetings, training, and bulletins.
6. Oversee the hazard reporting system and occurrence reporting scheme.
7. Ensure compliance with dangerous goods regulations.
8. Maintain competency in safety matters and provide independent safety advice.

**Qualifications**

The minimum qualifications for Director of Safety are:

1. A technically qualified person in the field of aircraft maintenance or flight operations
2. At least five years’ experience in the field of aircraft maintenance or flight operations
3. Must have successfully completed a training in safety management systems course

recognized by the Authority.

### Quality Manager

**Roles**

* Reports to the Accountable Manager.
* Supervises quality control and quality assurance across all operational, maintenance, and support services.
* Ensures compliance with operational and airworthiness requirements.
* In his absence, the Director of Safety assumes his responsibilities.

**Responsibilities**

* Verify compliance with company policies and regulatory standards.
* Monitor performance across flight operations, maintenance systems, crew training, and ground operations.
* Implement quality assurance programs and audits as outlined in the Quality Manual

**Qualifications**

The minimum qualifications for Quality Manager are:

1. A technically qualified person in the field of aircraft maintenance, or flight or ground

operations;

1. At least three years’ experience in the field of aircraft maintenance, flight or ground

operations;

1. Must have successfully completed a training in quality management recognized by the

Authority

1. Must have completed a company indoctrination course

### Contractual Obligations of Management Personnel

Auric Air shall ensure that required management personnel are contracted to work sufficient hours to fully meet the management functions and responsibilities of the Air Operator Certificate (AOC) holder.

Additionally, any person serving in a required management position for Auric Air shall not simultaneously serve in a similar position for another AOC holder unless an exemption is issued by the Authority. This measure ensures effective oversight and accountability within the organization.

### Exemptions from Qualification requirements

Auric Air can employ personnel who do not meet the required qualifications as long as the Authority can grant an exemption on the basis of having comparable experience and can perform the tasks effectively.

## Other Key personnel Roles and Responsibilities

### Flight Operations Officer Roles and Responsibilities

**Roles**

Flight Operations Officers at Auric Air are accountable to the Chief Pilot and, in their absence, to the Fleet Captain or a delegate. They hold a current Tanzania Civil Aviation Authority (TCAA) Flight Operations Officer License and play a critical role in ensuring safe and efficient flight operations by supporting the pilot-in-command (PIC) and managing essential flight procedures.

**Responsibilities**

1. **Flight Preparation and Support**
   * Assist the PIC in flight preparation and provide all relevant information required for safe operations.
   * Prepare operational and air traffic services flight plans, sign them when applicable, and file them with the appropriate air traffic services unit.
   * Provide the PIC with weather analysis, NOTAMs, and route-specific operational information, including forecasts for destinations and alternates.
2. **Flight Supervision and Monitoring**
   * Ensure the PIC is furnished with critical in-flight information necessary for safe operations.
   * Notify the appropriate air traffic services unit if the aircraft's position cannot be determined through tracking systems and communication attempts fail.
   * Monitor flights operating in adverse conditions and provide additional operational support as required.
3. **Emergency Response**
   * Initiate emergency procedures as outlined in the operations manual while avoiding actions that conflict with air traffic services procedures.
   * Communicate safety-related updates and amendments to the PIC during emergencies to ensure safe continuation of the flight.
4. **Operational Oversight and Resource Management**
   * Oversee the safe and efficient operation of the flight operations section, including crew management and resource allocation.
   * Supervise the discipline, welfare, and morale of flight operations staff.
   * Identify training needs and assist in developing training programs for flight crew members.
   * Manage flight schedules, bookings, and related client communications, including airstrip coordination and flight plan deviations.
5. **Ground Operations and Documentation**
   * Coordinate with the maintenance team to verify aircraft airworthiness two hours prior to departure.
   * Ensure all legal documentation, landing permits, and ground handling processes comply with regulatory and safety standards.
   * Verify passenger and cargo check-in processes, and ensure efficient ground handling.
   * Maintain an adequate stock of official forms, checklists, and operational documents for use in the office and aircraft.
6. **Post-Flight and Record-Keeping**
   * Conduct post-flight checks to ensure proper documentation, including passenger manifests, load sheets, and operational records, is completed.
   * Maintain accurate records of flight and duty times for crew members.
   * Investigate and resolve any operational irregularities, including incidents or accidents.

### Flight Operations Officer Qualification

Auric Air shall ensure that no person acts as a flight operations officer for releasing a scheduled passenger-carrying commercial air transport operation unless that person holds a valid flight operations officer license or an airline transport pilot license. Additionally, the individual must be currently qualified by Auric Air for the specific operation and type of aircraft being used. A flight operations officer shall not be assigned to duty after twelve consecutive months of absence from such duty, unless the provisions of this regulation are met.

## ****Fleet Captains****

**Roles**

Fleet Captains, if employed, will coordinate with the **Chief Pilot** regarding Standard Operating Procedures (SOPs) and Aircraft Operating Manuals.

### ****Responsibilities****

* Monitor the **general airworthiness** of the fleet and coordinate with the Maintenance Coordinator to address any technical issues.
* Ensure operational compliance of assigned aircraft and report any deviations to the Chief Pilot.

### ****Training Captain and Check Captain****

**Roles**

Training Captains and Check Captains are appointed by the **Director of Operations** in consultation with the **Chief Pilot**. They are selected based on seniority, ability, competency on type, training experience, and communication skills. Training Captains conduct training, while Check Captains ensure pilots maintain required competency levels. All Training and Check Captains must be authorized by the **TCAA**.

### ****Responsibilities****

1. Maintain the **highest standards** of flying and oversee training and statutory checks as outlined in the Training Manual.
2. In consultation with the Chief Pilot, approve routes and airports to be used.
3. Plan and manage flight crew **establishment** and training programs.
4. Update and amend Auric Air’s **Approved Training Manual**.
5. Maintain and monitor **training standards** across the organization.
6. Conduct training and regular checks for all categories of Training Captains.
7. Liaise with the **TCAA** on all training matters.
8. Arrange and conduct periodic **Training Captains' meetings** to review training standards.
9. Liaise with the Chief Pilot regarding unsuitable airfields and alternate route options.
10. Develop and provide special **briefings** for inclusion in aircraft Route Manuals.
11. Brief aircrews on **routes and airfields** as per the Air Operator Certificate requirements.
12. Coordinate with control authorities on **navigation aids** and airfield facilities.
13. Investigate and address specific training-related concerns.

**Note:** For a detailed description of responsibilities, refer to the OM-D **Training Manual**.

## Cabin Crew

Refer to AASL Operations Manual Part E - CCM

## Authority, Duties, and Responsibilities of the Pilot-in-Command (PIC / Commander)

The company will nominate one of the pilots to serve as the aircraft commander for each flight or series of flights. The pilot-in-command shall responsible for the safety of all crew members, passengers, and cargo on board from the moment the doors are closed. This responsibility extends to the operation and safety of the aircraft from the time it is ready to move for takeoff until it comes to a complete stop at the end of the flight and the engines used as primary propulsion are shut down.

**Authority of the PIC**

The Pilot-in-Command (PIC) has full authority to:

1. Issue all commands necessary to ensure the safety of the aircraft and its occupants, and all persons onboard must comply with such commands.
2. Disembark any person or cargo that, in the PIC’s opinion, represents a potential hazard to the safety of the aircraft or its occupants, including individuals under the influence of alcohol or drugs.
3. Refuse transportation of inadmissible passengers, deportees, or persons in custody if they pose a safety risk.
4. Deviate from operational rules and procedures in emergency situations requiring immediate decision and action, prioritizing safety.
5. Apply greater safety margins, including increased aerodrome-operating minima, if deemed necessary.

**Duties and Responsibilities**

**Operational Compliance and Safety**

1. Maintain familiarity with all relevant aviation regulations, company manuals, notices, circulars, and procedures.
2. Conduct all flights safely, efficiently, and in compliance with company policies and operational manuals.
3. Uphold the prestige of the company by maintaining a high standard of discipline, conduct, and appearance.
4. Liaise with customers and operational staff to ensure efficient and punctual operations.
5. Confirm that all operational procedures and checklists are completed as per manuals, including:

* Pre-flight inspections.
* Flight preparation (planning, weather briefing, NOTAMs, overflight/landing clearances, weight and balance).

**Aircraft and Crew Management**

1. Ensure the aircraft is serviceable in accordance with the MEL.
2. Supervise aircraft refuelling when required, verifying correct fuel type, quantity, and fire safety.
3. Ensure passengers receive a proper pre-flight briefing with emphasis on seat belt use.
4. Take all reasonable steps to secure passengers and cabin baggage during flight, especially in turbulent conditions.
5. Confirm that aircraft documentation and manuals are valid for the flight.
6. Maintain a continuous listening watch on appropriate radio frequencies.

**Decision Making and Emergency Response**

1. In the event of any circumstances jeopardizing flight safety, take appropriate corrective action, which may include:

* Delaying the flight.
* Returning to the aerodrome of departure.
* Landing at the nearest suitable aerodrome.

1. Notify Operations and the Chief Pilot immediately of any incident, accident, or flight deviation.
2. Report all incidents to the Director of Safety using the designated company Incident Report Form.

**Compliance with Regulations**

1. Ensure compliance with fuel, oil, and reserves policies.
2. Prevent unauthorized handling of aircraft controls by any person other than authorized flight crew.
3. Ensure that:

* The cockpit voice recorder (CVR) and flight data acquisition systems remain active during flight.
* No data is erased during or after flight in the event of an incident or accident.

**Crew Coordination and Conduct**

1. Ensure all crew members are properly secured in their seats during take-off, climb, descent, and landing.
2. Maintain the discipline, conduct, and professional appearance of all crew members.
3. Dispatch the aircraft in the absence of a dispatcher.
4. Assist with passenger and cargo operations, including proper loading and lashing.

**Emergency and Incident Reporting**

1. In the event of an incident or accident:

* Inform Air Traffic Control (ATC) and Operations immediately.
* Submit incident reports promptly to the Chief Pilot and ensure the TCAA is notified.

**Accountability**

1. The Aircraft Commander shall primarily occupy the left seat, except during training or instruction where otherwise approved.
2. The PIC is ultimately responsible for the safe operation of the aircraft and the safety of all occupants throughout the flight.

## Duties and Responsibilities of the First Officer (On Two-Crew Flights)

The First Officer (FO) is responsible to the Commander for assisting in the safe and efficient conduct of the flight in accordance with the Dual Crew Standard Operating Procedures (SOPs). In the event of the Commander’s incapacitation, the First Officer will assume command of the aircraft.

**General Duties of the First Officer**

1. Maintain familiarity with relevant **Tanzanian and International air legislation** and agreed aviation practices.
2. Maintain familiarity with the provisions of the **Company’s General Operations Manual** necessary to fulfill the duties of the First Officer.
3. Assist the Commander with administrative duties related to the flight as requested.
4. Support the Commander in maintaining proper standards of **crew discipline, conduct, and personal appearance**.

**Specific Responsibilities of the First Officer**

1. Perform duties allocated by the Commander, ensuring compliance with the **Company SOPs**, including aircraft-specific procedures, limitations, and performance requirements.
2. Confirm the **safe navigation** of the aircraft by maintaining a continuous and independent check on the aircraft’s geographical position and safe terrain clearance.
3. Provide the Commander with **advice, information, and assistance** that contributes to the safe and efficient operation of the flight.
4. Seek and receive necessary information or explanations from the Commander to effectively fulfill the assigned duties.
5. Maintain a high personal standard of **discipline, conduct, and appearance** as a representative of the company.
6. Support the Commander by setting an **active example** in the development and maintenance of high professional standards, expertise, and morale among the crew.
7. Report any **irregularities** encountered during flight or on the ground to the appropriate personnel.

## Duties and Responsibilities of Crew Members Other Than the Commander

**General**

1. All crew members are responsible for the proper execution of their duties, which include:  
   Duties related to the safety of the airplane and its occupants.  
   Duties specified in the instructions and procedures outlined in the Company’s General Operations Manual.
2. Every crew member must:  
   Report to the Commander any **incident** that has endangered or may have endangered safety.  
   Utilize the company’s **incident reporting schemes** as detailed in the Operating Manual. A copy of the report must be provided to the Commander concerned.

## Crew Regulations

### Reporting for Duty

1. Flight crew shall ensure that, as per the SOPs, they check their mailboxes.
2. Load sheets (weight and balance forms) must be completed, with one copy left with the flight dispatch officer for filing.
3. Briefing sheets, manifests, and flight plans shall be received from flight operations officers/dispatch personnel.
4. Ensure all aircraft documents, operations documents, flight manuals, and technical logs are onboard the aircraft.
5. Confirm the aircraft has been refuelled with the correct quantity and type of fuel, with a fuel receipt onboard the aircraft.
6. Ensure domestic and international fuel carnets are available on the aircraft.
7. Confirm the aircraft, along with all required operational and emergency equipment, has been inspected, is airworthy, and has been certified after the pre-flight inspection.

### Reporting Time

The company has established ON and OFF duty reporting times to allow for pre-flight preparations and post-flight activities but reserves the right to amend these times if conditions warrant. Unless briefed otherwise:

* Crews shall report for duty 60 minutes before departure for the DHC8 and 45 minutes for the C208B and PC12.
* Crews are off duty 30 minutes after arrival.

When reporting for duty, flight crew shall ensure:

1. They check their mailbox and boards for the latest updates.
2. Flight plans and load sheets are completed, with one copy remaining in the operations room.
3. NOTAMs and weather briefings are available.
4. Briefing sheets and manifests are collected from operations personnel.
5. Aircraft documents, flight manuals, and the technical log are onboard.
6. The aircraft has been refuelled with the correct fuel type and quantity, with a fuel receipt onboard.
7. The aircraft is inspected, serviceable, and airworthy as per the pre-flight check and certification.

### Adherence to Schedule

Auric Air Services Limited crew shall adhere strictly to the flight schedule. Early departures are encouraged, in consultation with **operations personnel** and the client, provided all passengers and cargo are loaded, and no inconvenience is caused. Time saved may be utilized for **aircraft maintenance** as necessary.

### Uniform

Flight crew uniforms must be worn at all times during flight operations:

1. White pilot shirt.
2. Navy blue or black trousers (no denim).
3. Black or dark brown leather shoes and socks.
4. Epaulettes reflecting crew position.
5. **Blue tie** for Dash 8 crew; optional for C208B and PC12 crew.

All crew members are required to carry **at least one change of uniform and personal clothing** while on flying duty. If a **longer duration night stop** is expected, crew members shall carry sufficient clothing as appropriate for the stay.

Crew members must keep their uniforms **clean and tidy** at all times. Any lost, damaged, or worn-out uniform items must be reported to the **Chief Pilot** for replacement.

### Behaviour in Public

Crew members represent Auric Air and shall maintain a **disciplined and professional demeanour** at all times, whether on or off duty, to uphold public confidence in the company.

### Appearance

A clean and well-groomed appearance must be maintained. For multi-crew flights, the Commander shall ensure a uniform appearance in public. Uniforms may only be worn during duty and transit to/from duty.

### Conversation

Crew members shall:

1. Avoid negative statements about the company.
2. Refrain from discussing internal affairs or procedures (e.g., maintenance or serviceability).
3. Maintain tactful and polite communication with passengers, authorities, and colleagues.

### Smoking in the Aircraft

Smoking is prohibited in all areas of the aircraft.

### Wearing of Sunglasses and Prescription Lenses

Crew members are cautioned against using polarized lenses as they can impair visibility through laminated windshields.

### Crew Baggage

Crew members are responsible for their baggage and must:

1. Never leave it unattended or unlocked during transit.
2. Comply with local security procedures and ensure baggage is not mixed with passenger baggage.

### Illness

Accidents or illnesses must be reported immediately to the **OCC**. A pilot must provide a **medical certificate** upon return to work after an absence of more than **three consecutive days**. Crew members are required to notify the Chief Pilot and OCC of any projected absence.

### Cooperation with Other Personnel

1. Cooperation with fellow crew members, company staff, and contracted personnel is essential for safe and efficient operations.
2. Report any abnormalities or suspicions around the aircraft to the Commander.
3. Inform the incoming crew of all flight details during a crew change at intermediate stops.
4. Report unsafe or impractical operations using a Voyage or Hazard Report to the Chief Pilot.

### Care of Company Property

Crew members must handle **company property** with care, maintaining and updating any manuals or documents issued to them.

### Meal Regulations

Light meals are permitted in the cockpit, provided no spillage occurs. Any spillage must be cleaned immediately.

### Carriage of Personal Documents

Crew members must carry the following:

1. Valid license.
2. Valid passport.
3. Valid AASL identity card.
4. Visa, medical certificate, and vaccination certificates as required.

### Customs Regulations

Crew members must comply with local customs and immigration laws. Violations are serious and may lead to immediate dismissal and prosecution.

### Postal Regulations

Crew members are not permitted to accept personal mail for transportation.

### Conduct During Night Stops

1. Avoid any action that may cause complaints from hotel management.
2. Use layovers primarily for crew rest.
3. Inform the Commander or OCC of your whereabouts during layovers.
4. Do not leave the assigned crew hotel for more than 12 hours without permission.
5. Avoid alcohol the evening before a flight task.
6. All crew members on international night stops must check in with OCC everyday before 7pm Tanzania time

### Deadheading Crew

Deadheading crew may wear personal attire or company uniform but must ensure a smart appearance at all times.

### Carrying of Private Weapons

Carrying weapons during flight duty or deadhead travel is strictly prohibited.

### Illness

Accidents or illnesses must be reported immediately to the OCC. A medical certificate must be provided for any absence exceeding three consecutive days.

## Violation of Regulations in the Interest of Safety

In the event of an emergency situation that endangers the safety of the aircraft or persons onboard, Auric Air shall adhere to the following procedures to ensure safety remains the highest priority. If the emergency situation is first identified by the flight operations officer, immediate actions shall be taken to notify the appropriate authorities about the nature of the situation without delay and to request any necessary assistance. If the emergency necessitates actions by the pilot-in-command that result in a violation of local regulations or procedures, the pilot-in-command shall promptly inform the relevant local authority about the situation and the actions taken.

Additionally, where required by the State in which the incident occurs, the pilot-in-command shall submit a detailed report on the violation to the local authority within ten days of the occurrence. A copy of this report shall also be provided to the Tanzania Civil Aviation Authority (TCAA) to ensure compliance and transparency. Auric Air emphasizes that such measures are to be taken only in the interest of safety and when no other alternatives are available.

### Compliance with Laws of Another State

The Pilot-in-Command (PIC) may comply with the laws of any State other than the United Republic of Tanzania while the aircraft is operating within that State's jurisdiction.

## Change Of Particulars on Licence or Authorization

A holder of a licence, certificate, authorisation, approval, or any other document issued by the Authority must notify the Authority of any changes to their personal details. For name changes, the holder must submit a court order or other legal document verifying the name change, along with the current licence, certificate, authorisation, or document to be amended.

For address changes, the holder must:

* Notify the Authority at least fourteen days prior to any change in physical address.
* Notify the Authority immediately upon any change in mailing address.

### Notification of Changes to Principal Base of Operation

Auric Air shall submit written notification to the Authority at least thirty days in advance of any proposed establishment or change to the location of its principal base of operation.

## Display and Availability of Air Operator Certificate (AOC) and Associated Documents

Auric Air shall conspicuously display the Air Operator Certificate (AOC) and its associated operations specifications, detailing the terms and conditions applicable to the certificate, at all its operational bases. Additionally, Auric Air shall ensure the availability of the following at its principal base of operations:

1. The current AOC and its operations specifications.
2. The Operations and Maintenance Manuals.
3. A comprehensive list detailing the location and responsible individuals for each record, document, and report required to be maintained by the AOC holder.

# OPERATIONAL CONTROL AND SUPERVISION

## Supervision Of the Operation

The supervision of the operation will be maintained by ensuring that proper operational management is employed. The board will employ an accountable manager who will then employ the following qualified post holders as the operational management of the organization:

Director of operations

Chief pilot

Director of maintenance

Director of safety

Quality manager

Each of the above will develop policies and procedures to be compiled into manuals in accordance with the regulations and standard and recommended practices for use by all company personnel to be able to execute their duties safely and effectively. These postholders could appoint supervisors as required who will assist in the supervision and control of the operation in line with the operational documentation in their respective departments.

The accountable manager and the postholders must ensure that they maintain competency of all staff by providing the required training. They will also have to ensure that licenses and qualifications of crewmember and when applicable, of other operational staff, are valid.

They must ensure that all operations are performed within the authorized limits by:

* Ensuring that the aircraft are airworthy.
* Ensure that the aircraft, airports, and routes are operated in compliance of:
* The AOC and the operational documentation which shall remain current.
* The Pilot Operating Handbook of the Aircraft Flight Manual
* The Minimum Equipment List and the Configuration Deviation List, if applicable
* The licenses and qualifications of the crew
* The flight/duty time limitations and the minimum rest periods of the crewmembers

## Flight Operations Supervision

The DFO is responsible for the overall supervision of both scheduled and charter operations. He coordinates and supervises the operational departments and appoints their managers.

### Means of Operational Supervision

The supervision of the flight operations is achieved by:

1. Defining in the Operations Manual, the policies and the procedures to ensure that the operations comply with the content of the granted AOC and its associated Operations Specifications
2. Ensuring that the aircraft is operated in compliance with the terms of its Certificates of Airworthiness and within the approved limitations contained in its Aircraft Flight Manual.
3. Setting up operational procedures and instructions for all types of operations both on ground and in flight, which define duty for ground staff and crewmembers.
4. Setting up a checklist system to be used by crewmembers under normal, abnormal and emergency conditions to ensure that the operating procedures of the Operations Manual are adhered to.
5. Training ground staff and crewmembers on the procedures, instructions and checklist associated to their tasks.
6. Ensuring crew licenses validity and competence of operational staff.
7. Promulgating additional operational instructions and information when needed.
8. By monitoring flight time, duty time and rest period of each crewmember.
9. Checking, analysing and storing flight and maintenance records, pilots and cabin crew reports as well as passenger complaints for the statutory periods.
10. Putting in place an Operational Control Centre (OCC) to supervise and to manage all operational daily events in respects of safety and of the efficiency of the operations.
11. Putting in place a Maintenance Control Centre (MCC) to ensure that aircraft are airworthiness during daily operations and that maintenance can be performed or planned in accordance with the aircraft flight planning.
12. OCC and MCC should also assist the crew to ensure safe and efficient operations taking account the satisfaction of the passengers.
13. Ensuring that there is are effective safety and quality systems in place that have functional reporting and auditing practices in place.

## Aspects Of Supervision

Overall, the following will be considered by managers to maintain proper supervision:

### The Company

No operations shall be undertaken until and unless all the following company documents, agreements, resources, staff and/or offices are valid and are available.

* 1. A valid Air Operators Certificate and Operations Specifications. The Director of Operations will ensure all the applications for this is done 60 days before the expiry of the current AOC.
  2. A valid Air Service License for Tanzania and if required, other States. Applications for these will be done well in advance to ensure continuity of validity.
  3. A designated area which will include adequate communication and office equipment to enable efficient flight planning, a facility to display Safety/Operational Notices and/or bulletins and an area to be utilized for retention of all records and operational documentation.
  4. A valid Ground Handling License
  5. Selection of a TCAA approved AMO appropriately rated for Auric Air fleet
  6. Valid and Approved Operational Manuals and Documents which will be available to all staff in flight operations and the flight planning office.
  7. Ensuring that responsible people have been employed to manage operations, training, safety and quality.
  8. Valid and current Insurance Policies
  9. Appropriate maintenance Agreements
  10. Adequate office space for pilots briefing and crew rest in between flights, with facilities such as water, coffee, drinks and physiological needs.
  11. Any other document as required by clients or operations.

The archives department will monitor expiry requirements and intimate the relevant postholder if any expiry is coming due within 90 days.

### Personnel

#### Employment of Qualified Personnel

AASL management has defined the minimum requirements for each position within the Company. All employees employed must meet these minimum requirements.

These requirements will be assessed on a regular basis by the management team of the Company and amended when required in order to ensure that all the personnel meet the required standard.

#### Training and Examining Staff Regularly

All staff will be trained and examined regularly as per requirements of the Company by the heads of departments. Company management has defined the content and the minimum requirements for the training of all personnel in the Company in the Operations Manual Part D.

These requirements are to be reviewed periodically and will never be less than the minimum requirements set out by the Authority.

#### Competence of Operations Personnel

##### Monitoring Competence of crew members and dispatchers

The chief pilot shall ensure that all crew members are qualified, well-trained, current, proficient and sufficiently rested before being scheduled to fly. He will ensure this by:

* + 1. Monitoring expiries of Medicals and planning renewals in good time
    2. Monitoring expiries of IRs and planning renewals in good time
    3. Monitoring expiries of base checks and planning renewals in good time
    4. Monitoring expiries of Line/route checks and planning renewals in good time
    5. Monitoring expiries of all other legislative training (CRM, DG etc)
    6. Monitoring expiries of all other training required by clients and planning renewals in good time
    7. Maintaining a training and checking program (OM D) to ensure that every crew member is trained in accordance with approved practices.
    8. Ensuring FT and FDT records are kept current and checked regularly to enable decision making regarding scheduling of crew.
    9. Ensure that all freelance and part-time crew meet the training and qualification requirements of the Company. The background check, recency and rest period must be considered before assigning a freelance pilot for duty.

All the above records will be kept electronically by the chief pilot/designated operations personnel. Any crewmember or dispatcher that is expired or outside of FT/FDT limitations shall not be scheduled for duty.

##### Monitoring Competence of ground personnel

The ground handling manager or the station managers shall ensure that all ground personnel at stations under them are well-trained and competent to perform their duties.

Where ground staff require licensing, the managers will ensure that the expiries are tracked, and the renewals are done in due time.

### Maintenance and Airworthiness Responsibilities

Auric Air Services Limited (AASL) is not an approved aircraft maintenance organization (AMO); however, the proper maintenance and airworthiness of its fleet remain its responsibility. AASL must ensure that all company-operated aircraft are maintained and released to service in compliance with the latest Tanzania Civil Aviation Regulations (TCARs). To achieve this, the Director of Maintenance (DOM) and the Quality Officer will appoint an AMO that meets the requirements of the Civil Aviation (Approved Maintenance Organization) Regulations. They will also ensure compliance with the Civil Aviation (Airworthiness) Regulations for all flights.

AASL shall adhere to the following maintenance and airworthiness provisions:

1. **Aircraft Engineering and Maintenance Compliance**
   * Aircraft used in service shall comply with the aircraft engineering and maintenance requirements as outlined in the TCARs.
   * All aircraft shall hold valid Certificates of Registration and Airworthiness issued under the TCARs.
2. **Maintenance Standards and Oversight**
   * Aircraft shall be inspected, repaired, maintained, or modified in accordance with TCAR provisions and the AMO's Authority-Approved Maintenance Procedures Manual.
   * Aircraft logbooks and technical logs, including records for engines, components, and equipment, shall be preserved and maintained in compliance with TCARs.
   * Maintenance, inspections, repairs, and modifications shall meet approved standards and consider minimum equipment lists (MEL) and configuration deviation lists (CDL) for each aircraft type.
3. **Operational and Emergency Equipment Serviceability**
   * The AOC holder shall ensure the serviceability of operational and emergency equipment necessary for flight by:
     + Conducting pre-flight inspections.
     + Correcting any defect or damage affecting safe operation to an approved standard.
     + Carrying out maintenance in accordance with the approved aircraft maintenance programme.
     + Analyzing the effectiveness of the maintenance programme.
     + Implementing airworthiness directives, operational directives, and other mandatory continued airworthiness requirements.
     + Performing modifications per approved standards and implementing policies for non-mandatory modifications.
4. **Records and Documentation**
   * AASL shall retain:
     + A copy of the AMO certificate for the organization maintaining the aircraft.
     + Certificates of Airworthiness or certified true copies for each aircraft.
     + Defect reports and associated documentation of defect removal after each flight.
   * These documents shall be made available to inspectors authorized by the Director General of Civil Aviation upon request.
5. **Compliance Before Operations**
   * No aircraft shall be operated by Auric Air unless the Maintenance Coordinator verifies that:
     + All required certificates and documentation are on file.
     + All necessary maintenance and inspections have been performed.
     + Any defects identified are resolved or accounted for under the MEL or CDL.

#### Approved Maintenance Organisations in support of Auric Air aircraft

Refer to the AASL Maintenance Control Manual Section 19.10 Appendix J contracted AMO Particulars

#### Categories and Ratings of AMO

As endorsed on AMO Certificates and Operations Specifications

### Functional Safety and Quality Teams

Auric Air has instituted methodology for the company to implement safety systems to identify hazards, record incidents and occurrences for control and mitigation before turning into undesirable situations and quality systems to ensure laid down standards are being met. These are done with adequate scheduling and record-keeping functions. All audits shall be performed against appropriate and adequate references.

Auditing can be used in different ways:

* As a Hazard Identification sources
* To check the real-life robustness of various risk controls
* To audit the company Safety system itself
* To audit an external service provider

Auric Air emphasizes that:

* benefit should be taken from the synergy between safety and quality auditing. The audit data should be shared, and the auditors could be co-located.
* neither safety nor quality missions are to be sacrificed to the benefit of the other.
* audits are guided by risk considerations. High-risk areas should be audited more frequently and with more depth.
* special focus is put on interfaces between organizations and the related risk ownership matters.
* audits are not only limited to regulatory compliance. They should also address the internal standards.

### Record Keeping Requirements

Auric Air has established an Electronic Safety and Technical Records backup systems with the capability for entry, storage, retrieval and archiving of all records in the categories required. (The electronic storage systems, the backup recording system is of a permanent nature). All records maintained in a physical format under must be recorded using permanent and indelible material to ensure their durability and compliance.

#### Period Retention of Records

The following documents or copies thereof shall be retained for the period specified:

|  |  |
| --- | --- |
| **Record** | **Period of Retention** |
| Flight and duty records | Two years; |
| Flight crew , Flight dispatchers records | Two years; |
| Fuel and oil records | Three months |
| Completed load manifests | Six months |
| Mass and balance records | Six months |
| Dispatch releases | Six months |
| Flight plans | Six months |
| Passenger manifests/cargo manifests | Six months |
| Operational flight plans | Six months |
| Weather reports | Six months |
| Journey logs | Two years |
| Aircraft technical logbooks | Two years |

#### Records of crew members

Details of each crew member are kept in folders in fire resistant lockable cabinets at the head office as well as in the current web-based system in use. The data on record for all crew will include but not be limited to the following information:

1. Full name of the pilot;
2. Pilot license (copy) and ratings the pilot holds;
3. Pilot’s aeronautical experience in sufficient detail to determine the pilot’s qualification to pilot aircraft in Auric Air operations.
4. Pilot’s current duties and the date of the pilot’s assignment to those duties.
5. Effective date and class of the medical certificate that the pilot holds;
6. Date and result of each of the initial and recurrent competency tests and proficiency and route checks required by this Operations Manual, and the type of aircraft flown during that test or check;
7. Pilot’s flight time in sufficient detail to determine compliance with the flight time limitations of this section;
8. Pilot’s check pilot authorization, if any;
9. Action taken concerning the pilot’s release from employment for physical or professional disqualification;
10. And storage and retrieval of all other data required for all other crew members other than flight crew

Some of the records from the above are permanent in nature while others could change depending on currency.

##### Permanent Records

Permanent records are the documentation of the successful completion of training or qualification events which are prerequisites for subsequent assignments. These records are retained for the duration of the individual’s employment with Auric Air to substantiate the individual’s qualifications. Permanent records include the following:

1. Application for employment
2. Contracts
3. Personal particulars
4. All correspondence
5. Pilot assessment forms
6. Conversion course /type rating /upgrade checks
7. Record of disciplinary action against staff, if any
8. Ground and flying training files
9. Training Bond Agreements (if any)

##### Currency Records

Currency records are the documentation of training or qualification events which qualify individuals for their present assignments and are required to be re-taken at scheduled intervals. To show continuity of qualification, this type of record is retained until superseded by a record of similar training or qualification.

1. Copy of the License
2. Copy of the Passport
3. Route check forms
4. Proficiency check Forms
5. Base check forms
6. Instrument rating
7. Medical Certificates
8. English Language Proficiency
9. Radio Telephony-where applicable
10. Dangerous Goods Certificate
11. Emergency Procedure Training
12. CRM training certificate

Some permanent records like indicated below are the responsibility of the crew member. He must ensure that they are kept valid and current at all times.

1. Crew Licenses
2. Passports
3. Cockpit Crew Logbooks
4. Medical Certificate
5. Visas where applicable
6. Inoculation Certificates where applicable

The company will be responsible for obtaining the visas if required. The crew is responsible for the maintenance of valid inoculation certificates appropriate to the area of operation. All staff members should take suitable anti-malaria precautions.

#### Aircraft Documents

The Director of Operations and the Director of Maintenance will ensure that the documents relevant to them and required to be on company aircraft are maintained in the office.

These are:

* + - * 1. AOC
        2. ASL of various states as applicable
        3. Certificate of Airworthiness
        4. Certificate of Registration
        5. Radio License
        6. Mass and Balance
        7. Certificate of Insurance
        8. Certificate of release to service
        9. Relevant maps
        10. Jeppesen plates

#### Additional aircraft records

In addition, the below records shall be maintained.

1. Mode ‘S’
2. First Aid Kit Content List
3. ELT Registration

#### Records of Emergency and Survival Equipment

Auric Air shall maintain and make available, at all times, detailed records of emergency and survival equipment carried on board aircraft engaged in international air navigation. These records shall include:

1. The number, type, and colour of life rafts.
2. Details of pyrotechnics.
3. Emergency medical supplies.
4. Water supplies.
5. Type and operating frequencies of portable emergency radio equipment.

#### Continuous Preservation of Operator Documents and Records

A person required to preserve documents or records as the operator of an aircraft shall continue to do so even if they cease to be the operator. In the event of the operator's death, the responsibility to preserve the documents or records shall transfer to their personal representative.

## Flight Authorization

Authorisation for flights will be via a WhatsApp message on the relevant group from the Operations Control Centre (OCC) only. Flight crew and dispatchers should not operate or dispatch any flights that have not yet been posted onto the WhatsApp Group. Any routing or crew changes must also be promulgated on the group for them to be considered valid. If an aircraft experiences a reportable incident or technical issue that has caused a significant delay or requires notification of the OCC, it shall only depart once approval has been received via a WhatsApp message.

## Flying Hours for Management Personnel

Personnel with combined roles as flying crewmembers and management staff shall have their duty time include both flight duty hours and full office hours. The OCC shall roster management pilots for flying duties only after confirming their availability. Management pilots must inform the OCC in advance of any significant periods of non-availability to ensure proper planning and compliance with duty time limitations. Rest periods shall be calculated in accordance with the normal limitations stated in the Fatigue Risk Management System (FRMS).

## Promulgation Of Additional Instructions And Information

An effective communications system ensures efficient exchange of relevant operational information within the company. AASL uses various methods to promulgate all additional instructions and information within the company.

### Internal Memorandums

These shall be used in the form of RED and YELLOW tags when official information which is operational in nature like change of personnel or changes of procedures needs to be promulgated. Internal memorandums will be transmitted by the means available like emails, relevant WhatsApp groups, company web-based software for transmission of information.

#### Red Tags Memorandums

Internal memos that are of a safety critical nature will be marked “RED TAG” and addressed to the relevant group or department. These could be for important operational notices such as:

notices giving information on the condition of a particular runway that impacts the operations negatively.

Notices that may affect the safety of the operation.

Notices that signal a change in procedures that need immediate amendment.

#### Yellow Tags Memorandums

Internal memos that are administrative in nature will be marked “YELLOW TAG” and addressed to the relevant group or department. These could be notices such as:

Notice to introduce a new employee.

Notices that give information from other departments.

Information about fueling information at a certain airstrip.

Aircraft performance information.

Company news

### WhatsApp Groups

The company has established WhatsApp groups to facilitate the promulgation of important and immediate information to relevant operational personnel. This platform shall be used for the distribution of pilot schedules, rosters, and other relevant operational information, as well as the dissemination of manuals, circulars, manual amendment notifications of an urgent safety nature, urgent safety alerts, and operational updates such as weather reports.

### Company Newsletters and / or Circulars

These will be used to promulgate good to know safety information as well as safety performance of the company in general.

### Reporting Forms

Auric Air has made available forms and documents that might be required by operating staff. Some of these forms are produced by the Tanzanian Civil Aviation Authority and are used to notify or to make a report of specific occurrences. Some of them are internal for the reporting of incidents and hazards. The dispatcher on duty will ensure that all flight crew get these forms on their flight folder for the flight. AASL shall ensure that operational significant information is made available to flight crew and other operational staff before the beginning of any operation.

In all cases the transmitter of any information using any of the means above will ensure that all parties give an acknowledgement of receipt.

## Use and Updating of AFM and POH

Flight crews shall use the Aircraft Flight Manual (AFM) and Pilot’s Operating Handbook (POH) as primary references for aircraft operation. Each AFM shall be updated to incorporate all changes mandated by the State of Registry to ensure compliance and safe operation.

## Manuals, Software and Jeppesen Charts

The Chief Pilot is responsible for ensuring that all manuals (including AIP, AIC, and other operational manuals), software, and charts are updated as soon as revisions or amendments become available. Auric Air Services LTD maintains a Jeppesen subscription and receives update alerts. Crew members are not permitted to use charts from any other source.

The Operations Department shall create trip kits for major aerodromes with frequent flight operations. These trip kits will be compiled using the latest version of Jeppesen charts. If any chart is updated, a new trip kit shall be created. Copies of the latest charts shall always be kept onboard the aircraft. The distribution of trip kits will be carried out via WhatsApp, and the compiled kits will be stored on a suitable electronic storage system for future reference. The Chief Pilot shall check Jeppesen every Friday for updates to ensure all charts remain current.

## Control Of Approach Plates on Board The Aircraft

The Dispatching Flight Operations Officer shall print approach plates from JeppView in the operations office, stamp them with the “Auric Air Services” seal, and sign to confirm that they are controlled documents. Only the Chief Pilot or a person authorized by them has the authority to print official approach plates. If plates are printed for personal use by pilots, they must be signed by the Flight Dispatcher and clearly marked with the note: “This is not a controlled document.”

## Operational Control for An Individual Flight

### Operational Control for an Individual Flight

The Director of Operations holds overall responsibility for ensuring that operational control and supervision are fully maintained. The Operations Management Team shares responsibility for overseeing their respective sections. For an individual flight, the Commander (PIC) has the authority and responsibility for the initiation, continuation, diversion, termination, or cancellation of the flight in the interest of safety.

### Before the Flight

The Duty Flight Operations Officer/Dispatcher coordinates the latest flight information and makes decisions regarding flight continuation or cancellation.

The Duty Flight Operations Officer/Dispatcher prepares the flight and, once the Commander begins duty, provides information and consultation on all matters related to the flight, crew, and aircraft.

* The Station Manager supervises all airport activities, including passenger handling, ground handling, and loading. They coordinate with the Operations Office and the Commander. Responsibility for the flight transitions to the Commander once the aircraft doors are closed.
* The Duty Flight Operations Officer/Dispatcher and the Commander ensure that all required manuals are available and up to date.
* They confirm that all documentation needed for flight planning is complete and that the Commander has verified performance calculations.

### Initiation of the Flight

The Commander (PIC) is responsible for initiating the flight.

### During the Flight

Once the flight has commenced, the Commander has full authority over the aircraft.

The Duty Flight Operations Officer/Dispatcher must provide the Commander with any operational information that impacts the flight or any information requested by the Commander.

### **After the Flight**

The Commander must report any operational procedure deviations or events that provide useful information for enhancing flight safety to the Chief Pilot and, if necessary, the Director of Safety.

## En-Route Navigational Facilities

Auric Air shall ensure compliance with regulations governing en-route navigational facilities on proposed routes or areas of operation. Non-visual ground aids must be available over the route to navigate aircraft with the accuracy required by Air Traffic Control (ATC) and must be positioned to allow navigation to any regular, provisional, refueling, or alternate airport with the necessary operational precision. These aids are not required for Visual Flight Rules (VFR) operations or route segments where the use of celestial or other specialized navigation methods has been approved by the Authority. Additionally, non-visual ground aids required for operational approval of routes outside controlled airspace shall be specified in Auric Air's operations specifications, except for those pertaining solely to alternate aerodrome routes.

## Pilot Recruitment Policy and Procedure

### Pilot Recruitment Policy

Auric Air Services Limited (AASL) is committed to a structured, fair, and transparent process for recruiting pilots. The recruitment process ensures that only qualified and competent candidates are selected, with priority given to Tanzanian nationals where possible. All applications will be screened against the following criteria:

1. Submission of a complete CV.
2. Academic qualifications with a minimum grade of "C" in Mathematics, Physics, and Geography.
3. Minimum age of 22 years.
4. Possession of a valid pilot license.
5. Proficiency in the English language.
6. Priority consideration for Tanzanian candidates.

### Pilot Recruitment Procedure

1. **Pre-Screening**
   * Before confirmation of recruitment, the Director of Operations and Chief Pilot (or a designated appointee) shall ensure that applicants are pre-screened as follows:
     + Shortlisting based on CVs and qualifications.
     + Reference checks with previous employers.
2. **Oral Interview**
   * Candidates will participate in a face-to-face interview with a panel consisting of:
     + A Human Resources representative.
     + The Chief Pilot.
     + A member of the operations team.
3. **Written Technical Examination**
   * Candidates who successfully pass the oral interview will proceed to one or more written technical exams administered by the Chief Pilot or Training Captain.
4. **Flight Test**
   * After passing the written examination, candidates will undergo a flight test to evaluate their practical skills and decision-making in a real or simulated environment.
5. **Second Attempt**
   * Candidates who do not meet the required standards in steps 2–4 will be given one additional opportunity to improve and retest.
6. **Final Clearance by Human Resources**
   * Candidates who successfully complete all stages will be handed over to the Human Resources Department for formalities, including:
     + NSSF registration.
     + Bank account setup.
     + Signing of terms and conditions of employment.
     + Submission of all necessary forms and documentation for personal file completion.
7. **Employment Contract**
   * Once all formalities are completed, the candidate will sign the employment contract and officially join AASL.

### Flight Crew Radiotelephony Language Proficiency

Auric Air shall ensure that all flight crew members demonstrate proficiency in speaking and understanding the language used for radiotelephony communications, with a minimum proficiency level of 4.

## Sub Chartered Operations / Dry Lease/ Wet Lease.

1. **Sub-Chartered Operations**

Auric Air shall ensure that any sub-chartered operator has a valid and applicable Air Operator Certificate (AOC) with the necessary approvals. A copy of the AOC is retained in the Company Documents file. For sub-chartered flights conducted for the BMO, only operators audited and approved by Auric Air and the contracting company are utilized.

1. **Dry Lease Arrangements**  
   Under a dry lease, the lessee provides its own crew and assumes operational control of the flights.
2. **Wet Lease Arrangements**  
   A wet lease involves the provision of an entire aircraft and at least one crew member.
3. **Approval for Wet Lease Operations**  
   Auric Air, as an AOC holder, may enter into wet lease arrangements with other air operators, subject to:

* Approval from the Authority;
* Compliance with terms, conditions, or limitations set by the Authority.

1. **Operational Control Requirements**  
   Auric Air maintains operational control of leased aircraft and crew in wet lease arrangements. To meet this obligation, Auric Air must provide the Authority with the following:
2. Aircraft type and serial number;
3. Name and address of the registered owner;
4. Details of the crew members;
5. State of Registry and registration marks;
6. Certificate of Airworthiness and confirmation of compliance with State of Registry airworthiness standards;
7. Name, address, and signature of Auric Air as the responsible party, acknowledging responsibilities under applicable regulations;
8. Copies of lease and maintenance agreements;
9. Duration of the lease; and
10. Any additional information required by the Authority.
11. **Operations Specifications for Wet Lease**  
    Auric Air ensures that its operations specifications include:
12. Names of the parties to the agreement and its duration;
13. Make, model, series, serial number, nationality, and registration marks of each leased aircraft;
14. Lease expiration date;
15. Type of operation;
16. Statement of operational control as determined by the Authority; and
17. Any additional conditions or limitations imposed by the Authority.

### Dry Leasing of Foreign-Registered Aircraft

#### Overview

Auric Air may dry-lease foreign-registered aircraft for commercial air transport with TCAA authorization. Operations must comply with the following requirements:

#### Dry Lease Authorization and Compliance

1. **TCAA Approval**: Authorization is mandatory before operations begin.
2. **Duration**: Dry-leased aircraft operations must not exceed six consecutive months.
3. **State Agreements**:
   * Agreement between TCAA and the State of Registry must exist, covering operational regulations, airworthiness, and TCAA access to the aircraft.
   * Airworthiness compliance with Annex 8 of the Chicago Convention is required unless transferred to TCAA under Article 83bis.

#### Dry Lease Documentation Requirements

Auric Air must provide TCAA with:

1. Aircraft type, serial number, and registration details.
2. Registered owner's name and address.
3. Certificate of Airworthiness confirming compliance with the State of Registry.
4. Lessee's details and acknowledgment of regulatory responsibilities.
5. Lease and maintenance agreements.
6. Lease duration and any additional information requested by TCAA.

#### Dry Lease Operational Guidelines

1. **Crew**: Tanzanian-licensed crew employed by Auric Air must operate the aircraft.
2. **Maintenance**: Aircraft must follow an approved maintenance program, with the lease agreement specifying the program and MEL.
3. **Operational Control**: Full operational control remains with Auric Air.
4. **Fleet Composition**: Foreign-registered aircraft must not form a predominant portion of the fleet.

#### Dry Lease Operational Specifications

The lease agreement must define:

1. Parties involved and lease duration.
2. Aircraft type, registration marks, and operational area.
3. Applicable regulations.

#### Additional Dry Lease Provisions

1. Evidence of aircraft deletion from the lessor’s AOC is required before listing it on Auric Air’s AOC.
2. Immediate coordination with TCAA is necessary in case of disputes or irregularities.

This ensures regulatory compliance, operational safety, and efficiency for dry-leased foreign-registered aircraft operations.

### Auric Air Aircraft Operated Outside of Tanzania

For aircraft operated by Auric Air and registered under the United Republic of Tanzania, specific procedures shall be followed when the aircraft is continuously operated outside the United Republic of Tanzania for a period exceeding thirty days. Auric Air shall ensure that the aircraft remains in an airworthy condition at all times in accordance with its approved maintenance program and applicable airworthiness regulations. Prior to initiating such extended operations, Auric Air shall provide formal notice to the Tanzania Civil Aviation Authority (TCAA) in the format prescribed by the Authority, detailing the intended duration and scope of the operations. Furthermore, Auric Air shall establish and implement arrangements acceptable to the TCAA to facilitate ongoing inspections and oversight of the aircraft’s airworthiness throughout the extended period of operation outside the United Republic of Tanzania. These arrangements shall include, but are not limited to, engaging approved maintenance organizations (AMOs) or certified personnel to perform necessary inspections and maintenance activities in compliance with applicable regulatory requirements.

## Operations For Bars Member Organisations (BMOs)

BMO’s require compliance with Flight Safety Foundations BAR Standard. Auric Air Services Limited shall comply with the safety standards set by Flight Safety Foundation as far as practical and in this regard, if there has been an accident, serious incidents or significant change in the company, the quality Manager or the Director of Operations shall upload the details of the change on “BAR soft” within 7 days of the official date of change. Safety reports (of accidents or serious incidents) and details thereof must be shared with, the contracting company and the BARS Program Office.

## Mandatory Insurance

Auric Air shall ensure that no aircraft is operated without a valid insurance policy covering third-party risks. For commercial air transport, the insurance policy must also include coverage for passengers’ liability, cargo, baggage, and mail risks. The minimum sum insured for any aircraft shall comply with the requirements specified by the Authority.

# CREW COMPOSITION

## GENERAL

1. The minimum number and composition of the flight crew shall not be less than the minimum number and composition specified in the approved POH/AFM and the respective Certificates of Airworthiness.

For the C208B and PC12, the flight crew shall include one qualified PIC with a valid license issued by the Authority for the aircraft type and variant.

For the DHC8, a minimum of 2 qualified pilots, one designated as a PIC and the other as the first officer with both pilots holding valid licences issued by the Authority for the aircraft type and variant.

1. Auric Air shall allocate additional flight crew members when it is required by the type of operation or customer preferences, and the number of such additional flight crew members shall not be less than the number specified in the AFM/POH. For 2 crew operations, AASL shall ensure that at least one pilot is less than 60 years of age.
2. Flight crew in single pilot operations shall adhere to the single crew SOPs and those in multi crew operations shall abide by the dual crew SOPs as well as the relevant chapters of the TCARS.
3. An instructor, an engineer, an inspector or an observer may use cockpit seating provided for observers for the purpose of evaluation or observation.
4. Auric Air shall not operate any aircraft with a maximum mass exceeding 5,700 kg for commercial air transport operations without having at least two pilots as part of the flight crew.

### Crew members for IFR Operations (where applicable)

Operations under IFR or by night, the assigned crew members for such operations shall be as specified in the applicable regulations/ approval and the approved aircraft flight manuals but at a minimum shall have the required ratings, recency and approvals to conduct such flight operations

### Crew members VFR Operations

Operations under VFR, the assigned crew members for such operations shall be as specified in the applicable regulations/ approval and the approved aircraft flight manuals but at a minimum shall have the required ratings, recency and approvals to conduct such flight operations

### Single-Pilot Commercial Operations

Auric Air shall ensure that single-pilot commercial operations comply with the following requirements:

* A Commercial Pilot License holder shall not operate as pilot-in-command (PIC) in an aircraft certified for single-pilot operations unless:
  1. For passenger-carrying operations under Visual Flight Rules (VFR) beyond 50 nautical miles from the departure aerodrome, the pilot has a minimum of 500 hours total flight time on aircraft or holds a valid instrument rating.
  2. For multi-engine aircraft operations under Instrument Flight Rules (IFR), the pilot has at least 700 hours total flight time on aircraft, including 400 hours as PIC, of which 100 hours must have been under IFR, including 40 hours of multi-engine operations.
  3. The 400 PIC hours referenced above may be substituted with co-pilot hours on a 2:1 basis, provided the hours were accrued within an established multi-pilot crew system as outlined in the Operations Manual.
* For single-pilot IFR operations, additional requirements specified under Regulation 157 must be satisfied.
* In multi-pilot operations, before assuming the role of PIC, the pilot must complete the command course prescribed in the Operations Manual as specified in the Civil Aviation (Air Operator Certification and Administration) Regulations.

These standards ensure that pilots operating in single-pilot or multi-pilot commercial operations are adequately qualified and experienced to maintain the highest levels of safety.

### Single-Pilot Operations Under IFR

An aircraft shall not be operated under instrument flight rules (IFR) by a single pilot unless the flight manual permits a single-pilot crew, the aircraft is propeller-driven, a maximum certificated take-off mass of 5,700 kg or less, and is equipped as per Civil Aviation Instruments and Equipment Regulations. Additionally, the pilot-in-command must meet all experience, training, checking, and recency requirements. Auric Air does not currently operate single-crew aircraft at night.

## Designation Of PIC

### General

If two-crew are tasked to operate the flight the crew planner will nominate one pilot as the pilot in command in accordance with a list defined by the chief pilot considering appropriate qualifications.

### Designation of crew on the Schedule

Schedule must clearly state (C) for PIC, (FO) for First Officer (SP) for Safety Pilot after the name of the pilot.

## Responsibilities and Authority of the Pilot-In-Command (PIC)

The **Pilot-In-Command (PIC)** is responsible and has the authority for the safe and efficient operation of the aircraft from the moment it is ready to move for flight until the engines are shut down.

### Responsibilities of the PIC

* **Operation and Safety:**
  + Responsible for the safe operation of the aircraft while in command.
  + Ensures the conduct and safety of all flight crew members and passengers on board.
* **Discipline:**
  + Maintains discipline among all persons on board the aircraft.

### Authority of the PIC

* **Issue Commands:**
  + Has the authority to give any commands deemed necessary in the interest of the safety of the aircraft, persons, or property.
* **Disembark Persons or Cargo:**
  + May remove any person or cargo that, in their opinion, represents a potential hazard to the safety of the aircraft, persons, or property.

### General Restrictions for the PIC

1. The PIC shall not allow the aircraft to endanger persons or property.
2. The PIC shall not conduct abnormal or simulated situations during flights, whether passengers are on board or not.

### Additional Roles of the Commander

The **Commander** shall:

* Maintain overall responsibility for the execution of the flight.
* Act as the company representative when interacting with other crew members during flight duty and at outstations.
* Promote an atmosphere of optimum crew cooperation and coordination.
* Ensure flight preparation and execution comply with legal and company procedures as per TCARs.
* Ensure they are in the appropriate condition and proficient to report for duty without any doubts.

## Training and Check Flights

On training and check flights, the pilot undergoing training or testing will occupy the seat appropriate to the check. The following applies.

1. For operator proficiency checks and training, the nominated TRE/TRI will be the pilot in command.
2. During line checks the pilot being checked will be nominated pilot in command in all respects unless the pilot’s line check is overdue in which case the TRE will be the pilot in command.
3. Should the pilot undergoing a line check fail the first sector during a precision flight, the TRE will assume command for the remaining sectors of the task.

## Flight Crew Incapacitation

### Types of Incapacitations

Incapacitation may take many forms, such as acute discomfort, involuntary muscle spasm, partial loss of vision or hearing, a complete loss of consciousness whilst at the controls and possibly most dangerous, a subtle incapacitation where the PIC is fully conscious and responding to some stimuli but then acts in an irregular or irrational manner

### General

The handling of the aircraft, its systems, navigation, communication or any other action of the PIC is to be constantly monitored by the Co-Pilot and any irregularities, unexplained action or deviations from the required flight path that may occur are to be queried and, if not satisfactorily explained, it is to be assumed that the PIC is suffering from some sort of incapacitation. In whatever form it takes, another very dangerous situation may arise from interference with the flying controls to the extent that the other crewmember is unable to maintain control of the aircraft. It is therefore necessary for pilots to be aware of the alternatives available to them.

### The “Two Communication” Rule

Incapacitation can be detected using the “Two Communication” rule, whereby a crewmember should suspect incapacitations any time when a pilot does not respond appropriately to a second verbal communication associated with a significant deviation from a standard operating procedure or flight profile. This rule shall be used by Auric Air pilots as a matter of principle

### Single Pilot Operations

If the single PIC becomes ill during flight, they must immediately take action to land at the nearest safe and suitable location, prioritizing safety while considering practicalities without unnecessarily prolonging the flight. The PIC should also inform the passengers of the situation and their ability to conduct an emergency landing if necessary.

### Two Pilot Operations

As soon as a pilot, particularly the PIC, is aware that he or she is not feeling well or suffering from any symptoms that could result in a deteriorated performance, he shall inform the Co-Pilot who shall immediately take control of the aircraft.

A decision should immediately be made in regard to revising the planned flight and the urgency of landing

### Priorities

a) The first priority is to ensure that the afflicted crewmember is fully back in his seat and his seat and his seat harness is in the locked position. If possible, the victim’s feet should be drawn back from the pedals, hands and arms positioned between the knees. The affected pilot is not to take control again for the remainder of the flight. He shall not fly again until he has been examined by a physician or, in the case of diarrhea or vomiting, has had no symptoms for 24 hours

b) The second priority is to alert ground operations to the problem. A PAN prefix should be used on VHF, requesting such landing priority as may be required, and where it is the PIC who is incapacitated, requesting such other advice as the Co-Pilot may need.

In the case of aircraft carrying a crewman, this person should be capable of handling the aircraft checklist and giving a limited degree of assistance to the pilot who remains in control of the flight

Simulation and practice are best carried out in the aircraft whilst on the ground

### Subtle Incapacitation

As described above, the PIC may remain apparently fully conscious and respond to some stimuli but then act in an irregular or irrational manner contrary to normal pilot discipline or instructions given in this Manual. Any irregularities, unexplained actions, deviations from flight path, failure to comply with proper control instructions or failure to react to instrument indications as part of a procedure or not, should immediately be challenged by the Co-pilot invoking the “Two communication” rule. If immediate corrective action is not taken, then the Co-Pilot must challenge the PIC again and to include the words.

**“If you do not make a correction, I will assume control”**

Under no circumstances should the Co-Pilot allow such time to pass between his initial challenges and his final assumption of command that the aircraft and occupants are placed in any further danger

During non-precision or visual approaches particular attention must be paid to the performance of the PIC who is expected to make sufficient commentary of his actions and assessment of the aircraft position to enable the Co-Pilot to compare these comments with the actual situation and query any discrepancies in actions or judgment

If incapacity of a crewmember results is less than the number of crew as specified in the Flight Manual, by Management or by the contract, to continue the flight, communication shall immediately be made with Auric Air flight operations and / or the client in the case of a contract. The flight shall be discontinued until the crew can be brought up to strength or permission given for the aircraft to be flown back to base by the remaining crew

Incapacitation constitutes an incident and shall be reported as such on an incident report form. (See Company Safety Manual for further information)

### Auric Air Definition of the Succession of Command

In the event of the incapacitation of the PIC, command shall be determined based on the following sequence: A fully qualified pilot on the specific aircraft, including takeoff and landing capabilities, takes precedence over any partly qualified pilot. A Pilot in Command (PIC) takes precedence over a Co-Pilot. If two pilots of equal rank are available, the rostered Co-Pilot will assume command, with seniority taking precedence if necessary. A senior, fully qualified pilot onboard but not operating the flight (e.g., on a positioning flight) may be approached to assume command but may decline depending on the circumstances. This sequence ensures clarity and logical delegation of command

#### In the Case of Two Crew Operation

Auric Air Services will designate an Aircraft Commander for each flight. In the event of the Commander’s incapacitation, the Co-Pilot will assume command. During training, check, or supervision flights, if the instructor occupies the right-hand seat, they will retain the role and authority of the Commander under these conditions. The PIC is ultimately responsible for the safety of the aircraft, its crew, passengers, and cargo, and this responsibility can only be transferred in the case of the Commander’s incapacitation

## The relief of PIC and other flight crew

AASL operations do not anticipate any operational condition that requires relief of flight crew.

## Operations On More Than One Type or Variant

The chief pilot shall ensure that pilots operating multiple types of aircraft do not exceed the limitations specified in the requirements (refer to the OM-D). Different model variants listed under the same type rating on the pilot's license shall be regarded as a single type. Crew members shall not operate two different variants of aircraft within any 24-hour period. Pilots transitioning between different aircraft types must have a 24-hour off-duty period, calculated from 30 minutes after their last landing to 45 minutes before their expected next departure in the different aircraft type. This is subject to approval by the Authority.

## Inexperienced Flight Crew Members

A flight crewmember shall considered inexperienced, following completion of Type Rating or command course, and the associated line flying under supervision, until he has achieved on the type either:

* 100 flying hours and flown 10 sectors within a consolidation period of 120 consecutive days or
* 150 flying hours and flown 20 sectors (no time limit)

A newly qualified Pilot in Command on an Auric Air Services aircraft shall not fly with a newly qualified Co Pilot in the case of two-man crew operation. A newly qualified Pilot in Command will be released from this limitation after attaining 100 hours in command on type after release on line duties.

## Flightdeck Seating

Crew are to stay in their assigned seats during all phases of flight. The flight Crew members are to use all seat belts and harnesses during take-off and landing and at any other stage of flight.

## Flying While Undergoing Conversion Training

When a flight crew member has begun a conversion course to another type or class, with any operator, no flying duties are permitted on any previously operated type or class until the course is terminated or completed.

## Family Members

No family members related by blood or marriage, under normal circumstances, are to be rostered to operate as flight crew on a flight.

## Exchange of Controls In Case Of Two Pilot Operation

In two-man flight crew operations, one pilot serves as the Pilot Flying (PF) while the other is the Pilot Monitoring (PM).

* If the PF wishes the PM to take over the controls, the PF shall say, “YOU HAVE CONTROL.”
* The PM must take over the controls and confirm by responding, “I HAVE CONTROL.” The PF shall not relinquish control until they hear the PM's response.
* Similarly,
* If the PM is the PIC and needs to assume control, they shall say, “I HAVE CONTROL,”
* PF must relinquish control by responding, “YOU HAVE CONTROL.” This ensures clear communication and safe transfer of control.

## Carriage Of Flight Safety Inspectors from the TCAA

Any person appointed by the TCAA to as a flight safety inspector with appropriate credentials shall be permitted at any time to board and fly in any aircraft operated under the company AOC and to enter and remain on the flight deck.

However, the aircraft commander may refuse to allow the inspector to enter or remain on the flight deck if, in his opinion, the safety of the aircraft would thereby be endangered or in an emergency situation. In this case, a report is to be submitted to the flight safety inspector giving the reasons for this decision.

## Carriage Of Quality Auditor

A person appointed by AASL to carry out Quality Audits in accordance with Quality Manual may be required from time to time to fly on the company aircraft to conduct flight inspections in accordance with audit procedures.

## Cabin Crew Composition

### General Cabin crew requirements

1. The C208B and PC12 do not need cabin crew.
2. For the DHC8 flying with passengers, AASL shall ensure that the minimum number of required cabin crew members are on board as stipulated in the TCARS.

### Normal and minimum Cabin Crew Number

|  |  |  |
| --- | --- | --- |
| Aircraft type | No. Of Passengers | Minimum Cabin Crew |
| DHC8 | * 1. - 50 | 1 |

### Operating with Minimum Cabin Crew

AASL commercial flights shall not be operated with less than minimum cabin crew.

If operations require more than one cabin crew member, the crew planner shall nominate one as a senior cabin crew member whose name will appear third on the crew schedule.

### Cabin Crew Requirements for Parked Aircraft with Passengers

When passengers are onboard a parked Auric Air aircraft, a minimum of one cabin crew member or another individual qualified in emergency evacuation procedures must be present. If the standard number of cabin crew required for the flight operation is more than one, at least half of the required number must be onboard.

### Fractional Cabin Crew Calculations

For calculations where half of the required cabin crew results in a fractional number, the total may be rounded down to the nearest whole number.

### Authority-Directed Cabin Crew

Auric Air acknowledges that the Authority may mandate the inclusion of at least one cabin crew member for commercial air transport operations, even if fewer than 20 passengers are onboard.

### Emergency Evacuation Duties

Cabin crew members assigned to emergency evacuation duties must occupy their designated seats during take-off, landing, and at any time as directed by the pilot-in-command. These seats must comply with the Civil Aviation (Instruments and Equipment) Regulations.

### CCM and SCCM Qualification, recency and experience

Cabin Crew Member (CCM) and Senior Cabin Crew Member refer OM A Chapter 5 and AASL CCMM.

### Relief of Cabin crew

AASL Operations do not anticipate any operational condition requiring relief of cabin crew.

# QUALIFICATION REQUIREMENTS

## Description Of License, Qualification & Training

All flight crewmembers working for or on behalf of Auric Air must possess a current Tanzania Flight Crew License in compliance with the Tanzania Civil Aviation Regulations. For operations requiring two crew members, one will be designated as the pilot-in-command by dispatch. Pilots shall not conduct flight operations unless they are within the privileges and limitations of their licenses as specified in the Civil Aviation (Personnel Licensing) Regulations. Additionally, license holders must have their license, certificate, approval, or authorization physically present or readily accessible at their workstation while exercising the privileges of such credentials.

### Inspection of License

A person who holds a licence, certificate, approval or authorisation required by the TCARs shall have it in their possession whilst at their work station and shall present it for inspection upon a request from the Authority or any other person authorised by the Authority

### Renewal of Licenses

The Tanzania Civil Aviation Authority holds each crew member personally responsible for the renewal of their license. Flight crew members must arrange their medical examinations well in advance of their license expiry date to ensure timely renewal. Crew members are not permitted to fly with a license that has expired or is due to expire during a tour where renewal is not possible. After renewing their license or any change in status, crew members must submit the relevant copies of their licenses to the Chief Pilot via the Archives Department. The submitted information must include:

* License Type
* License Number
* TCAA Reference Number
* License Renewal Date
* IR Renewal Date (*if applicable*)
* Instructor’s Rating Grade (*if applicable*)
* Instructor’s Rating Renewal Date (*if applicable*)

## Personal Flying Logbooks

Each flight crewmember must maintain a personal record of their flying hours in an approved logbook, ensuring all details are accurately recorded as required by the logbook format. The following points must be observed:

### Logging of Flight Time

Flight time records shall include personal details (name and address of the holder) and, for each flight, the following information: the pilot-in-command's name, date and time of flight (in UTC, block to block), departure and arrival locations, aircraft type (make, model, variant, and registration), single or multi-engine status, total flight time, accumulated flight time, and specific remarks (e.g., student PIC time or instrument flight time). Synthetic flight trainer sessions must log the type and qualification number of the training device, date, total session time, and accumulated total time. Operational conditions such as night or instrument flight rules (IFR) must also be specified.

### Flight Time Logging Requirements

1. **Pilot-in-Command (PIC):** PIC time includes all flight time during which the pilot acts as PIC, solo flights, or PIC under supervision (countersigned by the PIC). Instructor flight time can also be logged as PIC.
2. **Co-Pilot:** Co-pilot flight time can be logged for multi-crew operations as required by the aircraft’s certificate of airworthiness. Cruise relief co-pilot time is logged while occupying a pilot seat.
3. **Instruction Time:** Instruction and training must be certified by an authorized instructor.
4. **Supervised Time:** Co-pilots acting as PIC under supervision may log flight time if all PIC duties were carried out without intervention, provided the supervision method is approved by the Authority.

Multiple flights on the same day, returning to the same departure point within 30-minute intervals, may be recorded as a single entry.

Logbooks must be summarized and presented to the Chief Pilot for certification upon completion of instrument rating renewal tests and/or at the time of license renewal Type Rating Requirements

* Pilots must have the appropriate aircraft type rating endorsed on their license for the aircraft they operate.
* The following limitations apply to company type ratings:
  + A pilot may operate up to two separate types during one duty period, provided they are current on both.
  + The chief pilot shall monitor multi-rated pilots closely to ensure task allocation aligns with their recent experience on type.
  + For operations on variants of the same type, adequate differences training must be completed before exercising the privileges of the type rating on the variant.

### Type Rating Differences Course Requirement

A flight crew member transitioning between variants of the same aircraft type or between aircraft with similar operating procedures, systems, and handling characteristics must complete a Type Rating Differences Course. This course shall be approved by the Authority and tailored to address the specific differences in systems, operations, and procedures required for safe and efficient operation of the assigned aircraft variant or type.

## Flight Crew Minimum Qualifications

### Initial Training For Flight Crew

Auric Air shall not assign as a flight crew member unless they have completed the initial ground training approved by the Authority for the specific aircraft type they are to operate. A flight crew member shall not serve unless they have completed the initial flight training approved by the Authority for the specific aircraft type.

### Pilot in Command – DH8 Minimum Crew Qualifications

1. A current Airline Transport Pilot’s License with a minimum of 3,500 hours total flight time.
2. A valid English language proficiency endorsement
3. Instrument rating.
4. For rated pilots, successful release to line duties after completing the syllabus as prescribed in the Auric Air Flight Crew Training Manual.
5. For unrated pilots, successful completion of the syllabus under the Company training captain.
6. Check-out as per the Auric Air Flight Crew Training Manual.

### Co-Pilot – DH8 Minimum Crew Qualifications

1. A current Commercial Pilot’s License with a minimum of 1,000 hours total flight time.
2. A valid English language proficiency endorsement
3. Instrument rating.
4. For rated pilots, successful release to line duties after completing the syllabus as prescribed in the Auric Air Flight Crew Training Manual.
5. For unrated pilots, successful completion of the syllabus under the Company training captain.
6. Check-out as per the Auric Air Flight Crew Training Manual.

### Pilot in Command – Cessna 208 / PC12 Minimum Crew Qualifications

1. A current Commercial Pilot’s or Airline Transport Pilot’s License.
2. A valid instrument rating proficiency endorsement.
3. For rated commanders, successful release to line duties after completing the syllabus as prescribed in the Auric Air Flight Crew Training Manual.
4. For non-type-rated commanders, successful completion of the syllabus under the Company training captain.
5. Experience requirement of 1,000 hours total flight time and check-out as a commander as per the Auric Air Flight Crew Training Manual.

### Safety Pilot – Cessna 208 / PC12

**Minimum Crew Qualifications**

1. A current Commercial Pilot’s License.
2. A valid English language proficiency endorsement and instrument rating.
3. For rated pilots, successful release to line duties after completing the syllabus as prescribed in the Auric Air Flight Crew Training Manual.
4. For non-type-rated pilots, successful completion of the syllabus under the Company training captain.
5. Experience requirement of 250 hours total flight time on type and check-out as per the Auric Air Flight Crew Training Manual.

**Note**

The above requirements may be reduced based on a review of the candidate’s qualifications and the company’s operational needs.

### Minimum qualifications for United Nations (UN) Flights

#### PIC (UN)

When operating for the UN, the Pilot in Command MUST meet the following requirements:

|  |  |  |  |
| --- | --- | --- | --- |
| **Qualifications** | **More than 5700 kg Multi** | **Less than 5700 kg Multi** | **Single-Engine** |
| License | ATPL | CPL | CPL |
| Instrument Rating | Command multi-engine | Command, multi-engine | Command |
| Total Hours | 3000 | 2500 | 2000 |
| Total Command | 2500 | 1500 | 1500 |
| Total Command Multi | 500 | 500 | N/A |
| Total Command on type | 100 | 100 | 100 |

#### Co-Pilot (UN)

And the Co-Pilot MUST meet the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Qualifications** | **More than 5700 kg Multi** | **Less than 5700 kg Multi** | **Single-Engine (safety pilot)** |
| License | CPL | CPL | CPL |
| Instrument Rating | Command | Co-Pilot | Co-pilot |
| Total Hours | 500 | 250 | 300 |
| Total Multi | 100 | 50 | N/A |
| Total on type | 50 | 100 | 50 |
| Total Time as PIC (Only for UN) | 250 | 100 | 100 |

All pilots eligible to fly for the UN will be indicated on the whiteboard or on the electronic records system by the archives departments.

## Recency Requirements

A pilot shall not act as PIC, co-pilot, or safety pilot of an aircraft unless they have carried out at least 3 take-offs and 3 landings in the same type or variant of aircraft within the preceding 90 days or in a flight simulator approved for the purpose by the appropriate authority. A pilot who has lost their recency experience must undergo training as specified in OM Part D. The 90-day period may be extended up to a maximum of 120 days by line flying under the supervision of a Type Rating Instructor. Pilots may fulfill the required take-offs and landings using an Authority-approved visual synthetic flight trainer capable of simulating these maneuvers.

A flight crew member who does not meet recency requirements must re-establish proficiency under the supervision of a check pilot by completing at least three take-offs and landings in the same aircraft type, or in an advanced synthetic flight trainer if applicable. These maneuvers must include a take-off with a simulated critical engine failure, a landing from an instrument landing system (ILS) approach to the lowest authorized ILS minimum, and a full-stop landing. When using a synthetic flight trainer, the crew member must have logged at least 100 flight hours in the aircraft type and complete two observed landings during live operations within 45 days under weather minima no less than those specified in the air operator certificate holder’s operations specifications for Category I operations. The check pilot must certify proficiency and may require additional maneuvers to confirm qualification.

## Instrument Rating Qualifications

The currency requirements to maintain an instrument rating are 6 hours instrument flight time (3 must be in the category of aircraft), 6 approaches flown within the preceding 6 months. During the 6 months following renewal of your instrument rating, you are considered to be current. No pilot who has not completed successfully an Instrument Flying test shall occupy the left seat of a Company aircraft with passengers on board.

## Pilot Under Supervision

1. All pilots flying AASL aircraft from the left-hand seat, which are not designated or appointed, as qualified Aircraft Commanders on type will be considered as pilots under supervision.
2. Pilots flying AASL aircraft from the right-hand seat will be considered as pilots under supervision when:

* For the C208B and PC12, undergoing a conversion course onto the type of aircraft.
* For the DHC8, undergoing line flying under supervision after the type rating in order to build their experience on the type.

1. When flying as a second crew member on the C208B or PC12 during a flight conducted under multi-crew procedures approved by the authority, time should be logged as **PICUS**.

## Management Pilots

1. Must ensure that they maintain currency in all the requirements of their licence.
2. Must ensure that duty time is logged for all management/office hours utilized, this will be recorded onto the FDP system and count towards daily FDP.
3. The duty time for Management Pilots may be found in chapter 8 of this manual.

## Maximum Age Limitation for Pilots

The maximum age for pilots in AASL is 65 years. In this age bracket, the older pilot shall be paired with a pilot who is less than 60 years of age. When operating in a foreign country, the local regulations shall apply, or whichever is the lowest

## Route and Airport Qualification

1. **General Requirements**  
   Auric Air ensures that all pilots meet the Tanzania Civil Aviation Authority (TCAA) requirements as the minimum standard, with enhancements to maintain operational safety and efficiency. Flight crew members must demonstrate adequate knowledge of the routes and aerodromes to be used. Practical methods, including thorough briefings using all available information, are employed to ensure flight deck crew are adequately prepared before departure.
2. **Pilot Responsibility**  
   It is the responsibility of individual pilots to ensure they are qualified to operate a specific route or aerodrome. Pilots must comply with all applicable regulations, limitations, and local procedures while being thoroughly conversant with the operational aspects of the route and aerodrome.
3. **Route Competence Training**  
   Route competence training includes:

* Knowledge of terrain and minimum safe altitudes.
* Understanding seasonal meteorological conditions.
* Familiarity with meteorological, communication, and air traffic facilities, services, and procedures.
* Search and rescue procedures.
* Navigational facilities and long-range navigation procedures associated with the route.
* Procedures for flight paths over heavily populated and high air traffic density areas.

1. **Aerodrome Competence Training**  
   Aerodrome competence training focuses on:

* Obstacles, topography, lighting, and approach aids.
* Minimum safety altitudes.
* Procedures for arrival, departure, holding, and instrument approaches.
* Consideration of flight paths over heavily populated areas.

1. **Specific Requirements for Pilot-in-Command (PIC)**  
   Auric Air shall not utilize a PIC on a route or aerodrome until the following qualifications are demonstrated:
2. Adequate knowledge of:
   * Route terrain and minimum safe altitudes.
   * Seasonal meteorological conditions.
   * Meteorological, communication, and air traffic procedures.
   * Search and rescue procedures.
   * Navigational facilities and procedures for the route.
3. Procedures applicable to:
   * Flight paths over heavily populated and high air traffic density areas.
   * Obstructions, physical layout, lighting, approach aids, and arrival/departure procedures.
   * Instrument approach and holding procedures, which may be demonstrated in an appropriate training device.
4. **Aerodrome Familiarity**  
   A PIC must have made an actual approach into each aerodrome of landing on the route, accompanied by a qualified pilot, unless one of the following conditions is met:

* The approach terrain and procedures are similar to those familiar to the pilot, with added margins to operating minima.
* Descent is made during the day in visual meteorological conditions.
* The operator qualifies the PIC using pictorial presentations.
* The aerodrome is adjacent to another aerodrome where the PIC is currently qualified.

1. **Record-Keeping**  
   Auric Air shall maintain detailed records to demonstrate to the Authority the qualifications of its pilots and the methods used to achieve and maintain these qualifications.

### Route Currency Requirements

Auric Air shall not operate a pilot as pilot-in-command (PIC) on a specified route or within an area approved by the Authority unless the pilot has, within the preceding 12 months, completed at least one trip as a flight crew member, check pilot, or observer in the flight crew compartment within that area. This includes routes or aerodromes requiring the application of special skills or knowledge for take-off, landing, or associated procedures.

If more than 12 months elapse without the PIC completing such a trip over the specified route, area, or aerodrome, or practicing the associated procedures in an adequate training device, the pilot must requalify in accordance with this regulation before being assigned to operate in that capacity.

### Route Competence Training

Route competence training includes the following knowledge areas:

* Terrain and minimum safe altitudes.
* Seasonal meteorological conditions.
* Meteorological, communication, and air traffic facilities, services, and procedures.
* Search and rescue procedures.
* Navigational facilities associated with the route to be flown.
* Procedures for flight paths over heavily populated areas and areas with high air traffic density.
* Obstructions, physical layout, lighting, approach aids, and procedures for arrival, departure, holding, and instrument approaches, including applicable operating minima.

### Aerodrome Competence Training

Aerodrome competence training includes the following knowledge areas:

* Obstacles, general topography, lighting, and approach aids.
* Minimum safety altitudes.
* Arrival, departure, holding, and instrument approach procedures.
* Procedures for flight paths over heavily populated areas.

### Pilot in Command’s Initial Route Training

After being certified as competent to operate as PIC, a new Pilot in Command’s shall only be rostered on routes on which he has already been checked for a minimum of 30 days , 50 sectors whatever comes last or until the Chief pilot permits otherwise.

## Route Familiarization Methods

### Qualification to Operate on a Particular Route

To ensure Auric Air pilots are qualified to operate on a specific route or into a particular aerodrome, the following methods shall be utilized:

### Crew Briefing

Pilots must conduct a comprehensive self-briefing using available resources, which include:

* + **Jeppesen Charts**: These provide detailed navigational and aerodrome information.
  + **Auric Air VFR Charts**: These charts offer essential visual flight rules (VFR) guidance tailored to Auric Air’s operations.
  + **Operations Office Resources**: Pilots must review all route and aerodrome-specific information available in the Operations Office, including weather reports, NOTAMs, and aerodrome procedures.
  + **Google Earth**: Pilots may use Google Earth to visually familiarize themselves with the terrain, aerodrome layout, and surrounding areas to enhance situational awareness.

### Chief Pilot Briefing

Pilots shall receive a formal briefing from the Chief Pilot or a designated representative from the Chief Pilot’s office. This briefing will cover route-specific details, aerodrome characteristics, and any additional safety considerations necessary for the operation.

### Previous Experience

* Pilots who have operated on a specific route or into a particular aerodrome within the past 12 months as a flight crew member are considered familiar with that route or aerodrome.
* If the pilot has not operated on the route or aerodrome within this period, additional briefing or familiarization will be required.

### Safety Risk Analysis

* A safety risk analysis of the route and aerodrome identifying any potential operational hazards may be used
* This analysis ensures that all risks are adequately mitigated and that pilots are equipped with the necessary knowledge to operate safely.

## Promotion From First Officer To Captain

Refer to AASL OM D – Chapter 3

## Qualifications Of Checking and Supervisory Personnel

### Authorized Instructor Qualifications

Auric Air shall not use a person as an instructor in an established training program unless that person meets the following criteria for the applicable aircraft type:

* 1. Holds the required licences and ratings to serve as a pilot-in-command.
  2. Has satisfactorily completed the appropriate training phases, including recurrent training, for the role.
  3. Has passed the necessary proficiency, competency, and recency of experience checks.
  4. Has completed applicable initial or transitional training requirements and an Authority-observed in-flight competency check.
  5. Holds a valid Class 1 medical certificate.

### Check Pilot Qualifications

An air operator certificate holder shall not use a person as a check pilot unless that person meets the following qualifications for the aircraft type:

* 1. Holds the required pilot licences and ratings to serve as a pilot-in-command.
  2. Has satisfactorily completed all relevant training phases, including recurrent training, for the role.
  3. Has passed the necessary proficiency, competency, and recency of experience checks.
  4. Has completed applicable initial or transitional training requirements and an Authority-observed in-flight competency check.
  5. Holds a valid Class I medical certificate.
  6. Has received approval from the Authority for check pilot duties.

### Additional Check Pilot Requirements

A check pilot shall meet the following additional requirements:

* 1. Be designated by the Authority for a specified function within the preceding 12 months.
  2. For checks involving flight crew positions:
     + Hold the necessary flight crew licences and ratings.
     + Complete all applicable training, qualification, and currency requirements for the crew position and flight operations being checked.
  3. For checks as an observer:
     + Hold the necessary pilot licences and ratings.
     + Complete all applicable training, qualification, and line observation requirements for the operations being checked.
  4. For checks in a synthetic flight trainer:
     + Complete or observe all training, qualification, and line observation requirements for the position and flight operations being checked.

### Check Pilot Authorization

A check pilot may be authorized to:

* 1. Conduct proficiency or competency checks, line checks, and special qualification checks.
  2. Supervise the re-establishment of landing currency.
  3. Supervise initial operating experience requirements as prescribed by the regulations or the Authority.

## Crew Resource Management

The company shall ensure that each crew member undergoes CRM training as part of initial/recurrent training completed biennially. A crew member or flight operations officer shall not operate unless that person has completed initial and recurrent crew resource management training See Training Manual – OM D Chapter 17 for further details of required CRM training. Auric Air shall ensure that elements of Crew Resource Management (CRM) are integrated into all appropriate phases of recurrent training. Additionally, each flight crew member shall undergo specific modular CRM training, ensuring that all major CRM topics are covered within a period not exceeding three years.

## Dangerous Goods Training

The Company shall ensure that each crew member and certain ground staff undergo DG Awareness Training biennially. See Training Manual – OM D for further details of required DG Awareness Training.

## Recurrent Training And Checking

1. Theory (soft skills) Refresher Training

Auric Air shall ensure that each flight crew member undergoes ground and refresher training, including aircraft systems review, operations manual tests, and procedures tests, at least every 12 months. If this training is conducted within three months prior to the expiry of the 12-month period, the next training must be completed within 12 months of the original expiry date of the previous training. A method, such as a questionnaire, shall be implemented to verify the knowledge gained during ground and refresher training.

In addition, each flight crew member shall complete aircraft training or synthetic flight trainer training at least every six months. If conducted within three months prior to the expiry of the six-month period, the next training must be completed within six months of the original expiry date of the previous training.

1. Operator Proficiency Check (Base Check)

Auric Air Services Limited shall ensure that each flight crew member undergoes operator proficiency checks to demonstrate his competence in carrying out normal, abnormal and emergency procedures as part of a normal crew complement.

For the C208B and PC12 , the check shall be performed thrice in any period of one year and any two checks will not be separated by a period of more than 5 months between any two.

For the DHC8, the check shall be performed twice a year separated by no more than 6 months. Refer OM D.

c) Line Check (Route check)

Auric Air Services Limited ensures that each flight crew member undergoes a line check in the airplane to demonstrate competence in normal line operations. The validity period for a line check is 12 calendar months, plus the remainder of the month in which it is issued. Additionally, operator proficiency checks are valid for six months, plus the remainder of the month of issue. If an operator proficiency check is conducted within the final three months of a previous check’s validity, the new check remains valid for six months from the expiry date of the previous check.

d) Emergency and Safety Equipment Training and Checking (SEPT)

Auric Air Services Limited ensures that each flight crew member undergoes annual training and checking on the location and use of all emergency and safety equipment, as detailed in the training manual. Crew members may also participate in random tabletop exercises to assess their proficiency in handling safety and emergency equipment. The emergency equipment onboard includes life jackets, fire extinguishers, first aid kits, survival kits, firefighting drills, and an axe. The validity period for emergency and safety equipment checks is 12 months, plus the remainder of the month in which the check is issued. If a check is conducted within the final three months of a previous check’s validity, the new check remains valid for 12 months from the expiry date of the previous check.

## Inexperienced Crew

Before releasing crew to line duty, the Director of Operations shall consider the overall experience of the flight crew to prevent rostering inexperienced flight deck members. For single-crew operations, an inexperienced crew member is defined as a commander with less than 100 hours on type as a released PIC. For two-crew operations, inexperienced is defined as either flight deck crew member having less than 100 hours in their respective roles on a particular aircraft type. In cases where both the PIC and SIC have less than 100 hours, they shall not be paired together for operations.

When a co-pilot has fewer than 100 hours of flight time in the aircraft type being operated and the PIC is not an appropriately qualified check pilot, the PIC shall perform all take-offs and landings under specific conditions. These conditions include operations at special airports designated by the Authority or the air operator certificate holder and during adverse situations such as low visibility (1,200 meters or below), Runway Visual Range (RVR) of 4,000 feet or below, adverse runway conditions (e.g., water, snow, or slush), reported braking action less than “good,” crosswinds exceeding 15 knots, wind shear in the vicinity, or any other conditions deemed prudent by the PIC.

Additionally, neither the PIC nor the co-pilot may conduct operations unless at least one of them has 75 hours of line operating flight time in the aircraft type as PIC or co-pilot. In cases involving the introduction of a new aircraft type or pilots who have completed a type conversion course with Auric Air Services Limited, lesser hours or sectors may be acceptable, subject to any special conditions imposed by the Authority.

## Other Flight Crew Proficiency

Auric Air shall ensure that no person is assigned as a flight crew member unless they meet the following requirements:

### Instrument Proficiency Check:

* + Flight crew members must pass the proficiency check prescribed by the Authority for the make and model of the aircraft they will operate, within the six months preceding their service.
  + For operations under Instrument Flight Rules (IFR), flight crew members must also pass the instrument competency check prescribed by the Authority within the same timeframe.

### Instrument Rating Renewal:

* + Instrument ratings shall be renewed at the earliest opportunity after the end of the eleventh month of validity.
  + Renewals must be conducted by a TCAA-approved examiner.

### Combined Proficiency and Instrument Competency Requirements:

* + Flight crew members may fulfill the proficiency and instrument competency requirements simultaneously for a specific make and model of aircraft.

### Medical Examinations:

* + Flight crew members shall complete medical examinations within 20 days prior to the expiry date of their current medical certificate.

### Aircraft Type Rating:

* + Completion of an approved operator training program and a pilot-in-command proficiency check satisfies the requirement for an aircraft type rating practical test if the check:
    - Includes all maneuvers and procedures required for a type rating practical test.
    - Is conducted by an authorized examiner.

### Instructors, Line Training, and Simulator Commanders:

* + The Chief Pilot shall appoint instructors, line training, and simulator commanders based on the following criteria:
    - Familiarity and experience on the specific aircraft type.
    - Successful completion of the required training.
    - Effective communication skills with candidates.
    - Demonstrated training ability and competence.
    - Compliance with TCAA requirements and approval.

### Commanders’ Qualification for Either Pilot Seat:

* + Commanders must meet the requirements to operate in either pilot’s seat.
  + Detailed requirements and procedures are outlined in the AASL OM-D Training Manual.

These standards ensure the safety, proficiency, and qualification of flight crew members in compliance with regulatory requirements and operational excellence.

## Cabin Crew

### Qualification Requirements

A cabin crew member shall meet the following requirements:

1. Be at least 18 years old.
2. Has passed an initial medical examination or assessment and be found medically fit for the duties.
3. Remains medically fit to discharge the duties specified in the Operating Manual Part E

Cabin crew members have responsibility to the Commander for the cabin safety and comfort of the passengers during flight operations in accordance with the procedures specified in the Operations Manual. They shall hold a valid certificate and trainings.

### Initial Ground Training for Cabin Crew

Auric Air shall not assign a person as a cabin crew member unless they have completed the initial ground training approved by the Authority for the specific aircraft type they are to operate. The initial ground training for cabin crew members shall include a competence check to evaluate their ability to perform assigned duties and responsibilities. The training shall include a minimum of 32 programmed hours of instruction for multi-engine turbine aircraft. The training programme must completed by all persons before being assigned as a cabin crew member

### Training, Checking Requirements and Familiarisation Flights

Refer Operating Manual

Before undertaking any duties, each cabin crewmember shall complete the appropriate training as specified below:

1. Prior experience as a cabin crew.
2. Valid certifications and current on type.
3. Familiarization with company SOP.

After successfully completing the initial and conversion trainings each C/A attends a familiarization flight as a supplement to the minimum cabin crew count as allowed by Cabin Crew Training Manual (CCTM). Following training, each cabin crewmember shall have passed the prescribed checks in order to verify proficiency in carrying out normal and emergency safety duties.

### Dangerous Goods for Cabin Crew

The operator ensures that each cabin crewmember has received training that covers at least the following

1. General philosophy
2. Limitations on dangerous goods in the air transport
3. Classification and list of dangerous goods
4. Package marking and labeling
5. Loading, restrictions on loading and segregation
6. Provision of information to the commander
7. Dangerous goods in passenger's baggage

The validity of the training is 2 years. Cabin Crew Security Training

The operator ensures that each cabin crewmember undergoes the security training as specified in the Part D training Manual.

### Cabin Crew Recurrent Training And Checking

Cabin crewmember will undergo recurrent training every 12 months to ensure continued proficiency with all equipment and application of procedures relevant to the aircraft types/variants operated. The period of validity of the recurrent training and associated checking is 12 calendar months in addition to the remainder of the month of issued. If issued within the final 3 calendar months of validity of a previous check, the period of validity will extend from the date of issue until 12 calendar months from the expiry date of that previous check.

#### Recurrent training and checking program

The recurrent training and checking program includes theoretical and practical instruction. Emphasis on special subject will change every year.

The annual recurrent training covers:

1. Emergency procedures including pilot incapacitation
2. Evacuation procedures including procedures including crowd control techniques
3. Touch-drills for opening normal and emergency exits
4. Location and handling of emergency equipment, including oxygen systems and the donning by each cabin crewmember of lifejackets, portable oxygen and protective equipment breathing (PBE)
5. First aid and the content of the first aids kits
6. Stowage of articles in the cabin
7. Security procedures
8. Incident and accident review

#### Other Training Requirements

1. The following training shall be conducted biennially.
2. Dangerous goods procedures
3. Crew resource management
4. Every 3 years the recurrent training will also include:
5. The operation and actual opening of all normal and emergency exits for passenger evacuation in an aircraft or representative training device
6. Demonstration of the operation of all other exits (including flight deck windows)
7. Realistic and practical training in the use of all fire-fighting equipment, including protective clothing representative of that carried in the aircraft.

### Cabin Crew Operation on More Than One Type or Variant

The operator ensures that each cabin crew member does not operate on more than 3 airplane types. The cabin crewmember may operate on 4 aircraft types provided that for at least 2 of the types :

(1) Non-type specific normal and emergency procedures are identical and

(2) Safety equipment and type specific normal and emergency procedures are similar In this context, variants of aircraft type are considered to be different types if they are not similar in all the following aspects:

1. Emergency exit operation
2. Location and type of portable safety equipment, and
3. Type specific emergency procedures

### Cabin Crew Refresher and Requalification Requirement In Case Of Absence From Operational Duties

Auric Air shall ensure that:

1. **Cabin crew members shall complete a recurrent training programme annually.**
2. **Refresher Training for Extended Absence**
   * Any cabin crewmember who has been absent from all flying duties for more than six (6) months shall complete refresher training as specified in Part D of the Training Manual before resuming duties.
3. **Refamiliarization for Non-Recent Flying on Type**
   * If a cabin crewmember has not been absent from all flying duties but has not operated on a specific type of aircraft during the preceding six (6) months, the cabin crewmember shall:
     + Complete a refresher training specific to the aircraft type, **or**
     + Operate a minimum of two (2) refamiliarization sectors under supervision on that type before being assigned operational duties.

### Cabin Crew Competency Check

Auric Air shall ensure that no cabin crew member is assigned duties unless, within the preceding 12 months, they have passed a competency check approved by the Authority, demonstrating the ability to perform emergency duties appropriate to their assignment. Competency checks shall be conducted by evaluators to ensure that the cabin crew member's proficiency level is sufficient to successfully perform their assigned duties and responsibilities. These checks shall be observed and evaluated by a qualified supervisor or inspector approved by the Authority.

## Operations Personnel

The Director of Operations is responsible for the training and standards of all other operations staff. Flight Operations Officers (Dispatchers) must possess a Flight Operations Officer License issued by the TCAA and should have demonstrated a comprehensive knowledge in the use of Operations Manual, aviation legislation and laws, aviation regulations, ATC procedures, meteorology, aircraft general, performance and planning, computerised flight plan, navigation, radio communication, and in the English language. Refer to Auric Air Training Manual

## Eligibility for BMO Flights

Only flight crew that are adequately qualified as per the BAR Standard shall fly BMO flights. An electronic record of flight crew members who meet minimum qualifications as specified in Appendix 1 of the BAR Standard, shall be kept specifically labeling them as ‘BARS’.

## Tracking and Recording of Crew Qualifications and Recurrent Training

All crew qualifications and recurrent training shall be recorded and tracked by means of a suitable electronic software system whose data shall be maintained and monitored by the archives department. These records shall be checked before scheduling to ensure aircrew are qualified for flight. Record currency shall be the responsibility of the Chief Pilot.

## Eligibility Period

Any proficiency check, test or competency check or recurrent training to maintain qualification for commercial air transport operations by any crew member or staff at Auric Air Services Limited shall be considered done in the actual month due as long as it is done within the eligibility period. The eligibility period is defined as the three-month period including the month prior, the month due and the month after the due date.

## Emergency Equipment Training

Auric Air shall not assign, and no person shall serve, as a crew member unless they have completed the approved initial emergency equipment training and drills specific to their position and the emergency equipment available on the aircraft. Crew members must also complete periodic emergency training using the installed emergency equipment for each type of aircraft they are assigned to operate.

## Flight Operations Officer Training Requirement

Auric Air shall ensure that no person is assigned as a Flight Operations Officer unless they have completed the initial training program approved by the Authority. The initial ground training for Flight Operations Officers shall include a competence check conducted by an appropriate supervisor or ground instructor to ensure the candidate demonstrates the required knowledge and abilities.

### Flight Operations Officer Competency

A flight operations officer shall not serve unless, within the preceding 12 months, they have passed a competency check approved by the Authority, demonstrating their ability to perform flight preparation and related duties appropriate to their assignment. Evaluators shall conduct competency checks to ensure the officer's proficiency is sufficient for successful dispatch operations. An authorized person must observe and evaluate these competency checks.

### Flight Operations Officer Recurrency Requirements

Auric Air shall ensure that no flight operations officer serves unless they have completed the recurrent ground training curriculum approved by the Authority within the preceding 12 months. The air operator certificate holder shall establish and maintain an Authority-approved recurrent training program outlined in the operations manual, which each flight operations officer must complete annually.

Recurrent training shall be conducted by suitably qualified personnel and must be relevant to the type or variant of aircraft and the operations conducted by the air operator certificate holder.

## Synthetic Flight Training Devices

Synthetic flight training devices used for flight crew member qualification at Auric Air may be provided by an external approved Aviation Training Organization (ATO) or operated internally under regulatory approval. These devices shall:

1. **Approval**:
   * Be specifically approved by the Authority for:
     + The air operator certificate holder.
     + The specific aircraft type, including variations, for which training or checks are conducted.
     + The specific maneuver, procedure, or crew member function involved.
2. **Performance Standards**:
   * Maintain the performance, functional, and other characteristics required for approval.
   * Be modified to reflect any changes to the aircraft being simulated that affect performance or functionality.
3. **Daily Checks**:
   * Undergo a daily functional pre-flight check before use.
   * Maintain a daily discrepancy logbook, updated by the instructor or check pilot after each session.
4. **Qualification**:
   * Be qualified for initial aircraft type training and the intended maneuver or procedure.

## Flight Operations Officer Requirements

Auric Air shall not permit a flight operations officer to serve unless they have successfully completed the recurrent ground training curriculum approved by the Authority within the preceding 12 months. The company will establish and maintain an Authority-approved recurrent training program, outlined in the operations manual, which must be completed annually by each flight operations officer.

This training shall be conducted by suitably qualified personnel and specifically designed to address the type or variant of aircraft and the operational requirements of Auric Air, ensuring continued proficiency and adherence to regulatory standards.

## Simulator Flight Instructor Requirements

Auric Air shall not assign or use a person as an authorised instructor or a synthetic flight trainer instructor in a training program unless:

The individual has satisfactorily completed initial or transition training for authorised instructors or synthetic flight trainer instructors, as applicable. Within the preceding 24 months, the individual has conducted instruction under the observation of an authorised person, an air operator certificate holder's check pilot, an authorised flight engineer (if applicable), or an examiner employed by the air operator certificate holder.

### Simulator Flight, Line and Check Pilot Instructor Recency

A person shall serve as a check pilot or synthetic flight trainer instructor unless, within the preceding 12 months, that person has:

* Flown at least five flights as a required flight crew member on the applicable aircraft type, or
* Observed, from the cockpit, the conduct of two complete flights in the assigned aircraft type.

## Indoctrination

Auric Air shall ensure that no person serves as a crew member or Flight Operations Officer unless they have completed the company procedures indoctrination curriculum approved by the Authority. This training includes a comprehensive review of operations manual procedures relevant to their duties, ensuring compliance with regulatory requirements and operational standards. Completion of the training, conducted by qualified personnel, must be certified, and records shall be maintained for regulatory inspection.

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# CREW HEALTH PRECAUTIONS

## Fitness for duty

It is the responsibility of all flight crew members to ensure that they are fit to carry out their duties. Notwithstanding the advice given below, the company should be informed by a flight crew member of any treatment or medication which may affect this fitness.

In the event of a crew member becoming unfit during flight, an Air safety report will be completed, and the crew member involved referred to the locally appointed Medical Officer. Such a procedure may safeguard against further incapacitation e.g. food poisoning

A crew member shall not perform duties on an aircraft if he is in any doubt of:

1. Not being able to accomplish his assigned duties to the standard required,
2. or if he knows or suspects that he is suffering from fatigue,
3. or feels unfit to the extent that the mission may be endangered.

### Responsibilities of Staff and Management

### Flight Crew

Flight crew are under no circumstances to carry out any duties when they are under the influence of alcohol, any intoxication or hallucinogenic substance, any prescribed stimulant, or any other narcotics unless prescribed by an Aviation Medical Examiner. In all cases, medical clearance to fly must be obtained from a TCAA Authorized Aviation Medical Examiner (AME)

### Management

Management is to ensure that anyone suspected or known to be in breach of 6.2.1 must be immediately suspended from duty pending full investigation of the circumstances

## Psychoactive Substances, Narcotics And Drugs

The problematic use of psychoactive substances, narcotics and/or drugs which have not been prescribed by a medical practitioner is expressly prohibited.

Employees including holders of a license, rating or a certificate, shall not exercise duties assigned to them while under the influence of any psychoactive substance which could impair human performance.

In case problematic use of psychoactive substances is identified in any employee deployed on safety-critical functions, he/she will be removed immediately from such duties. Reinstatement could be possible after cessation of the substance abuse and upon determination that continued performance of such duties does not jeopardize safety.

The following are considered to be psychoactive substances:

* Alcohol
* Opioids;
* Cannabinoids;
* Sedatives and hypnotics;
* Cocaine and other stimulants (except caffeine);
* Hallucinogens; and
* Volatile solvents.

The use of “Pep Pills” that may be purchased over the counter is also strictly forbidden. They produce an artificial feeling of well-being, but when the effect of the stimulant wears off, the person can be considerably more exhausted than if no stimulant had been taken. They also have undesirable long-term effects.

### Advice on the Use of Specific Drugs

Drugs which are prescribed by a medical practitioner may have a detrimental effect on the performance of flight crew personnel. Therefore, flight crew should seek advice from an Aviation Medical Examiner if there are any doubts over the use of specific drugs whilst conducting an FDP. Final authority and advice can be sought from an Aviation Medical Examiner

## Alcohol

Although alcohol consumption may be socially acceptable, it has a detrimental effect on human skills and efficiency which is particularly noted in relation to flying duties. The effects of alcohol are primarily related to levels in blood which vary individually according to the quantity and rate of consumption and may be significant long after the last alcoholic intake. The following requirements apply to all aircrew

### Minimum period after consumption prior to FDP

Crew members shall not consume alcohol for a minimum period of 8 hours before standby or reporting for duty

### Alcohol Blood Level

Crew members shall not commence a flight duty period with a blood alcohol level in excess of 0.2 mg per ml (milligrams per milliliter). This level is one quarter of the legal driving limit. The company may conduct random breath tests to check blood alcohol levels of crewmembers before flight. If above legal limit, the crewmember will not be allowed to fly pending investigation and subsequent disciplinary action. A standby pilot shall be called to complete the flight. All records related to the tests shall be collected and stored confidentially by the chief pilot or an appointee. The grounded pilot’s contract will be terminated, if found guilty of alcohol abuse.

### Failure To Undergo Alcohol Testing

Any employee who refuses to undergo an alcohol test or fails to present themselves for a test when asked, shall be considered to have failed said test. Failed alcohol test disciplinary action shall be enforced.

### Alcohol & Standby Duty

Crew Members shall not consume alcohol while on standby or during the flight duty period

### Alcohol Consumption on Night Stops

Crewmembers will not be permitted at any point to consume alcohol on night stops of less than 24 hours

### Actions Following a Failed Alcohol Test

1. **Immediate Actions:**
   * The employee shall be removed from all duties immediately through an official letter issued by the company.
   * A confirmatory blood test will be required at a government hospital to verify the results of the initial alcohol test.
2. **Notification of Authorities:**
   * For pilots, cabin crew, and maintenance personnel, the Tanzania Civil Aviation Authority (TCAA) shall be notified as per regulatory requirements.
3. **Disciplinary Hearing:**
   * The employee will be required to attend a formal disciplinary hearing to address the incident and present their case.
4. **Disciplinary Action:**
   * Based on the outcome of the hearing, appropriate disciplinary action will be taken, which may include suspension, termination, or other measures as deemed necessary by the company policy and regulatory requirements.

## Medication

Many medications may have adverse effects on the nervous system, which may be more marked in flight than on the ground. As a general rule, if a crew member finds it necessary to take, or has been prescribed some form of medication, his fitness to fly must be suspect, and he shall seek medical advice before commencing or continuing with flying duties

Appropriate medical advice and the authority to use medication during an FDP may be sought from an Aviation Medical Examiner

## Immunization

Medical advice is to be sought concerning the period to be observed before returning to flying duties following immunization.

## Other Precautions

### Blood Donation

Crew members should not normally act as blood donors. If, for any reason, they have done so, they are to advise the company immediately following each donation and shall not undertake any flying duties for at least 24 hours after giving blood

### Deep Sea Diving

Crew members whose sporting activities include deep sea diving to a depth exceeding 10 meters shall not fly within 48 hours of completing such diving activity

### Sleep and Rest

Although the controls on flight and duty periods are intended to ensure that adequate opportunities are provided for crew members to obtain rest and sleep, individuals should ensure that proper advantage is taken of such opportunities

A crew member shall not perform duties in flight if he knows or suspects that he is suffering from fatigue, or feels unfit to the extent that the flight may be endangered

### Fitness to Fly

No individual shall act as a member of the crew of company aircraft if, for any reasons his physical or mental condition is such that it could endanger the safety of the aircraft or its occupants

### Surgical procedures

Medical advice should be sought prior to returning to flying duties following any surgical procedure

### Meals

Sensible precautions should be taken to avoid the risk of food poisoning (eg from shellfish of dubious freshness). Particularly when meals are taken or uplifted enroute, pilots operating together should select different items from the menu to reduce the possibility that both of them could become incapacitated

Poor diet brings about digestive problems that can affect professional abilities and damage health, as well as shorten a pilot's career. To help prevent side effects that can cause accidents, the following are guidelines: -

1. All food that can be contaminated should be avoided. Examples are mayonnaise, oysters (shellfish in general), shrimps and salads.
2. Before flight, flight crew should not operate on an empty stomach. A meal should be taken where possible one to two hours prior to take-off, preferably a light meal consisting of carbohydrates and protein, but low in fat.

#### Every Day Diet

In hot countries, the food should be less rich in calories than in cooler climates or temperate zones. In order to maintain a good hydro-mineral level and sufficient dieresis, 3-4 litres of water should be drunk a day.

To avoid dehydration, 3-5 grams a day of sodium chloride should be taken and up to 10 grams in particularly hot countries. To avoid obesity food should not be too rich in calories, 3000 calories a day would seem sufficient. The protein, carbohydrate, fat proportions should be:

Protein 15%

Carbohydrates 60%

Fats 25% and preferably vegetable origin

#### Food Precautions

To avoid dysentery, food poisoning and gastro-enteritis along routes in warm climates, certain precautions should be taken by all flying crew:

1. Fresh salads and uncooked vegetables should not be eaten, unless they have been known to be hygienically prepared.
2. Fruits with thin skins are potentially dangerous, as are watermelons, because the water in which they are grown can be polluted and the germs in the skin will contaminate the melon when it is cut.
3. Ripe fruit or that, which has been damaged or left cut, should not be eaten.
4. Fish, unless cooked shortly after being caught will undergo rapid decomposition, leading to the presence of powerful poisons that may not affect the taste. Shellfish of all kinds should particularly be avoided.
5. Ice and ice cream are often infected with germs unless hygienically made and handled.

Drinks should be refrigerated or put on ice, but ice (unless safe) should not be put in drinks. Draughts of cold drinks can be dangerous

## Immunization

(a) Flight crew on international flights, in addition to immunizations required by international regulations, should consider being vaccinated against typhus, typhoid, paratyphoid, tetanus, poliomyelitis, influenza, hepatitis A and B and others as indicated

(b) Professional medical advice on precisely what will be required, such as is obtainable at a travel clinic, should be sought in good time prior to embarking on an international trip

(c) All employees shall be aware that certain countries (irrespective of the validity of their judgment require immunization against

(i) Yellow Fever (valid for 10 years)

(ii) Cholera (valid for 6 months)

(iii) Any other diseases that may from time be notified by the World Health Organization in the International Health and Sanitary Regulations

Flight Crew should arrange the date of their renewal immunizations so as to ensure that the certification of immunization does not become invalid during the planned duration of any trip or mission. This may necessitate renewal before expiry of validity of the preceding immunization

## Malaria Prophylaxis

In many countries and areas within Tanzania, malaria is endemic. The strains can differ from one locality to the next. However, all employees, whether on duty or on leave, shall take the necessary anti malaria precautions. Prior to travelling to areas where malaria is known to be present, employees shall consult a doctor, pharmacist or specialist travel clinic to obtain the correct advice and applicable treatment or medication

To avoid being bitten by mosquitoes, take the following precautions

Wear slacks and long sleeved shirts, buttoned up at the cuffs and neck

Apply insect repellent every 2 hours to exposed parts such as the face, neck, hands and ankles

Where applicable, sleep under a mosquito net

Note: Mosquito net are not normally necessary in air conditioned rooms. However, such rooms should be regularly sprayed with insecticide

## Classes Of Medical Certificates.

### Medical requirements

The medical requirements and standards to be complied with by an applicant for, or the holder of, a Class 1, 2 or 3 medical certificate are the following:

### Impairment or sudden or subtle incapacitation

Applicants must be free from any risk factor, disease or disability which renders them either unable, or likely to become suddenly unable, to perform assigned duties safely. These may include effects and/or adverse effects from the treatment of any condition and drugs or substances of abuse.

### Medical deficiency

Applicants must be free from any of the following, if it results in a degree of functional incapacity likely to interfere with the safe operation of an aircraft or with the safe performance of their duties:

* Congenital or acquired abnormality;
* Active, latent, acute or chronic disability, disease or illness;
* Wound, injury, or outcome of operation.

### Flight crew medical certificate validity

Flight crew medical certificates shall be valid for a maximum of 12 months.

### Duties Of Holder Of Medical Certificate

The holder of a medical certificate shall carry such medical certificate on his or her person

* when carrying out the duties as a flight crew member,
* not act as a PIC, or in any other capacity as a flight crew member while he or she is aware of any medical condition which could affect the validity of such medical certificate,
* while he or she is receiving medical treatment, unless otherwise provided in TCARs
* after such medical certificate has expired,

Before such holder resumes the exercising of the privileges of the license held by him or her, furnish the company with proof that he or she has fully recovered from the decrease in medical fitness.

## Fatigue

Fatigue has direct bearing on the fitness and rest of crewmembers. Fatigue can be prevented by a proper diet and by adequate rest and sleep. Auric Air flight crew member shall not operate on a commercial air transport operation if he knows or suspects that he is suffering from fatigue, or feels unfit to the extent that he would be unable to discharge his responsibilities to a safe standard. Refer to Chapter 8.

## Spectacles

Pilots who are required to wear spectacles as a condition of their medical certificate will carry a spare pair with them on all occasions when they are part of an operating crew. Where the only correction is for reading, pilots should wear half-moon spectacles or lower segment lenses with a neutral upper segment and never wear full lenses when flying.

## Humidity

Prolonged flight in an aircraft is prone to cause dehydration. It is recommended that flight crew consume 3 to 4 litres of water per day especially during flight duty or more if required.

The water should be from a safe source, preferably bottled water.

## Hydraulic Fluid

Hydraulic fluid is extremely corrosive and physical contact without protective equipment (gloves) should be avoided. If physical contact occurs, the affected area should be flushed with castor oil and if further irritation continues, medical opinion sought.

## Pregnancy

Crewmembers with a low-risk, uncomplicated pregnancy, evaluated and supervised in accordance with regulatory requirements, shall be restricted as follows: for Class 1 and 2 medical certificates, the fit certificate shall be valid from the end of the 12th week to the end of the 26th week of gestation; for Class 3 medical certificates, the fit certificate shall be valid until the end of the 34th week of gestation.

## Tropical Diseases and Tropical Medicines

All flight crew must ensure that they are in good health and if they suspect otherwise visit an AME as soon as possible. If a tropical disease is suspected then a referral to a doctor specialising in Tropical Diseases will be given.

The crew member should not resume duty until pronounced fit by the AME.

It is important for crew operating in the areas in which we operate, to take suitable anti-malarial precautions.

This should include but is not limited to the following:

1. Wearing of long trousers and long sleeved shirts after sunset
2. Sleeping under a mosquito net
3. If in an air-conditioned room, a mosquito net is not normally required however the room should be sprayed with a suitable insecticide.

## Health Regulations

The holder of a medical certificate shall notify the appropriate authority in the case of any of the following:

1. Injury
2. Hospitalisation
3. Regular use of medication pregnancy
4. Absence due to illness for a period of more than 21 days
5. Psychiatric treatment, which renders such holder unable to comply with the appropriate medical requirements and standards.

The holder of such a medical certificate shall not exercise the rights associated with this certificate until the member has furnished proof to the authority that the person has fully recovered from the decrease in medical fitness associated with any of the above**.**

## Tropical Diseases

### Occurrence

Tropical diseases are not confined entirely to the tropics. They can occur almost anywhere and are transmitted in the following ways:

* Through insect stings or bites
* Through healthy skin by other parasites
* Through food and drink
* From the ground
* Person to person.

### Transmission

1. Mosquitoes Transmit Malaria, Yellow Fever, Dengue Fever and Sand Fly Fever
2. Tsetse Fly (Central Africa) Transmit Sleeping Sickness
3. Lice Transmit Typhus, Relapsing Fever and Spotted Fever
4. Rat Fleas Transmit Plague.

### Protective Measures Against Insects.

Sleeping quarters should be free of insects. Use mosquito nets over beds. Nets should be taut and not come into contact with the body. Use insecticide and protect the skin by using an insect repellent.

## Diseases Contracted Through The Skin

The following diseases are contracted through the skin:

1. Weil’s disease. The germs of this disease are excreted in rat’s urine. They can penetrate the skin of wimmers
2. Fungus Diseases. The fungus is present in tropical and sub-tropical inland waters, in shallow rivers and lakes, hardly ever in seawater

### Protective Measures To Avoid Contagion Through The Skin.

1. Avoid inland water
2. Swim only in the sea or in pools containing purified water
3. Use ear plugs
4. Wear shoes when walking round the pool.

## Cholera

The onset of cholera is very sudden and the symptoms are nausea, vomiting, diarrhea, fever and abdominal pain. It is spread in water and food contaminated from the excrement of infected individuals. It is endemic in many areas of Asia. Prevention is by vaccination but strict hygiene in the handling of food and drink should be observed.

## Amoebic Dysentery

Amoebic dysentery is characterized by recurring bouts of fever, abdominal pain and diarrhea with blood and mucus in the stools. It is caused by infection of the intestinal tract by the parasite Entamoeba Histolytica. The disease is endemic in tropical and sub-tropical countries; however, unsanitary disposal of excreta and primitive methods of water purification may result in outbreaks in temperate zones. Water pollution is the most common source, hence the importance of only drinking water known to be safe. No vaccination or inoculation is available nor any preventative drug. The only means of avoidance is good hygiene.

## Dysentery

Dysentery is an acute infection of the bowel characterized by frequent passage of stools, abdominal cramps, malaise and fever very similar to amoebic dysentery. It occurs worldwide but is particularly prevalent in hot climates. The source of infection is the excreta of infected individuals and it is spread in contaminated food and on inanimate objects by the inadequate personal hygiene of the carrier. Water borne instances of the disease are rare but it can be carried by flies. There is no effective inoculation against the disease, and again, strict personal hygiene, particularly when handling food is essential in prevention. There are many medicines available for disinfection but it is always advisable to consult a doctor.

## Malaria

Malaria kills more people throughout the world than any other known disease. It is characterized by frequent bouts of sweats and chills. It can be confused with several other diseases, so if the symptoms occur after the return from a region where malaria is endemic, it is important that your doctor is informed of this. Infection takes place through the bite of an infected mosquito transmitting the malaria parasite into the blood stream. The period between dusk and dawn is the most active time for these mosquitoes, but bites can occur at other times of the day. Malaria is endemic in areas of Asia, Latin America, Central, West and East Africa and Turkey. There are three components to the prevention of Malaria:

### Malaria Risk Awareness

It is important to be aware of the possibility of contracting malaria. Any ‘flu type illness which develops within three months of visiting an area where malaria is endemic should be considered as malaria until proven otherwise - even if anti-malaria drugs have been used.

### Protection against malaria infection

Use insect repellent on the skin and wear clothing to cover as much skin surface as possible particularly after sunset. Avoid dark colors as much as possible as these attract mosquitoes. Toweling bands impregnated with ‘Deed’ worn around the ankles and wrists provide even more protection. In the hotel the use of a ‘knockdown’ aerosol and an electrical pyrethroid vaporizer overnight in an air conditioned room is important, as is the use of a mosquito DEET net, if provided.

### Anti-Malaria Drugs

The recommended regime for crew is a combination of Proquani (Paludrine) 200mgm daily and Chloroquine (Nivaquine or Avloclor) 300mgm weekly. These drugs should be started at least one week before anticipated exposure and continued for four weeks after leaving the area. It is important to realize that these drugs are not completely effective and hence the importance of the other preventative measures mentioned above. Other drugs recommended for travelers are not, currently, considered suitable for crew.

## Plague

This is caused by Yersinia pestis, and is spread by fleas which have been on rodents or more rarely, infested cats.

## Smallpox

This is now officially eradicated.

## Typhoid And Paratyphoid

The symptoms of typhoid and paratyphoid are lethargy, frontal headache, general aches and pains, disturbed sleep, anorexia and thirst, abdominal discomfort, body temperature rising to 40° and diarrhea. It is conveyed by water contaminated by sewage and food grown in, or gathered from, contaminated water e.g. shellfish and watercress. It can also be conveyed by cooking utensils washed in such water. It occurs wherever the water supply is impure. Prevention is by inoculation and through strict hygiene of food and drink. The inoculation is not an international requirement but is strongly recommended. Aircrew should not fly within 48 hrs. after inoculation.

## Typhus

This is caused by a species of Rickettsia and is conveyed between hosts by insects or spiders.

## Yellow Fever

Yellow fever is characterized by sudden onset fever with relatively slow pulse, flushed face, infected eyes, congested gums, red and pointed tongue, vomiting and constipation. Jaundice appears after the third day. It is an infectious virus disease in tropical and sub-tropical zones particularly in tropical Africa, Central and South America. It is unknown in Asia. The virus is transmitted by the bite of a female mosquito which itself became contaminated through feeding on the blood of an infected person. Prevention is by inoculation and is a Company requirement.

## Communicable Diseases H1n1 (Swine Influenza)

Swine influenza, or “swine flu”, is a highly contagious acute respiratory disease of pigs, caused by one of several swine Influenza A viruses. Although swine influenza viruses are normally species-specific and only infect pigs, they do sometimes cross the species barrier to cause disease in humans.

The clinical symptoms are similar to seasonal influenza but reported clinical presentation ranges broadly from asymptomatic infection to severe pneumonia resulting in death. The symptoms of influenza including fever, cough, headache, body aches, sore throat, runny nose and sometimes include vomiting or diarrhea.

## Infections Disease Handling Procedures On Board

### Pilot In Command Actions

The pilot in command of an aircraft may take such emergency measures in flight as may be necessary for the health and safety of passengers on board. The event needs also to be recorded on the Health Part of the Aircraft General Declaration, PIC shall inform air traffic control, as early as possible before arrival, of any cases of illness indicative of a disease of an infectious nature or evidence of a public health risk on board. This information must be relayed immediately/as soon as possible by air traffic control to the competent authority for the destination airport

The flight crew of an En-route aircraft shall, upon identifying a suspected case(s) of communicable disease, or other public health risk, on board the aircraft, promptly notify the Air Traffic Service (ATS) unit with which the pilot is communicating, the information listed below:

1. aircraft identification;
2. departure aerodrome;
3. destination aerodrome;
4. estimated time of arrival;
5. number of persons on board;
6. number of suspected case(s) on board; and
7. nature of the public health risk, if known.

### Parking Position of Aircraft

The pilot in command (PIC) shall be advised where to park the aircraft by air traffic control. The decision will usually be taken by the public health authority in consultation with Company and airport authorities. This may be on a remote stand or, depending on the situation, on the apron with or without an air bridge attached.

### Cleaning And Disinfection

Cleaning refers to the removal of visible dirt or particles, while disinfection refers to the measures taken to control, deactivate or kill infectious agents such as viruses and bacteria. Cleaning and disinfection on aircraft require special attention since it is necessary to use agents that are not corrosive or otherwise detrimental to aircraft components. It is therefore necessary to exercise caution in selecting suitable products and before applying them in the cabin. In addition, manufacturers’ instructions must be followed carefully to protect the health of the cleaning personnel and to ensure effective action. Cleaning crews need to be adequately trained for routine cleaning and disinfection procedures and also for those to be implemented following a communicable disease event, since the requirements are likely to differ. Exposure to body fluids (such as respiratory secretions or blood),vomit or feces may involve a risk of infection if not properly contained. Cleaning crews therefore need to follow the procedures that will ensure effective cleaning and disinfection and protect their health, using appropriate personal protective equipment.Since the DH8 and PC12 are equipped with a toilet, extra care will be taken to ensure proper cleaning and disinfection of the toilet is done. The PC12 toilet shall not be used by crew or passengers during single pilot flights.

### Management Of Crew-Member Exposure Following Completion Of Flight

Crew members who may have been exposed to a passenger suspected of having influenza A(H1N1) should monitor their health for 7 days following the exposure. They can continue to work as per their original schedule unless they become ill with influenza-like symptoms. If they do become ill with influenza-like symptoms, including fever, cough, headache, body aches, sore throat, runny nose and sometimes include vomiting or diarrhea, they should immediately take the following steps:

1. Stay at home except to seek medical care; do not report to work.
2. Notify the Company.
3. Inform the health service, clinic, or emergency room before visiting it about the possible exposure to influenza.
4. Do not travel, unless it is critical to travel locally for health care.
5. Limit contact with others as much as possible.
6. When not alone or in a public place, wear a facemask to reduce the number of droplets coughed or sneezed into the air.

## First Aid Kit

Auric Air Services aircraft carry a comprehensive First Aid Kit onboard each aircraft.

## Sleeping Tablets

Sleeping tablets may be severe or dangerous. Crew are therefore instructed not to take anti-histamine motion sickness tablets whilst on duty or during the 12 hours preceding duty.

Sleeping tablets should not be taken 18 hours preceding duty unless necessary and prescribed by a doctor who is aware of the crew's profession. In the event of a Crew member requiring medication, the Company is to be informed. Sound, natural sleep is the best way to full recuperation. Elimination of sound by the use of cotton wool or ear plugs rather than the use of medicine is recommended.

## Sickness And Injury Reporting

1. When a Crew member falls sick, the Chief Pilot or his delegate shall be advised immediately.
2. In cases of sickness exceeding 48 hours, a doctor's certificate is required.
3. When fit for duty, the Chief Pilot or his delegate shall be informed immediately.
4. The Company is responsible for costs involved in evacuation and treatment of crew when ill or disabled away from home base, in the course of their duties, unless such injury arises from the individual's negligence or incompetence. In such cases the Chief Pilot or the Director of Operations shall be advised immediately so as to organise treatment if locally available.
5. If any member suffers injury either on or off duty, the following details must be notified to the Chief Pilot or his delegate with the least possible delay:

* Date and time of injury
* Nature of the injury
* Expected duration off duty.

In the event that relatives should be notified or other relevant information is necessary at short notice, the Director of Operations shall be advised by the most expeditious means possible.

## Drug Policies of Contracting Companies

The drug policies of contracting companies such as BMOs shall be compared with regulatory requirements as stated in part 102 of the Tanzania Civil Aviation (Air Operator Certification And Administration) regulations. Where policies are found to conflict, the more stringent requirement shall be enforced. If the regulations do not have a particular policy, then the contracting company’s policies shall be enforced.

# ACCIDENT PREVENTION, FLIGHT SAFETY, POWERS OF THE AUTHORITY AND GENERAL REGULATIONS

## Accident Prevention & Flight Safety

### Flight Safety Awareness Programme

A flight safety awareness Programme will be rostered by the Safety Manager in accordance with his responsibilities.

This will entail the following:

1. The use of Flying Staff Instructions
2. The circulation of the latest accident reports & incident Bulletins
3. The circulation of safety bulletins and other flight safety literature or airworthiness operational information, newsletters
4. The circulation of safety related AICs
5. Highlighting operational aspects of ADs
6. The circulation of NOTAMs

This literature is to be formally displayed inside offices on suitable notice boards easily recognizable as flight safety boards. Incidents and accidents involving aircraft types or equipment with other operators but relevant to the company shall be highlighted by the Safety Officer. It is the Safety Manager’s responsibility to bring to the attention of the Chief Pilot any occurrences that indicate the company’s procedures may need revision in the interests of Flight Safety. Copies of Mandatory Occurrence Report (MOR) and air miss reports are available in aircraft flight document folders and in all company offices

## Power Of The Authority

### Civil Aviation Authority Inspectors

Inspectors are authorized by the TCAA to fly in company aircraft during the course of normal operations. Arrangement for such flight will normally be made in advance, however the inspector is empowered by the Authority with the right to board a company aircraft without notice. The right to fly can only be refused should the PIC of such a flight decide that flight safety may be compromised. For such purposes inspectors carry an Authority Credentials and certificate of appointment that must be produced on request

### Power of the Authority – Company Responsibility

The Chief Pilot Shall:

* Give any person authorized or empowered by the Authority access to any documents and records which are related to the flight operations or maintenance and
* Produce all such documents and records when requested by the Authority within a reasonable period of time

### Powers of the Authority – PIC’s Responsibility

The PIC shall, within a reasonable time of being requested to do so by a person authorized by the Authority, produce to that person the documentation required to be carried on board

### Inspection by the Authority

Under the Civil Aviation Regulations, the Authority may subject Auric Air to routine and non-routine inspections. Typically, when the operation is supervised adequately, the Authority conducts pre-planned inspections of flight operations, giving the Accountable Manager advance notice of the intended inspection. During these inspections, the Authority will expect reports and recommendations from previous company audits to be available.

For the purpose of inspections, Auric Air shall:

1. Cooperate with and grant the Authority unrestricted access to any of its organizations, facilities, and aircraft.
2. Ensure that the Authority is granted unrestricted access to any organization or facilities contracted for services associated with commercial air transport operations and maintenance.
3. Grant the Authority unrestricted access to the cockpit of the aircraft during flight operations.
4. Provide the Authority with a forward observer’s seat on the aircraft, allowing easy observation of the flight crew’s actions and conversations.

### Non-Routine Inspection Goals

In the unlikely event that the Company becomes deficient in an important or vital aspect of the operation, the Authority will have the right to conduct non-routine inspections. Non-routine inspections should be treated with the attention they deserve as they are an indication from the Authority that they’re some discrepancies in the organization and systems

### Pre – inspection Goals

Prior to any Authority inspection the relevant management post holders should take all reasonable steps to ensure that the operation is in compliant with the required operating standards and requirements. The best way to achieve this is to conduct an internal audit at least 1 month ahead of the proposed Authority inspection. This will give the company adequate time for the management post holders to address any non-compliance arising and demonstrate to the Authority that the internal audit system is effective.

During the pre – inspection audits it is important that any findings are recorded in an open manner. Mistakes will be made, and all efforts should be made to mitigate such incidences from occurring. The important thing is that the management demonstrates the ability to accept mistakes for what they are, evaluate the consequences or potential consequences and take appropriate action to correct the findings

## Authority Inspection Procedures

### Prior to the inspection

Prior to the inspection, the Accountable Manager should make contact with the assigned Flight Operations or Airworthiness Inspector to confirm the timings for the inspection and any administrative requirements. On the day of the inspection, the following should be considered

* 1. The nominated post holders should be available for interview as required by the inspectors
  2. Copies of any audit reports carried out since the last inspection should be available

Preparations should be made to provide the Flight Operations Inspector the opportunity to observe the flight operation in the air. A seat on a Commercial Air Transport Operations task would be ideal but if this is not available and practical the inspector will advise what he would like to see.

### Scope of Inspections

Any of the Company aircraft could be inspected so it is important that they are properly presented with all the required elements such as documentation and manuals

Key areas for the inspection are flight records, licences, medicals, recency, training records, aircraft records, and tasks, booking forms and their authorizations.

### Post Inspection Procedures

The inspector will usually take time to de-brief the Accountable Manager, or his designee, on his findings at the end of the inspection. This will normally be followed with a letter. It is vital that the following are carried out

* 1. That a full understanding is reached with the inspector as to the deficiencies he has found and if possible a suggested corrective actions
  2. That any questions the inspector may have are answered candidly
  3. Following the Authority’s letter, that any outstanding items are concluded in the shortest possible time and that in particular, any amendments required to the operations manuals are carried out promptly, with copies of the amendments forwarded to the Authority for approvals as appropriate
  4. Once the outstanding items have been addressed the Accountable Manager writes to the Authority to formally request close of the inspection, giving full details of the actions taken.

## General Regulations

### The Company’s Aircraft

For passenger carrying operation on single engine aircraft in Auric Air Services Limited’s fleet, it shall ensure that aircraft operating meet the following requirements;

1. Day VFR/IFR Operations Only, limited to DAY VFR upon client request.
2. The route guide will include routes, which are always within gliding distance to an adequate landing area
3. is powered by a turbine engine.
4. Has an engine type certificate data sheet (TCDS)
5. Implementation of an Engine Condition Trend Monitoring System (ECTM) for single-engine turbine-powered aircraft operated at night or in IMC if authorized.

Company aircraft are not to be flown for any purpose other than those authorized by the company through the chief pilot and in accordance with its certificate of airworthiness

### Additional Provisions

The Company Operations’ office will maintain a satellite and radio flight following system to ensure the safety of all Company aircraft while on flight details.

### Smoking In Aircraft

Smoking is not permitted on any company aircraft

## List Of Publications

The following publications shall be available in the Company Operations/Planning room:

* All applicable AIPs to States where the company operates regularly
* AICs
* NOTAMs
* TCARs
* Company Operations Manuals
* AFM/HFM
* MMELs/MELs/Aircraft Manuals, Operations General Publications.

## Last Minute Changes (LMC)

### Last Minute Changes (LMC) Procedure

Last minute changes (LMC) refer to adjustments made to the load sheet after its completion. These adjustments incorporate late alterations or updates to a final manual or electronically produced load sheet without requiring revisions to the main body or the creation of a new document. Guidance on the LMC process is provided by the TCAA.

### LMC Restrictions:

1. Any LMC increase or change must not exceed the following:
   * Allowable underload calculation (underload refers to the weight still available until the first limiting maximum weight is reached).
   * Maximum mass and balance limits for zero fuel, take-off, or landing.
   * Limitations of any compartment intended to be used.
2. Operators must define:
   * A maximum allowable change to the number of passengers or hold load as an LMC for each aircraft type in their Operations Manual.
   * Rules for changes to the balance condition, expressed in index units.
3. Fuel Adjustments:
   * If there are changes to fuel quantities or locations, the weight and balance figures must be fully recalculated, and new documentation produced.
   * Some operators may permit smaller fuel LMCs, in which case fuel mass and index data must be checked and made available.
4. LMC Limit:
   * LMCs are limited to a maximum of three changes. If a fourth adjustment is required, new weight and balance documentation must be produced.

### LMC Documentation and Notification:

* Any LMC that occurs after the completion of the mass and balance documentation must be brought to the captain's attention.
* The captain is required to amend the mass and balance sheet, ensuring that the changes are clearly recorded on the copy retained at the point of departure.

# FATIGUE RISK MANAGEMENT SYSTEM

## Fatigue Risk Management Policy

Auric Air Services Limited is committed to developing, implementing, maintaining, and continuously improving strategies and processes to ensure that all aviation activities are conducted with the highest levels of safety, efficiency, and compliance. This Fatigue Risk Management System (FRMS) policy underlines our commitment to mitigating fatigue-related risks and promoting a positive safety culture across all levels of the organization.

**Our Commitments are:**

1. **Promote Safe Practices**: Establish an organizational culture that fosters safe operational practices and encourages open communication and collaboration to address fatigue-related risks.
2. **Adequate Resource Allocation**: Ensure the availability of sufficient resources to manage and mitigate physical and mental fatigue to the lowest practical levels.
3. **Compliance with Regulations**: Adhere to the Tanzanian Civil Aviation Authority (TCAA) regulations regarding duty time, flight time, and rest requirements to maintain operational compliance.
4. **Fatigue Risk Monitoring and Management**: Define and implement clear processes for recording, managing, and monitoring duty schedules to identify and address fatigue hazards using our Safety Management System (SMS).
5. **Non-Punitive Reporting**: Maintain a confidential and non-punitive reporting system to encourage employees to report fatigue-related concerns without fear of reprisal, fostering a Just Culture.
6. **Data-Driven Decision Making**: Use performance-based metrics and fatigue performance indicators to continuously monitor and assess fatigue-related risks, incorporating scientific principles and operational experience.
7. **Crew Training and Awareness**: Provide ongoing education and training for all personnel on fatigue management strategies, including sleep hygiene, circadian rhythm management, and effective use of rest periods.
8. **Continuous Improvement**: Regularly review and update the FRMS policies and procedures based on new research, operational data, and feedback to ensure continuous improvement.
9. **Transparency**: Ensure the timely and accurate disclosure of all relevant fatigue-related information to employees and regulatory authorities.
10. **Fatigue Surveys**: Conduct regular surveys to gather subjective data from personnel, enabling meaningful analysis and the development of targeted improvements.
11. **Safe and Reliable Operations**: Prioritize the health and well-being of all personnel to maintain a safe operational environment and enhance overall reliability.

This policy will be periodically reviewed to ensure its relevance and alignment with organizational objectives and regulatory requirements.



**Signed:**  
**Sajid Hussein**  
**Accountable Manager**  
**Date:** 1 December 2024

## FRMS Definitions

For the purposes of this FRMS program, the following terms are defined:

1. **Augmented Flight Crew**  
   A flight crew comprising more members than the minimum required for operating an aircraft, enabling in-flight rest by replacing each flight crew member with another appropriately qualified crew member.
2. **Audit Reports**  
   Results of internal and external audits conducted on the FRM system, including identified gaps, recommendations, and implemented improvements, shall be retained.
3. **Cabin Crew**  
   A person employed to facilitate the safety of passengers, whose duties are detailed by the company or the aircraft commander. Such a person will not act as a member of the flight crew.
4. **Cabin Crew Member**  
   A crew member responsible for passenger safety and performing duties assigned by the operator or pilot-in-command but is not a flight crew member.
5. **Compliance and Exception Reports**  
   Documentation of compliance with duty and rest regulations, as well as any exceptions or deviations, shall be recorded and retained.
6. **Contactable**  
   A short period of time, other than on a day off unless mutually agreed, during which the company requires a crew member to be contactable for the purpose of giving notification of a duty period that will commence not less than 10 hours ahead. The contactable period will be between 1900 and 2000 hours local time.
7. **Crew**  
   A member of the flight crew or cabin crew.
8. **Crew Member**  
   A person assigned by an operator to perform duties on an aircraft during a flight duty period.
9. **Cumulative Fatigue**  
   Fatigue resulting from incomplete recovery from transient fatigue over time.
10. **Day Off**  
    A period available for leisure and relaxation free from all duties. Consecutive days off shall include a local night for each additional consecutive day off. A rest period may be included as part of a day off.
11. **Duty**  
    Any continuous period during which a crew member is prepared to carry out any task associated with the business of the company.
12. **Duty and Rest Period Records**  
    Records of flight and cabin crew duty and rest periods, including summaries, cumulative hours, weekly schedules, and daily records, shall be maintained, kept up to date, and made available before a person begins their duty or their first flight of the day.
13. **Duty Period**  
    The period starting when a crew member reports for duty and ending when all duties are completed.
14. **Early Start Duty**  
    A duty is an early start duty if it commences between 0430 and 0630 hours local time.
15. **Fatigue Reports**  
    All fatigue-related reports submitted by crew members, including details of reported fatigue events, actions taken, and resolutions, shall be securely stored.
16. **Flight Crew**  
    Members of the crew of an aircraft who act as pilots.
17. **Flight Crew Member**  
    A licensed crew member responsible for operating an aircraft during a flight duty period.
18. **Flight Duty Period (FDP)**  
    Any time during which a person operates in an aircraft as a member of its crew. It starts when the crew member is required by the company to report for a flight and finishes at rotors stopped on the final sector.
19. **Flight Time – Aircraft**  
    The total time from when an aircraft begins moving under its own power for takeoff to when it comes to rest after landing.
20. **Home Base**  
    The location designated by the operator where a crew member begins and ends duty periods.
21. **Late Finish Duty**  
    A duty is a late finish if it ends between 0100 and 0159 hours local time.
22. **Local Night**  
    A period of 8 hours falling between 2200 hours and 0800 hours local time.
23. **Night Duty**  
    A duty is a night duty if any part of that duty falls between 0200 and 0459 hours local time.
24. **Operator**  
    Any person, organization, or enterprise engaged in or offering aircraft operations.
25. **Positioning**  
    The practice of transferring crews from place to place as passengers in surface or air transport at the behest of the company. Synonymous with “Deadheading.”
26. **Regular**  
    When applied to duties that are late finishes, night, or early starts, refers to a run of 4 or 5 consecutive duties not broken by a period of 24 hours free from such duties, contained in a single 7-consecutive-day period.
27. **Reporting Time**  
    The time at which a crew member is required by the company to report for any duty.
28. **Rest Period**  
    A continuous period free from all duties, providing time for rest before or after duty. It is designed to give crew members adequate opportunity to rest before a flight.
29. **Roster**  
    A schedule detailing when a crew member is required to perform duties. Synonymous with “Schedule,” “Line of Time,” “Pattern,” and “Rotation.”
30. **Rostered/Planned Duty**  
    A duty period or series of duties with stipulated start and finish times, notified by the company to crews in advance.
31. **Rostering Period**  
    Four consecutive weeks.
32. **Scheduled Duty**  
    The allocation of specific flights or other duties to a crew member within the pre-notified rostered/planned series of duty periods.
33. **Sector**  
    The time between an aircraft first moving under its own power until it next comes to rest after landing on the designated parking position.
34. **Split Duty**  
    A flying duty period consisting of two or more sectors, separated by less than a minimum rest period.
35. **Standby Duty**  
    A period during which the company places restraints on a crew member who would otherwise be off duty. However, it does not include any time during which the crew member is contactable for a duty that starts 10 hours or more ahead.
36. **Standby**  
    A defined period during which a crew member must be available to receive assignments without an intervening rest period.
37. **Suitable Accommodation**  
    A well-furnished bedroom that is subject to minimum noise, is well ventilated, and has the facility to control light and temperature levels.
38. **Transient Fatigue**  
    Fatigue dispelled by sufficient rest or sleep.
39. **Travelling**  
    All time spent by a crew member transiting between the place of rest and the place of reporting for duty.
40. **Unforeseen Operational Circumstances**  
    Unplanned events beyond the operator’s control, such as adverse weather, equipment malfunctions, or air traffic delays.
41. **Week**  
    A period of seven consecutive days starting at 0001 on Sunday.

## Introduction

Fatigue is a significant safety concern in aviation, and its management is crucial for the well-being of flight crew members and the safety of operations. The purpose of this Fatigue Risk Management Program (FRMP) is to provide a structured approach to manage fatigue risks, ensure compliance with regulatory requirements, and promote flight safety. This program addresses key areas, including fitness for duty, flight time limits, rest requirements, on-call duty, and more.

## Objectives of the Fatigue Risk Management Program (FRMP)

This manual outlines the Fatigue Risk Management (FRM) system implemented by Auric Air in compliance with the Civil Aviation (Fatigue Risk Management) Regulations, 2024. The FRM system is designed to identify, assess, and mitigate fatigue-related risks among flight and cabin crew. It incorporates pre-duty assessments, health and wellness standards, and a structured reporting mechanism to manage fatigue effectively.

Auric Air ensures compliance with regulatory requirements for flight time, duty hours, and rest periods while utilizing predictive tools, data analysis, and crew feedback to minimize operational fatigue. The practices detailed in this manual are continually refined based on scientific research, industry standards, and operational data to maintain the highest levels of safety and efficiency.

## Fatigue Risk Management Processes (FRMP)

### Identification of Hazards

#### Predictive Process

Auric Air’s predictive process shall identify fatigue hazards by examining crew scheduling and considering factors affecting sleep, fatigue, and performance. Methods shall include:

1. **Operational Experience**

Auric Air shall collect flight schedules, duty hours, and rest period records from past operations in alignment with TCAA and ICAO guidelines. Data analytics tools shall be used to identify trends such as repeated incidents after long-duty periods or inadequate rest. The organization shall investigate all fatigue-related incidents or near-misses, documenting root causes and factors contributing to fatigue. Case studies shall be created to inform future scheduling and operational adjustments, following ICAO Doc 9966 recommendations. Regular debrief sessions shall be set up where crew members can report fatigue-related concerns, and anonymous surveys or feedback tools shall be implemented to ensure candid responses and meet TCAA safety reporting requirements.

1. **Evidence-Based Scheduling Practices**

Schedules shall be designed with built-in compliance to TCAA rest period regulations and scientifically validated circadian rhythm considerations from ICAO Annex 6 Part I. Adequate recovery time shall be prioritized after high-demand duties or night operations. Auric Air shall reference ICAO and TCAA aviation regulatory guidelines to ensure schedules align with global and national standards. Examples from similar operators shall be incorporated to refine scheduling strategies. Quarterly reviews of crew schedules shall be conducted to assess their alignment with fatigue management goals. Rosters shall be proactively adjusted based on predicted workload changes, crew feedback, and fatigue risk assessments.

### Proactive Process

The proactive process shall identify fatigue hazards within Auric Air’s current flight operations through detailed methods, in alignment with TCAA and ICAO safety management requirements:

##### Self-Reporting of Fatigue Risks

A user-friendly, confidential reporting system shall be established and accessible to all crew members. A no-blame culture shall be actively promoted to encourage honest reporting of fatigue-related concerns, in compliance with TCAA directives. Reporting tools shall be integrated within the crew management system to streamline submission and analysis of reports. Options for anonymous submissions shall be included to ensure participation without fear of reprisal. Submitted reports shall be regularly reviewed to identify patterns or recurring fatigue triggers. Immediate action shall be taken on high-risk fatigue concerns to mitigate their impact.

##### Crew Fatigue Surveys

Surveys shall be developed to assess factors contributing to fatigue, including work schedules, rest opportunities, and operational pressures. A combination of quantitative (e.g., Likert scales) and qualitative (e.g., open-ended questions) data collection methods shall be used. Surveys shall be conducted quarterly to align with operational reviews and ensure timely data collection. They shall be distributed digitally for ease of access and higher response rates. Survey results shall be analyzed to uncover trends and underlying issues impacting crew fatigue. Findings shall be shared with management and crew to foster transparency and collaborative improvements.

##### Performance Data Analysis

Auric Air shall monitor performance indicators such as reaction times, decision-making quality, and adherence to standard operating procedures. Deviations from norms during extended duties or night shifts shall be a focus. Flight data monitoring systems, simulator assessments, and operational audits shall be used to gather relevant metrics, consistent with TCAA SMS principles. Performance data shall be correlated with scheduling patterns to detect potential fatigue-related trends. High-risk areas or operations requiring immediate attention shall be highlighted.

##### Safety Databases and Studies

Safety databases, including ICAO ADREP and TCAA records, shall be regularly reviewed for incident reports or studies linking fatigue to operational risks. Findings shall be integrated into Auric Air’s operational planning and fatigue management strategies. Partnerships with ICAO, TCAA, and academic institutions shall be established to stay updated on the latest scientific insights into fatigue management. Evidence-based recommendations shall be applied to refine internal processes.

##### Planned vs. Actual Time Analysis

Scheduled duty times shall be compared against actual hours worked to identify patterns of overtime or schedule deviations. Operations consistently leading to extended duty periods or insufficient rest shall be highlighted. Automated systems shall be implemented to track and log deviations in real-time. Quarterly reviews shall assess the impact of these discrepancies on crew fatigue. Scheduling practices shall be modified to reduce identified discrepancies and mitigate their impact on fatigue levels. Contingency plans shall be introduced to handle unforeseen disruptions without overburdening crew.

### Implementation of Proactive Process

Auric Air shall deploy digital tools and platforms for self-reporting, survey distribution, and data analysis, meeting TCAA and ICAO technical standards. Crew shall be educated on the importance of fatigue reporting and proactive measures to mitigate risks, aligned with TCAA and ICAO SMS requirements. Data streams shall be regularly monitored, and corrective actions based on proactive insights shall be implemented. Collaboration between management, crew, and safety teams shall be fostered to ensure successful process implementation. Metrics such as increased reporting rates, reduced fatigue-related incidents, and improved survey participation shall be defined to measure the success of the proactive process.

### Fatigue Risk Mitigation

Fatigue risk mitigation at Auric Air shall be an integrated process involving the careful selection, implementation, and continuous evaluation of strategies to manage identified fatigue risks effectively.

#### Fatigue Risk Mitigation Strategy Selection

Auric Air shall select fatigue mitigation strategies tailored to the specific risks identified during hazard assessments. This process shall involve collaboration across departments, ensuring the chosen measures address both operational and individual crew member needs. Strategies may include modifying schedules to reduce high-risk duty periods, implementing additional rest opportunities during extended operations, or introducing workload-sharing mechanisms for demanding tasks. The selection process shall be guided by evidence-based practices, ICAO guidelines, and TCAA regulations.

#### Implementation of Fatigue Mitigations

Once strategies are selected, Auric Air shall implement them systematically across relevant departments and operations. Implementation shall involve clear communication of new measures to all stakeholders, including crew members, operations staff, and management. For example, if additional rest breaks are introduced, updated schedules shall be disseminated, and compliance shall be monitored closely. Training sessions shall be provided to ensure all personnel understand the rationale behind the changes and their roles in maintaining compliance. Continuous coordination between scheduling teams and operational units shall be essential to integrate the strategies seamlessly into daily operations.

#### Monitoring and Evaluation

Auric Air shall continuously monitor the effectiveness of fatigue mitigation measures using both quantitative and qualitative feedback. Metrics such as reduced fatigue-related incidents, crew satisfaction scores, and compliance with new schedules shall be tracked regularly. Feedback mechanisms, including crew surveys and performance assessments, shall be utilized to gather insights into the practicality and impact of the implemented strategies. Data collected during this phase shall inform adjustments to the strategies, ensuring they remain relevant and effective. Quarterly evaluations of mitigation measures shall be conducted to align with operational goals and regulatory requirements. This iterative process shall enable Auric Air to refine its fatigue risk management system continually.

### FRMS Safety Assurance Processes

Auric Air shall develop and maintain Fatigue Risk Management System (FRMS) safety assurance processes to ensure the continuous effectiveness, adaptability, and improvement of fatigue safety risk controls. These processes will be designed to address performance monitoring, change management, and systematic enhancements as follows:

#### Continuous FRMS Performance Monitoring, Analysis of Trends, and Measurement

To ensure the effectiveness of fatigue safety risk controls, Auric Air shall implement systems for continuous monitoring, trend analysis, and performance measurement. These mechanisms will utilize various sources of data, including:

1. **Hazard Reporting and Investigations**  
   Auric Air shall establish a robust hazard reporting system to enable employees to report fatigue-related issues promptly and without fear of reprisal. Investigations into reported hazards will aim to identify root causes and implement appropriate corrective actions, ensuring proactive mitigation of fatigue risks.
2. **Audits and Surveys**  
   Regular audits and surveys will be conducted to assess compliance with FRMS protocols and gauge their effectiveness. Audits will review operational practices and adherence to FRMS guidelines, while surveys will collect feedback from employees on fatigue-related challenges, providing critical insights for continuous improvement.
3. **Reviews and Fatigue Studies**  
   Periodic reviews of the FRMS and targeted fatigue studies will be undertaken to align the system with scientific advancements and operational requirements. These reviews may include analysing operational data, studying sleep patterns, or assessing workload distribution to refine fatigue risk controls.

#### Formal Process for the Management of Change

Auric Air shall implement a structured process for managing changes that could impact FRMS performance. This process will include:

1. **Identification of Changes in the Operational Environment**  
   Auric Air will monitor and identify changes in the operational environment, such as new flight schedules, altered routes, or varying operational demands, that may introduce new fatigue-related risks. These changes will be thoroughly assessed to ensure the FRMS remains responsive.
2. **Identification of Changes within the Organisation**  
   Organizational adjustments, including staffing changes, restructuring, or modifications in roles and responsibilities, will be evaluated for their potential impact on the FRMS. This assessment will ensure that internal transitions do not compromise fatigue risk management.
3. **Consideration of Available Tools for FRMS Maintenance or Improvement**  
   Before implementing any changes, Auric Air shall evaluate and adopt appropriate tools and methods to maintain or enhance FRMS performance. This may involve incorporating new fatigue monitoring technologies, advanced data analysis methods, or updated training programs to mitigate emerging risks.

#### Continuous Improvement of the FRMS

Auric Air shall ensure the FRMS evolves continually to address changes in operational and organizational contexts. This process shall include:

1. **Elimination or Modification of Risk Controls with Unintended Consequences**  
   Risk controls that produce unforeseen negative outcomes or become obsolete due to changing circumstances shall be reviewed and either modified or removed. This ensures that the FRMS remains relevant and effective.
2. **Routine Evaluations of Facilities, Equipment, Documentation, and Procedures**  
   Regular evaluations of operational facilities, equipment, procedural documentation, and workflows will be conducted to identify inefficiencies or outdated practices. Necessary updates will be made to maintain alignment with FRMS objectives.
3. **Introduction of New Processes and Procedures for Emerging Fatigue-Related Risks**  
   As fatigue-related risks evolve, Auric Air shall proactively develop and implement new processes and procedures to address these challenges. This may include adopting innovative fatigue management strategies or enhancing existing protocols to meet emerging needs.

### FRMS Promotion Processes

Auric Air shall develop and implement FRMS promotion processes to ensure the ongoing development of the Fatigue Risk Management System (FRMS), achieve continuous improvement in its performance, and maintain optimum safety levels. These processes will support a culture of safety and encourage proactive engagement from all personnel involved in managing fatigue risks. The following components shall be established and implemented:

#### Training Programs

Auric Air shall establish comprehensive training programs to ensure all personnel involved in the FRMS possess the necessary knowledge, skills, and competencies to fulfill their roles effectively. These training programs will be tailored to the specific roles and responsibilities of management, flight and cabin crew, and other relevant personnel under the planned FRMS.

1. **Management Training**  
   Management personnel shall be trained to oversee the implementation, monitoring, and improvement of the FRMS. The training will include fatigue science, risk management principles, and decision-making strategies to effectively support fatigue mitigation initiatives.
2. **Flight and Cabin Crew Training**  
   Flight and cabin crew training shall focus on practical strategies for managing fatigue. This includes recognizing personal fatigue symptoms, understanding sleep hygiene, and adhering to FRMS procedures. The training will also emphasize the importance of reporting fatigue-related issues and following prescribed mitigation measures.
3. **Training for Support and Ground Personnel**  
   All other personnel involved in FRMS, such as schedulers, maintenance teams, and operational planners, shall be trained to understand their roles in minimizing fatigue-related risks. Training will highlight how their actions influence fatigue management and how to apply effective practices in daily operations.
4. **Regular Refresher Training**  
   Auric Air shall conduct periodic refresher training to ensure personnel remain updated on new developments in fatigue management, operational best practices, and changes to FRMS policies or procedures. Refresher sessions will reinforce the importance of fatigue management in ensuring operational safety.

#### Effective FRMS Communication Plan

Auric Air shall establish a clear and effective communication plan to promote understanding, collaboration, and engagement with the FRMS across the organization. The communication plan will include the following components:

1. **Explanation of FRMS Policies, Procedures, and Responsibilities**  
   The communication plan shall ensure that FRMS policies, procedures, and responsibilities are clearly explained to all relevant stakeholders. This will help everyone in the organization, from senior management to operational staff, understand their roles within the FRMS and the importance of adherence to its protocols. Clear communication will also reinforce Auric Air’s commitment to managing fatigue-related risks.
2. **Description of Communication Channels**  
   The plan shall specify the communication channels used to gather and disseminate FRMS-related information. These channels will include:
   * **Electronic Software Solutions**: Auric Air shall utilize suitable electronic software, such as safety management systems (SMS) platforms or fatigue management tools, to share policy changes, training schedules, fatigue reports, and risk assessments.
   * **Meetings and Briefings**: Scheduled briefings will facilitate discussions on FRMS updates, operational insights, and provide opportunities for personnel to voice concerns or suggestions.
   * **Feedback Mechanisms**: Systems such as digital fatigue reporting tools, surveys, or dedicated feedback portals will gather input from personnel to address challenges and refine FRMS processes.
   * **Awareness Campaigns**: Internal newsletters, bulletins, and visual reminders in operational areas will reinforce FRMS principles and keep fatigue management visible across the organization.
3. **Two-Way Communication**  
   The communication plan shall promote bi-directional engagement. While disseminating FRMS-related information, Auric Air will actively encourage feedback from personnel. This approach ensures that operational challenges, emerging risks, and improvement opportunities are identified and addressed.
4. **Communication Consistency**  
   All communication efforts shall maintain consistency in messaging to align with Auric Air’s safety goals and reinforce the importance of effective fatigue risk management.

## Knowledge or Suspicion of Crew Fatigue

No person shall act as a crew member on an aircraft if they know or suspect that they are suffering from fatigue that may endanger the safety of the flight. Additionally, no person in a supervisory or operational capacity shall cause or permit a crew member to operate an aircraft if it is known or suspected that the crew member is suffering from such fatigue.

It is the responsibility of all crew members to assess their fitness for duty and report any fatigue concerns, and it is the duty of management to ensure that no fatigued individual is assigned to operate an aircraft, in strict adherence to regulatory and safety standards.

## Fitness for Duty

Crew members must report for a flight duty period only when fully rested and prepared to safely perform their assigned duties. Crew members are required to notify the office of the Director of Operations immediately if they are experiencing fatigue that could compromise safety.

Flight duties will not be assigned, and crew members must not accept, any assignment if fatigue has been reported or is known to impact their ability to perform duties safely. Additionally, no crew member will be permitted to continue a flight duty period after reporting fatigue. Each crew member is required to affirm their fitness for duty prior to dispatch or flight release, ensuring adherence to safety and regulatory standards.

## Fatigue Reports

### Actions to Take Following Self-Reported Fatigue

When a crew member self-reports fatigue, Auric Air shall take immediate action to address the issue as prescribed in the regulations. If the crew member is at their normal base of operation, they shall be removed from duty and required to remain at home while an investigation is conducted and appropriate mitigations are formulated. If the crew member is out of their normal base of operation, Auric Air shall provide suitable rest facilities or transport them to appropriate accommodations to recover. Additionally, the crew member must complete a fatigue report, which shall be submitted to the Safety Department. This report will include details of the fatigue incident, its circumstances, and any contributing factors. The Safety Department shall analyze the report and implement any necessary follow-up actions to prevent future occurrences, such as adjustments to scheduling practices or enhanced fatigue training.

### Actions to Take if a Crew Member is Suspected to Be Fatigued

If a crew member is suspected to be fatigued, the PIC or duty manager must act in accordance with the regulations. An initial assessment of the crew member’s condition shall be conducted based on observed behavior, alertness, and other operational considerations. If it is determined that the crew member is fatigued, they shall be removed from duty to ensure flight safety. Auric Air must provide suitable rest facilities or arrange transportation to accommodations where the crew member can recover. Operational continuity must be maintained by promptly reassigning tasks to other crew members as necessary. A detailed incident report must be completed, documenting the suspected fatigue, the assessment process, and actions taken. This report shall be submitted to the Safety Department for regulatory compliance and for review to improve fatigue management practices.

### Actions to Take When a Crew Member Reaches Any Duty or Flight Limitation

Auric Air shall monitor duty and flight time records to ensure no crew member exceeds the limitations prescribed by regulations. If a crew member reaches their maximum allowable duty or flight time, they must be relieved of their responsibilities and scheduled for a rest period as required. If, due to unforeseen circumstances, a crew member exceeds their limitations, Auric Air shall prepare a formal report as prescribed in the regulations. This report must be submitted to the Authority within the stipulated timeframe, detailing the circumstances of the exceedance, the reasons for it, and the corrective actions taken to prevent recurrence.

## Flight Duty And Flight Time General

### General Principles

#### Scheme of Flight, Duty, and Rest Time Regulations

The primary objective of this scheme of flight, duty, and rest time regulations is to ensure that all crew members are adequately rested at the beginning of each flight duty period. To achieve this, Auric Air agrees to consider the interrelated planning constraints of individual duty and rest periods, the length of duty cycles and their associated rest periods, and cumulative duty hours within specific timeframes.

Duties must be scheduled within the limits prescribed by this scheme. However, to accommodate unforeseeable delays, the Pilot-in-Command (PIC) may, under defined conditions, use their discretion to exceed these limits on the day. Despite this flexibility, flight schedules must remain realistic, and the planning of duties should be designed to minimize the risk of exceeding the allowed flight duty times wherever possible.

#### General Planning Considerations

In addition to adhering to duty and rest time regulations, other general considerations must be taken into account when planning duties:

* **Constructing Consecutive Work Patterns**: Duty rosters should aim to avoid undesirable practices such as alternating day and night duties or scheduling positioning flights that disrupt established sleep and work patterns. These practices can lead to fatigue and reduced alertness.
* **Pre-Flight Notification of Duty**: For flights conducted on a programmed basis, reasonable time should be allowed for pre-flight notifications to the flight crew, except for those on standby. This ensures that crew members have adequate preparation time.
* **Planning and Notification of Time Off**: Time off must be planned effectively, and crew members should be notified of their schedules well in advance to facilitate proper rest and personal planning.

#### Responsibility of Flight Crew Members

All flight crew members bear the responsibility to make optimal use of the rest opportunities and facilities provided by Auric Air. Proper planning and utilization of rest periods are crucial to minimizing the risk of fatigue. Additionally, crew members must report any flying they have undertaken outside of Auric Air operations if the cumulative duty hours, including such flying, risk exceeding the maximum limits outlined in this manual.

#### Record-Keeping and Oversight

Auric Air will maintain accurate records of all duty periods performed by flight crew members for control and compliance purposes. These records will ensure adherence to the regulations and allow for effective monitoring of duty and rest patterns.

#### Role of the Pilot-in-Command

Notwithstanding the limitations set forth in this manual, the ultimate responsibility lies with the Pilot-in-Command to ensure that all crew members are sufficiently rested to safely fulfill their duties. This includes assessing the readiness of the crew and taking necessary actions to mitigate fatigue-related risks during flight operations. Through adherence to these regulations, Auric Air aims to maintain high safety standards and promote the well-being of its flight crew members.

### Applicability

The scheme shall apply in relation to any Commercial Air Transportation duty carried out at the behest of the company by flight crew. Pilots engaged in non-commercial flying activities must ensure that they are back within the limitations of the scheme prior to undertaking a Commercial Air Transport duty (FDP). A crew member is considered to be on duty when performing any tasks on behalf of Auric Air or any other operator in the case of a freelance pilot, whether these tasks are scheduled, requested, or self-initiated. Additionally, when computing the duty period for a crew member, the Authority shall account for excessive time accumulated during emergencies or adverse situations that are beyond the control of the operator. This ensures that all operational and unforeseen circumstances are accurately reflected in duty time calculations.

### Responsibilities

#### The Company

The primary objective of this scheme of flight, duty, and rest time regulations is to ensure that all crew members are adequately rested at the beginning of each flight duty period. To achieve this, Auric Air agrees to consider the interrelated planning constraints of individual duty and rest periods, the length of duty cycles and their associated rest periods, and cumulative duty hours within specific timeframes.

Duties must be scheduled within the limits prescribed by this scheme. However, to accommodate unforeseeable delays, the Pilot-in-Command (PIC) may, under defined conditions, use their discretion to exceed these limits on the day. Despite this flexibility, flight schedules must remain realistic, and the planning of duties should be designed to minimize the risk of exceeding the allowed flight duty times wherever possible.

In addition to adhering to duty and rest time regulations, other general considerations must be taken into account when planning duties. These include constructing consecutive work patterns that avoid undesirable practices such as alternating day and night duties or scheduling positioning flights that disrupt established sleep and work patterns. Planning should also ensure reasonable pre-flight notification for flight crews, except for those on standby. Furthermore, time off must be effectively planned, and crew members should be notified of their schedules well in advance to facilitate proper rest and personal arrangements.

Flight crew members hold the responsibility to make optimal use of the rest opportunities and facilities provided by Auric Air. Proper planning and utilization of rest periods are critical in minimizing the risk of fatigue. Crew members are also required to report any flying undertaken outside of Auric Air operations if the cumulative duty hours, including such activities, risk exceeding the maximum limits outlined in this manual.

Auric Air will maintain accurate records of all duty periods performed by flight crew members for control and compliance purposes. This ensures adherence to the prescribed regulations and enables effective monitoring of duty and rest patterns.

Notwithstanding the limitations outlined in this manual, the ultimate responsibility lies with the Pilot-in-Command to ensure that all crew members are sufficiently rested to safely fulfill their duties. This includes assessing the readiness of the crew and taking any necessary measures to mitigate fatigue-related risks during flight operations.

#### Crew Members

Responsibility for the proper control of flight and duty time does not rest solely with the company. Crew members have an essential role in ensuring they are fit and ready for their duties. They are responsible for making optimal use of the opportunities and facilities for rest provided by the company. Additionally, crew members must plan and utilize their rest periods properly to minimize fatigue and maintain operational safety.

The regulations further emphasize the responsibility of crew members to assess their own fitness for duty. Crew members must not act as operating crew if they know or suspect that their physical or mental condition renders them unfit to operate. Similarly, they must refrain from flying if they know they are, or are likely to be, in breach of the duty and rest time requirements outlined in this scheme.

Crew members not in the regular employment of the company bear additional responsibilities. Before undertaking flying duties on behalf of the company, they must provide detailed records of their previous 28 days’ totals of duty periods and flying hours. This information ensures compliance with the company’s fatigue management requirements and prevents the risk of exceeding permissible limits.

Furthermore, crew members are responsible for the following:

* **Complying with the Requirements**: Crew members must adhere to all aspects of the flight, duty, and rest time regulations established in this scheme.
* **Utilizing Rest Opportunities**: They must take full advantage of the rest and sleep opportunities provided to achieve sufficient restorative sleep, ensuring they are alert and capable of performing subsequent flight duties.
* **Reporting Fatigue-Related Occurrences**: Any fatigue-related occurrences that have resulted in or could have resulted in a reduction in safety margins must be reported. Such reports help identify potential risks and enhance the company’s safety practices.
* **Notifying Personal Situations**: Crew members are required to notify the Director of Safety of any personal situations—whether due to their nature, duration, or effects—that might impact their ability to fulfill the company’s fatigue risk management obligations effectively.

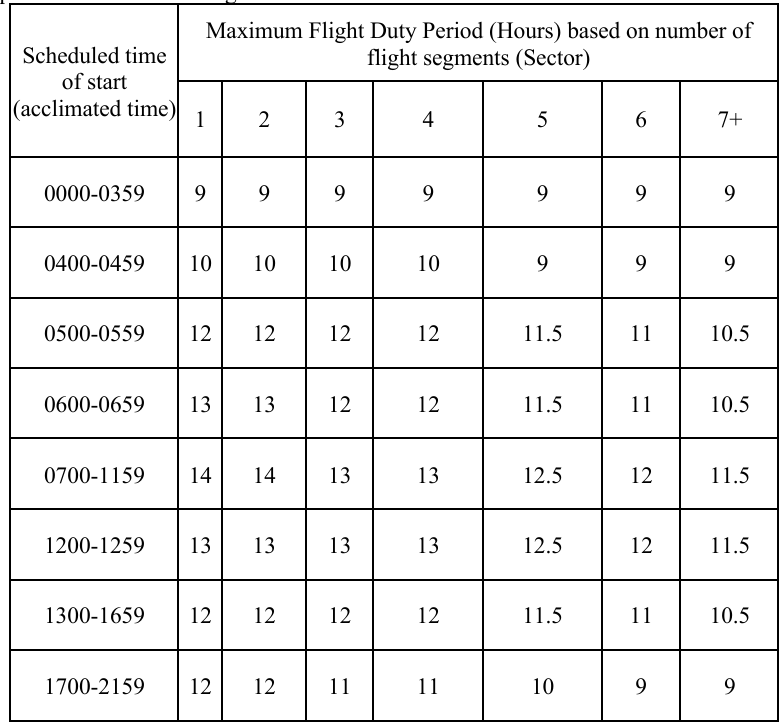
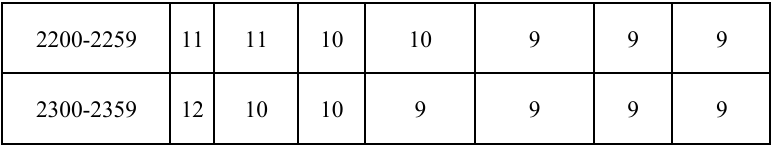
## Duty Period Limitations

A crew member is considered to be on duty whenever performing any tasks on behalf of Auric Air, whether the task is scheduled, requested, or self-initiated. Additionally, when calculating the duty period for a crew member, the Authority shall take into account any excessive time accumulated during emergencies or adverse situations that are beyond the control of Auric Air. This ensures fair computation of duty periods while acknowledging the impact of unforeseen operational circumstances.

### Maximum Rostered Flight Duty Periods 2 Crew

Auric Air shall not schedule, and a flight crew member shall not accept, any assignment for flight time in commercial air transport if the crew member’s total duty time in commercial flying exceeds the limitations prescribed by the Authority, as prescribed in the Table 1 below. This ensures compliance with regulatory requirements and promotes safe operational practices.

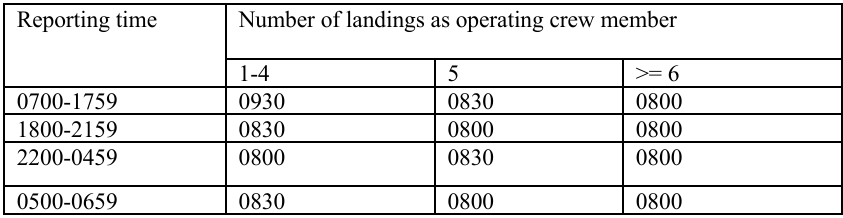
### Table 1 Maximum Rostered Flight Duty Periods 2 Crew



#### Maximum Rostered Flight Duty Periods Single Crew

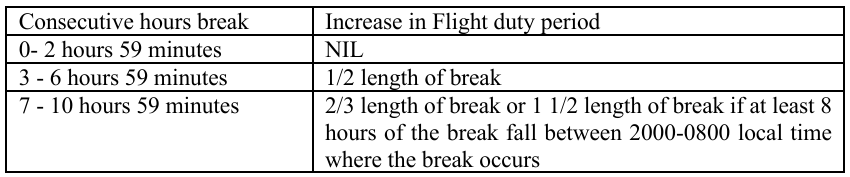
* For flights operated by a single pilot and conducted wholly under Visual Flight Rules (VFR), allowable flight duty periods shall be derived from the first column of the table below addressing 1-4 landings in the maximum flight duty period. In this case, there is no limit to the number of landings. However, where the number of landings exceeds an average of 4 per hour, a break of at least 30 minutes shall be taken within any period of 3 consecutive hours. This ensures the pilot has adequate rest to maintain operational safety and comply with fatigue management principles.
* Where report for duty is between 0700 and 0959 a crew member may be assigned a flight duty period up to a maximum of 13 hours provided the crew member has an off-duty period of at least 12 hours immediately prior to reporting for such an assigned duty.
* A duty period, as opposed to an FDP, may be up to 14 hours, however, once a crewmember’s duty period is 12 hours or longer, a 12 hour off duty period after that duty period is required.
* A flight crew member shall not be assigned, nor shall a flight crew member accept such assignment, if the members total flight time will, as a result, in the case of a single-pilot operation exceed 8 hours within any flight duty period.
* When a flight crew member flies in a simulator, either on a check or training flight, or as an instructor, and then within the same duty period flies as a flight crew member, all the time spent in the simulator is counted in full towards the subsequent FDP and daily flying hour maxima. The FDP allowable is calculated from the report time of the simulator detail.

**Table 2 extended duty for single-pilot Duty**



### Split Duty

Auric Air shall not schedule, and the Pilot-in-Command (PIC) shall not accept, split-duty assignments unless specific conditions are met. These include ensuring no more than two landings occur within a flight duty period, rest facilities are available onboard for cabin crew, and each cabin crew member is relieved of all duties for part of the flight. An operator may increase the allowable planned flight duty period through split-duty policies provided the flight duty period consists of no more than two duty segments, there is a single adequate break, crew members are notified in advance, and adequate facilities or suitable accommodations are provided, particularly for breaks of six hours or more or those covering the critical 2200-0600 local time period. Additionally, the parts of the flight duty period before and after the break must not exceed 10 hours, with a total flight duty period capped at 18 hours. If travel time to and from rest facilities exceeds one hour in total, the excess is deducted from the break. Split duty cannot be combined with provisions for an augmented flight crew or extended flight duty periods for cabin crew.

**Table: 3 Split Duty**

### Cumulative Rostered Duty Hours with Split Duty

When calculating cumulative duty hours, specific guidelines apply to breaks during split-duty assignments. If the break is less than 8 hours, the entire duration of the break is considered accountable as duty time. However, if the break is 8 hours or more, only 50% of the break period is considered accountable as duty time. This method ensures a balanced approach to managing cumulative duty hours while accommodating operational flexibility and crew rest requirements

### Cumulative Duty Hours

Auric Air shall not schedule, and no crew member shall accept, an assignment for duty that exceeds the following limits:

1. 1800 hours in any twelve consecutive months.
2. 190 hours in any twenty-eight consecutive days.
3. 55 hours in any seven consecutive days.

### Calculation of Duty Period for Mixed Flying Operations

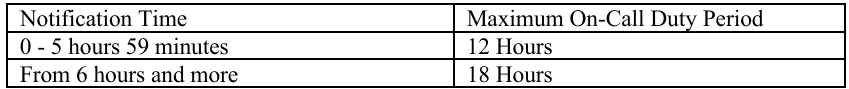
Where a flight crew member conducts flight simulator or training flights prior to a commercial air transport flight, the duration of these simulator or training flights shall be doubled when calculating the limits of that flight duty period. Additionally, the number of landings performed during flight simulator and training flights need not be considered in these calculations

### On-Call Duty

When utilizing scheduled on-call duty for flight crew members, Auric Air shall ensure the following:

1. **On-Call Duty Period Limitations**:  
   Auric Air shall apply on-call duty period limitations for flight crew members as prescribed in the table below.
2. **Provision of Suitable Rest Facilities**:  
   (a) Suitable rest facilities shall be provided where:  
   (i) A flight crew member requests to be on call duty at a base located at a distance.  
   (ii) On-call duty is to be carried out at the aerodrome.
3. **Inclusion in Total Duty Time**:  
   Auric Air shall include the following in the calculation of total duty time:  
   (a) **Fifty percent** of the on-call duty time, excluding the first four hours of on-call duty carried out at home.  
   (b) **Fifty percent** of the notification time if the notice period is less than 10 hours.
4. **Rest Period After On-Call Duty**:  
   If a flight crew member completes the on-call duty period without being assigned any duty, Auric Air shall ensure the crew member has a rest period of at least 10 hours before commencing duty or the next on-call duty assignment.

**Table 4 : On Call Duty**



### Deadheading

If a flight crew member is required to engage in deadhead transportation for more than 4 hours, one-half of that time shall be included in the calculation of the flight duty period, unless the crew member is provided with 10 hours of rest on the ground before being assigned to flight duty. All time spent in deadhead transportation is considered duty time and shall not be classified as a rest period.

For the purpose of determining the maximum flight duty period, deadhead transportation is not considered a flight segment.

### Extension of the Flight Duty Period for Cabin Crew

Auric Air shall not schedule, and a cabin crew member shall not accept, an assignment involving the extension of the flight duty period for cabin crew up to a maximum of **18 hours**, unless the following conditions are met:

1. **Limit on Landings**: No more than **two landings** are carried out within the extended flight duty period.
2. **Onboard Rest Facilities**: Adequate **rest facilities** are available on board for cabin crew members to rest during the flight.
3. **Relief from Tasks**: Each cabin crew member is **relieved of all tasks** for a portion of the flight to ensure adequate rest.

These conditions are intended to safeguard cabin crew well-being and ensure operational safety during extended duty periods.

#### Limits On Disruptive Duty Periods

No more than two consecutive late-night operations are permitted. Any duty period rostered during late-night operations must be preceded by an off-duty period of at least 12 hours immediately prior to reporting for such an assigned duty.

* + Any rostered late-night operations must also be followed by a minimum 12 hour off- duty period.

## Maximum Rostered Flight Duty Hours

Auric Air and the Pilot-in-Command shall not schedule or accept any assignment for flight time in commercial air transport if the total flight time for any consecutive 24-hour period exceeds **8 hours** for operations conducted with a two-pilot flight crew. All time spent on an aircraft as an assigned or relief flight crew member, whether resting or performing tasks shall be included in the determination of the flight duty period.

### Cumulative Flight Duty Hours

Auric Air and the Pilot-in-Command shall not schedule or accept any assignment for flight time in commercial air transport if the cumulative duty aloft flight time exceeds the hours stated the table below:

**Table 5 Cumulative duty hours**

|  |  |
| --- | --- |
| Single-pilot operation | Two-crew operation |
| 8 hours daily flight time | 8 hours daily flight time |
| 34 hours in any 7 day consecutive period | 34 hours in any 7 day consecutive period |
| 100 hours in any 28 day consecutive period | 100 hours in any 28 day consecutive period |
| 1000 hours in any 365 day consecutive period | 1000 hours in any 365 day consecutive period |

### Maximum number of Sectors

Auric Air and the Pilot-in-Command shall not schedule or accept any assignment for flight time in commercial air transport that violates the following limitations:

1. Auric Air shall not schedule, and a flight crew member shall not accept, an assignment as a required crew member for more than **8 sectors during a consecutive 24-hour duty period**.
2. Auric Air shall not schedule, and a flight crew member shall not accept, an assignment as a required crew member for more than **7 sectors during an 18-hour consecutive duty period**.
3. When operating an aircraft with a maximum mass below 5,700 kg, Auric Air shall not schedule any flight crew member, and no flight crew member shall accept an assignment in commercial air transport as a required crew member, for more than **10 sectors within a consecutive 24-hour duty period.** This limitation ensures compliance with safety regulations and mitigates the risk of fatigue.

### Exceeding flight time in unforeseen circumstances

Auric Air shall adhere to the following provisions regarding unforeseen operational circumstances and flight time limitations:

Where unforeseen operational circumstances arise after take-off and are beyond Auric Air’s control, a flight crew member may exceed the maximum and cumulative flight time This extension is permitted only to the extent necessary to safely land the aircraft at the next destination airport or an alternate airport. Auric Air shall report to the Authority within 10 days any instance where flight time exceeded the maximum limits permitted. The report submitted to the Authority shall include a detailed description of the extended flight time and the circumstances that necessitated the extension.

## Rest Periods

### General Requirements

Auric Air and the Pilot-in-Command (PIC) shall ensure the following:

1. Crew members shall not:  
   (a) Perform duties unless they have completed at least the minimum rest period prescribed by the regulations.  
   (b) Accept assignments during any required rest period.

Auric Air may reduce a crew member's rest period within the limitations prescribed.

It is the responsibility of Auric Air to notify flight crew members of a flight duty period so that adequate and, within reason, uninterrupted pre-flight rest can be obtained by the flight crew. Away from base the operator must provide support for the flight crew to obtain adequate pre-flight rest. It is the pilot’s responsibility to ensure that sufficient funds have been received for the nights stop.

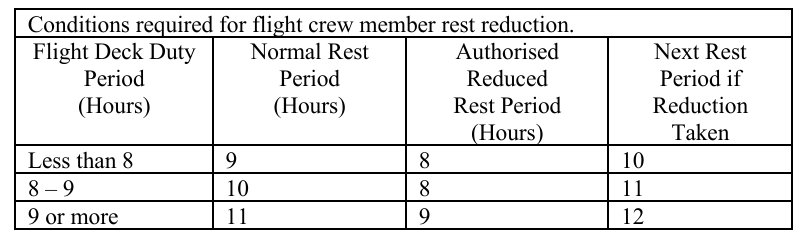
### Minimum Rest Period

Auric Air and the PIC shall comply with the following minimum rest period requirements:

1. Rest periods shall not be less than:  
   (a) 9 hours for pilots.  
   (b) 8 hours for cabin crew members.
2. Before the start of a flight duty period, Auric Air shall ensure crew members have completed a rest period that is:
3. At least as long as the preceding duty period.
4. 11 hours, whichever is greater.
5. For split-duty periods, rest must:
6. Be at least as long as the total flight duty period, including the break.
7. Exclude the break duration if suitable accommodation is provided.

### Rest period reductions: Rest periods may be reduced by up to 3 hours but not less than 11 hours. The reduced time must be added to the next rest period. Reduced time must also be deducted from the subsequent allowable flight duty period.

**Table 6: Crew Rest Reduction**



### Minimum Rest Period for Extended Periods

Auric Air shall ensure the following:

Crew members and flight operations officers are provided rest periods of:

1. 36 consecutive hours during any 7 consecutive days
2. 60 consecutive hours during any 10 consecutive days.

### Local and Deadhead Transportation

Auric Air and the PIC shall ensure that:

1. Time spent in local transportation exceeding 30 minutes is not considered part of a crew member’s rest period.
2. Transportation required by the operator to position crew members for flights, which is not local in nature, is also not considered part of a rest period.
3. Time spent on aircraft transportation, at the insistence of Auric Air, to or from a crew member's home station is excluded from rest periods.

## Flight and Duty Records to be Maintained

Records for the duty and off-duty periods of all crew members shall include:

1. **Duty and Rest Period Records**Records of flight and cabin crew duty and rest periods, including summaries, cumulative hours, weekly schedules, and daily records, shall be maintained and kept up to date and made available before a person begins their duty or their first flight of the day.
2. **Fatigue Reports**  
   All fatigue-related reports submitted by crew members, including details of reported fatigue events, actions taken, and resolutions, shall be securely stored.
3. **Scheduling and Roster Data**  
   Crew rosters and schedules, including any changes made to mitigate fatigue risks, shall be documented and retained.
4. **Training Records**  
   Records of all initial and recurrent fatigue management training programs attended by crew members and operational staff shall include training dates, content covered, and attendance logs.
5. **Compliance and Exception Reports**  
   Documentation of compliance with duty and rest regulations, as well as any exceptions or deviations, shall be recorded and retained.
6. **Audit Reports**  
   Results of internal and external audits conducted on the FRM system, including identified gaps, recommendations, and implemented improvements, shall be retained.
7. **Health and Fitness Declarations**  
   Records of crew members’ fitness declarations prior to duty, including instances where fitness for duty was not affirmed, shall be maintained.
8. **Fatigue Risk Assessments** Data from fatigue risk assessments conducted using predictive tools, operational data, or crew feedback shall be documented.

### Flight time Records

Each flight crew member shall keep a record of his flight time in the personal logbook as per civil aviation regulations requirements and record:

1. The times of the beginning and end of each flight in any aircraft made by that person as crewmember.
2. The times of the beginning and end of each duty period of that person.
3. The times of the beginning and end of each duty period of that person ending within a period of seventy-two hours immediately preceding the beginning of any duty period.
4. Brief particulars of the nature of the work or other duties carried out by that person.

### Personal Flying Logbook Records

A person required by the Civil Aviation (Personnel Licensing) Regulations to maintain a personal flying logbook shall keep the records for a minimum period of two years from the date of the last entry. The logbook must be produced immediately to an authorized person upon request or, in any case, no later than fourteen days after the request.

### Preservation of Records

The records above shall be recorded electronically and preserved for a period of at least six months after the end of the flight duty period or rest period to which they relate. All paper records shall be securely stored to prevent unauthorized access while remaining accessible for audits, regulatory inspections, and internal reviews.

## Operations Department Communication with crewmembers

Contact with crew members between the hours of 2000 and 0600 hours should be avoided unless in an emergency. If a crew member’s reporting time is to be delayed, contact with crew members to inform them of the delay shall be conducted in a manner to minimize disturbance to the crew member’s sleep. When the company informs the crew member of a delay of 10 hours or more in reporting time and the crew member is not to be further contacted by the company, the delay counts as an off-duty period. The off-duty period is reset if a crew member is contacted in a manner that disrupts the opportunity for 8 hours uninterrupted sleep.

# OPERATING PROCEDURES

## Operating Considerations and Facilities

Auric Air shall ensure that operations are conducted only along routes and within areas where:

1. Adequate ground facilities and services, including meteorological services, are provided for the planned operation.
2. The performance of the intended aircraft complies with minimum flight altitude requirements.
3. The equipment of the aircraft meets the minimum requirements for the planned operation.
4. Appropriate and current maps and charts are available.
5. For two-engine aircraft, adequate airports are accessible within the time and distance limitations.
6. For single-engine aircraft, surfaces are available to permit the execution of a safe forced landing.

No flight shall be commenced unless the ground or water facilities required for safe operation and passenger protection are adequate and appropriately operated. Flights shall not commence or continue unless the airspace along the intended route, including take-off, destination, and alternate aerodromes, can be safely used. When operating over or near conflict zones, a risk assessment must be conducted, and appropriate mitigation measures implemented. Any inadequacies in facilities observed during operations must be reported to the responsible authority without undue delay.

Aerodromes and their facilities must remain available for flight operations during published hours, regardless of weather, subject to their conditions of use. Through its Safety Management System (SMS), Auric Air shall assess the level of rescue and firefighting services available at aerodromes intended for use in flight plans to ensure acceptable protection levels. This information shall be included in the Operations Manual. Furthermore, Auric Air shall not conduct commercial air transport operations on any route or in any area unless these operations comply with any restrictions imposed by the Authority.

### Suspension and Continuation of Operations Due to Hazardous Aerodrome Conditions

Auric Air shall restrict or suspend all commercial air transport operations to any aerodrome or runway where the pilot-in-command or the company becomes aware of conditions that pose a hazard to safe operations. Operations shall only resume once those conditions have been corrected or have sufficiently improved to ensure safety.

A pilot-in-command shall not allow a flight to continue toward an aerodrome where commercial air transport operations are restricted or suspended unless the pilot-in-command reasonably expects that the hazardous conditions will be corrected or will have improved by the estimated time of arrival, or there is no safer alternative procedure available.

## PIC Flight Preparation Requirements

Auric Air shall ensure that a flight is not commenced unless the pilot-in-command (PIC) has completed all necessary flight preparation steps and is satisfied that the following requirements are met:

1. **Aircraft Airworthiness**
   * The aircraft is airworthy, and all instruments and equipment required for the specific operation are serviceable in accordance with TCARs, except as provided in the MEL.
   * A maintenance release, as prescribed in the Civil Aviation (Air Operator Certification and Administration) Regulations, has been issued for the aircraft.
2. **Required Documents and Information**
   * Relevant parts of the operations manual required for the flight are available.
   * All required documents, forms, and additional information are on board, including:
     + The operational flight plan or navigation log and dispatch release completed by the operations officer or pilot on duty.
     + A filed flight plan.
     + Weather information from an authorized source.
     + The latest NOTAMs reviewed and considered.
3. **Performance Data**
   * Calculations for take-off, en-route, diversion, and landing performance data are completed using:
     + Section 5 of the Pilot Operating Handbook (C208B, PC12).
     + The Aircraft Flight Manual (DH8).
4. **Maps, Charts, and Checklists**
   * Current maps, charts, checklists, and other relevant documents for the planned operation and potential diversions are available.
   * Information related to communication facilities, navigation aids, aerodromes, and instrument procedures is obtained using:
     + Jeppesen Airway Manual (en-route charts and approach plates).
     + Tanzania AIP.
     + Company-produced airstrip information.
5. **Ground Facilities and Services**
   * Ground facilities and services required for the flight are available and adequate.
6. **Fuel, Oil, and Oxygen Provisions**
   * Provisions for fuel, oil, oxygen requirements, minimum safe altitudes, aerodrome operating minima, and alternate aerodromes (where applicable) are met as per the operations manual.
7. **Load Security and Distribution**
   * The load is properly distributed, safely secured, and complies with TCARs.
   * The aircraft's mass and center of gravity are within safe limits for the expected flight conditions.
8. **Operating Limitations**
   * A check has been completed to ensure compliance with operating limitations for the intended flight.
9. **Normal and Emergency briefings**
   * The PIC and crew must conduct normal and emergency briefings (where applicable)

## Operating Altitudes

### Minimum Flight Altitudes:

Auric Air shall operate only at minimum flight altitudes that are not lower than those established by the State overflown. For routes without established minimum altitudes, Auric Air shall specify a procedure for determining such altitudes, include it in the operations manual, and ensure it complies with the Civil Aviation (Rules of the Air) Regulations. The method, submitted to the Authority for approval, must consider factors such as position accuracy, altimeter reliability, terrain characteristics, meteorological conditions, chart inaccuracies, and airspace restrictions to ensure safety.

### Cruising Levels Selection

Cruising levels for a flight or any portion of a flight shall be selected in terms of flight levels for operations at or above the lowest usable flight level or above the transition altitude, and altitudes for operations below the lowest usable flight level or at or below the transition altitude.

### General Operating Altitudes

**Abbreviations Used**

* + **MEA** - Minimum En-route Altitude.
  + **MSA** - Minimum Sector Altitude.
  + **MORA** - Minimum Off Route Altitude.

1. **Obstacle Clearance Standards**
   * The Pilot in Command is responsible for maintaining adequate obstacle clearance, regardless of Radar or ATC clearance.
   * Radar vectoring within the TMA must ensure a minimum obstacle clearance of 1000 ft AGL, avoiding GPWS warnings.
2. **Climb/Approach Standards**
   * Initial climb standards must align with the specifications in the relevant Aircraft Flight Manuals.
   * The climb phase from the end of the initial climb to the start of the approach shall comply with the Civil Aviation Regulations, 2017.
   * All visual and instrument approach procedures must adhere to the prescribed approach standards.
3. **En-Route Horizontal and Vertical Clearance**
   * The valid Minimum Sector Altitudes (MSAs) from the airway centerline are as published by Jeppesen and conform to international standards. These are clearly displayed in the Jeppesen Introduction Part.
4. **SID, STAR, and Profile Descent**
   * Legends for Standard Instrument Departure (SID), Standard Terminal Arrival Route (STAR), and profile descent are presented in the Jeppesen Introduction, Pages 81-84.
5. **Approach Charts**
   * The Minimum Sector Altitudes (MSAs) are displayed in the Jeppesen Introduction Page 102 or directly on the relevant approach charts.
6. **Mountainous Terrain**
   * Mountainous terrain combined with strong winds can generate abnormal turbulence and lee waves. This must be considered when operating at MEAs and MSAs.
   * When wind speeds at MEA or MSA exceed 50 knots, the MORA must be increased by at least 2000 ft.
   * If mountain wave conditions are forecasted, reported, or experienced, the MORA must be further increased to provide vertical clearance over the highest ridge equal to the height of the ridge above the surrounding terrain.

### Applicable Reference Material for Determining and Applying Minimum Altitudes

#### Minimum Heights

1. Except when necessary for take-off or landing, or except with prior written approval of the Director General, no aircraft:
2. shall be flown over built-up areas at a height less than 1000 feet above the highest fixed obstacle, within a radius of 600 metres from the aircraft;
3. when flown elsewhere than specified in paragraph (i), shall be flown at a height less than 500 feet above the ground or water; and
4. shall circle over or do repeated over-flights over an open-air assembly of at least 1000 persons within 1000 meters.
5. below the height of 1500 feet above ground level when operating the aircraft over game parks, game reserves or national parks
6. below 1,000 metres, except where the aircraft is towing a banner in which cause the height shall be calculated on the basis that the banner and such banner shall not be dropped within one thousand metres of assembly:
7. An aircraft shall by night, in IMC, or when operated in accordance with IFR, be flown:
8. for flights over high terrain or in mountainous areas, at a level which is at least 600 meters (2000 ft) above the highest obstacle located within eight kilometers of the estimated position of the aircraft; or
9. elsewhere than as specified in subparagraph above, at a level which is at least 300 meters (1,000 ft) above the highest obstacle located within eight kilometers of the estimated position of the aircraft.

#### Minimum Flight Altitudes.

No PIC shall operate an aircraft at altitudes below:

* altitudes, established by the owner or operator, which provide the required terrain clearance, taking into account the operating limitations referred to in this Chapter; and
* the minimum altitude referred to in Subpart 6, except when necessary for take-off and landing.

The method of establishing minimum flight altitudes referred to in sub-regulation (a)(i), shall be as prescribed in Civil Aviation Regulations.

Where the minimum flight altitudes established by the appropriate authority of a foreign State are higher than the minimum flight altitudes prescribed in this regulation, the minimum flight altitudes established by the appropriate authority shall apply in respect of a Tanzanian registered aircraft flying in the airspace of the foreign State.

Pilots shall use the following in the order written in determining minimum flight altitudes for routes flown;

1. For routes that are published by Jeppesen, the Jeppessen airway manual enroute charts shall be used. Between the MEA and the MORA, whichever is the higher shall be used as the minimum.
2. For routes that are not in the Jeppesen airway manual, the AIP shall be used.
3. For routes where both (a) and (b) are not applicable, the PIC shall not operate an aircraft at altitudes below 1000 feet above the highest terrain within a radius of 15nm of his current location. The altitudes shall be determined by using the grid MORA on the ONC.

#### Minimum Flight Altitude Formula

Auric Air employs the following methods to calculate minimum flight altitudes based on current ONC or WAC charts to ensure safe terrain and obstacle clearance during operations:

1. **Types of MORA**  
   Two types of MORA are charted:
   * **Route MORA**: Example - 9800a.
   * **Grid MORA**: Example - 98.
2. **Route MORA**
   * Computed based on an area extending **10 nm** on either side of the route center line and including a **10 nm radius** beyond the radio fix, reporting point, or mileage break defining the route segment.
   * Provides clearance above terrain and man-made obstacles as follows:
     + **1000 feet** clearance for terrain or obstacles up to **5000 feet**.
     + **2000 feet** clearance for terrain or obstacles **5001 feet and above**.
3. **Grid MORA**
   * Altitudes are computed within each grid formed by charted lines of **latitude and longitude**.
   * Values are displayed in **thousands and hundreds of feet**, omitting the last two digits to reduce chart congestion.
   * Figures followed by a **+/-** indicate that the altitude shown is not believed to be exceeded.
   * The same clearance criteria as Route MORA apply:
     + **1000 feet** clearance for terrain or obstacles up to **5000 feet**.
     + **2000 feet** clearance for terrain or obstacles **5001 feet and above**.

## Suitability Of Aerodromes

Auric Air shall only operate to licensed aerodromes. Aerodromes will normally be selected from those listed in the Jeppesen Airway Manual, the AIP, and AASL’s Route and Aerodrome Guide Part II. Other aerodromes may only be used with the approval of the DFO, issued by means of an individual flight release, or in case of emergency.

The following considerations should apply:

1. **Operational Requirements:**
2. Limitations as indicated in the route guide and/or aerodrome information.
3. Weather conditions and weather minima.
4. Number of usable runways.
5. Runway condition and length.
6. Approach facilities.
7. Availability of fuel and starting equipment.
8. Aircraft handling facilities.
9. **Commercial Considerations:**
10. Commercial preference, such as hunting/safari clients.
11. Distance from destination.
12. Passenger-handling facilities.
13. Final destination of disembarking passengers, including:
    * Ground connections.
    * Hotel/lodge accommodation.
14. Schedule regularity.
15. Political considerations.

This ensures all aerodrome selections meet licensing, operational, and commercial suitability requirements.

### Adequate Aerodrome

When defining aerodromes for the type of aircraft(s) and operation(s) concerned, an operator must take account of the following:

* An adequate aerodrome is an aerodrome which the operator considers to be satisfactory,
* taking account of the applicable performance requirements and runway characteristics.
* In addition, it should be anticipated that, at the expected time of use, the aerodrome will be available and equipped with necessary ancillary services as required and
* that the aerodrome must be licensed.
* On uncontrolled aerodromes:
  + the PIC shall fly overhead and visually inspect the aerodrome and then proceed for landing.
  + pilots shall comply with any traffic patterns established by the authorities having jurisdiction over that aerodrome.
  + landing and taking-off shall be done into the wind unless safety, the runway configurations, or traffic considerations determine that a different direction is preferable.
* Auric Air Services Limited shall suspend/restrict all commercial air transport operations to aerodromes and runways that have developed hazardous conditions until those conditions are rectified.
* Auric Air Services Limited shall not allow a flight to continue toward any aerodrome of intended landing where commercial air transport operations have been restricted or suspended.

#### Maximum Distance from Adequate Aerodrome for Twin-Engined Aircraft

Auric Air shall not operate twin-engined aircraft over a route containing a point further from an adequate aerodrome than the following operational limits:

1. **Distance Limitation**:  
   For large turbine-powered aircraft, the route shall not extend beyond the distance flown in 60 minutes at the one-engine-inoperative cruise speed for aircraft with:
   * A maximum approved passenger seating configuration of 20 or more.
2. **Speed Determination**:  
   The one-engine-inoperative cruise speed for each aircraft type or variant shall be determined based on:
   * A speed not exceeding **Vmo** under International Standard Atmosphere (ISA) conditions, in level flight, with:
     + Flight at FL170 or the maximum altitude the aircraft can maintain with one engine inoperative (whichever is lower).
     + Maximum continuous thrust or power on the remaining engine.
3. **Mass Considerations**:  
   The aircraft mass used for determining this speed shall be based on:
   * Maximum take-off mass at sea level.
   * Climb to optimum long-range cruise altitude with all engines operating.
   * Cruise at the long-range cruise speed at the given altitude.
4. **Operational Manual Data**:  
   Auric Air shall ensure the following information is included in the Operations Manual for each type or variant of twin-engine aircraft:
   * The one-engine-inoperative cruise speed.
   * The maximum distance from an adequate aerodrome, as determined by the criteria outlined above.
5. **Usage of Data**:  
   The specified speeds and altitudes are to be used exclusively for establishing the maximum distance to an adequate aerodrome and are not to be employed for other operational purposes.

#### Operations With En-Route Alternate Beyond Sixty Minutes

For operations beyond sixty minutes from a point on a route to an en-route alternate aerodrome, Auric Air shall ensure that en-route alternate aerodromes are identified, and the most up-to-date information, including operational status and meteorological conditions, is provided to the flight crew. For aircraft with two turbine engines, the information must indicate that conditions at the identified en-route alternate aerodromes will meet or exceed the operator’s established aerodrome operating minima at the estimated time of use.

### Aircraft Performance Data Management System

Auric Air shall maintain a system, approved by the Authority, to ensure the availability, upkeep, and dissemination of current performance data for each aircraft, route, and airport utilized. This system will provide accurate and up-to-date obstacle data for calculating departure and arrival performance, ensuring compliance with operational requirements and safety standards

### Approach to Land Decision

An approach to land shall not be continued below 300 meters (1,000 feet) above aerodrome elevation unless the pilot-in-command (PIC) is satisfied that the available runway surface condition information and aircraft performance data indicate that a safe landing can be made

## Aerodrome Operating Minima (VFR)

Auric Air in determining aerodrome operating minima for VFR flights regards the following Civil Aviation (Rules of the Air) Regulations, as amended, requirements as the minimum acceptable to their operation:

Except when operating a special visual flight rules (VFR) flight, a PIC shall conduct a VFR flight so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in Table 1.

### Table 1 - VMC Visibility And Distance From Cloud Minima

|  |  |  |  |
| --- | --- | --- | --- |
| Altitude band | Airspace class | Flight visibility | Distance from cloud |
| At and above 3 050 m (10 000 ft) AMSL | A\* B C D E F G | 8 km | 1,500 m horizontally 300 m (1,000 ft) vertically |
| Below 3050 m (10000 ft) AMSL and above 900 m (3 000 ft) AMSL, or above 300 m (1 000 ft) above terrain, whichever is the higher | A\*B C D E F G | 5 km | 1,500 m horizontally 300 m (1,000 ft) vertically |
| At and below 900 m (3 000 ft) AMSL, or 300 m (1 000 ft) above terrain, whichever is the higher | A\*B C D E | 5 km | 1,500 m horizontally 300 m (1,000 ft) vertically |
| F G | 5 km | Clear of cloud and with the surface in sight |

The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace.

### VFR within a Control Zone

A pilot-in-command of a visual flight rules flight shall not take-off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or traffic pattern when-

* the ceiling is less than 450 m (1,500 ft); or
* the ground visibility is less than 5 km.

Except when a clearance is obtained from an air traffic control unit,

### Minimum Safe VFR Altitudes

Except when necessary for take-off or landing, or except by permission from the Authority, a pilot-in-command shall not fly a visual flight rules flight-

* over congested areas of cities, towns or settlements or over an open air assembly of persons at a height less than 1,000 feet above the:
  + highest obstacle within a radius of 600 metres from the aircraft; or
  + elsewhere than specified in the first bullet at a height less than 500

feet above the ground or water.

## Reserved For Future Use

## Reserved For Future Use

## Reserved For Future Use

## Reserved For Future Use

## Reserved For Future Use

## Non –Precision Approach

### System Minima

AASL ensures that system minima for non-precision approach procedures, which are based upon the use of LLZ (Localizer only approach), VOR, NDB and VDF, are not lower than the MDH values given in Table 4 below.

Table 4: System minima for non-precision approach aids

|  |  |
| --- | --- |
| System minima |  |
| Facility | Lowest MDH |
| LLZ – Localizer only approach | 250 ft |
| VOR / DME | 250 ft |
| VOR | 300 ft |
| NDB | 300 ft |
| VDF (QDM and QGH) | 300 ft |

### Minimum Descent Height

Auric Air ensures that the minimum descent height for a non-precision approach is not lower than either: -

(a) the OCH/OCL for the category of aircraft; or

(b) the system minimum.

### Visual Reference

A pilot may not continue an approach below MDA/MDH unless at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:

Elements of the approach lights system;

* the threshold;
* the threshold markings;
* the threshold lights;
* the threshold identification lights;
* the visual glide slope indicator;
* the touchdown zone or touchdown zone markings;
* the touchdown zone lights;
* Runway edge lights; or
* Other visual references accepted by the Director General.

### Required RVR

The lowest minima to be used by an operator for non-precision approaches are:

Table 5(a): RVR for non-precision approach-full facilities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Non-precision approach minima  Full facilities (Notes (1), (5), (6) and (7)) | | | | |
| MDH | RVR/Aircraft category | | | |
|  | A | B | C | D |
| 250 ft. - 299 ft. | 800 m | 800 m | 800 m | 1200 m |
| 300 ft. - 449 ft. | 900 m | 1000 m | 1000 m | 1400 m |
| 450 ft. - 649 ft. | 1000 m | 1200 m | 1200 m | 1600 m |
| 650 ft. and above | 1200 m | 1400 m | 1400 m | 1800 m |

Table 5(b): RVR for non-precision approach-intermediate facilities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Non-precision approach minima  Intermediate facilities (Notes (2), (5), (6) and (7)) | | | | |
| MDH | RVR/Aircraft category | | | |
|  | A | B | C | D |
| 250 ft. - 299 ft. | 1000 m | 1100 m | 1200 m | 1400 m |
| 300 ft. - 449 ft. | 1200 m | 1300 m | 1400 m | 1600 m |
| 450 ft. - 649 ft. | 1400 m | 1500 m | 1600 m | 1800 m |
| 650 ft. and above | 1500 m | 1500 m | 1800 m | 2000 m |

Table 5 (c): RVR for non-precision approach-basic facilities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Non-precision approach minima  Basic facilities (Notes (3), (5), (6) and (7)) | | | | |
| MDH | RVR/Aircraft category | | | |
|  | A | B | C | D |
| 250 ft - 299 ft | 1200 m | 1300 m | 1400 m | 1600 m |
| 300 ft - 449 ft | 1300 m | 1400 m | 1600 m | 1800 m |
| 450 ft - 649 ft | 1500 m | 1500 m | 1800 m | 2000 m |
| 650 ft and above | 1500 m | 1500 m | 2000 m | 2000 m |

Table 5 (d): RVR for non-precision approach-Nil approach light facilities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Non-precision approach minima  Full facilities (Notes (4), (5), (6) and (7)) | | | | |
| MDH | RVR/Aircraft category | | | |
|  | A | B | C | D |
| 250 ft - 299 ft | 1500 m | 1500 m | 1600 m | 1800 m |
| 300 ft - 449 ft | 1500 m | 1500 m | 1800 m | 2000 m |
| 450 ft - 649 ft | 1500 m | 1500 m | 2000 m | 2000 m |
| 650 ft and above | 1500 m | 1500 m | 2000 m | 2000 m |

### Notes On Non-Precision Approaches:

1. Full facilities comprise runway marking, 720m or more of HI/MI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.
2. Intermediate facilities comprise runway markings, 420-761m of HI/MI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.
3. Basic facilities comprise runway marking, <420 m of HI/MI approach lights, any length of LI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.
4. Nil approach light facilities comprise runway markings, runway edge lights, threshold lights, runway end lights or no lights at all.
5. The tables are only applicable to conventional approaches with a nominal descent slope of not greater than 4 deg. Greater descent slopes will usually require that visual glide slope guidance (E.G. PAPI) is also visible at the Minimum Descent Height.
6. The above figures are either reported RVR meteorological visibility converted to RVR.
7. The MDH mentioned in Table 4(a), 4(b), 4(c) and 4(d) refers to the initial calculation of MDH. When selecting the associated RVR, there is no need to take account of a rounding up to the nearest ten feet, which may be done for operational purposes, e.g. conversion to MDA.
8. The above tables reflect the ICAO required minima. (Refer to Auric Air Company specific information - all weather operations minima which are more conservative in application).
9. The pilot shall not land when the visibility is less than the prescribed minimums.

### Night Operations

1. For night operations at least runway edge, threshold and runway end lights must be on.
2. Intersection takeoff are not permitted at night
3. Visual approaches are not permitted at night

## Precision Approach-Category I Operations

### General

A CAT I is a precision approach with decision height not lower than 200 ft and a visibility not less than 800 m or RVR not less than 550 m. CAT II is a precision approach with decision height not lower than 100 ft and RVR not less than 300 m.

### Decision Height

Auric Air ensures that the decision height to be used for a Category I precision approach is not lower than:

(i) the minimum decision height specified in the aero plane flight manual (AFM) if stated;

(ii) the minimum height to which the precision approach aid can be used without the required visual reference;

(iii) the OCH/OCL for the category of aircraft; or

(iv) 200 ft.

### Visual Reference

A pilot may not continue an approach below the Category I decision height, determined in accordance with paragraph (b) above, unless at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:

Elements of the approach light system;

* the threshold;
* the threshold markings;
* the threshold lights;
* the threshold identification lights;
* the visual glide slope indicator;
* the touchdown zone or touchdown zone markings;
* the touchdown zone lights; or
* runway edge lights.

### Required RVR

The lowest minima to be used by an operator for Category 1 operations are:

Table 6: RVR for Cat I approach vs. facilities and HD

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Category I Minima | | | | |
| Decision height (Note 7) | Full  (Notes 1 and 6) | Interim.  (Notes 2 and 6) | Basic  (Bites 3 and 6) | Nil  (Notes 4 and 6) |
| 200 ft | 550 m | 700 m | 800 m | 1000 m |
| 201 – 250 ft | 600 m | 700 m | 800 m | 1000 m |
| 251 – 200 ft | 650 m | 800 m | 900 m | 1200 m |
| 301 ft and above | 800 m | 900 m | 1000 m | 1200 m |

### Notes on Precision Approaches

1. Full facilities: Runway markings, 720 m or more of HI/MI approach lights, runway edge lights, threshold lights, and runway end lights. Lights must be on.
2. Intermediate facilities: Runway markings, 420–719 m of HI/MI approach lights, runway edge lights, threshold lights, and runway end lights. Lights must be on.
3. Basic facilities: Runway markings, less than 420 m of HI/MI approach lights, any length of LI approach lights, runway edge lights, threshold lights, and runway end lights. Lights must be on.
4. Nil approach light facilities: Runway markings, runway edge lights, threshold lights, runway end lights, or no lights at all.
5. The figures provided are either the reported RVR or meteorological visibility converted to RVR in accordance with Table 9.
6. The table is applicable to conventional approaches with a glide slope angle up to and including 4 degrees.
7. The DH mentioned in Table 5 refers to the initial calculation of DH. When selecting the associated RVR, there is no need to take into account a rounding up to the nearest ten feet, which may be done for operational purposes, e.g., conversion to DA.

## Circling Approach

The lowest minima to be used by an operator for circling are:

Table7: Visibility and MDH for circling vs. aircraft category

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Aircraft category | | | | |
|  | A | B | C | D |
| MDH | 400 ft | 500 ft | 600 ft | 700 ft |
| Minimum meteorological visibility | 1500 m | 1600 m | 2400 m | 3600 m |

Circling with prescribed tracks is an accepted procedure within the meaning of this paragraph.

**NOTE:** In the even that there is degradation of approach facilities, the pilots must refer to the minimas as indicated below in order:

Jeppesen Approach plates

The latest Tanzanian AIP

## Visual Approaches

Auric Air shall not conduct a visual approach with an RVR of less than 1500 meters.

### Approach Using PAPI/VASI

A pilot-in-command of an aircraft approaching a runway served by a Precision Approach Path Indicator (PAPI) or Visual Approach Slope Indicator (VASI) shall maintain an altitude at or above the glide slope until descending to a lower altitude is necessary for a safe landing.

## Conversion of Reported Meteorological Visibility to RVR

Auric Air ensures that a metrological visibility to RVR conversion is not used for calculating take-off minima, Category II or III minima or when a reported RVR is available.

When converting meteorological visibility to RVR in all other circumstances than those in paragraph 1 above, an operator must ensure that the following table is used.

Table 8: Conversion of visibility to RVR

|  |  |  |
| --- | --- | --- |
| Lighting elements in operation | RVR = Reported Met. Visibility x | |
| Day | Night |
| HI approach and runway lighting | 1.5 | 2 |
| Any type of lighting installation other than above | 1 | 1.5 |
| No lighting | 1 | Not applicable |

## En Route Operating Minima for VFR Flights Or VFR Portions of a Flight

Auric Air operate from time to time under Instrument Flight Rules, however when operating under Visual Flight Rules then the company policy is to abide by the Civil Aviation (Operation of Aircraft) Regulation, as amended, which state:

## Flight Over Built-Up Areas and Open-Air Assemblies

**Flight Altitude Restrictions**

1. Except when necessary for take-off or landing, or with prior written approval of the Director General, no aircraft shall:
2. Be flown over built-up areas at a height less than 1000 feet above the highest fixed obstacle within a radius of 600 metres from the aircraft.
3. Be flown at a height less than 500 feet above the ground or water when operating outside built-up areas.
4. Circle over or conduct repeated over-flights over an open-air assembly of at least 1000 persons within 1000 metres, or as prescribed in the Civil Aviation (Rules of the Air) Regulations as amended.
5. Auric Air shall comply with the above legislation or the aviation regulations of the applicable State, applying whichever minima are more restrictive, for international operations.

## Weather Reporting and Forecasting for Flight Operations

Auric Air, as an Air Operator Certificate (AOC) holder, shall use weather reports and forecasts only from sources approved by the Authority for all decisions related to flight preparation, routing, and terminal operations. For passenger-carrying operations on a published schedule, Auric Air shall maintain an approved system for obtaining forecasts and reports of adverse weather phenomena that may impact the safety of flights on designated routes and at intended airports.

The approved sources of weather reports for flight planning and flight movement control include:

1. Tanzania Meteorological Agency as the primary source.
2. Tanzania-operated automated surface observation stations reporting complete surface aviation weather data.
3. Supplemental aviation weather reporting stations operated within Tanzania.
4. Aerodrome control towers providing local weather observations.
5. Tanzania-contracted weather observatories.
6. Foreign meteorological offices adhering to Chicago Convention standards and practices.
7. Military weather reporting sources approved by the Authority, for operations involving military airports as departure, destination, alternate, or diversion points.
8. Near-real-time data sources such as pilot reports, radar reports, radar summary charts, and satellite imagery from commercial weather providers or other Authority-approved sources.
9. Auric Air’s own weather reporting system, provided it is maintained and approved by the Authority.

### Aerodrome Weather Forecasts (TAF) and Reports (METAR)

1. **General Information**  
   Meteorological forecasts provide the most probable values of elements like visibility, wind, and cloud conditions for a specific time and location. The issue of a new forecast automatically cancels any previous forecast for the same place and validity period.
2. **Flight Crew Requirements**  
   All flight crew members must maintain a sound working knowledge of the weather reporting system, including METARs, TAF, and associated codes.
3. **Weather Report Codes**
   * **METAR (Routine Weather Report)**:  
     Compiled every 30 to 60 minutes, METARs include terms for visibility, cloud cover, temperature, dew point, pressure settings, windshear, and runway state. Key details:
     + Horizontal visibility is provided in metres; "9999" indicates visibility of 10 km or more.
     + Runway Visual Range (RVR) specifies the touchdown zone RVR, e.g., "R24L/1100".
     + Cloud cover is reported in layers, with abbreviations like FEW (1-2 oktas), SCT (3-4), BKN (5-7), and OVC (8).
     + "CAVOK" indicates visibility of 10 km or more, no significant weather, and no cloud below 5000 ft.
     + Significant changes are forecast with "BECMG" (becoming) or "TEMPO" (temporarily).
4. **Aerodrome Weather Forecasts (TAFs)**
   * **Validity Period**: TAFs cover periods of 9 to 24 hours and are updated as needed. Shorter forecasts are issued more frequently.
   * **Cloud and Visibility**: TAFs provide minimum visibility and include codes for clear sky (SKC), no significant weather (NSW), and no significant cloud (NSC).
   * **Changes and Probabilities**: Significant changes are marked with "FM" (from), "BECMG," or "TEMPO," with percentages provided for the probability of changes (e.g., "PROB30").
   * **Amendments**: Amended forecasts include "AMD" to indicate updates to the original forecast.
5. **Operational Implications**
   * **Trend Group**: Significant changes expected within two hours are indicated in the METAR trend group, using terms like "NOSIG" (no significant change).
   * **Runway State**: Details of runway contamination may be included as an additional eight-figure code in METARs.
   * **Recent Weather**: Observed but no longer current weather is prefixed by "RE," e.g., "RETS" for recent thunderstorms.
   * **Windshear**: Wind changes along take-off or landing paths are specified using the prefix "WS," e.g., "WS TKOF RWY20."
6. **Interpretation and Use**
   * Flight crew must utilize information from METARs and TAFs, ensuring compliance with company minima for planned arrivals and alternates.
   * "DENEB" indicates fog dispersal operations in progress, while oblique slashes denote missing data.

## Determination of Quantities of Fuel and Oil Carried

Auric Air bases the company’s fuel policy, including calculation of the amount of fuel to be carried as prescribed by the Civil Aviation (Operation of Aircraft) Regulations, as amended. The amount of usable fuel to be carried shall be based on current aircraft-specific data from a fuel consumption monitoring system or, if unavailable, data from the aircraft manufacturer. It shall also account for operating conditions, including anticipated aircraft mass, NOTAMs, meteorological reports and forecasts, air traffic services procedures and restrictions, anticipated delays, and the effects of deferred maintenance items and configuration deviations.

### Auric Air Company Specific Fuel Policy

#### Objective

To determine by appropriate calculation an amount of fuel to be carried to achieve a safe and efficient operation, whilst meeting the minimum fuel requirements as prescribed by the Civil Aviation (Operation of Aircraft) Regulations, as amended. The PIC shall ensure a sufficient amount of usable fuel to complete the planned flight safely and to allow for deviations from the planned operation.

#### Pre-flight/Start-up Fuel Policy

For IFR/VFR flight Pre-flight/start-up fuel is the total amount of fuel expected to be used from the point of start up until ready for taxi.

#### Taxi Fuel

For IFR/VFR flights which shall be the amount of fuel expected to be consumed before take-off considering local conditions at the departure aerodrome and auxiliary power unit (APU) fuel consumption.

#### Trip Fuel

Which shall be the amount of fuel required to enable the aircraft to fly from take-off or the point of in-flight re-planning until landing at the destination aerodrome considering the operating conditions listed below:

1. Anticipated aircraft mass
2. Notices to Airmen
3. Current meteorological reports or combination of current reports and forecasts
4. Air traffic services procedures, restrictions, and anticipated delays and
5. The effects of deferred maintenance items and/or configuration deviations

#### Contingency Fuel

Which shall be the amount of fuel required to compensate for unforeseen

factors and it shall be five per cent of the planned trip fuel or of the fuel required from the

point of in-flight re-planning based on the consumption rate used to plan the trip fuel but,

in any case, shall not be lower than the amount required to fly for five minutes at holding speed

at 450 m (1 500 ft) above the destination aerodrome in standard conditions;

#### Alternate Fuel

The required fuel for a destination alternate aerodrome must account for specific operational contingencies. This includes sufficient fuel to perform a missed approach at the destination aerodrome, climb to the expected cruising altitude, navigate the anticipated routing, descend to the point where the approach is initiated, and complete the approach and landing at the destination alternate aerodrome.

##### For IFR Flights;

1. A go-around from the applicable MDH/DH at the destination aerodrome to missed approach altitude, taking into account, the complete missed approach procedure.
2. Climb from missed approach altitude to cruising level/altitude.
3. Cruise from TOC to TOD.
4. TOD to landing.

##### For VFR Flights;

Alternate fuel, to include fuel required from the destination aerodrome to alternate aerodrome.

Note: The departure aerodrome may be selected as a destination alternative.

#### Holding Fuel

Minimum holding fuel shall be calculated as follows:

1. Minimum of 60 minutes INTER holding fuel for unplanned intermediate stops or diversions during a flight due to unforeseen circumstances, such as unscheduled alternate airports.

or

1. Minimum of 30 minutes TEMPO holding fuel, for temporary delays or holding patterns caused by transient factors like air traffic congestion or weather conditions, with the intention of addressing short-duration disruptions.

#### Variable and Fixed Reserve

##### Fuel Reserve Requirements for IFR and VFR Flights

1. **IFR Flights**
   * **Fixed Reserve Fuel**: Fuel sufficient to hold for **30 minutes at 1500 feet** above the aerodrome elevation in ISA conditions, calculated based on the estimated landing mass on arrival at the alternate or the destination (when no alternate is required).
2. **VFR Flights**
   * **Fixed Reserve Fuel**: Fuel sufficient for **45 minutes of flying time**.
3. **IFR/VFR Flights**
   * **Variable Reserve Fuel**: Must be **10% of the total trip fuel**.

#### Additional Fuel Requirements

Additional fuel shall be carried when the minimum calculated fuel is insufficient to meet the following requirements: allowing the aircraft to descend and proceed to an alternate aerodrome in the event of engine failure or loss of pressurization, whichever requires more fuel, assuming the failure occurs at the most critical point along the route; flying for 15 minutes at holding speed at 450 meters (1,500 feet) above aerodrome elevation in standard conditions; making an approach and landing; and meeting any additional operational requirements not otherwise covered.

#### Discretionary fuel,

#### Which shall be the extra amount of fuel to be carried at the discretion of the pilot-in-command.

#### Adjustments

The Sector Fuel may be adjusted by the Pilot in Command before departure depending on the circumstances of the particular flight. This could include adjustments for marginal weather conditions, the possible use of a closer of more distant alternate, anticipated ATC traffic congestion, arrival and approach maneuvers, and any other circumstances over and above those already catered for.

This fuel is carried at the discretion of the Pilot in Command who shall make a reasoned decision taking all likely circumstances into account.

#### Emergency Fuel Policy

Auric Air ensures that emergency fuel requirements are incorporated into all existing routes by accounting for sector-specific fuel needs. Should a new route necessitate additional fuel, flight crews are responsible for making the necessary adjustments.

For all flights, the following emergency situations must be accounted for:

1. **Depressurization**  
   Sufficient fuel must be carried at the start of a flight to ensure that, in the event of a pressurization failure, the aircraft can descend to the specified altitude for depressurization, continue en route to the destination, and land at a suitable airport. This calculation must include 30 minutes of holding fuel as reserves.
2. **Engine Failure**  
   Sufficient fuel must be carried at the start of a flight to ensure that, in the event of an engine failure, the aircraft can perform a drift-down descent and cruise with one engine inoperative to land at a suitable airport. This calculation must also include 30 minutes of holding fuel as reserves.

#### Island Holding

Is based on fuel for 2 hours continuation of cruise at the last cruise flight level overhead destination.

#### Re-Dispatch Fuel Policy

Auric Air ensures that re-dispatch fuel planning meets the most stringent requirements to guarantee safety and flight regularity. A flight shall not commence or continue from the point of in-flight re-planning unless the usable fuel on board meets all necessary requirements.

1. **Fuel to Intermediate Destination**  
   Sufficient fuel must be carried for a normal flight from the departure airport, via the Re-dispatch Point (RDP), to the intermediate destination, including standard reserves.
2. **Fuel to Scheduled Destination**  
   Sufficient fuel must be carried for a flight from the departure airport, via the RDP, to the scheduled destination, plus standard reserves. Contingency fuel is calculated only for the segment from the RDP to the scheduled destination. To enhance flight regularity, an additional scheduled contingency fuel equal to 1% of the trip fuel to the RDP is included at departure as a company recommendation.

#### ATC Flight Plan Procedure

Auric Air files the ATC flight plan to the scheduled destination with its specified alternate. If the flight has insufficient fuel at the RDP to continue to the scheduled destination, a new ATC clearance must be obtained during the flight to proceed to the intermediate destination.

#### Tankering Fuel Policy

Auric Air recommends tankering fuel on sectors where the cost difference between fuel at the departure and arrival airports justifies the added costs, which include:

* Fuel burned due to tankering.
* Additional wear and tear on engines, brakes, and tires.

**Limitations on Tankering:**  
Tankering fuel may be reduced from the theoretical maximum by company policy or at the Pilot in Command's discretion to account for the following:

* High landing weights, particularly on short or contaminated runways.
* Excess fuel required for the next sector.
* The potential for overweight landings.

**Operational Consideration:**  
Additional fuel may also be carried to minimize refueling time at the next stop if operationally advantageous.

#### Alternate Policy

Auric Air plans flights using the nearest suitable civilian airfield, determined through the following steps:

1. **Initial Planning:** The alternate airfield is selected as the **standard specified alternate** during the initial planning phase.
2. **Pre-Flight Stage:** The Pilot in Command evaluates the conditions and forecasts of the day to confirm or adjust the selection.
3. **Final Confirmation:** Before departure

#### Foreign Requirements

In certain cases the flight planning requirements of foreign authorities differ from the Tanzania Civil Aviation Regulations. In cases where the fuel required is greater than the Auric Air Sector Fuel, flight crews will be notified so as to make the necessary adjustments.

#### Adequate Airport

An adequate airport is an airport, meeting the performance requirements applicable at the expected landing weight. In particular, it should be anticipated that at the expected time of use:

The aerodrome will be available, and equipped with necessary ancillary services, such as ATC, sufficient lighting, communications, weather reporting, navaids and emergency services; and at least one letdown aid (ground radar would so qualify) will be available for an instrument approach.

#### Suitable Airport

A suitable airport is an adequate airport with weather reports, or forecasts, or any combination thereof, indicating that the weather conditions are at or above operating minima and the field condition reports indicate that a safe landing can be accomplished at the time of the intended operation. If no weather report is available, the field must be 800 metres long minimum and licensed accordingly.

### In-Flight Fuel Management

#### General

The Pilot in Command (PIC) must continuously monitor the flight's operational phase based on the expected quantity of fuel upon landing. The phases are categorized as follows:

1. **Normal Phase**:
   * The estimated fuel upon landing is **more than the sum of alternate fuel and final reserve fuel**.
2. **Abnormal Phase**:
   * The estimated fuel upon landing is **less than the sum of alternate fuel and final reserve fuel but greater than final reserve fuel**.
3. **Emergency Phase**:
   * The estimated fuel upon landing is **less than the final reserve fuel**.

#### Normal Phase Operation

As long as a flight is operating in the normal phase no special conditions, apart from regularly checking the weather forecasts at destination and alternate(s), are required.

#### Abnormal Phase Operation

Entering the abnormal phase clearly poses a greater risk when bound for an airport with a single runway and/or unreliable weather conditions, than when heading for a multiple runway, well equipped, stable weather airport. All relevant factors such as weather, approach aids, extensive vectoring, traffic congestion and number of usable runways must be weighed carefully.

The following actions are recommended depending on circumstances:

Replacing the original alternate by another available alternate, demanding less fuel, thus placing the flight back into the normal phase.

#### Diversion to an En-Route Alternate.

* 1. The required fuel must be at least the sum of:
  2. Trip fuel (from present position to the new destination),
  3. 5% over the newly calculated trip fuel,

Alternate fuel with a minimum of 15 minutes holding fuel (new alternate for new destination).

If, in the case of operation to an isolated airport, at any time the expected amount of fuel at the point of the last possible diversion is less than the trip fuel required to divert to an en-route alternate airport +5%+final reserve fuel, the PIC may only proceed to the destination, if at the destination two separate runways are available and the expected weather conditions comply with the planning minima for destination airports.

#### Emergency Phase Operation

The PIC must immediately declare an emergency when the estimated fuel on board the aircraft upon landing will be less than final reserve fuel.

An emergency due to low fuel requires traffic priority to ensure a safe landing.

Report to ATC remaining usable fuel in minutes and action to be taken.

#### Operational Requirements

**Fuel Monitoring During Flight**:

* **C208B and PC12**: For flights exceeding 45 minutes, actual fuel remaining shall be recorded and compared with the planned fuel remaining on the Navigation Log every 30 minutes.
* **DH8**: Actual fuel usage shall be recorded and compared with the planned fuel usage on the Operational Flight Plan at every waypoint.

**Fuel Reading Tolerances**:  
If the difference between the fuel quantity and fuel used readings exceeds the tolerances listed below, a technical defect report (5%) must be submitted for maintenance investigation.

#### Fuel Monitoring and Management

The pilot-in-command (PIC) shall continually ensure that the usable fuel remaining on board is sufficient to proceed to an aerodrome where a safe landing can be made, with the planned final reserve fuel remaining upon landing. If unanticipated circumstances arise that may result in landing at the destination aerodrome with less than the final reserve fuel plus any required alternate or isolated aerodrome fuel, the PIC shall request delay information from air traffic control. The PIC must declare a "minimum fuel" state when committed to land at a specific aerodrome if any change to the current clearance may result in landing with less than the planned final reserve fuel. In the event that the usable fuel upon landing at the nearest safe aerodrome is calculated to be less than the planned final reserve fuel, the PIC shall declare a fuel emergency by broadcasting "MAYDAY, MAYDAY, MAYDAY FUEL." These procedures ensure the safety of operations and adherence to fuel management regulations.

#### Time and Fuel Reporting (TFR)

As part of the fuel management process, it is essential that a post flight control or measurement function is carried out to determine the effectiveness of procedures and policies.

One of the most important items is landing fuel reserves. Too low a figure may indicate a safety problem, whilst too high a figure could indicate an inefficient flight from a planning or operational point of view.

Input: the information required is obtained from the flight crew. TFR reports which include the start and end times, and fuel used per sector flown. Accurate information on these reports is essential.

Efficiency Analysis: a number of aspects can be monitored using the TFR data.

* flight plan accuracy (time and fuel)
* use of contingency fuel
* flight plan alternates
* average fleet landing reserves
* sector times for future timetables
* tankering data
* taxi times and fuel
* cost implications.

The average reserves remaining on shutdown are a good yardstick for efficiency. Shutdown fuel reserves equivalent to more than 2 hours holding fuel could in many cases be considered excessive. Normally 1 ½ hours landing fuel reserves would be sufficient provided a long distance alternate is not used.

#### Fuel and Oil record

Auric Air maintains fuel and oil records for each flight undertaken by the aircraft under the control of such owner or operator. The PIC of the aircraft shall enter the fuel and oil records referred to in paragraph (a) in the flight folio/tech log.

#### Conclusion

The implementation of the procedures and polices contained above will result in the optimum usage of fuel with no compromise to operational flight safety.

## Mass and Centre of Gravity

Auric Air Services Limited shall not allow an aircraft to depart for flight without determining its mass and centre of gravity. The calculations to determine this must be made using the basic empty weight for each individual aircraft as shown on the current Weight and Balance certificate as it appears on the electronic record system in use. The company bases its mass and centre of gravity policy, on the following planning criteria:

### Definitions

Any word or expression to which a meaning has been assigned in the Civil Aviation Act, and the Tanzania Civil Aviation Regulations, bears, when used in this technical standard, the same meaning unless the context indicates otherwise, and:

* “maximum structural landing mass” means the maximum permissible total aircraft mass upon landing under normal circumstances;
* “maximum structural take-off mass” means the maximum permissible total aircraft mass at the start of the take-off run or lift-off; and
* “maximum zero fuel mass” means the maximum permissible mass of an aircraft with no usable fuel. The mass of the fuel contained in particular tanks must be included in the zero fuel mass when it is explicitly mentioned in the aircraft flight manual limitations;
* “traffic load” means the total mass of passengers, baggage and cargo, including any no-revenue load.

### Mass Values for Flight Crew

1. Auric Air uses the following mass values to determine the dry operating mass:

* Actual masses including any flight crew baggage; or
* Standard masses, including hand baggage, of 92 (203lbs) kg for flight deck crew members.

1. Auric Air corrects the dry operating mass to account for any additional baggage.

The position of this additional baggage must be accounted for when establishing the centre of gravity of the aircraft.

### Mass Values for Passengers and Baggage

Auric Air determines the mass of passengers and checked baggage using one of the following methods:

1. **Actual Weighed Mass**:
   1. The mass of each passenger and their checked baggage is determined by weighing.
   2. Passengers' personal belongings and baggage must be included in the weighing process, which must be conducted immediately prior to boarding at an adjacent location.
2. **Standard Mass Values**:
3. Where the total number of passenger seats available on the aircraft is 20 or more the standard mass values given in Table 2 are applicable for each piece of checked baggage and for aircraft with less than 20 passenger seats the actual mass of checked baggage, determined by weighing, shall be used.

|  |  |
| --- | --- |
| **Type of flight** | **Baggage standard mass** |
| Domestic | 11kgs |
| Regional | 13kgs |
| Intercontinential | 15kgs |
| All others | 13kgs |

1. When using standard mass values, the values include hand baggage and the mass of any infant below 2 years of age carried by an adult on one passenger seat. Infants occupying separate passenger seats are considered as children.

#### Auric Air Company-Specific Standard Passenger Weights:

1. **Hunter**: 132 kg (290 lbs) includes baggage and hunting equipment
2. **Male**: 92 kg (203 lbs)
3. **Female**: 74 kg (164 lbs)
4. **Child (2 to 12 years)**: 35 kg (77 lbs)
5. **Infants**: Nil
6. Baggage allowance 15kg (33lbs) for regular passengers
7. 30kg (66lbs) for VIP passengers

Note: On flights where no hand baggage is carried in the cabin or where hand baggage is accounted for separately, 6 kg may be deducted from the male and female masses above. Articles such as an overcoat, an umbrella, a small handbag or purse, reading material or a small camera are not considered as hand baggage for the purpose of this regulation.

### Loading Policy

#### Loading

The PIC is legally responsible for satisfying himself that the load is correctly and safely distributed, properly stowed, and secured. He must check and sign the load sheet and balance chart before departure, ensure that sufficient fuel is on board, and satisfy himself that the load sheet accounts for all the items referred to below. Two passenger/cargo manifests and load sheets for each sector must be completed and signed by the PIC, and one copy left behind with Operations.

A person supervising the loading of the aircraft shall prepare and sign a load sheet in duplicate before the commencement of a flight. If the air operator is the pilot-in-command (PIC) of the aircraft, the load sheet must be submitted to the PIC for examination. Upon being satisfied that the aircraft is loaded in compliance with the required standards, the PIC shall sign the load sheet.

The PIC shall ensure that one copy of the load sheet is carried on board the aircraft, as required, until all flights to which the load sheet pertains have been completed. Auric Air shall preserve the load sheet for a period of six months following the completion of the flights.

#### Detailed Checking (When Required)

Management will provide aircraft scales capable of weighing the passengers for use by the crew to ensure that the Maximum Allowable Takeoff Weight (MAUW) is not exceeded. Ground staff will load the aircraft and have it ready on the scales for inspection by the PIC at least 30 minutes before departure of each flight. It is now physically possible for the PIC to ensure:

* That the aircraft's basic weight and index are correct according to the Weight and Balance Manual.
* That cargo has been correctly weighed and that correct passenger weight allowance has been made.
* That the load has actually been loaded in accordance with the load sheet and/or balance chart.
* That the trim of the aircraft loaded in accordance with the combined load sheet or balance chart is within the indicated limits.
* That all goods carried are properly manifested, and that manifests are stamped and signed as required.
* That a total weight of 203 lbs is used for calculations of each crew member and their kit.

The **Weight and Balance Manual** (Section 6 of the POH) provides detailed information on the compilation of load sheets and balance charts.

#### Use of Verbal Statements for Declaring Masses

In situations where scales or other approved weighing methods are unavailable, passenger and baggage weights may be determined based on verbal declarations. When using verbal statements, flight crew or ground staff shall ensure accuracy by cross-checking the declared weights against expected norms or applying appropriate conservative adjustments if necessary. This method is permitted only under specific circumstances, such as operations in remote locations or when equipment limitations prevent the use of actual weighing methods. All declared weights must be documented, and procedures outlined in this manual must be followed to ensure safety and compliance with weight and balance requirements.

#### Passenger Seating

Restriction on passenger seating reflected in the balance chart, must be enforced during take-off and the PIC must be informed on this.

At the present time Auric Air Services operates a policy of free seating. However, passengers, baggage and cargo need to be distributed properly in order to stay within the operational CG envelope and to obtain an optimum CG. Passengers shall be seated where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the aircraft. The following shall be considered:

1. Seat allocation (persons likely to assist evacuation): Only those persons who appear reasonably fit and strong should be seated adjacent to self-help exits**.**
2. Seat allocation (persons likely to impede evacuation): Persons who should be seated where they will not obstruct emergency equipment or exits, or otherwise impede the crew in carrying out their duties, include:
3. Persons who are physically or mentally handicapped to the extent that they would have difficulty in moving quickly if asked to do so.
4. Persons whose sight or hearing is impaired to the extent that they might not readily become aware of instructions given to begin evacuating the aircraft.
5. Children and infants, whether or not they are accompanied by an adult. (max 5 infants on Dash 8, 3 on C208B and 2 on the PC12)
6. Persons whose physical size would prevent them from being able to move quickly.

#### Passenger and Baggage Weights

On certain routes PIC are authorized to accept load sheets calculated using standard passenger weight, but a PIC may require actual weights of baggage and passengers to be used if he considers it necessary for flight safety.

Actual weights are used for any abnormal cabin loaded baggage. Reference to the following shall be made: The Weight and Balance Manual.

#### Correction of Loading Errors

Correction of loading errors if any, after the doors have been closed, must be assessed and cleared by the PIC if within Weight and Balance limitations or otherwise rectified before take-off-

* the maximum authorized Take-off Weight for the flight is exceeded;
* the maximum authorized Zero Fuel Weight for the aircraft is exceeded;
* the maximum permissible weight in the holds, or in a particular hold, is exceeded;
* the appropriate balance limits are exceeded;
* there is a take-off weight error of 300 kg or more, or three passengers-whether or not any of the above limits have been exceeded.

#### Corrections to the Load Sheet

Corrections to the Load sheet and Balance charts, station and aircraft copies, must be made by the same person immediately.

#### Trim Discrepancy during Flight

In this event the PIC shall ensure that a thorough baggage, cargo loading check is carried out at next landing.

#### Special Load Notification to PIC

It is important that the PIC of a flight be informed of any special load on board the aircraft, which owing to its nature or value, may require special attention and treatment during the process of acceptance, storage, transportation, loading and unloading.

Consignments considered special load include the following:

* dangerous goods.
* live animals;
* food stuffs;
* undeveloped film;
* human remains;
* perishable cargo; and
* valuable cargo.

Where a crew-change takes place the disembarking PIC must arrange to hand over the notification to the joining PIC.

Reference for Units of Measurement: Weights and specific gravity/temperature related values of Fuel and Oil-see Jeppesen (Tables and Codes)

#### Take Off Mass

The mass of the aircraft at the start of take-off must not exceed the maximum take-off mass specified in the flight manual for the aerodrome's pressure altitude and conditions, nor the estimated landing mass at the destination or alternate aerodromes. The aircraft must be capable of stopping within the accelerate-stop distance in the event of a critical engine failure during take-off or continuing the take-off and clearing all obstacles until a safe altitude is reached. Additionally, the PIC must ensure that the aircraft can safely land and stop within the available landing distance at the intended or alternate aerodrome while accounting for variations in approach and landing techniques.

#### Landing Masses

The mass of the aircraft at the start of take-off must not exceed the maximum take-off mass specified in the flight manual for the aerodrome's pressure altitude and local conditions. Additionally, the estimated mass at the time of landing, including any destination alternate aerodrome, must comply with the maximum landing mass and applicable noise certification standards, unless otherwise authorized in exceptional circumstances.

## ATS Flight Plan

### General

An Air Traffic Service (ATS) flight plan must be filed by the Duty Flight Operations Officer or Pilot-in-Command (PIC) at an airport where no Auric Air representative is available prior to departure.

#### Types of ATS Flight Plans

1. **Single ATS Flight Plan**: Filed for one particular flight.
2. **Repetitive Flight Plan (RPL)**: Filed for flights regularly operated at the same time and day of operation within a specific time period.

The PIC is responsible for ensuring that a flight plan has been filed and that they are fully aware of its details.

#### Mandatory Details for an ATS Flight Plan (Filed Pre-Flight) The flight plan must include:

1. Aircraft identification and transponder data.
2. Flight rules and type of flight.
3. Number and type(s) of aircraft and wake turbulence category.
4. Radio communication, navigation, and approach-aid equipment.
5. Aerodrome of departure and time.
6. Flight Information Region boundaries and estimated times.
7. Cruising speed and flight level.
8. Route to be followed.
9. Aerodrome of destination and estimated time of arrival.
10. Alternate aerodrome(s). (Two destination alternate aerodromes shall be selected if the meteorological conditions at the destination aerodrome are forecasted to be below the established operating minima or if meteorological information is unavailable)
11. Alerting action required.
12. Fuel endurance.
13. Total number of persons on board.
14. Emergency and survival equipment and aircraft color.
15. Other pertinent information, including the name, postal address, telephone, and telefax number of the aircraft owner or operator, to be included in Field 18 of the standard flight plan form.

#### Mandatory Details for an ATS Flight Plan (Filed In-Flight) For an in-flight ATS flight plan, the following items must be included:

1. Aircraft registration.
2. Flight rules.
3. Type of aircraft.
4. Aerodrome of departure.
5. Cruising speed and flight level.
6. Route to be followed and estimates as applicable.
7. Aerodrome of destination and estimated time of arrival.
8. Alternate aerodrome for IFR flights.
9. Alerting action required.
10. Fuel endurance if alerting action is required.
11. Total number of persons on board.
12. Name, postal address, telephone, and telefax number of the aircraft owner or operator.

### ATS Flight Plan – Operational Requirements

#### Filing and Responsibility

A flight plan must be filed with the nearest convenient air traffic services unit, which will then transmit the plan to all concerned units.

#### Mandatory Filing Situations

A flight plan must be filed for the following:

1. All flights conducted in controlled or advisory airspace.
2. Flights crossing airways or advisory routes at right angles.
3. VFR flights entering or departing an aerodrome traffic zone or control zone.
4. Flights from or to an unmanned aerodrome, provided no other controlled or advisory airspace is entered.
5. International flights.
6. Public transport operations or public transport of cargo.
7. Flights requiring alerting action.

#### Filing Time Requirements for Flight Plans

Auric Air requires that a flight plan be submitted before departure to an air traffic services reporting office or, if during flight, transmitted to the appropriate air traffic services unit or air-ground control radio station. For flights requiring air traffic control or advisory service:

1. The flight plan must be filed at least 60 minutes before departure.
2. If filed in-flight outside controlled or advisory airspace, it must be submitted at least 10 minutes before:
   * The intended entry point into a control or advisory area.
   * Crossing an airway or advisory route unless otherwise directed by the applicable ATS authority.

#### Flight Plan Content Pre-flight Flight Plan A pre-flight ATS flight plan must include:

1. Aircraft identification and transponder data.
2. Flight rules and type of flight.
3. Aircraft type(s) and wake turbulence category.
4. Radio communication, navigation, and approach-aid equipment.
5. Aerodrome of departure and time.
6. Flight information region boundaries and estimated times.
7. Cruising speed and flight level.
8. Route to be followed.
9. Aerodrome of destination and estimated time of arrival.
10. Alternate aerodrome(s).
11. Alerting action required.
12. Fuel endurance.
13. Total persons on board.
14. Emergency and survival equipment, and aircraft colour.
15. Other pertinent information, including the name, postal address, and contact details of the aircraft operator (Field 18 of the standard flight plan form).

#### In-flight Flight Plan: An ATS flight plan filed in-flight must include:

1. Aircraft registration.
2. Flight rules.
3. Aircraft type.
4. Cruising speed and flight level.
5. Route to be followed and estimated times.
6. Aerodrome of destination and estimated time of arrival.
7. Alternate aerodrome for IFR flights.
8. Alerting action required.
9. Fuel endurance if alerting action is required.
10. Total persons on board.
11. Operator contact details (name, postal address, telephone, telefax).

#### Updates to Flight Plans

* The PIC must ensure all changes to the flight plan are reported to the responsible air traffic services unit.
* If a pre-filed flight plan is not activated within one hour of the estimated time of departure for IFR flights or 120 minutes for VFR flights, it is considered canceled, and a new flight plan must be filed.

#### Arrival Reporting

#### For flights with a submitted flight plan, an arrival report must be made to the appropriate air traffic services (ATS) unit immediately before or after landing if no ATS unit operates at the aerodrome of arrival. This report can be made in person, by radiotelephony, or via data link at the earliest opportunity after landing. If a flight plan covers only a portion of the flight, it must be closed with a report to the relevant ATS unit when required. In cases where no ATS unit exists at the destination, the arrival report should be submitted as soon as practicable after landing using the quickest means available.

Arrival reports made by aircraft shall contain

1. the following elements of information:
2. aircraft identification;
3. departure aerodrome;
4. in the case of a diversionary landing destination aerodrome; and
5. arrival aerodrome time of arrival.

#### Adherence to Filed Plans

The PIC must adhere to the current filed flight plan unless a change is approved by ATC or necessitated by an emergency. Any deviation taken under emergency authority must be reported to ATC as soon as possible.

#### Deviation from Current Flight Plan

In case of inadvertent deviation:  
i. Adjust the heading to regain track immediately.  
ii. Inform ATS if the true airspeed varies by ±5%.  
iii. Notify ATS if the estimated time at the next reporting point or aerodrome is in error by more than three minutes.

### Changes to a flight plan

Any changes to a filed flight plan, including route, destination, estimated departure or arrival times exceeding 30 minutes, cruising levels, or aircraft type and equipment, must be promptly communicated to the appropriate air traffic services (ATS) unit. Significant delays exceeding one hour may require filing a new flight plan, subject to ATS requirements. Timely updates ensure accuracy in ATS services, enhancing safety and operational efficiency.

## Operational Flight Plan

### General

Auric Air ensures that an operational flight plan is completed for each flight undertaken by its aircraft in operations. The operational flight plan shall be approved and signed by the pilot-in-command and, where applicable, signed by the flight operations officer and a copy shall be filed with Auric Air or a designated agent, or, if these procedures are not possible, it shall be left with the aerodrome authority or on record in a suitable place at the point of departure.

* The operational flight plan and its use shall be as described in the operations manual
* All entries in the operational flight plan shall be current and permanent in nature.
* The items to be contained in the operational flight plan shall be as prescribed in TCARs
* The operational flight plan shall be retained for a period of at least 90 days.

### Items in Operational Flight Plan

Auric Air ensures that the operational flight plan used and the entries made during flight contain the following items:

1. Aircraft Registration;
2. Aircraft type and variant;
3. Date of flight;
4. Flight identification;
5. Names of flight crew members;
6. Duty assignment of flight crew members;
7. Place of departure;
8. Time of departure (Actual off block time, take-off time);
9. Place of arrival (planned and actual);
10. Time of arrival (Actual landing and on block time);
11. Type of operation (ETOPS, VFR, ferry flight, charter etc);
12. Route and route segments with checkpoints/waypoints, distances, time and tracks;
13. Planned cruising speed and flying times between checkpoints/waypoints, estimate and actual times overhead;
14. Destination alternate aerodrome (Two destination alternate aerodromes shall be selected if the meteorological conditions at the destination aerodrome are forecasted to be below the established operating minima or if meteorological information is unavailable)
15. Safe altitudes and minimum levels;
16. Planned altitudes and flight levels;
17. Fuel calculations (Records of in-flight fuel checks);
18. Fuel on board when starting engines;
19. Alternate(s) for destination and, where applicable, take-off and en route, including information required in subparagraphs (xi), (xii), (xiii) and (xiv) above;
20. Initial ATS flight plan clearance and subsequent re-clearance
21. In-flight re-planning calculations; and
22. Relevant meteorological information.

Items which are readily available in other documentation or from an acceptable source or which are irrelevant to the type of operation may be omitted from the operational flight plan. Auric Air ensures that the operational flight plan and its use are described in this Operations Manual. Auric Air ensures that all entries in the operational flight plan are made concurrently and are permanent in nature. The Auric Air Operational Flight Plan is an in house developed flight planning system with preset waypoints.

## Technical Log

The aircraft technical log is a system for recording journey data, defects and malfunctions discovered during the operation and for recording details of all maintenance carried out on the particular aircraft to which the aircraft technical log applies whilst that aircraft is operating between scheduled visits to the base maintenance facility. In addition, it is used for recording operating information relevant to flight safety and must contain maintenance data that the operating crew needs to know. Sample electronic copies are stored separately.

### Information to Be Contained in a Technical Log

1. Auric Air retains the following information for each flight in the form of a technical log:
2. Aircraft registration;
3. Date;
4. Name(s) of flight crew member(s);
5. Duty assignment of flight crew member(s);
6. Place of departure;
7. Place of arrival;
8. Time of departure (off-block time);
9. Time of arrival (on-block time);
10. Hours of flight;
11. Nature of flight;
12. Incidents, observations (if any);
13. Signature of PIC;
14. All outstanding deferred defects which affect the operation of the aircraft;
15. Fuel used;
16. Fuel uplift; and
17. The current maintenance statement giving the aircraft maintenance status of what maintenance, scheduled or out of phase, is next due.
18. Auric Air keeps a flight technical log or parts thereof, if the relevant information is available in other documentation.
19. Auric Air ensures that all entries are made concurrently and are permanent in nature.
20. The technical should be filled neatly, all boxes required to be filled should be filled, correction should be done with a single strike through with denotation of initials.

**Do Not** use white out or any corrective equipment to correct the technical log.

## Responsibilities of the Commander

### Before Flight

Before undertaking any flight, the aircraft commander must ensure the following requirements are met:

1. **Certificate of Release to Service**
   * The Certificate of Release to Service must be valid and remain so for the duration of the intended flight.
2. **Recorded Defects**
   * For any defect recorded after the immediately preceding flight, the 'ACTION TAKEN' column must include particulars of any rectification action taken, accompanied by a properly completed Certificate of Release to Service.
   * If no rectification action has been taken or a Certificate of Release to Service cannot be completed, the 'ACTION TAKEN' column must include a statement indicating that the defect has been deferred in accordance with the MEL.
3. **Pre-flight Inspection**

Before commencing a flight, they must ensure the flight can be safely conducted, considering the latest available information on the route, aerodromes, weather, and alternative actions if the flight cannot be completed as planned. They must ensure all required equipment, including radio apparatus, is on board and in fit condition for use. The aircraft must be fit for the intended flight, with a valid certificate of release to service, if required, that remains in force for the duration of the flight. Additionally, the aircraft's load must be of acceptable weight, properly distributed, and securely fastened to ensure safe operation.

1. **Outstanding Deferred Defects**
   * The aircraft commander must ensure that any outstanding deferred defect(s) are acceptable for the intended flight and that all unserviceable equipment is adequately placarded if allowed by the MEL.

### Immediately After Flight

After completing any flight, the aircraft commander must ensure compliance with the following requirements:

1. **Flight Details Recording:**  
   The following details of the completed flight must be accurately entered in the designated spaces:
   * Airfield of departure
   * Airfield of arrival
   * Surname of Captain
   * Aircraft registration
   * Date(s) of the flight
   * Time of take-off
   * Sector elapsed time
   * Total time since CRS
   * Number of landings made
2. **Defect Reporting:**
   * The PIC must conduct a post-flight walk-around, checking for airframe damage, fluid leaks, tire wear, and panel security. Any anomalies must be recorded in the Aircraft Technical Log and reported to Maintenance for rectification.
   * Any known defect affecting the airworthiness or safe operation of the aircraft must be recorded.
   * A full description, including the time and/or phase of flight when the defect occurred, must be provided.
   * Each defect must be numbered and entered in a separate block in the defects column.
   * If no defects are identified, a statement confirming this must be entered.
   * The commander must sign immediately under the last entry.
3. **Engine Performance Data:**
   * If applicable, the pilot shall record engine performance data in the technical log.
   * This must be completed during cruise and level flight in the designated spaces.

## Responsibilities of Maintenance Personnel

### After Flight

The authorized engineer or authorized crew member as appropriate must make sure that all defects entered in the defects column in respect of the immediate preceding flight are either rectified or are transferred to the deferred defect sheet of Technical Log.

1. When a defect is rectified, particulars of the rectification action must be entered against the defect entry in the ACTION TAKEN column. The associated Certificate of Release to Service must be properly completed by an authorized person showing signature, date and authority.
2. Where a defect is deferred from the Technical Log, a statement to that effect must be entered by an authorized person, against the defect in the ACTION TAKEN column.

### Before Flight

Before releasing an aircraft for flight, the engineer or crew member as appropriate, must ensure that the aircraft is signed out.

## Responsibilities of the Personnel entering Deferred Defects

### Entering of Deferred Defects

When a defect which has been transferred from a page of the Technical Log is entered, the authorized engineer or crew member, as appropriate, who makes the entry, must ensure that the following information is included:

1. Defect number (to be numbered consecutively)
2. Serial number of the page of the Technical Log from which the defect has been transferred, together with the number of the defect as it appears on that page.
3. Full particulars of the transferred defect including MEL reference.
4. The declared limit to the deferment of the defect is given as:
   * + 1. A date (e.g. ’12.2.99’)
       2. Until return to base (‘RTB’)
       3. Until a specified next maintenance check (e.g. ‘Next Check D’)
5. The date of transfer of the defect (this must be the same date as indicated above).
6. The signature and authority of the person authorizing the transfer of the defect.
7. Any alteration to the limit of deferment must be accompanied by a signature and a stamp of authority OR the name of the person issuing the change must be appended in block capitals.

### Clearing of Deferred Defects

When a deferred defect is cleared, the Chief Engineer or designated Engineer of authorized crew member, as appropriate, responsible for the clearance must ensure that the requirements below are complied with:

1. Entries must be made against the cleared defect entry in the DEFECT CLEARED column, giving the date of the defect.
2. Clearance action, signature and authority of the person affecting such action and the defect.

## Documents, Forms and Additional Information to be Carried in Flight

### Documents to Be Carried on Board

Auric Air ensures that the following documents or certified true copies thereof, are carried on board the aircraft on each individual flight, if the aircraft is engaged in domestic and international flight.

1. The certificate of registration;
2. The certificate of airworthiness;
3. The appropriate license of each flight crew member
4. The journey logbook or general declaration;
5. The aircraft radio station license;
6. The certificate of release to service
7. The technical logbook;
8. The Operations Manual;
9. The aircraft flight manual or an equivalent document;
10. The mass and balance report;
11. The aircraft journey logbook;
12. Passenger and Cargo manifest;
13. Copy of Air Operator Certificate (AOC);
14. Operational flight plan;
15. Filed notice to Airmen (NOTAMS) briefing documentation;
16. Meteorological information;
17. Maps and Jepessen charts required for the flight and possible diversions;
18. Filed air traffic control (ATC) flight plan;
19. The MEL;
20. The noise certificate if such certificate has been issued for the type of aircraft; and
21. A list of visual signals for use by intercepting and intercepted aircraft.
22. Copy of Insurance
23. Search and rescue information
24. Security Search Checklist

### Aircraft Flight Manual

Auric Air keeps a current approved Aircraft Flight Manual for each aircraft.

The flight crew member of the aircraft shall, on each flight operate such aircraft in accordance with the approved aircraft flight manual, unless an unforeseen emergency dictates otherwise.

### Aircraft Checklists

Auric Air shall ensure that flight crews and other relevant personnel are provided with checklists for all phases of operation under normal, abnormal, and emergency conditions. These checklists, designed and utilized in accordance with human factors principles, shall be issued to each flight crew member and made available at each flight crew member’s position on the aircraft. The checklists shall be approved by the Authority and shall be specific to the type and variant of aircraft being operated. Flight crews shall use these checklists prior to, during, and after all phases of operation, including emergencies, to ensure compliance with procedures contained in the aircraft operating manual, aircraft flight manual, or other associated documents. Approved procedures shall be included in the checklists to ensure safety before starting engines, taking off, or landing, and to address engine and system abnormalities and emergencies. The design of these procedures shall ensure that flight crew members do not need to rely on memory for critical items. The approved checklists and procedures shall be readily accessible in the cockpit, and flight crews shall be required to follow them during all operations.

### Journey Log Book

Auric Air shall ensure that the pilot-in-command is responsible for maintaining the journey log book or the general declaration, which must include the following details:

* 1. Aircraft nationality and registration.
  2. Date of the flight.
  3. Names and duty assignments of crew members.
  4. Place of departure and arrival.
  5. Time of departure and arrival.
  6. Hours of flight.
  7. Nature of the flight (e.g., private, aerial work, scheduled, or non-scheduled).
  8. Any incidents or observations during the flight.
  9. Signature of the person in charge.

All entries in the journey log book shall be made promptly, using ink or indelible pencil, to ensure the accuracy and permanence of records.

## Ground Procedures

### Fueling (Refueling)

Note:Throughout this chapter the term fueling encompasses refueling. APU must be OFF during the refueling process.

### Introduction

The airport authority, the aircraft operator and the fuel supplier each has responsibilities in respect of the safety measures to be taken during fueling operations. Guidance on these safety measures is given below. The material includes the following subjects.

* General precautionary measures to be taken during fueling operations;
* No fueling to be conducted with passengers on-board.
* Sources and dissipation of electrical energy that may develop during aircraft fuelling operation.

### General Precautionary Measures to be taken during Aircraft Fueling Operations

Aircraft fueling operations should be done outdoors;

1. Bonding and/or grounding, as appropriate, should be done in accordance with 9.2.1.3;
2. Aircraft fueling vehicles should be positioned so that.
3. Accessibility to aircraft by rescue and fire fighting vehicles is not interrupted. A cleared path is maintained to permit rapid removal of fuelling vehicles from an aircraft in an emergency;
4. They do not obstruct evacuation from occupied portions of the aircraft in the event of a fire; and
5. The vehicle engines are not under the wing – if possible;
6. All vehicles performing aircraft servicing functions other than fuel servicing (e.g. Baggage trucks, etc) should not be driven or be parked under aircraft wings if applicable, while fuelling is in progress;
7. The exhaust systems of all vehicles required to operate in the fuelling zone must be subjected to the most stringent and regular maintenance to eliminate defects which may result in the emission of sparks of flames capable of igniting fuel or fuel vapour;
8. Aircraft borne auxiliary power units which have an exhaust efflux discharging into the zone should be started before filler caps are removed or fuelling connections made;
9. If an auxiliary power unit is stopped for any reason during a fuelling operation it should not be restarted until the flow of fuel has ceased and there is no risk of igniting fuel vapours;
10. Aircraft should not be fuelled within the immediate vicinity of radar equipment under test or in use in aircraft or ground installations;
11. Aircraft batteries should not be installed or removed nor should battery chargers be connected, operated or disconnected;
12. Connecting of ground power generators should not be done during this period;
13. Electric tools, drills or similar tools likely to produce sparks or arcs should not be used;
14. Photographic flash bulbs or electronic flash equipment should not be used in the immediate vicinity of the fuelling equipment or of the fill or vent points of the aircraft;
15. Open flames and lighted open flame devices should be prohibited on the apron and in other locations within 15 m of any aircraft fuelling operation. Included in the category of open flames and lighted open flame devices are the following:

* Lighted cigarettes, cigars, pipes;
* Exposed flame heaters;
* Welding or cutting torches, etc; and
* Flare pots or other open flame lights.
* Cigarette lighters or matches should not be carried or used by anyone while engaged in aircraft fuelling operations

1. Extreme caution should be used when fuelling during lightning and electrical storms. The fuelling operations should be suspended during severe lightning disturbances in the immediate vicinity of the airport;
2. When any part of an aircraft undercarriage is abnormally heated, the airport rescue and fire fighting service should be called and fuelling should not take place until the heat has dissipated;
3. Portable fire extinguishing equipment suitable for at least initial intervention in the event of a fuel fire and personnel trained in its use shall be readily available and there shall be a means of quickly summoning the rescue and fire fighting service in the event of a fire or major fuel spill. It should be ensured by regular inspection and maintenance that this equipment is maintained in a full serviceable condition.

### Refueling with Passengers on Board

Auric Air Services limited prohibits hot refuelling. It does not permit passengers to embark, disembark or remain onboard during refuelling.

### Sources and Dissipation of Electrical Energy that May Develop during Aircraft Fueling Operations

During aircraft fuelling operations, hazards such as electrostatic charge, stray currents, and spark discharge can occur. Electrostatic charge may accumulate on the aircraft or fuelling vehicle, creating a risk of sparking. To mitigate this, bonding between the aircraft and fuelling vehicle must be ensured using clean, unpainted metal surfaces, as conductive hoses are insufficient. For over wing fuelling, the nozzle must be bonded to the aircraft before removing the filler cap, while under wing fuelling relies on automatic metal-to-metal contact. Additional safeguards like drag chains or conductive tires provide limited protection. Where grounding is required, the aircraft and fuelling vehicle must be grounded separately before bonding them to each other and connecting the nozzle to the aircraft. Disconnections must always follow the reverse order.

Electrostatic charge within the fuel poses a separate risk of sparking inside the aircraft tank, addressed by using antistatic additives, as bonding and grounding are ineffective for this issue. Stray currents, caused by electrical faults, can be dissipated through proper bonding between the aircraft and fuelling vehicle. To avoid sparking during disconnection, grounding the aircraft directly rather than through the fuelling vehicle or hydrant systems is recommended. Additionally, the grounding systems for fuelling and electrical power supplies should remain separate to prevent potential damage from short circuits. Adherence to these procedures minimizes risks during fuelling operations.

### Precautions to Avoid Mixing Fuel

**Marking:**  
Aircraft fuel filler openings must be marked with "FUEL" and the minimum fuel grade or designation. These markings must remain clean and legible through regular washing and occasional repainting. Fuel tank vehicles should be clearly marked with the type of fuel they carry, using contrasting colors and lettering at least 12 inches tall, visible on all sides and the rear. Hose lines and nozzles should also be labeled or color-coded to indicate the type of fuel being dispensed, with all markings maintained clean and legible.

**Training:**  
All personnel involved in fuelling operations must receive thorough training on procedures, equipment, and fuel types. Ground staff should be familiar with fuelling facilities and procedures, while flight crew should understand the proper handling of fuel types. Periodic retraining should be conducted, with records maintained for all personnel.

**Fuel Testing:**  
The PIC or appointed refuellers must ensure that fuel is tested by the supplier using water detection capsules or equivalent. Records of these tests, including the date, tester's name, and observations, should be maintained.

**Precautions for Alternative and Mixed Fuels:**  
When using JP-4 or mixing JP-4 with JP-1, extreme caution is required due to the increased risk of ignitable fuel-air mixtures in tanks. JP-4 vapors can develop an explosive mixture at common ambient temperatures. All fuel should be handled as though it can create an ignitable mixture under the right conditions. These precautions are supplementary to standard procedures outlined in maintenance and engineering manuals.

### Approved Fuels

Refer to the Approved Aircraft Flight Manual DH8 and POH for C208 and PC12

### Refueling from Drums

If an aircraft is to be refuelled from drums, the PIC shall ensure that the quality of fuel is not compromised. He shall ensure this by following the guidelines outlined below:

1. Correct type and grade is checked.
2. Drum seals are tight and not broken prior to use.
3. Fuel in drums is consumed within the specified Aviation Release Note certification date;
4. Drums have been stored horizontally with bungs at the 3 and 9 o'clock position, or stored vertically with drum tops covers in place;
5. Stored with minimal ground contact (using wooden slats or equivalent);
6. Thorough sampling and testing is conducted prior to use with water detector capsules, paste or an approved equivalent;
7. Refuelling pumps must be fitted with a Go/No- filter; and
8. Before fuelling the aircraft, a small amount of fuel is pumped into a container to remove any contaminants in the hose and nozzle.
9. All gear used must be sealed when not in use to protect from ingress of dust and contaminants.
10. Because fuel spills have a damaging effect on ramp areas, tyres, de-icing boots and aircraft paint, spilt fuel should be removed as soon as possible.
11. Suitable precautions against fire, such as use of a grounding wire and positioning of fire extinguishers, should always be taken

## Aircraft, Passengers and Cargo Handling Procedures - Loading general

The PIC is legally responsible for satisfying himself that the load is correctly and safely distributed and properly stowed and secured. He must check and sign the load sheet before departure, ensure that sufficient fuel is on board, and satisfy himself that the load sheet accounts for all the items referred to below.

All ramp operations, baggage services and passenger services at manned airports shall be handled by the flight dispatcher, for unmanned aerodromes the PIC shall handle.

### Detailed Checking

It is impractical for the Pilot in Command to physically check; therefore, the Flight Dispatcher shall be taking the weights of Baggage. Passenger weights can be taken by the dispatcher when requested by the pilot, otherwise standard weights to be used.

The Dispatcher/PIC shall check:

1. That the aircraft basic weight and index is correct according to the Weight and Balance manual.
2. That cargo has been correctly weighed and that correct passenger weight allowance had been made.
3. That the load has actually been loaded in accordance with the load sheet.
4. That the trim of the aircraft loaded in accordance with the combined load sheet or balance chart is within the indicated limits;
5. That all goods carried are properly manifested.

### The Weight and Balance Manual

Refer to the Approved Aircraft Flight Manual DH8 and POH for C208 and PC12

### Passenger Seating

Restrictions on passenger seating reflected in the balance chart, must be enforced during take-off and this must be confirmed by the Pilot in Command.

#### Exit Row Seating Policy

The pilot-in-command (PIC) shall ensure that no passenger is seated in an emergency exit row if it is determined that the passenger is unable to understand or perform the necessary functions to open the exit and evacuate rapidly. Passengers occupying exit row seats must meet specific criteria, including sufficient mobility, strength, and dexterity to reach, operate, and remove obstructions from emergency exit mechanisms; assist in deploying and stabilizing escape slides; and evacuate expeditiously. Passengers must also be at least 15 years old, able to read and understand printed or graphic evacuation instructions, comply with oral crew commands, and have adequate visual and auditory capacity to perform evacuation functions without additional aids.

The pilot-in-command (PIC) or the designated person assigned by the air operator certificate holder shall ensure that, when passengers are on board the aircraft prior to movement on the surface, at least one floor-level exit is available for passenger egress through either normal or emergency means

#### Exit Row Seating Policy For Aircraft with Cabin Crew

The cabin crew is responsible for assessing the suitability of passengers seated in exit rows. If a cabin crew member determines that a passenger in an exit row is unable to perform the required functions or if a passenger requests a non-exit seat, the crew member shall expeditiously relocate the passenger to a non-exit seat. If non-exit seats are fully booked, the crew may reassign a willing and capable passenger to an exit row to ensure compliance.

#### Exit Row Seating Passenger Briefing

Request passengers to self-identify if they cannot meet the exit row requirements or prefer not to occupy an exit seat. Refer passengers to safety information cards for detailed guidance on emergency functions.

Compliance with instructions from the cabin crew or other authorized personnel regarding exit seating restrictions is mandatory. Prior to taxi or pushback, at least one required crew member must verify that all exit rows and escape paths are unobstructed and that exit seats are occupied by passengers who meet the requirements.

#### Passenger Seat Back Positioning

The pilot-in-command (PIC) shall ensure that all passenger seat backs are in the upright position during take-off and landing. Exceptions to this requirement may only be made in accordance with the procedures outlined in the Auric Air Operations Manual, provided that the reclined seat back does not obstruct any passenger's access to the aisle or an emergency exit.

### Passenger and Baggage Weights

The PIC may require actual weights of baggage and passengers to be used if he considers it necessary for flight safety.

1. Standard Weights:

For the sake of a simplified weight calculation, and in accordance to AURIC AIR SERVICES Limited’s Operations Manual, passenger weights inclusive of 6kg of hand baggage have been standardized as specified below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Passenger  seats | 1-5 | 6-9 | 10-19 | 20 and more | 30 and more |
| Male | 104 | 96 | 92 | 88 | 84 |
| Female | 86 | 78 | 74 | 70 | 84 |
| Children | 35 | 35 | 35 | 35 | 35 |

###### Actual weights of passengers, baggage and cargo shall be used when:

* + 1. There are instructions from the commander to use actual masses.
    2. It is expected that the passenger and/or baggage mass on the airplane will be significantly less than standard e.g. school trips.
    3. If a significant number of passengers on any flight and/or a significant amount of checked baggage is expected to exceed the standard mass,
    4. Clients request so or for operations for BMOs.

1. Baggage masses

Actual baggage weights shall be recorded on the manifest. If the need for recording standard weights arises, the standard mass for passenger baggage shall be 15 kilos per piece of checked baggage maximum dimension should not exceed 90x65x35 cm.

1. Crew Members

Actual Crew and crew baggage weight shall be added

1. Cargo masses

Cargo and mail, actual weights shall be used as documented on the cargo manifest

1. Weighing scales

Where necessary actual weights have to be used for mass and balance calculations to meet a customer requirement, only current calibrated weighing scales shall be used.

### Trim Discrepancy during Fight

In this event, the PIC shall ensure that a thorough baggage and cargo loading check is carried out at next landing.

### Special Load

It is important that the PIC of a flight be informed of any special load on board the aircraft, which owning to its nature or value, may require special attention and treatment during the process of acceptance, storage, transportation, loading and unloading.

### Handling Procedures for Disabled Persons.

A handicapped passenger is a person who may need the assistance of another person to expeditiously move to an exit in the event of an emergency. These people have a disability or condition that could lead to a significant delay during an emergency evacuation of an aircraft or could increase the risk of that person being injured during the evacuation. Handicapped passengers are categorized as:

1. Ambulatory:

A patient passenger who can board, deplane, and move around the aircraft independently without assistance.

1. Non-ambulatory: A patient passenger who is not able to board and deplane from an aircraft unassisted or who is not able to move about the aircraft unassisted. This includes the blind, deaf, mentally retarded, etc.

Auric Air can accommodate a maximum of 3 wheelchair passengers or special needs passengers on any one flight on Dash 8 as well as 1 on C208B and PC12.

### Assisting Disabled Persons

Flight crew should communicate with disabled passengers to understand their specific needs and ensure assistance is provided appropriately. Mismanagement can cause injury, so sensitivity is crucial. Common categories of disabled travelers include:

1. **Limited Endurance:** Passengers with heart or lung conditions need minimal assistance but should avoid physical exertion. They should board early, avoid long lines, and be provided transportation for long distances within terminals.
2. **Casts or Splints:** Passengers with limbs in casts should be asked how to assist them, such as propping up casts to reduce swelling. Leg casts may require space adjustments when possible.
3. **Muscular Control Issues:** Passengers with jerky movements or slurred speech should be treated with patience and clarity. Auric Air provides communication tools for those unable to speak.
4. **Paralysis:** Passengers with paralysis (e.g., quadriplegia, paraplegia, hemiplegia) may have difficulty balancing, expressing themselves, or understanding instructions. Speak slowly, use short phrases, and stand directly in front of them for clarity.
5. **Single-Hand Use:** Passengers needing assistance dressing should have the weak arm dressed first and undressed last.

### Blind Passengers:

Assistance should be offered when appropriate and accepted at the passenger's discretion. When guiding, allow the passenger to hold the attendant's arm, staying slightly ahead for smooth navigation. Inform blind passengers of moving walkways and provide clear emergency briefings.

### Deaf Persons

Deaf passengers face challenges such as missing boarding announcements, pre-takeoff briefings, or "fasten seat belt" instructions, and may not hear evacuation commands, especially in emergencies with poor visibility or loss of power. Many use sign language, lip reading, or written communication.

Auric Air ensures access to trained personnel for sign language and provides written instructions when needed. A sign at the check-in counter is recommended to prompt passengers with hearing difficulties to inform the agent. Tickets could be stamped for easy identification by crew, ensuring proper assistance throughout the flight. Crew should update deaf passengers on schedule changes, and security areas should have clear, visible written instructions.

### Unaccompanied Minors

#### Definition of Unaccompanied Minor

An Unaccompanied Minor (UM) is a child traveling without a parent, guardian, or responsible adult aged 18 years or older and requires additional arrangements to ensure their safety and well-being during the journey. The minimum age for a UM is 5 years, and the maximum age is 12 years. Passengers aged 13 to 17 are considered "Young Passengers" rather than UMs but may request special assistance if needed.

#### Procedure for check-in of a UM

At check-in, the unaccompanied minor (UM) must be accompanied by a guardian or parent, who will remain at the airport until the aircraft has departed. The check-in staff will collect the UM handover form in triplicate and ensure it is fully completed, with all relevant details clearly stated. The check-in staff will verify the UM’s travel documents, including their passport, ticket, and boarding pass, to confirm their accuracy and validity. Check-in staff must contact the person picking up the UM at the destination to confirm the arrival time, adjusted to 30 minutes earlier to allow for preparation and arrival procedures.

#### Handling of UM For Aircraft with Cabin Crew

1. **Ground Handling Procedures:**
   * Ground handling personnel must present three copies of the UM Hand Over Form to the Lead Cabin Crew Member (LCCM).
   * The LCCM must verify the UM’s documents, including passport, ticket, and boarding pass, before signing the form. A copy of the signed form must be retained by the ground personnel.
2. **In-Flight Care:**
   * The LCCM and cabin crew must ensure the UM is well cared for throughout the flight.
   * The UM must be prepared for landing well in advance and briefed on what to expect.
3. **Arrival Procedures:**
   * At the UM's destination, the receiving staff must sign a copy of the form, which shall be retained by the LCCM as a record.
4. **Communication with PIC:**
   * The Pilot in Command (PIC) must be informed whenever there is a UM onboard.

#### Handling of UM For Aircraft Without Cabin Crew

1. **Ground Handling Procedures:**
   * Ground handling personnel must present three copies of the UM Hand Over Form to the PIC.
   * The PIC must verify the UM’s documents, including passport, ticket, and boarding pass, before signing the form. A copy of the signed form must be retained by the ground personnel.
2. **In-Flight Care:**
   * The PIC is responsible for ensuring the UM is comfortable and safe during the flight.
   * Before landing, the PIC must prepare the UM for arrival and ensure they are ready for handover.
3. **Arrival Procedures:**
   * At the UM’s destination, the receiving staff must sign a copy of the form, which shall be retained by the PIC as a record.
4. **Communication:**
   * The ground staff at the destination must be informed in advance of the UM’s arrival to ensure a smooth handover.

### Seating handicapped passengers.

Handicapped passengers should be seated in an aircraft so that, in the event of an emergency evacuation, they can leave the aircraft, either unassisted or assisted, by the safest and most expedient route while not slowing the evacuation.

* Non-ambulatory handicapped passengers should be seated in aisle seats near the exits.
* Ambulatory handicapped passengers should be seated in areas in which evacuation would be unobstructed.

### Carriage of stretcher patients

The stretcher shall be secured so as to prevent it from moving under the maximum accelerations likely to be experienced in flight and in an emergency alighting such as ditching;

* The patient shall be secured by an approved harness to the stretcher or aircraft structure;
* An able-bodied assistant shall accompany each stretcher patient.

### Permissible Size and Weight of Hand Baggage

Only hand baggage that can be adequately and securely stowed is permitted in the passenger cabin. Auric Air has established procedures to ensure that all baggage and cargo on board, which might cause injury, damage, or obstruct aisles and exits if displaced, is placed in storages designed to prevent movement. Cabin baggage allowance is limited to 7 kg, measuring 55x38x20 cm.

These procedures ensure the following:

1. Each item carried in the cabin is stowed only in a location capable of restraining it.
2. Mass limitations placarded on or adjacent to stowages are not exceeded.
3. Under-seat stowages are used only when the seat is equipped with a restraint bar and the baggage is of a size that can be adequately restrained by this equipment.
4. Items are not stowed in toilets or against bulkheads unless the bulkheads are capable of restraining articles against movement forward, sideways, or upward, and carry a placard specifying the maximum allowable mass.
5. Baggage and cargo placed in lockers do not exceed a size that prevents the secure closing of latched doors.
6. Baggage and cargo are not placed where they can impede access to emergency equipment.
7. Checks are conducted before take-off, before landing, and whenever the pilot-in-command illuminates the fasten seat belt signs (or otherwise orders) to ensure that baggage is stowed securely to prevent obstruction to evacuation or injury by falling or movement appropriate to the phase of flight.

By adhering to these procedures, Auric Air ensures the safe and secure stowage of cabin baggage and cargo during all phases of flight.

### Multiple Occupancy of Aircraft Seats

Before takeoff and landing, and whenever deemed necessary in the interests of aviation safety, the PIC of an aircraft shall ensure that each person on board such aircraft, occupies a seat or berth with his or her safety belt or harness, where provided, properly secured.

The PIC shall ensure that multiple occupancy of aircraft seats does not occur other than by one adult.

### Carriage of Inadmissible Passengers, Deportees or Persons in Custody

The PIC of the aircraft shall be notified prior to departure, of the intended carriage, and the reason for carriage, of any of the persons referred to above.

For the purposes of this regulation, “inadmissible passenger” means any person who is not entitled to board the aircraft and includes those persons who are not in the possession of a valid passenger ticket, passport or visa.

### Refusal To Embark And Disembark

The Pilot-in-Command (PIC) of an Auric Air aircraft shall have the statutory authority to refuse entry to any individual whose presence on board could pose a hazard to the safety of the aircraft or its occupants. This includes individuals under the influence of alcohol or drugs to a degree that endangers the safety of the aircraft or its passengers, as well as those suffering from mental or physical illness that could place others at risk unless prior medical approval has been granted and qualified nursing personnel accompany the patient(s). The PIC may also refuse boarding to individuals who fail to comply with instructions regarding exit seating restrictions as prescribed by the Authority or have a physical handicap that cannot be accommodated without obstructing the safe evacuation of other passengers. These provisions ensure the safety and well-being of all passengers and crew on Auric Air flights.

In order to assist the PIC in the proper exercise of this authority, all company personnel engaged in passenger handling and loading, including other crew members, handling agents and check in personnel, should alert the PIC if at any time they consider that the condition of particular passengers could jeopardize the safety of a proposed flight.

If difficulty is encountered in dealing with such passengers, particularly those who may require physical restraint, the assistance of the aerodrome, or local police should be requested.

#### Prohibition of Intoxicated Persons on Aircraft

No person shall permit any individual who appears intoxicated or exhibits physical or behavioral signs of intoxication to board an Auric Air aircraft or be served alcohol while on board. Furthermore, individuals are prohibited from boarding an aircraft while intoxicated or under the influence of drugs. Similarly, being intoxicated or under the influence of drugs while on board is strictly forbidden

### Alcoholic Beverages

Auric Air does not allow alcoholic beverages to be served on its aircraft.

### Special Protection for Crew Members

Crew interference is defined as an incident where a passenger assaults, threatens, intimidates or interferes with a crew member while in performance of crew duties on board an aircraft.

Auric Air will provide legal counsel and supervisory assistance in pursuing appropriate action to any employee who is subjected to abuse, physical violence, or intimidation on the job.

### Ground Support Equipment

Auric Air Services LTD only uses a Ground Power Unit where available to power the Aircraft which are supervised by the Director of Maintenance.

## IFR / VFR Flight Procedures

### Flight in Accordance with the Instrument Flight Rules

#### Flight in Accordance with the Visual Flight Rules

Auric Air conducts most flights under IFR flight plans, irrespective of weather conditions. However, when VFR flights are necessary, the following applies: flights, except those of a purely local character in visual meteorological conditions, must not commence unless current meteorological reports, or a combination of reports and forecasts, confirm that compliance with VFR is possible along the route. An ATC VFR flight plan must be filed for all VFR flights, and VFR flights at night are not permitted.

#### Aerodrome Operating Minima (IFR)

Auric Air in determining aerodrome operating minima for IFR flights regards the following Civil Aviation (Operations of Aircraft) Regulations, as amended, requirements as the minimum acceptable to their operation:

#### Take-Off Minima

##### General

1. Take-off minima established by Auric Air must be expressed as visibility, taking into account all relevant factors for each aerodrome planned to be used and the aircraft characteristics. Where there is a specific need to see and avoid obstacles on departure and/or for a forced landing, additional conditions (e.g. ceiling) must be specified.
2. The PIC shall not commence take-off unless the weather conditions at the departure aerodrome are equal to or better than the applicable minima for landing at that aerodrome, unless a suitable take-off alternate aerodrome is available. For an aerodrome to qualify as a take-off alternate, the available information must indicate that, at the estimated time of use, the conditions will meet or exceed Auric Air’s established aerodrome operating minima for that operation.
3. When no reported meteorological visibility is available, a take-off may only be commenced if the pilot-in-command can determine that the visibility along the take-off runway is equal to or better than the required minimum.

Specifically, Pilots shall use the following in the order written in determining minimum flight altitudes for routes flown;

1. For aerodromes that are published by Jeppesen, the Jeppessen airway manual approach plates and aerodrome charts shall be used.

ii For aerodromes that are not in the Jeppesen airway manual, the AIP shall be used.

#### Visual reference point

The take-off minima point must be selected to ensure sufficient guidance to control the aircraft in the event of both a discontinued take-off in adverse circumstances and a continued take-off after failure of the critical power unit.

#### Required Visibility

For multi-engine aircraft, whose performance is such that, in the event of a critical power unit failure at any point during take-off, the aircraft can either stop or continue the take-off to a height of 1500 feet above the aerodrome while clearing obstacles by the required margins, the take-off minima established by an operator must be expressed as Visibility values not lower than those given in Table 2.

Table 2: Visibility for take-off

|  |  |
| --- | --- |
| Take-off Visibility |  |
| Facilities | Visibility |
| Nil (Day only) | 800 m |
| Runway edge lighting and / or centerline marking | 800 m |
| Runway edge and centerline lighting | 800 m |
| Runway edge and centerline lighting and multiple RVR information | 800 m |

Notes: 1. For night operations at least runway edge and runway end lights are required.

2. For single engine operations, visibility required is 1500m.

For multi-engine aircraft whose performance is such that they cannot comply with the performance conditions above in the event of a critical power unit failure, there may be a need to re-land immediately and to see and avoid obstacles in the take-off area. Such aircraft may be operated to the following take-off minima provided they are able to comply with the applicable obstacle clearance criteria, assuming engine failure at the height specified. The take-off minima established by an operator must be based upon the height from which the one engine inoperative net take-off flight path can be constructed. The minimum visibility used may not be lower than either of the values given in Table 2 above or Table 3.

Table 3: Assumed engine failure height above the runway versus Visibility

|  |  |
| --- | --- |
| Take-off Visibility - flight path | |
| Assumed engine failure height above the take-off runway | Visibility |
| <50 ft. | 800 m |
| 51 - 100 ft. | 800 m |
| 101 - 150ft | 800 m |
| 151 - 200 ft. | 800 m |
| 201 - 300 ft. | 800 m |
| >300 ft. | 800m (Note 1) |

Notes: (1)800 m is also applicable if not positive take-off flight path can be constructed.

When reported meteorological visibility is not available, the pilot-in-command may not commence take-off unless he or she can determine that the actual conditions satisfy the applicable take-off minima.

#### VFR Operating Minima

Auric Air ensures that VFR flights comply with visual flight rules as prescribed by TCARs. Special VFR flights are not initiated when visibility is less than 3 km or without ATC authorization. VFR flights must maintain conditions of visibility and distance from clouds as required.

#### VFR Flight Restrictions

VFR flights must not:

* Take off, land, or enter a controlled aerodrome zone when the ceiling is below 450 m (1,500 ft) or ground visibility is below 5 km unless cleared by ATC.
* Operate above FL 145 or at transonic or supersonic speeds unless authorized by the appropriate ATS authority.
* Be flown over congested areas, towns, or open-air assemblies at less than 300 m (1,000 ft) above the highest obstacle within a 600 m radius.
* Be flown below 150 m (500 ft) above ground or water elsewhere, except during take-off or landing or with specific permission.

#### VFR Flight Operations

VFR flights above 900 m (3,000 ft) or a specified datum must adhere to cruising levels appropriate to their track, unless specified otherwise in ATC clearances or by the ATS authority. They must comply with operational provisions when operating:

* Within Classes B, C, and D airspace.
* As part of aerodrome traffic at controlled aerodromes.
* As special VFR flights.

#### Communication and Monitoring

VFR flights operating in designated areas or routes must maintain continuous air-ground communication and report positions to the relevant ATS unit when necessary.

#### Choice of VFR or IFR

A person shall fly an aircraft in accordance with visual flight rule (VFR) or instrument flight rules (IFR), provided that:

1. in the United Republic of Tanzania, an aircraft flying at night shall be flown in accordance with the IFR, or, in a control zone, in accordance with the IFR or the provisions of the applicable regulations.
2. irrespective of meteorological conditions, the pilot-in-command shall, when operating within the Dar es Salaam Flight Information Region at or above flight level 150 and within airways irrespective of flight level, fly in accordance with IFR.
3. Unless authorized by an appropriate air traffic services authority, a person shall not operate an aircraft in VFR:

* above flight level 145; or
* at supersonic or transonic speeds.

#### VFR Outside and Within Controlled Airspace

A pilot-in-command flying an aircraft-

* + - 1. Outside controlled airspace shall remain at least 1,500 m horizontally and 1,000 feet vertically away from cloud and in a flight visibility of at least 8 km:
* provided that below 1,000 feet above ground or water this sub-regulation shall be deemed to be complied with if the aircraft is flown clear of cloud and in sight of the surface in a flight visibility of not less than 1.5 km;
  + - 1. Within controlled airspace shall remain at least 1,500m horizontally and 1,000 feet vertically away from cloud and in a flight visibility of at least 8 km:
* provided that in a control zone, in the case of a special visual flight rules flight, the aircraft shall remain clear of cloud and in sight of the ground or water and shall be flow in accordance with any instructions given by the appropriate air traffic control unit.

#### Change from VFR to IFR

A pilot-in-command operating in visual flight rules who wishes to change to instrument flight rules (IFR) shall-

(a) if a flight plan was submitted, communicate the necessary changes to be effected to the current flight plan; or

(b) when so required by provisions of regulation 33submit a flight plan to the appropriate air traffic control unit and obtain a clearance prior to proceeding IFR when in controlled airspace.

#### Avoidance of IMC enroute

To prevent inadvertent entry into IMC enroute on a VFR flight, pilots must:

1. Thoroughly assess weather forecasts before departure,
2. Maintain ongoing weather monitoring by communicating regularly with ATC and other
3. aircraft for real-time weather updates and potential route adjustments.
4. Adhere strictly to Visual Flight Rules (VFR) minimums for visibility and cloud clearance.
5. Keep a constant visual look out for changes in weather conditions
6. Plan alternate routes and maintain awareness of nearby airports for potential diversions.
7. Use the weather radar, when available.

#### Aerodrome Operating Minima (IFR)

Auric Air in determining aerodrome operating minima for IFR flights regards the following Civil Aviation (Operations of Aircraft) Regulations, as amended, requirements as the minimum acceptable to their operation:

#### Change from IFR flight to VFR flight

1. The PIC of an aircraft who elects to change the conduct of flight of the aircraft from compliance with IFR to compliance with VFR shall, if a flight plan was submitted for the flight, notify the air traffic service unit concerned that the IFR flight is cancelled and communicate to such air traffic service unit the intended changes to be made to the current flight plan.
2. When an aircraft operating under IFR is flown in or encounters visual meteorological conditions, the PIC shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period in uninterrupted visual meteorological conditions.

### Flight in Accordance with the Instrument Flight Rules

#### Flight Planning and Operations Under IFR

1. **Flight Planning and Operations Under IFR**

Auric Air shall ensure that all aircraft are equipped with suitable instruments and navigation equipment appropriate to the route to be flown. Auric Air shall adhere to the following requirements for flight planning and operations under IFR:

1. **Take-off Alternate Aerodrome**:

Auric Air shall not select an aerodrome as a take-off alternate for a flight conducted wholly or partly under IFR in IMC unless appropriate weather reports or forecasts, or a combination thereof, indicate that during a period commencing one hour before and ending one hour after the estimated time of arrival, the weather conditions will be at or above the applicable landing minima specified in the Civil Aviation (Rules of the Air) Regulations. The ceiling must be considered when only non-precision or circling approaches are available, and any limitations related to one-engine-inoperative operations shall also be accounted for.

1. **Destination and Alternate Aerodromes:**

Auric Air shall ensure that appropriate weather reports or forecasts, or a combination thereof, indicate that during a period commencing one hour before and ending one hour after the estimated time of arrival, the weather conditions at destination and alternate aerodromes will be at or above the applicable planning minima.

1. **IFR Operations:**

A flight conducted under IFR shall not:

Take off from the departure aerodrome unless the meteorological conditions at the time of departure are at or above Auric Air’s established aerodrome operating minima.

Take off or continue beyond the point of in-flight re-planning unless current meteorological reports, or a combination of reports and forecasts, indicate that the meteorological conditions at the aerodrome of intended landing and each alternate aerodrome meet or exceed Auric Air’s established aerodrome operating minima at the estimated time of use.

#### Minimum Altitudes for IFR Flight

An IFR flight shall be flown at a level that complies with the minimum flight altitude established by the Authority. In the absence of such established minimum flight altitudes, the following shall apply:

* Over high terrain or in mountainous areas, the flight shall maintain a level at least **600 meters (2,000 feet)** above the highest obstacle within an **8-kilometer radius** of the estimated aircraft position.
* In other areas, the flight shall maintain a level at least **300 meters (1,000 feet)** above the highest obstacle within an **8-kilometer radius** of the estimated aircraft position.

Exceptions to these requirements are permitted only when necessary for take-off or landing or when specifically authorized by the appropriate authority.

#### Change from IFR Flight to VFR Flight

The PIC of an aircraft who elects to change the conduct of flight of the aircraft from compliance with IFR to compliance with VFR shall, if a flight plan was submitted for the flight, notify the air traffic service unit concerned that the IFR flight is cancelled and communicate to such air traffic service unit the intended changes to be made to the current flight plan.

#### Cancellation of IFR Flight

When an aircraft operating under instrument flight rules (IFR) enters or encounters visual meteorological conditions (VMC), the IFR flight shall not be canceled unless it is anticipated and intended that the flight will continue in uninterrupted VMC for a reasonable period of time.

When an aircraft operating under IFR is flown in or encounters visual meteorological conditions, the PIC shall not cancel his IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period in uninterrupted visual meteorological conditions.

#### IFR Cruising Levels in Controlled Airspace

An IFR flight in cruising flight within controlled airspace shall maintain a cruising level, or, if authorized, employ cruise climb techniques between or above levels selected as follows:

1. **Cruising Level Selection**:
   * From the tables of cruising levels provided in the First Schedule to these Regulations, or
   * From a modified table of cruising levels prescribed in the First Schedule for flights above FL 410.
2. **Exceptions**:
   * The correlation of levels to track shall not apply when specified by air traffic control clearances or when outlined by the appropriate ATS authority in aeronautical information publications.

#### IFR Cruising Levels Outside Controlled Airspace

An IFR flight operating in level cruising flight outside controlled airspace shall maintain a cruising level appropriate to its track as specified in the tables of cruising levels provided in the First Schedule to these Regulations, unless otherwise specified by the appropriate ATS authority for flights at or below 900 m (3,000 ft) above mean sea level. For flights above FL 410, a modified table of cruising levels may be prescribed in accordance with the First Schedule. This ensures adherence to altitude and airspace management requirements for safe and efficient operations.

#### Planning minima for a destination aerodrome

RVR or visibility specified in accordance with the Tanzanian Civil Aviation Regulations for a non-precision approach or a circling approach, the ceiling at, or above, MDA/H and planning minima for a destination alternate aerodrome shall be as prescribed in the TCAA AIP or Jeppesen.

`Auric Air does not select an aerodrome as an en route alternate aerodrome unless the appropriate weather reports or forecasts, or any combination thereof, indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the planning minima as prescribed in TCAA AIP or Jeppesen.

#### IFR at night

IFR flight plans must be filed for all IFR and night flights

## Navigation Procedures

### Standard Navigation Policy

#### Pre-Flight and In-Flight Navigation Equipment Checks

1. **Equipment Serviceability**: All navigation equipment, irrespective of specific fit, must be checked for serviceability and normal operation before each flight.
2. **Equipment Usage in Flight**:
   * Navigation equipment not directly required for the selected route should be tuned to ground stations within range. This enables:
     + Verifying the accuracy of primary aids.
     + Conducting ground speed checks or ETA adjustments.
   * Routine use of all fitted equipment helps detect errors or faults early, allowing timely rectification.
3. **Beacon Signal Verification**:
   * Reliance on ground beacon information is only allowed after confirming the appropriate coded signal. Both pilots must verify the signal.

##### Programming and Cross-Checking Procedures

1. For advanced equipment like cockpit computers with keyboards:
   * One pilot reads aloud the coordinates, tracks, or distances from the navigation log.
   * The other pilot inputs the data, reads it back aloud for cross-checking, and confirms accuracy.
2. Use secondary navigation equipment to verify primary aid accuracy and ensure readiness in case of primary equipment malfunction.

##### General Navigation Alertness

* Stay alert to potential errors in programming or equipment performance.
* Be prepared to revert to raw data from standard VOR, ADF, and DME equipment if inaccuracies or malfunctions occur.

##### Navigation Logs

1. **En-Route Log Maintenance**:
   * Complete navigation logs comprehensively, except when operating in busy terminal areas or lower altitudes.
   * Continuously update ETAs to reflect significant changes.
2. **Deviation Recording**:
   * Record any route diversions, including the circumstances, time of the alteration, and any fuel recalculations performed.
3. **Post-Flight Investigation**:
   * Log sufficient details to assist with post-flight investigations. This ensures better preparation for future flights along the same route.

## Navigation Equipment

Auric Air shall not operate the aircraft unless such aircraft is equipped with navigation equipment enabling it to proceed in accordance with its flight plan, the prescribed RNP types and the appropriate air traffic service requirements: Provided that the provisions of this regulation shall not apply to flights operated in accordance with VFR, if such flights can be accomplished by visual reference to landmarks.

The aircraft shall be equipped with sufficient navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment enables such aircraft to proceed with such flight.

No person shall operate an aircraft in airspace where minimum navigation performance specifications apply, unless the aircraft is equipped with navigation as prescribed in Civil Aviation (Instruments and Equipment) Regulations, as amended, in the form of regional supplementary procedures.

In an aircraft required to be operated by two pilots, the navigation equipment shall be visible and usable by each pilot seated at his or her duty station.

For unrestricted operation in airspace where minimum navigation performance specifications apply, an aircraft shall be equipped with two independent long range navigation systems.

For operation airspace where minimum navigation performance specifications apply along notified special routes, an aircraft shall be equipped with one long range navigation system, unless otherwise specified.

#### Use of Electronic Navigation Data Products

Auric Air shall not use electronic navigation data products for air or ground operations unless Auric Air’s procedures have been approved by the Tanzania Civil Aviation Authority (TCAA), or the processes applied and products delivered meet acceptable standards of integrity and are compatible with the intended equipment. The TCAA shall ensure continuous monitoring of both the processes and the products. Auric Air shall establish procedures to ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aircraft requiring such data.

#### Autopilot ( AP) Use

##### AP En-Route Operations

A pilot shall not use an autopilot en-route, including during climb and descent, at an altitude above terrain that is less than twice the maximum altitude loss specified in the aircraft flight manual for autopilot malfunction under cruise conditions, or less than 1000 feet, whichever is higher.

##### AP Approach Operations

For approach conditions, an autopilot shall not be used at an altitude above terrain that is less than twice the maximum altitude loss specified for autopilot malfunction under approach conditions, or 50 feet below the approved minimum descent altitude (MDA) or decision height (DH), whichever is higher.

##### AP Instrument Landing System (ILS) Approaches

When using an ILS approach with an autopilot coupled:

* In weather below basic VFR minima, the autopilot must not be used at an altitude less than 50 feet higher than the maximum altitude loss specified for autopilot malfunction with an approach coupler.
* In weather at or above VFR minima, the autopilot must not be used at an altitude less than the maximum altitude loss specified for autopilot malfunction with an approach coupler, or 50 feet, whichever is higher.

##### Avoidance of ACAS II Resolution Advisories

To avoid unnecessary airborne collision avoidance system (ACAS II) resolution advisories during climbs or descents near adjacent flight levels, operators shall specify procedures to limit climb or descent rates to less than 8 m/sec (1,500 ft/min) within the last 300 meters (1,000 feet) of the assigned level when another aircraft is at or near an adjacent altitude, unless otherwise specified in the Civil Aviation (Air Traffic Services) Regulations.

#### RNAV

##### General

The employment of airborne area navigation system (RNAV) permits flight over predetermined tracks within prescribed accuracy tolerances without the need to over fly ground based VOR/DME (VORTAC) navigation facilities. Area navigation has three principal applications:

* between any given departure and arrival points along a route structure so organized as to permit reduction in flight distances or reduction in traffic congestion;
* in terminal areas to permit aircraft to be flown on pre-organized arrival and departure flight paths to assist in expediting traffic flow and reduce pilot and controller workload; and
* to permit instrument approaches within certain limitations.

Area navigation allows the use of routes not solely limited by air navigation facility location. These addition routes provide operational advantages for pilots and controller by increasing route capability and flexibility.

##### RNAV Definitions of Particular Significance.

1. Along Track Distance (ATD) Fix – The ATD fix is an along track position defined with reference to a waypoint and with geographical coordinates.
2. Along Track Error – A fix error along the flight track resulting from the total error contributions of the airborne and ground equipment only.
3. Area Navigation (RNAV) – A method of navigation that permits aircraft operation on any desired course within the coverage of station referenced navigation signals or within the limits of self-contained system capability. In addition, RNAV utilizing capabilities in the horizontal plane only is 2-D while RNAV which also incorporates vertical guidance is 3-D.
4. Area Navigation (RNAV) Equipment – Airborne equipment that provides for area navigation.
5. Changeover Point – The point at which navigation reference is shifted from one reference facility to the next reference facility.
6. Circular Position Error (CPE) – The probable navigation error expressed in terms of the radius of a circle centered on the desired geographic point.
7. Cross track Error – A fix error to the left or right from the desire track to the present position, measured perpendicular to the desired track. This error includes airborne equipment, ground equipment, and FTE.
8. Designated RNAV Route- An area navigation route, based on current high altitude or low altitude VOR/DME Coverage.
9. Established RNAV Route – A predefined En-route segment, arrival or departure route (including RNAV SIDs and STARs). It also includes En-route segments established with gaps in VOR/DME coverage for use of aircraft equipped with RNAV systems capable of automatic dead reckoning
10. Flight Path Angle – A vertical angle defining an ascending or descending path to a specified altitude (MSL) at a specified waypoint.
11. Flight Technical Error (FTE) – Flight Technical Error refers to the accuracy with which the pilot controls the aircraft as measured by his success in causing the indicate aircraft position to match the indicated command or desired position. It does not include procedural blunders.
12. Instrument Approach Waypoints- Fixes used in defining RNAV instrument approach procedures, including the INITIAL APPROACH WAYPOINT (IAWP), INTERMEDIATE WAYPOINT (INWP), the FINAL APPROACH WAYPOINT (FAWP), the MISSED APPROACH WAYPOINT (MAWP), and the RUNWAY WAYPOINT (RWY WP).
13. Parallel Offset Route – A desired parallel track to the left or right of the “parent” or designated route specified in whole nautical miles.
14. Reference Facility – The ground VOR/DME facility used for the identification and establishment of an area navigation route, waypoint or fight procedure.
15. RNAV Transition Routes for Initial Approach – Transition routes, based on RNAV, from the En-route environment to the initial approach waypoint of an instrument approach procedure. RNAV routes may be included in conventional approach procedures such as ILS, as well as in complete RNAV approach procedures.

##### RNAV Conclusion

The advantages of area navigation are applicable or VFR as well as IFR operations. For VFR operation, straight line point to point navigation, bypassing of congested and restricted area, and elimination of air navigational facility overhead requirements are the principal advantages gains, and each contributes to the reduction of point workload and to flight safety.

### In-Flight Re-planning

Auric Air company procedural planning: that if the latest available information indicates that at the expected time of arrival, doubt exists that a landing may not be effected at the destination aerodrome or at least one designation alternate aerodrome, in compliance with the operating minima established in accordance with the TCARs, a decision to re-plan must also take cognizance of the availability and serviceability of en route, destination aerodrome and destination alternate aerodrome navigational and approach aids.

### Altimeter Setting Procedures

#### Introduction

The altimeter setting procedures in use conform to those contained in ICAO Doc 4444 RAC/501 Procedures for Air Navigation Services and ICAO Doc. 81680PS/6111 Procedures for Air Navigation Services\_ Aircraft Operations and are given in full below.

#### Flights Obliged to Comply with Altimeter Setting Procedures:

All aircraft operating in level fight, at or above 1500 feet above the ground or water irrespective of the weather conditions and irrespective of whether the flight is operating on a VFR or IFR flight plan, shall observe this altimeter setting procedures.

#### Basic Altimeter Setting Procedures

1. **En-route Flight and Flight Levels**  
   During en-route flight, aircraft are flown at "Flight Levels," which are surfaces of constant atmospheric pressure. These levels are based on an altimeter setting of 1013.2 hPa, with the vertical position of the aircraft expressed as flight levels. Flight Level Zero is located at the 1013.2 hPa pressure level. Flight levels are numbered based on the magnetic track:

* **Magnetic Track 000°–179°**: FL30, FL50, FL70, FL90, etc., for IFR flights; FL15, FL35, FL55, FL75, etc., for VFR flights.
* **Magnetic Track 180°–359°**: FL40, FL60, FL80, FL100, etc., for IFR flights; FL25, FL45, FL65, FL85, etc., for VFR flights.

1. **Transition Altitude and Level**  
   Aircraft in the vicinity of an aerodrome are flown at "altitudes" determined using the QNH setting. The transition altitude varies by aerodrome and marks the changeover to flight levels (transition level), ensuring at least 1000 feet separation from transition altitude.

* For points within 25 nautical miles of an aerodrome, transition altitude is specific to the aerodrome.
* For points beyond 25 nautical miles, the lowest safe cruising altitude or 3000 feet (VMC) and 500 feet above the lowest safe altitude (IMC) are used.
* Transition levels vary with barometric pressure and are provided by the ATSU.

1. **Take-off and Climb**

* At takeoff, QNH settings are used for altitude reference, with vertical position controlled by altitude until the transition altitude.
* On reaching transition altitude, at least one altimeter must be set to 1013.2 hPa, with vertical position referred to flight levels.
* QFE settings can be requested and used optionally.

1. **Vertical Separation and Terrain Clearance**  
   Vertical separation en-route is assessed in flight levels. For adequate terrain clearance, pilots can:
2. Set one altimeter to the lowest forecast QNH and compare readings with route maps to ensure 1500 feet clearance.
3. Pre-check that selected flight levels provide minimum terrain clearance based on the forecast lowest QNH.
4. **Approach and Landing**

* During approach, aircraft operate at flight levels until reaching the transition level. Afterward, altitudes are used, based on QNH.
* Terrain clearance during approach can be determined using either QNH (altitude) or QFE (height above QFE datum).
* ATSUs provide current QNH and QFE settings, rounded to the nearest hectopascal, to assist pilots.

1. **Altimeter Settings and Reporting**

* ATSUs ensure QNH is readily available for determining transition levels.
* Altimeter settings are passed to pilots with QNH/QFE rounded to the nearest whole hPa, or tenths if needed for precision.
* Accurate terrain clearance checks and altimeter setting practices are mandatory for flight safety.

#### Altitude Alerting System Procedures

Auric Air shall not operate the aircraft unless such aircraft is equipped with an altitude alerting system capable of –

* alerting the flight deck crew members upon approaching reselected altitude in either ascent or descent in sufficient time to establish level flight at such reselected altitude; and
* alerting the flight deck crew members when deviating above or below a reselected altitude by at least an aural signal.

## Ground Proximity Warning System (EGPWS)

All Auric Air turbine-powered aircraft are equipped with EGPWS with full function moving map display. The Terrain Inhibitor is only disabled in VMC conditions.

## Traffic Collision Avoidance System (TCAS)

All turbine-powered aircraft operated by Auric Air are all equipped with TCAS. Refer to SOP, Automation Philosophy and Autopilot Limitations.

## Hazardous Atmospheric Conditions

### Thunderstorms

Flights through known or forecast thunderstorm areas shall be avoided whenever possible because of the various hazards involved, such as turbulence, wind shear, hail, and lightning strikes.

Auric Air aircraft shall not take-off during heavy thunderstorm activity over the departure aerodrome.

Auric Air aircraft shall delay the approach or divert to an alternate aerodrome rather than attempting to penetrate a severe thunderstorm in a letdown area.

### General GuidelinesThunderstorm Avoidance and Procedures

#### Avoidance

* **Departure:** Do not take off during heavy thunderstorm activity over the departure aerodrome. For thunderstorms in the vicinity, request radar vectoring through thunderstorm-free areas and plan the climb-out to maintain a safe distance from active cumulonimbus (Cb) clouds.
* **Weather Radar:** Use the weather radar system as the primary tool to avoid hazardous conditions. Ensure it is operational and operated in advance of anticipated thunderstorm activity to assess and plan avoidance actions.
* **Approach and Landing:** Delay approach or divert to an alternate aerodrome rather than penetrate a severe thunderstorm within 3NM of the destination airfield.

#### Thunderstorm Avoidance During Cruise

* Visually stay well clear of Cb-clouds.
* Use airborne weather radar to detect and avoid storm systems.
* Request vectors from ATS radar for safe routing around thunderstorms.

#### Areas and Altitudes to Avoid

* Avoid flight in cirrus clouds when thunderstorm activity is reported, as they may hide anvil tops and reduce radar effectiveness.
* Avoid flight near the freezing level where heavy icing and hail are most likely.
* Avoid altitudes between 10,000 ft. and 25,000 ft. as these are associated with the roughest turbulence, even outside active storm centers.
* Avoid flying below Cb-cloud overhangs where heavy hail can occur.
* Maintain a minimum distance of 40 km (20 NM) from strong radar echoes, especially at FL 200 and above.

#### Preparation for Thunderstorm Areas

* Monitor airborne weather radar closely.
* Switch cockpit lighting to high intensity to mitigate lightning dazzle.
* Reduce speed to turbulence penetration speed as per the aircraft operations manual.
* Operate anti-icing equipment as needed.

#### Contingencies If the weather radar fails in IMC with forecasted thunderstorms, and VMC/VFR conditions cannot be maintained, the flight must be terminated as soon as possible. If no adverse conditions are forecasted, the PIC may choose to continue the flight to its destination.

#### Crossing Thunderstorm Areas

* Use airborne weather radar to locate the safest corridor for crossing.
* Follow turbulence flight procedures for safety.

#### Post-Crossing Assessment

* After crossing a thunderstorm area, functionally check the following systems:
  + Flight and engine instruments.
  + Pitot and static heating.
  + Radio and navigation equipment.
  + Compass readings.
  + Electrical systems, including circuit breakers.

#### Reporting

* Record any exposure to severe turbulence, lightning strikes, or static discharges in the aircraft technical log to ensure a thorough technical inspection for potential damage.

### Icing Conditions

Auric Air Services Limited aircraft C208B are not equipped to fly in icing conditions. No C208B flights are allowed in icing conditions. In case a pilot encounters icing, he shall divert away from the icing conditions and land as soon as possible. Also, pilots shall not take off if icing conditions are forecast enroute. For operation in icing condition:

For Dash 8 refer to FCOM Chapter 12

For PC12 refer to POH Section 2 and 4.23

### Turbulence

Three types are of significance to flight operations:

* Clear air turbulence – CAT
* Wind shear; and
* Wake turbulence

#### Clear Air Turbulence (CAT)

##### CAT Definition and Association

Clear Air Turbulence (CAT) is defined as "high-level turbulence (typically above 15,000 feet AGL) not associated with cumuliform cloudiness, including thunderstorms." It is frequently found near jet streams, which are high-altitude wind currents with speeds exceeding 50 knots, commonly located around the tropopause and upper fronts. The tropopause separates the troposphere from the stratosphere, generally having a temperature of -55°C to -65°C, and is often marked by the top of a cirrus cloud layer. CAT is most prevalent on the poleward side of the jet stream (left side facing downwind in the Northern Hemisphere, and the reverse in the Southern Hemisphere) and near jet stream maxima.

##### Common Patterns Associated with CAT

1. **Jet Streams:** CAT often occurs in the vicinity of strong wind shears along jet streams or at their confluence, such as where the polar front jet stream dips beneath the subtropical jet stream.
2. **Upper-Level Troughs:** CAT is commonly found:
   * At or just upwind of the base of a deep trough.
   * Along the centerline of a trough where horizontal wind shear exists between northerly and southerly flows.
   * On the backside of a trough near wind maxima.
3. **Wind Shear:** Both vertical and horizontal wind shear contribute to CAT formation. Severe CAT is likely when vertical wind shear exceeds 6 knots per 1,000 feet or horizontal wind shear exceeds 40 knots per 150 nautical miles.

##### Challenges and Characteristics of CAT

* **Spotty Nature:** CAT is difficult to predict due to its localized and transient nature. Turbulent areas typically span 100-300 miles in length, 50-100 miles in width, and 2,000-5,000 feet in depth. These zones may last from 30 minutes to a full day.
* **Threshold Wind Speed:** Wind speeds of 110 knots or higher in jet streams significantly increase the likelihood of CAT due to enhanced wind shear.

##### CAT Avoidance Strategies

* Pilots should utilize "Rules of Thumb" developed by ICAO and FAA to identify and minimize encounters with CAT until practical airborne detectors are available.
* CAT is primarily caused by wind shear, and understanding the relationship between wind speed variations and turbulence is key to mitigation efforts.

##### Recommendation

All pilots and other personnel concerned with flight planning should carefully consider the hazards associated with flight through areas where pilot reports or aviation weather forecasts indicate the presence of CAT including mountain wave turbulence.

### Avoiding or Minimizing Encounters with Clear Air Turbulence (CAT)

1. **Turbulence Near Strong Jet Streams**
   * Jet streams stronger than 110 knots at the core are likely to have turbulence near the sloping tropopause above the core, in the jet stream front below the core, and on the low-pressure side of the core.
   * Wind shear and CAT are more intense above and leeward of mountain ranges, especially when the flight path crosses strong jet streams near mountainous terrain.
2. **Impact of Wind Shear and Mountain Waves**
   * Vertical and horizontal wind shear are intensified in mountain wave conditions. Flying at turbulence penetration speed and avoiding abrupt terrain drops is recommended in such areas, even if no lenticular clouds are visible.
3. **Indicators of CAT on Isobaric Charts**
   * On 300-millibar charts, horizontal shear sufficient for CAT occurs when 20-knot isobars are spaced closer than 150 nautical miles (2 ½ degrees latitude), usually on the poleward side of the jet stream axis, though it may occur on the equatorial side in rare cases.
   * Vertical shear exceeding 5 knots per 1,000 feet, as indicated on tropopause height/vertical wind shear charts, is a likely indicator of turbulence.
4. **Jet Stream Shapes and Turbulence**
   * Curving jet streams are more likely to have turbulent edges than straight ones, particularly around deep pressure troughs.
   * Wind shift areas near pressure troughs and ridges often have turbulence; the magnitude of wind shear is the key factor.
5. **Flight Adjustments During Jet Stream Turbulence**
   * With direct tailwinds or headwinds, adjust flight level or course, as turbulence zones are elongated and narrow.
   * With crosswinds, course or flight level changes are less critical since turbulence is narrower across the wind.
   * If encountering turbulence in a sharp trough line, establish a course across the trough instead of parallel to it.
6. **Tropopause Penetration and Turbulence**
   * Turbulence is most pronounced in the temperature change zone on the stratospheric (upper) side of the sloping tropopause. The coldest temperature along the flight path indicates tropopause penetration.
7. **Satellite Imagery and Weather Reports**
   * Satellite images showing cirrus cloud bands or “wavelike”/“herringbone” patterns help identify jet streams and mountain wave turbulence. Pilots should utilize satellite data briefings when available.
   * Monitoring pilot reports (PIREPs) provides valuable real-time insights. If turbulence is encountered, file a PIREP to assist others.

### Wind shear

#### General Overview

Recognizing wind shear early is critical for safe aircraft operations. Pilots must minimize reaction time by spotting signs of wind shear promptly and applying recovery techniques without hesitation. Training is essential to build confidence and knowledge, enabling swift recognition and response.

#### Recognition of Wind Shear

1. **External Meteorological Clues**:
   * **Virga**: Precipitation falling from clouds but evaporating before reaching the ground.
   * **Lenticular Clouds**: Indicating standing waves, usually downwind of mountains.
   * **Roll Clouds**: Often present under thunderstorms, signaling gust fronts.
   * **Strong Gusty Winds**: Especially near hills or large buildings.
   * **Dust Rings**: Raised below convective clouds, indicating downbursts.
   * **Wind Socks and Smoke Plumes**: Indicating varying wind directions and speeds.
   * **Thunderstorms**: Always assume potential wind shear.
2. **Flight Deck Instruments**:
   * Stabilized approaches (constant airspeed, descent rate, and pitch angle) help detect deviations.
   * Airborne weather radar and reports from ATC or other pilots can provide critical warnings.

#### Avoidance Techniques

* Delay takeoff or landing during heavy thunderstorm activity.
* Use weather radar and ATC vectors to bypass hazardous areas.
* Avoid flight in cirrus clouds near thunderstorm activity, at freezing levels, or under overhanging Cb-clouds.

#### Precautionary Measures

1. **During Takeoff**:
   * Monitor airspeed, attitude, and climb rate.
   * Avoid pitch attitude reductions below 1,000 ft AGL unless necessary for terrain clearance.
2. **During Approach**:
   * Stabilize approach by 1,000 ft AGL.
   * Avoid drastic thrust or trim changes in response to airspeed fluctuations.
   * Monitor ground speed versus airspeed for additional clues.

#### Crew Coordination

* **Pilot Flying (PF)**: Focus on flying the aircraft and responding to PNF callouts.
* **Pilot Not Flying (PNF)**: Monitor instruments and call out significant deviations immediately.

#### Non-Recommended Recovery Techniques

* Maintaining airspeed alone reduces climb capability.
* Pitching directly to stick shaker increases stall risk.
* Retracting flaps during approach reduces initial climb performance.
* Using a "dive" technique to accelerate complicates recovery and increases risk.

#### Recovery Best Practices

The most effective recovery involves controlled pitch attitude and immediate thrust application to maximize the aircraft’s climb capability while minimizing exposure to wind shear hazards.

### Jet Stream

A jet stream is a river of high altitude wind with a speed of 50 knots, or greater. CAT associated with a jet stream is most commonly found in the vicinity of the tropopause and upper fronts. The tropopause is actually an upper front separating the troposphere from the stratosphere. The tropopause will genially have a temperature of between -55”C and -65”C in some cases. It will be at the top of a cirrus cloud layer. Clouds are very seldom found above the tropopause in the dry stratosphere, expect in the summertime when occasionally large thunderstorms will poke through the ward side of the jet stream (the left side facing downwind in the hemisphere and the reverse is true in the Southern hemisphere). It is additionally common in the vicinity of jet stream maxima (an area of stronger winds that moves along the jet stream).

Chances of encountering Jet streams are zero with the current operation but if encountered the following could be useful.

Clear air turbulences (CAT) are mostly located around jet streams (above and below the jet core). During moderate to severe turbulences in the vicinity of jet streams, the following can be done:

1. When flying parallel with a jet stream, a climb or descend of at least 1000 feet shall be accomplished.
2. When crossing a jet stream from warm to cold side, a descent of at least 1000 feet shall be accomplished.
3. When crossing a jet stream from cold to warm side, a climb of at least 1000 feet shall be accomplished.

Note: In turbulences, the procedures/manoeuvres as outlined in AFM shall be followed.

### Volcanic Ash Clouds

Volcanic ash clouds pose significant hazards to aircraft, including extreme abrasion to forward-facing surfaces, blocked airspeed indicators, and potential engine power interruptions or shutdowns. Ash clouds cannot be detected by weather radar and must be avoided using NOTAMs, SIGMETs, or visual observation.

**Key Risks**:

* **Surface Damage**: Severe abrasion to leading edges and forward-facing parts.
* **Blocked Instruments**: Airspeed indicators may fail due to pitot tube blockage.
* **Engine Hazards**: Engines may surge, overheat, or fail entirely.
* **Static Discharge**: St. Elmo’s fire and acrid odors may occur in the cockpit.
* **Unreliable Readings**: Airspeed indicators may give false readings.

**Avoidance and Mitigation**:

1. Avoid flying into areas of volcanic activity detailed in NOTAMs, especially in low visibility or at night.
2. If ash penetration occurs:
   * Execute a 180° turn to exit the ash cloud quickly.
   * Follow the aircraft’s AFM procedures.
   * Land at the nearest suitable aerodrome.
3. Report volcanic activity or ash clouds to ATC as a special air-report.

**Note**: Information on volcanic eruptions is published through NOTAMs and SIGMETs. Always prioritize avoidance of volcanic ash clouds at all times.

### Heavy Precipitation, Sandstorms & Other Significant Meteorological Information Related to Navigation Procedures

#### Rain, Snow, and Other Precipitation

**Ground Operations:** Slower taxiing speeds are required in snow, slush, or standing water due to reduced braking performance. Higher power settings may be necessary, and care should be taken to avoid jet blast or prop wash causing debris issues. Snowbanks near wing tips or engine pods should be noted, and flap selection may be delayed to avoid damage. Maintain greater spacing between aircraft to prevent jet blast damage.

**Runway Operations:** Contaminated runways reduce directional control and increase takeoff and landing distances. Firm touchdowns within the designated zone, early nose-wheel lowering, and prompt use of retarding devices are advised. Antiskid systems, if available, should be used immediately.

**Heavy Precipitation:** Heavy rain can quickly contaminate runways, requiring close monitoring of drainage. In-flight, it may cause downdrafts and wind shear, necessitating adherence to AFM procedures.

#### Sandstorms

Avoid flying in active sandstorms. On the ground, aircraft should be sheltered or fitted with engine and cockpit covers to prevent dust accumulation.

#### Mountain Waves

Mountain waves form near mountains in strong winds, causing turbulence and speed variations. Near the ground, severe turbulence (lee wave rotor) may occur. Avoid takeoff or landing in strong rotor conditions; climbing or moving away from the range is safest.

#### Significant Temperature Inversions

**Effects:**

1. **Climb Performance:** Large inversions reduce climb performance, especially at high weight.
2. **Cruising Altitude:** Inversions can limit cruising altitude and erode margins, necessitating descent.
3. **Visibility:** Lower-level inversions can worsen visibility and prolong fog.

Pilots should plan to mitigate these effects during operations.

### Wake Turbulence

#### Wake Turbulence General

Wake turbulence occurs when an aircraft generates lift by accelerating air downward, creating rotary motions or vortices at the wingtips. These vortices begin as soon as the aircraft leaves the ground and continue until it lands and the weight transfers back to the landing gear.

These vortices spread downward and outward from the flight path, drifting with the wind. The intensity of the turbulence is proportional to the aircraft's weight, making wake turbulence from large transport aircraft more hazardous than from smaller planes. The turbulence can persist for several minutes after the aircraft has passed.

At controlled airports, air traffic controllers warn pilots about potential wake turbulence. However, pilots should take the following precautions when using the same runway as a heavier aircraft:

* **Landing behind another aircraft**: Stay above the preceding aircraft's approach path and touch down beyond the point where its nose wheel contacted the runway.
* **Landing behind a departing aircraft**: Ensure the landing roll is completed before reaching the midpoint of the preceding aircraft’s takeoff roll.
* **Departing behind another aircraft**: Take off only if airborne before the midpoint of the preceding aircraft’s roll and climb above its flight path.
* **Departing behind a landing aircraft**: Taxi onto the runway beyond the preceding aircraft’s touchdown point, ensuring sufficient runway length remains for takeoff.
* **Parallel or crossing runways**: Use the upwind portion of the runway or wait for vortices to dissipate, typically 5 minutes.

Wake vortices are most hazardous during takeoff, initial climb, approach, and landing. They drift downward and can rebound near the ground, creating significant risks for following aircraft.

#### Wake Separation Minima

Wake turbulence separation minima reduce hazards for following aircraft. Controllers and pilots must understand conditions where wake turbulence may occur. Separation standards apply as follows:

1. **Departures**: Ensure sufficient spacing based on the aircraft's weight category.
2. **Opposite Direction Operations**: Maintain a two-minute gap when a lighter aircraft follows a heavier aircraft for takeoff or landing on opposite runways or directions.
3. **Vortex Monitoring**: Sensors like laser-based systems can detect vortices to improve safety.

#### Aircraft Categorization

Aircraft are categorized based on their maximum takeoff weight for wake turbulence considerations:

* **Heavy (H)**: 136,000 kg or more.
* **Medium (M)**: Between 7,000 kg and 136,000 kg.
* **Light (L)**: 7,000 kg or less.

#### Effect on Aircraft

Wake turbulence affects aircraft by inducing roll, causing loss of height or climb rate, and potentially creating structural stress. These effects are most severe during approach, where the aircraft operates at low speed and altitude, with limited reaction time.

#### Detection and Avoidance

New technologies like laser-based systems and real-time pilot reports are crucial for detecting wake turbulence. Pilots should monitor flight conditions and follow separation standards to ensure safety during takeoff, landing, and en-route phases.

#### Wake Turbulence Separation Tables

##### Take Off Table

|  |  |  |
| --- | --- | --- |
| Leading aircraft | Following Aircraft | Minimum spacing at time aircraft are airborne |
| Heavy | Medium Light Departing from the same take-off position | 2 Minutes |
| Medium | Light Departing from the same take take-off position | 2 Minutes |
| Heavy  Full length take-off | Medium Departing from an intermediate take-off position | 3 Minutes |
| Medium | Light Departing from an intermediate take-off position | 3 Minutes |

##### Landing Table

|  |  |  |
| --- | --- | --- |
| Leading aircraft | Following Aircraft | Minimum spacing at time aircraft are airborne or have touched down |
| Heavy Arrival | Medium Departure Light | 2 Minutes |
| Heavy Departure | Medium Arrival Light | 2 Minutes |
| Medium Arrival | Light Departure | 2 Minutes |
| Medium Departure | Light Arrival | 2 Minutes |

##### Crossing Table

|  |  |  |  |
| --- | --- | --- | --- |
| Leading aircraft | Aircraft Crossing Behind | Minimum Distance | Time Equivalent |
| Heavy | Heavy Medium Light | 4 Miles  5 Miles  8 Miles | 2 Minutes  3 Minutes  4 Minutes |
| Medium | Medium Light | 3 Miles  6 Miles | 2 Minutes  3 Minutes |
| Light | Medium or Light | 3 Miles  4 Miles | 2 Minutes  2 Minutes |

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## Flight Crew Members at Duty Stations

All flight crew members required to be on duty shall remain at their assigned stations during all phases of the flight, except when their absence is necessary for the performance of duties related to the operation of the aircraft or for physiological needs. During take-off and landing, all flight crew members must occupy their assigned seats.

Each flight deck crew member shall keep their seat belt fastened while at their assigned station during all phases of the flight, with a safety harness fastened during take-off and landing. For other flight crew members, safety harnesses must also be fastened during take-off and landing unless the shoulder straps interfere with the performance of their duties, in which case the seat belt must remain fastened.

The pilot-in-command (PIC) or, where applicable, Auric Air shall ensure that flight crew members remain focused on their responsibilities and do not perform activities unrelated to the safe operation of the aircraft during critical phases of the flight. These procedures are essential for maintaining safety and operational discipline.

#### Use of Safety Belts for Flight Crew and Passengers

The pilot-in-command (PIC) shall ensure that all passengers and crew fasten their safety belts while the seatbelt sign is illuminated or, on aircraft without a seatbelt sign, when instructed. Passenger signs shall be turned on during any movement on the surface, for each take off and each landing, and when otherwise considered to be necessary. The PIC shall ensure that all occupants are seated with their safety belts or harnesses secured. Multiple occupancy of seats is prohibited except for one adult and one infant secured with a child restraint device. All passengers and crew must occupy approved seats and wear seat belts during instrument approaches, flights below 1,000 feet above ground, and turbulent conditions. A child under two years of age may be held by an adult occupying a seat or berth.

## Access to Auric Air Aircraft

No person shall board or remain on an Auric Air aircraft without the explicit consent of the pilot-in-command or an authorized representative of Auric Air.

## Admission To Flight

### Flight Deck Authority

In addition to the operating flight crew, the following persons may be admitted to the flight deck, when authorized by the Director of Operations or his designate and the PIC of the aircraft.

* Officers and employees of the government or of other air carriers, and persons in related industries, whose presence on the flight deck is necessary or advantageous to the company from a technical point of view.
* Inspectors from the Authority who present a valid Safety Inspector Credentials carrying out an inspection.
* Engineering or maintenance staff on special duties pertaining to aircraft or flight.
* Flight operations staff whose functions are relevant to the conduct of flight operations.
* Pilots of other companies travelling on duty, and as authorized by the PIC.

The admission of any person to the flight deck shall not interfere with the operation of the aircraft.

### Flightdeck Access and Security

Auric Air ensures that the flightdeck remains secure during operations by maintaining the flight crew compartment door closed and locked from the time all external doors are closed after embarkation until disembarkation, except for authorized access. The door is equipped with monitoring systems at either pilot’s station to observe the area outside the compartment, allowing identification of individuals requesting entry and detection of potential threats. Additionally, all passenger-carrying aircraft, where practicable, are fitted with approved flight crew compartment doors designed to resist penetration by small arms fire, grenade shrapnel, and forcible intrusion, with the capability to be locked or unlocked from either pilot’s station. This policy prioritizes flightdeck security and operational safety.

### Use of vacant flight crew seats

The occupancy of a vacant flight crew seat on the flight deck or crew seat in the cabin by a person who is not a member of the operating flight or cabin crew is permitted providing the following conditions detailed below are complied with:

* any applicable AFM limitation is observed
* the person is assessed as able to operate self-help exits.
* The person has the permission of the Director of Operations or the PIC
* The person is in possession of a valid passenger/staff ticket;
* The PIC ensures that the person is properly briefed on safety procedures and equipment, and relevant operating procedures;
* The PIC emphasizes the importance of avoiding contact with, or operation of, any control or switch;

Multiple seat occupancy is not permitted.

### Control Manipulation Authorization

On an Auric Air flight, it is not permitted for any person to manipulate the controls of the aircraft during commercial air transport operations unless that person is both qualified and authorized to do so by Auric Air.

### Incapacitation Of Flight Crew Members

Refer to Chapter 4.3.3 of this Manual

## Cabin Safety Requirements

### General

1. During boarding, before take-off and landing and wherever deemed necessary in the interests of aviation safety, the PIC shall ensure that all equipment, baggage and loose articles in the cabin of the aircraft, including passenger service items and flight crew members’ and passengers’ personal effects, are properly secured and stowed so as to avoid the possibility of injury to persons or damage to such aero plane through the movement of such articles caused by be in flight turbulence or by unusual accelerations or man oeuvres; and all aisles, passage ways, exits and escape paths are kept clear of obstructions.
2. All solid articles shall be placed in approved stowage areas in the aircraft, at all times, whenever the seat belt lights are illuminated or when so directed by the pilot-in-command of such aircraft.
3. (For the purposes of paragraph (b), “approved stowage area” means
   1. The area under a passenger seat: or

A locker, overhead or other, utilized in accordance with the placard mass limitation.

No take-off or landing shall be commenced by the PIC of the aircraft, unless he is certain of the safe condition of the cabin.

### Passenger Services

Except when in use, all items provided for passenger services, including food containers, thermos flasks and servicing trays, shall be carried in their respective stowages and secured against movement likely to cause injury to persons or damage to the aircraft.

All items referred to in paragraph:

1. Shall be stowed during take-off and landing or during emergency situations, as directed by the PIC of the aircraft.
2. Any item which cannot be accommodated in the stowage, referred to in paragraph shall not be permitted in the cabin of the aircraft
3. Securing of the cabin shall be completed by the flight crew members before the approach for landing of the aircraft is commenced. If passenger services are provided while the aircraft is on the ground, no passenger service equipment shall obstruct the aisles or exits of the aircraft.

### Use of Portable Electronic Devices (PEDs)

A PIC or any crew member shall ensure compliance with the following regarding the use of portable electronic devices (PEDs) on board:

1. **Restriction on Use:** No person shall use, nor permit the use of, any PED that may adversely affect the performance of aircraft systems or equipment.
2. **Allowances for Non-Commercial IFR Operations:** For IFR operations other than commercial air transport, the PIC may allow the use of a PED only after explicitly granting approval.
3. **Commercial Air Transport Operations:**
   1. Auric Air shall assess and determine the acceptability of PEDs for use on board.
   2. Approved devices and associated usage policies must be documented and made available to crew members in the Operations Manual.

It is the responsibility of the flight crew to ensure that all passengers comply with these regulations during all phases of the flight.

### Carriage of Passengers with Disability, Pregnant Women, Sick Passengers and Passengers with Reduced Mobility (PRM)

1. **Expectant mother:** Expectant mothers are accepted under the same terms and conditions as any other passenger. The respective personnel should give special attention and assistance as required.
2. **Unaccompanied Minor (UM):** a passenger requiring the following special treatment:

For a passenger under the age of 12 years of age, an Auric Air Services staff accompanies the UM from check-in until after flight, meeting relatives of the UM.

1. **MEDA:** a passenger whose mobility is impaired, due to clinical cases with medical pathology in progress, being authorised to travel by medical authorities. Such passenger usually has social coverage in relation to the illness or accident in question.
2. **STCR:** At the present time, Auric Air Services does not transport passengers requiring a stretcher.
3. **WCHR:** a passenger who can walk up and down stairs and move about in an aircraft cabin, but who requires a wheelchair or other means for movements between the aircraft and the terminal, in the terminal and between arrival and departure points on the city side of the terminal.
4. **WCHS:** a passenger who cannot walk up or down stairs, but who can move about in an aircraft cabin and requires a wheelchair to move between the aircraft and the terminal, in the terminal and between arrival and departure points on the city side of the terminal.
5. **WCHC:** a passenger who is completely immobile, who can move about only with the help of a wheelchair or any other means and who requires assistance at all times from arrival at the aerodrome to seating in the aircraft or, if necessary, in a special seat fitted to his specific needs, the process being inverted at arrival.
6. **BLIND:** An unlimited number of blind passengers are allowed on board.
7. **DEAF:** a passenger who is deaf or a passenger who is deaf without speech. An unlimited number of passengers are allowed on board.
8. **DEAF/BLIND:** a blind and deaf passenger, who can move about only with the help of an accompanying person. The amount of deaf/blind passengers on board shall be below half the number of seats available.

#### Policy for the Transportation of Sick, Disabled, and Handicapped Passengers (PRMs)

#### Definition of PRM

A Person with Reduced Mobility (PRM) is defined as someone whose mobility is reduced due to physical incapacity (sensory or locomotory), intellectual deficiency, age, illness, or other disability. This excludes blind, deaf, or deaf-blind individuals unless otherwise noted. PRMs require special attention and adapted services during transport.

#### General Acceptance Criteria

1. **Fitness to Travel**:
   * A written medical report issued by a company or aerodrome medical doctor is required for PRMs.
2. **Availability of Assistance**:
   * The company must confirm the availability of trained staff and medical equipment from departure to arrival before accepting PRMs.
3. **Escort Requirements**:
   * PRMs without an escort are limited to one per floor-level exit.
   * Maximum PRMs allowed:
     + C208B and PC12: 1
     + Dash 8: 3

#### Seating Guidelines

* PRMs must not obstruct emergency exits, crew duties, emergency equipment, or evacuation routes.
* PRMs should not sit in rows adjacent to emergency exits but as close as possible while maintaining safety requirements.
* Completely immobile passengers (WCHC) should be seated in the last row.

#### Boarding and Disembarkation

* PRMs should board separately (before other passengers) and disembark separately (after all other passengers) for ease and proper assistance.

#### Prohibited Transportation

Auric Air does not transport the following under any circumstances:

1. Persons with contagious/infectious diseases (e.g., tuberculosis, hepatitis, chickenpox, SARS).
2. Persons within 8 weeks of a heart attack or stroke.
3. Persons requiring medical equipment not permitted on board (e.g., pneumatically or electrically operated apparatus).

#### Procedures for Special Cases

**Notification and Briefing**

* **PIC Notification**: The Pilot-in-Command must be informed when a PRM is on board.
* **Emergency Briefing**:
  + Individual briefings are provided to PRMs and their able-bodied assistants.
  + The most appropriate manner of assistance should be discussed to prevent injury or pain to the PRM.

#### Stretcher Patients

* The stretcher must be securely fastened to prevent movement during flight or emergency landings.
* The patient must be secured using an approved harness.
* An able-bodied assistant is required for each stretcher patient.

#### Mentally Disturbed Passengers

* Mentally disturbed persons may only travel if:
  + Accompanied by an able-bodied assistant.
  + A medical certificate certifies suitability for air travel and no risk of violence.
  + Special permission is obtained from the commission for violent history cases.

#### Passengers with Splinted or Artificial Limbs

* May travel unaccompanied if self-sufficient.
* Limbs or supporting aids must not obstruct aisles, emergency exits, or equipment.
* If self-sufficiency is not possible, the passenger must travel with an able-bodied assistant.

### Passenger Embarkation and Disembarkation

Safety of passengers: It is the PIC’s responsibility to see that all passengers are safely accompanied on to and off the aircraft, should Auric Air ground staff not be available to perform this function.

This responsibility may be delegated to another crew member when on board.

### Check-in/Boarding and Loading Procedures

All passengers booked on Auric Air flights shall be checked in by Company personnel and/or Company appointed handling agents. A Company Manifest is to be raised for each sector which as a minimum must indicate the full passenger name, to and from locations, ETAs and if requested by clients, weight of individual passengers, number of pieces of baggage of each passenger and the weight of the baggage. A copy of the manifest is supposed to be on board at all times. For more details please refer to Work Instructions published separately.

### Fuelling Precautions With Passengers

Refueling is not permitted with passengers on board, boarding or disembarking.

### Smoking On Board

No person shall smoke in an Auric Air aircraft

### Flights Over Water

For flights over water, the PIC shall ensure that life jackets are on board, accessible and within inspection date.

### Passenger Briefing Procedures

Auric Air Services Limited shall ensure that **-**

1. The crew shall brief passengers about safety matters and emergency procedures verbally for the C208B and via intercom for the DH8
2. in areas of operation where English is not the first language of passengers, decals and passenger briefings are provided in English and the local language
3. in aircraft engaged in commercial air transport operations, passengers are provided with a safety briefing card on which picture type instructions indicate the operation of emergency equipment and exits likely to be used by passengers; and
4. In the case an emergency, such as a medical emergency or a security threat, occurs in flight, the passengers are to be briefed on such emergency action as appropriate to the circumstances. In most cases the pilot may brief the passengers and decide to land at the nearest aerodrome in order to tackle the emergency while on ground. In the case of situations which could cause alarm to passengers, like sudden descent or returning to base, the PIC will ensure that the passengers are kept briefed as to the reasons. He will ensure that they are kept informed and updated in order to keep them calm and comfortable.

#### Briefing before boarding

* + 1. Passengers are briefed that there is no smoking during the flight or around the aircraft and apron area;
    2. A general description of the aircraft and specific avoid/danger areas e.g. propellers;

#### PIC Briefing responsibility

The PIC shall ensure that:

1. Passengers are verbally briefed about safety procedures
2. Passengers are provided with a safety briefing card on which picture type instructions indicate the operation of emergency equipment and exits likely to be used by passengers;
3. In an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.

#### Before Take-Off Briefing

The PIC shall ensure that, before take-off, passengers are briefed, to the extent applicable, on

1. The prohibition of smoking while physically pointing out the “no smoking” placard.
2. When the back of the seat is to be in the upright position, if applicable.
3. The location of emergency exits
4. The stowage of carry-on baggage
5. Portable electronic devices shall not be used;
6. The location and the contents of the safety briefing card; and
7. Passengers receive, to the extent applicable, a demonstration of

* The use of safety belts or safety harnesses, including the manner in which the safety belts of safety harnesses are to be fastened and unfastened and the location of the seatbelt sign in the cabin.
* The location and use of life jackets.
* Oxygen dispensing equipment, (C208B high altitude scenic flights)
* The use of the fire extinguisher (On the emergency briefing card)

#### After Takeoff Briefing

The PIC shall ensure that, after takeoff, passengers are reminded of the prohibition of smoking, and the use of safety belts or safety harnesses.

The PIC shall ensure that, before landing, passengers are reminded of

1. Prohibition of smoking
2. The use of safety belts or safety harnesses
3. The re-stowage for carry-on baggage, and
4. Portable electronic devices shall not be used.

#### After landing briefing

The PIC shall ensure that, after landing, passengers are reminded of

1. The need to remain seated until the door has been opened.
2. Prohibition of smoking; and
3. The use of safety belts or safety harnesses.
4. Collection of personal effect from the cabin.

### Unacceptable Conduct by a Passenger

A person on board an Auric Air aircraft shall not interfere with a crew member in the performance of their duties, refuse to fasten their seat belt while the seat belt sign is illuminated, or act willfully, recklessly, or negligently in a manner that endangers the aircraft or persons and property within. Additionally, individuals shall not cause or permit the aircraft to endanger any person or property, conceal themselves or cargo on board, or imperil the safety of the aircraft or its occupants. Such actions include interfering with crew members, tampering with the aircraft or its equipment, engaging in disorderly conduct, or any other behavior that compromises safety

### Denial of Transportation

Auric Air may deny transportation to any passenger who refuses to comply with exit seating restrictions as prescribed by the Authority or whose physical handicap would cause an obstruction to the safe evacuation of other passengers in the event of an emergency.

### Aircraft Ground Ops

1. Whenever an airplane is to be positioned on the ramp, whether under tow or under its own power, the assistance of marshallers or wingtip guides, as appropriate, should be obtained if there is any doubt about the clearances available for maneuvering. The path and ramp area should be inspected to ensure it is free of debris that could cause FOD as well as free from contamination that could be hazardous to aircraft movement. The positioning of the airplane should represent the best available compromise between the requirements of the aerodrome and/or air traffic control authorities, the prevailing wind direction and the proximity to buildings and other aerodromes.
2. Once the airplane has been parked, an Equipment Restraint Area (ERA) will be formed by placing cones at the 4 extremities. Personnel not involved in the process as well as Ground support vehicles should be stationed outside the ERA, if possible, parallel to the fuselage or main plane centerline, so that, in the event of brake failure, they will not collide with the airplane itself. Free access to the airplane main exit must be maintained at all times.

#### Authority to Taxi

No person shall taxi an aircraft on the movement area of an aerodrome unless they have been duly authorized by Auric Air or a designated agent, are fully competent to taxi the aircraft, are qualified to use the radiotelephone, and have received proper instruction from a competent person. This instruction must cover aerodrome layout, routes, signs, markings, lights, air traffic control signals and instructions, phraseology, and procedures. The individual must also demonstrate the ability to meet the operational standards required for the safe movement of the aircraft at the aerodrome.

1. When departing from the ramp, local procedures for start-up and taxi clearance are to be followed. Engine start is not to be initiated until all passengers or freight have been loaded, the doors and hatches closed and all ground equipment, except for a ground power unit when used, has been removed from the vicinity of the airplane.

As for the arrival, the assistance of marshallers should be arranged when maneuvering in relatively confirmed or crowded areas of the apron. Taxiing will only be carried out by company pilots and qualified engineering staff that may require moving the aircraft for maintenance purposes.

1. Ground staff must have been briefed on all aspects of ramp safety with particular reference to fire prevention, blast and suction areas and the need to be constantly alert to remove loose objects and/or debris.

### De-Icing and Anti-Icing on the Ground

Auric Air Services Limited’s ground operations are limited to areas where icing conditions are known to be non-existent.

### Cosmic Solar Radiation

Not applicable to the Auric Air as the aircraft cannot operate above 49 000 feet.

## All Weather Operations

In the context of this manual “all-weather operations” means any taxi, takeoff and landing operations in conditions where visual reference is limited by weather conditions.

### 9.4.1 Glossary of Terms

**Aerodrome Operating Minima**  
The limits of usability of an aerodrome for takeoff or landing, expressed in terms of visibility or runway visual range, decision altitude/height (DA/H), minimum descent altitude/height (MDA/H), and cloud conditions.

**Alert Height**  
A height above the runway based on aircraft and fail-operational automatic landing system characteristics. Above this height, a Category III approach would be discontinued, and a missed approach initiated if a failure occurs in one of the system's redundant parts or ground equipment.

**Alternate Aerodrome**  
An aerodrome for landing if proceeding to the intended destination becomes impossible or inadvisable. Types include:

* **Takeoff Alternate**: A landing aerodrome shortly after takeoff if the departure aerodrome cannot be used.
* **En-route Alternate**: A landing aerodrome in case of abnormal or emergency conditions during flight.
* **Destination Alternate**: A landing aerodrome if the intended destination is unavailable.

**Automatic Flight Control System (AFCS) with ILS Coupled Approach Mode**  
Airborne equipment providing automatic control of the aircraft's flight path using ILS.

**Automatic Landing System**  
Airborne equipment providing automatic control during the approach and landing phases.

**Categories of Aircraft**  
Aircraft categories based on 1.3 times the stall speed in the landing configuration at maximum certificated landing mass:

* **Category A**: Less than 169 km/hr (91 kt) IAS.
* **Category B**: 169 km/hr (91 kt) to less than 224 km/hr (121 kt) IAS.
* **Category C**: 224 km/hr (121 kt) to less than 261 km/hr (141 kt) IAS.
* **Category D**: 261 km/hr (141 kt) to less than 307 km/hr (166 kt) IAS.
* **Category E**: 307 km/hr (166 kt) to less than 391 km/hr (211 kt) IAS.

**Circling Approach**  
An extension of an instrument approach procedure providing visual circling of the aerodrome prior to landing.

**Commercial Air Transport Operation**  
An aircraft operation involving the transport of passengers, cargo, or mail for remuneration or hire.

**Decision Altitude/Height (DA/H)**  
A specified altitude or height in a precision approach where a missed approach must be initiated if the required visual reference to continue the approach is not established.

* **Note 1**: Decision altitude (DA) is referenced to mean sea level (MSL), and decision height (DH) is referenced to the threshold elevation.
* **Note 2**: The required visual reference refers to the section of visual aids or approach area visible for sufficient time for the pilot to assess the aircraft's position and its rate of change.

**Final Approach**  
Part of an instrument approach procedure commencing at the specified final approach fix/point or the last procedure turn. It ends at a point near the aerodrome where:

* A landing can be made, or
* A missed approach procedure is initiated.

**Flight Visibility**  
The visibility forward from the cockpit of an aircraft in flight.

**ILS Critical Area**  
A defined area around localizer and glide path antennas, free from vehicles, including aircraft, to prevent unacceptable disturbances to ILS signals during operations.

**ILS Sensitive Area**  
An extended area beyond the critical area where vehicle and aircraft movement is controlled to avoid interference with ILS signals.

**Instrument Approach and Landing Operations**  
Operations using instrument approach procedures, classified as:

* **Non-precision Approach and Landing Operations**: Without electronic glide path guidance.
* **Precision Approach and Landing Operations**: Using precision azimuth and glide path guidance, with minima determined by operation category.

**Non – precision approach and landing operations.** An instrument approach and landing which does not utilize electronic glide path guidance.

**Precision approach and landing operations**. An instrument approach and landing using precision azimuth and glide path guidance with minima as determined by the category of operation.

### Categories of Precision Approach and Landing Operations:

1. **Category 1 (Cat 1) Operation**
   * A precision instrument approach and landing with:
     + **Decision height**: Not lower than 60 m (200 ft).
     + **Visibility**: Not less than 800 m.
     + **Runway visual range (RVR)**: Not less than 550 m.
2. **Category II (Cat II) Operation**
   * A precision instrument approach and landing with:
     + **Decision height**: Lower than 60 m (200 ft) but not lower than 30 m (100 ft).
     + **RVR**: Not less than 350 m.
3. **Category IIIA (Cat IIIA) Operation**
   * A precision instrument approach and landing with:
     + **Decision height**: Lower than 30 m (100 ft) or no decision height.
     + **RVR**: Not less than 200 m.
4. **Category IIIB (Cat IIIB) Operation**
   * A precision instrument approach and landing with:
     + **Decision height**: Lower than 15 m (50 ft) or no decision height.
     + **RVR**: Less than 200 m but not less than 50 m.

**Note**: If the decision height (DH) and RVR fall into different categories, the lower minima (category) shall determine the operation classification.

#### Additional Precision Approach Terms:

* **Instrument Approach Procedure**  
  A series of predetermined maneuvers by reference to flight instruments with obstacle protection, from the initial approach fix (or defined arrival route) to:
  + A point for landing completion; or
  + A position for holding or en-route obstacle clearance if landing is not completed.
* **Instrument Meteorological Conditions (IMC)**  
  Conditions where visibility, distance from cloud, and ceiling are less than the minima for visual meteorological conditions (VMC).
* **Minimum Descent Altitude/Height (MDA/H)**  
  The lowest altitude/height in a non-precision or circling approach below which descent is not allowed without visual reference.
* **Missed Approach Point (MAP)**  
  The point in an instrument approach procedure where the missed approach must be initiated to maintain obstacle clearance.
* **Missed Approach Procedure**  
  The prescribed actions to follow if the approach cannot continue to landing.
* **Obstacle Clearance Altitude/Height (OCA/H)**  
  The lowest altitude (OCA) or height (OCH) ensuring obstacle clearance above the relevant runway threshold or aerodrome elevation.
* **Procedure Turn**  
  A maneuver involving a turn away from a designated track, followed by a turn in the opposite direction to intercept and proceed along the reciprocal track.
  + **Note 1**: Turns are designated as "left" or "right" based on the initial direction.
  + **Note 2**: Turns may be made in level flight or descending, depending on the procedure.
* **Runway Visual Range (RVR)**  
  The distance a pilot can see along the runway centerline markings or lights from the cockpit.
* **State of the Operator**  
  The state where the operator has their principal business or permanent residence.
* **State of Registry**  
  The state in which the aircraft is registered.
* **Surveillance Radar**  
  Radar equipment used to determine an aircraft's position in terms of range and azimuth.
* **Touchdown Zone (TDZ)**  
  The portion of the runway beyond the threshold intended for the first contact of landing aircraft.
* **Visibility**  
  The ability, determined by atmospheric conditions, to see and identify unlit objects by day and lit objects by night.
* **Visual Approach**  
  An IFR flight approach executed visually, without completing all or part of the instrument approach procedure.
* **Visual Meteorological Conditions (VMC)**  
  Meteorological conditions expressed as visibility, distance from cloud, and ceiling, equal to or better than specified minima.

### Application of Established Minima

#### General Policy

Minima figures of MDH/MDA and visibility are the lowest value for which landing or takeoff should be attempted and, except in the case of circling minima, these figures assume the serviceability of the ground and airborne equipment. If, for any reason, the PIC considers that the weather minima are too low for safe operation in a particular set of conditions, he is authorized to raise the minima accordingly.

The ICAO definition of decision height/altitude (DH/DA) means, in effect, that the pilot – by reference to the visual cues available to him – must have satisfied himself by the decision height that:

* The aircraft is in the correct position
* The aircraft flight path is correct and
* There is sufficient visual reference to control the aircraft for the reminder of the approach and landing.

If he is not satisfied that these conditions are fulfilled, he must initiate a missed approach and it is emphasized that the decision must be made by the time the aircraft arrives at decision height/altitude. It may happen that a pilot, having decided to land, must subsequently revise this decision because of loss or fore-shortening of the visual segment, for example, in shallow fog conditions where the fog top is below the decision height/altitude.

#### Pitch/Roll Guidance

It must be stressed that whereas roll guidance is sufficient, provided one or more crossbars can be seen, the pilot’s ability to control the aircraft in pitch and maintain the correct glide path by visual reference is very limited until the runway is in view. In limiting conditions, therefore, pilots are cautioned against making other than minor corrections in pitch, during the visual phase, until the runway is positively in view. Similarly, during an automatic approach in limiting conditions, the autopilot should not be disconnected above DH/DA and may be used down to the limiting height specified for the aircraft. The great danger is touching down before reaching the runway. Conversely, if the pilot finds that he has not touched down by the end of the touchdown zone lights or markings, he should consider making a missed approach.

#### Visibility

The minimum visibility must be such that at DH/DA or MDH/MDA

there is:

* Sufficient visual guidance to assess whether the aircraft is properly positioned for landing; and
* Adequate visual reference for control during the remainder of the approach

#### Minima (Approach/Alternate Procedures)

##### Alternate Aerodrome Minima Destination

An aerodrome considered as an alternative aerodrome shall at the time of obtaining the weather forecast meet the following criteria;

1. For a Precision Approach:

Non-precision approach minima on that particular runaway shall apply.

1. For a Non-Precision Approach:

* Cloud base equal to OCH + 200 ft
* Visibility should equal non-precision approach visibility plus1000 m.

##### Alternate Aerodrome Minima Take-Off

An aerodrome considered as an alternative aerodrome for take-off shall at the time of obtaining the weather forecast meet the following criteria.

1. For a Precision Approach.

Precision approach landing minima shall apply.

1. For a Non-Precision Approach

Non-precision approach minima shall apply.

NOTE. Should the actual weather conditions at the time of arrival at the alternate aerodrome prove to be below forecast minima, a landing may be attempted provided that the actual weather conditions are not below normal approved landing minima.

### Aerodrome General Principles and Publications.

Aerodrome Meteorological Operating Minima for all Destination and Alternate Aerodromes for Auric Air, are published in the Jeppesen Flight Guide and are calculated minima accepted by Auric Air.

‘Aerodrome Meteorological Operating Minima Data Sheets’ will reflect the current take-off, landing or circling minima applicable for the particular aerodrome concerned at that time.

Where a State has not established aerodrome operating minima, the appropriate published OCA/H (Obstacle Clearance Altitude/Height) will have been promulgated by the State having responsibility for the aerodrome; No minima may be lower than that authorized by the State in which the aerodrome is located.

A flight shall not commence unless the available meteorological information indicates that meteorological conditions at the departure, destination and the alternate aerodrome will at the expected time of departure and arrival be at or above the Company operating minima or the minima as specified in the A.I.P and Notams, whichever specifies the higher minima.

### Minima Principles

Auric Air accepts the ICAO All Weather Manual as a guideline for all weather operations.

Auric Air makes use of individual State Minima published in the Jeppesen Flight Guide for Auric Air operating minima, where not otherwise stated. It is Auric Air’s responsibility to ensure that the published minima are not below any state published minima.

The Jeppesen Flight Guide Minima are calculated according to the minima which any particular state may publish.

Auric Air may at places operate to higher minima than state minima.

Pilots are required to acquaint themselves with all pertinent regulations and orders of the various states into which they fly regarding the operating of the flight. These are published in the Jeppesen Flight Guide.

### Company Instrument Approach Procedures

#### General Policy Operating Minima

Auric Air Aerodrome Operating Minima as published in the Jeppesen Flight Guide is the minima below which the PIC must not operate except in a case of emergency. This, however, does not in any way reduce the PIC’s prerogative, should he consider that the operating minima are too low for safe operation, in a particular set of conditions, to apply a higher minimum than prescribed.

#### Use of Approach Plates.

A comprehensive approach plate revision and or briefing will be carried out prior to the commencement of an instrument approach.

#### Entries and Hold

Recommended TCAA approved entry and hold procedures will be completed with for an instrument approach.

#### Approach and Holding Speeds.

Refer to specific Aircraft Operating Procedures.

#### Entry and Holding Times.

All entry and holding times will be as specified for the appropriate let down facility

For the purpose of Company standardization, the following is recommended.

* Parallel Entry: From the facility, outbound on the appropriate heading for 45 seconds before returning to the facility.
* Teardrop Entry: Having reached the fix, the aircraft is turned onto a heading to made good a tracking an angle of 30 deg from the reciprocal of the inbound track on the holding side; then:
* The aircraft will fly outbound for the appropriate period of time where timing is specified, or
* Until the appropriate limiting DME distance is attained, where distance is specified, or
* Where a limiting radial is also specified, either until the limiting DME distance is attained or unit the limiting radial is encountered, whichever occurs first; then the aircraft is turned right to intercept the inbound boding track, and then on second arrival over the holding fix, the aircraft is turned right to follow the holding pattern.
* Direct Entry Approach: having reached the fix, the aircraft is turned right to follow the holding pattern.
* Procedure turn Approach: from the facility, on the procedure track outbound, to the commencement of the procedure turn, the time will not exceed 1 minute. The out bound leg of the procedure turn will be flown at 45 degrees to the procedure track unless otherwise stated. The time for this leg to be flown will be 45 seconds from the initial turn onto the leg to the commencement of the inbound turn.

#### Landing Gear Extension (where Applicable)

Refer to:

Dash 8 FCOM Chapter 13

PC12 POH Section 7.4

#### Procedure for an NDB/VOR Letdown.

Landing gear extension will be carried out when the descent for the approach is commenced, except in an emergency, (e.g. single engine approach)

Landing gear extension will be carried out on the downwind leg of the circling approach to land, unless the PIC requires the extension for the landing gear for a specific reason, (e.g. speed control)

#### Procedure for an ILS Approach

Landing gear extension will be carried out at the interception of glide slope prior to the commencement of the descent. The before landing check list will be completed for landing as laid down in the Company Standard Operating Procedures for the aircraft type.

#### Minimum Descent Altitude/Decision Height

The MDA or Decision Height will be as specified in the All Weather Policy or as laid down in the AIP.

* NOTE: The AIP has priority over any other published approach plate or manual except where the Company Operations Manual specifies higher minima. Should the MDA/DH not be specified on an approach chart, it will be calculated as follows: The OCL is added to the threshold elevation and is adjusted to the nearest 100 feet higher.

#### Runway Visual Range and Visibility

For instrument approach operations, aerodrome operating minima below 800 meters visibility shall not be authorized unless Runway Visual Range (RVR) information is provided. The last RVR or visibility figure obtained from the Airport Authority prior to departure shall be used for assessment purposes.

NOTE. The following table gives a conversion factor that should be applied to meteorological RVR to obtain visibility (VIS) i.e. (VIS = RVR x conversion factor and vice versa).

|  |  |  |
| --- | --- | --- |
| Lighting elements available | RV – reported MET VIS | |
|  | DAY | NIGHT |
| Hi approach and runway lighting  Any other type of lighting installation  No lighting | 15  10  10 | 2.0  1.5 |

Where no take-off minima are published, the minima under ‘take-off minima (2.1)’ shall apply and must be approved by the local authority.

Where only one RVR or VIS is published or reported by ATC this figure shall be controlling throughout the entire runway unless the Jeppesen Flight Guide indicates otherwise.

At aerodromes for which the aircraft PIC receives weather information in terms of meteorological visibility, it is his responsibility to determine whether the conditions are above the minima laid down.

He may either (1) commence the take-off or (2) descend to the applicable DH or MDA however he should satisfy himself that he can continue his approach by continual external visual reference with a visibility along the runaway not lower than the specified Company minima.

No pilot may descend an aircraft below the prescribed Minimum Descent Altitude or continue an approach below the Decision Height unless:

* The aircraft is in a position from which a normal rate of descent to a landing on the intended runway can be made using normal manoeuvres and
* the visual reference specified as the requirement for continued descent is continuously in view.

If due to circumstances a take-off or landing has been made in conditions where the officially reported meteorological conditions at the time are lower than the published minima, the PIC will

* Report the incident under separate cover to Auric Air Operations Control and Management.
* Report to the Air Traffic Control any serious discrepancies between weather conditions experienced and those given in the official meteorological report.

NOTE: In the absence of any approach aid, descend below Sector Safe Altitude where published or route safety altitude, is strictly prohibited and shall be attempted in VMC conditions only.

#### Approach Ban and Approach to Landing

The approach ban applicable to each State or authority shall apply

The ‘Approach to Landing’ segment is normally 1000ft above the DH or MDA for the particular runway, or where the glide slope intercepts the minimum final approach altitude.

Where no ‘Approach to Landing’ restrictions exist (for non-precision and Cat I approaches) and the reported RVR decreases below the published minima during the approach, the approach may be continued to the decision height or MDA. The PIC is required to assess the visual conditions and if the minimum required visual reference in his opinion has been established at the decision height or MDA and can be maintained, he may continue the approach and land. The PIC will then be responsible to report ‘Runway in sight’ to the Air Traffic Controller when in a position to land.

If at the decision height or MDA, the visibility is considered inadequate for safe landing, the go-around procedure must be carried out.

#### Aerodrome Operating Minima- TCAA Principles and All Weather Manual

Aerodrome operating minima (AOM) is usually expressed as a minimum height/altitude and a minimum visibility/RVR near to or along the runway. For take-off, the AOM is an indication of the minimum conditions in which the pilot of an aircraft may expect to have available the external visual reference he requires for the control of the aircraft along the surface of the run way until the aircraft is airborne, or until the end of the accelerate / stop distance.

For approach and landing, the AOM is an expression of the minimum height/altitude to which it is possible for the aircraft to be operated solely by reference to onboard instrumentation (i.e. decision height, decision altitude, minimum descent altitude) together with an indication of the minimum visibility in which the PIC may be considered to have the visual information necessary for continued flight path control during the visual phase of the approach and landing.

#### Take-off Minima

Take-off minima is usually stated as visibility only, except where there is a need to see and avoid an obstacle. In this case the minima may include a cloud ceiling and the published procedure should identify the location of the obstacle. However, if a specified minimum climb gradient required to clear the obstacle is noted in the procedure and the aircraft can meet this specified climb gradient, the minima may consist of visibility only.

The take-off minima are expressed in terms of Runway Visual Range (RVR) or Meteorological Visibility (VIS) i.e. no ceiling is required except as stated above.

Take-off minima at an aerodrome should not be less than the applicable minima for landing with the most critical engine inoperative at the aerodrome unless a take-off alternate aerodrome has weather conditions and facilities suitable for landing aircraft in the most critical engine-out configuration.

NOTE: Landing minima’s are applicable for take-off if alternate is not filed.

1. Basic take-off Minima:

RVR/VIS 2 engines 1600 m (1sm)

1. Lower than basic take-off minima:

If facilities indicated below are available, the following take-off minima may be used, unless obstructions require higher values.

|  |  |
| --- | --- |
| FACILITIES | RVR |
| Runway edge lights, runway centre line lights, center line marking, and TDZ, mid and roll – out RVR with readout down to at least 175m | 200 m |
| Runway edge lights, runway centre line lights, centre line markings, TDZ and roll – out RVR with read out down to at least 300m | 350 m |
| Runway edge lights and either centre line lights or centre line markings. | 500 m |

NOTE. If RVR is not available use applicable conversion factor to obtain RVR from VIS value

#### Take-off Alternate Aerodrome

A take-off alternate aerodrome may be any suitable main, alternate, or en-route aerodrome that meets the following requirements:

1. **Distance from Departure Aerodrome**
   * For aircraft with two engines, the take-off alternate must be within one hour of flight time from the departure aerodrome at one-engine-inoperative cruising speed, as determined from the aircraft operating manual. Calculations must be based on ISA and still-air conditions using the actual take-off mass.
2. **Weather Conditions**
   * The weather conditions forecast for the take-off alternate aerodrome must meet the landing minima specified for the period during which it is intended to be used, i.e., one hour before and one hour after the estimated time of arrival (ETA).
3. **Suitability and Compliance**
   * The take-off alternate aerodrome must be capable of supporting operations with one engine inoperative and allowing the aircraft to climb and maintain the minimum en-route safe altitude to the alternate.
   * Available information must indicate that the aerodrome conditions at the estimated time of use will meet or exceed Auric Air’s established aerodrome operating minima for the intended operation.

#### Operational Categories (TCAA all Weather Manual)

Where the decision height (DH) and runway visual range (RVR) do not fall within the same Category, the lower of the two shall determine the category of the operation.

Category I.

A precision instrument approach and landing with a decision height (DH) not less than 60 metres (200 ft) and with a visibility not less than 800 metres or TDZ runway visual range into less than 550 metres (1800 ft)

Precision approach – Category I.

Any precision approach operation using ILS with a decision height of 60 metres (200 ft) or higher and with 550 metres RVR or greater will be termed a Category I operation. Where a RVR transmissometer system is not operating and RVR determined for the operation is 800 metres, unless the RVR is determined by a trained visual observer. The minimum RVR midzone 150 metres.

#### Decision Height

The decision height for an operation cannot be lower than:

* The minimum height stated in the aircraft airworthiness certification or operating requirements to which it can be flown solely by reference to instruments.
* The minimum height to which the precision approach aid may be used solely by reference to instruments.
* The decision height to which the flight crew is permitted to operate as stated in the Operations Manual

#### Required Visual Reference

The runway environment (i.e.: Runway threshold, touchdown area, touch down zone lighting, or approach lighting) must be visible for sufficient time for the pilot to determine that the aircraft is in a position for a normal visual descent to land.

#### Precision Approach Category I Minima

|  |  |  |
| --- | --- | --- |
| FULL FACILITIES | INTERMEDIATE FACILITIES. | BASIC FACILITIES |
| Precision approach lights, R/W lights, incl. TDZ and centre line lights Runway markings. | Simple H.I  Approach Lights  Rwy lights and markings | Rwy lights & any length L 1 Approach lights or no approach |
| Decision (1) Height (DH) 60 m (200 ft) | 60 m (200 ft) | 60 m (200 ft) |
| RVR (2) 500 m (1800 ft)  TDZ Mid Zone 150 m  Minimum RVR | 700 m (2400 ft)  TDZ 150 m | 1200 m (4000 ft)  TDZ 150 m |
| Met vis (2) 800 m | 800 m | 1200 m |

DH is 60 metres (200 ft) or OCH, whichever is higher.

Increases in DH will require an appropriate increase in RVR/MET visibility.

#### Non Precision Approach

In the non-precision approach procedure track guidance is provided, but generally positive glide path information is not available from an electronic source.

The track guidance information required interpretation and is derived from the aids with varying degrees of accuracy, e.g. NDB, VOR, VOR/DME etc.

Additionally, the pilot is required to recalculate the optimum rate of descent from the limited information available. The term ‘non-precision’ describes the imprecision of the information available, so that in actual flight operations, the positional variations that may occur at MDA/H are larger than those that would occur in a precision approach due to the characteristics of the track guidance available.

The imprecise track information and lack of electronic glide path information necessitates landing minima generally higher than precision approach minima so as to ensure that the aircraft can complete a normal descent to land, for non-precision approaches to runways without precision approach lighting or with no approach lighting but with runway lighting and/or runway markers:

#### Day/Night

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| MDH In Feet | VIS In Metres Per Category Of Aircraft | | | | |
|  | A | B | C | D | E |
| 300 – 320 | 1600 | 1600 | 1600 | 1800 | 2000 |
| 321 – 390 | 1600 | 1600 | 1600 | 2000 | 2400 |
| 391 – 460 | 1600 | 1600 | 2000 | 2400 | 2800 |
| 461 – 530 | 1600 | 1600 | 2400 | 2800 | 3200 |
| 531 – 600 | 1600 | 1600 | 2400 | 2800 | 3600 |
| 601 – 670 | 1600 | 1600 | 2800 | 3200 | 4000 |
| 671 – 740 | 1600 | 1600 | 3200 | 3600 | 4400 |
| 741 – 810 | 1600 | 2000 | 3600 | 4000 | 4800 |
| 811 – 880 | 1600 | 2000 | 4000 | 4400 | 5000 |
| 881 – 950 | 2000 | 2000 | 4400 | 4800 | 5000 |
| 951 – up | 2400 | 4800 | 4800 | 5000 | 5000 |

For non-precision approaches on runways with precision approach lights, runway lights and/or markers.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mdh In Feet | Visibility in metres per category of aircraft. | | | | |
|  | A | B | C | D | E |
| 300 – 320 | 1200 | 1200 | 1200 | 1400 | 1600 |
| 321 – 390 | 1200 | 1200 | 1200 | 1400 | 1600 |
| 391 – 460 | 1400 | 1400 | 1400 | 1600 | 1800 |

#### The Height Element of Non-Precision Approach Minima

The height element of non-precision approach minima is the Minimum Descent Altitude (MDA)

It is the altitude below which the aircraft must not descend until the runway environment, ie. The runway threshold, touchdown area, approach lighting or markings identifiable with the runway, is in sight and the aircraft is in a position for a normal visual descent to land.

#### Circling Approach

No pilot may carry out a visual circling approach in an aircraft unless the weather conditions allow him all times to see an identifiable part on the aerodrome to which the approach is being made.

Where the let-down aid is not situated in line with the runway the PIC must not descend below the Minimum Descent Altitude for circling until, with the required visibility and having completed the appropriate manoeuvre(s) to position himself on final approach for the runway in use, he is satisfied that he can there after continue his approach to an assured landing by continuous external visual reference.

#### Circling Minima

|  |  |  |
| --- | --- | --- |
| Category | lowest OCH (ft) | minimum visibility (m) |
| A | 400 | 1900 |
| B | 500 | 2800 |
| C | 600 | 3700 |
| D | 700 | 4600 |

If the OCH is higher than the MDH in the table then the MDH will be equal to the OCH and the visibility value will be the value associated with this MDH

## Non Revenue Flights

### Training Flights

1. Training flights will be authorized by the Director of Operations, Chief Pilot.
2. Training flights will be scheduled to coincide with instrument flight renewals
3. Training flights will be scheduled when required for recurrent training.
4. No abnormal emergency situations shall be simulated whilst carrying cargo or passengers

### Test Flights

Test flights may be requested by a person responsible for the task to be test flown or aircraft maintenance requirement, but final approval will be the responsibility of the Director of Operations or Chief Pilot.

During test flights only flight crew or maintenance personnel will be aboard the aircraft.

### Delivery Flights

When an aircraft has got to be positioned to a place for maintenance to be conducted under a ferry permit

### Ferry Flights

Authorization to conduct a ferry flight is given by the Accountable Manager, Director of Operations or CP. Operations control Mwanza will advise all respective departments about the intention to operate a ferry flight.

### Demonstration Flights

Demonstration flights are flights for the purpose of sales/advertising promotion where no commercial load is carried. Nevertheless, all flights with passengers on board require full and normal crew complement. Flights without passengers may be combined with training flights.

No sightseeing or demonstration flight shall be conducted outside controlled airspace or established routes without prior permission and approval by the Accountable Manager or, if not available, by the Director of Operations

### Demonstration Flights for Regulatory Approval

Auric Air shall conduct demonstration flights to the satisfaction of the Tanzania Civil Aviation Authority (TCAA) before operating any aircraft type in commercial air transport, including aircraft materially altered in design and specific operational areas or navigation systems. These flights must comply with applicable regulations set by TCAA, and passengers are prohibited unless expressly authorized.

For aircraft with a maximum take-off mass of 5,700kg or less, TCAA will determine the necessity and scope of these flights. A detailed plan, including aircraft type and intended operations, must be submitted to TCAA, ensuring all requirements are met before approval for commercial operations.

### Positioning Flights

Positioning flights are flights to bring an aircraft to an aerodrome from which it will be scheduled for flight.

General Auric Air policy regarding 9.5.1.3 to 9.5.1.6 above is that:

* Only Auric Air flight crew to be used;
* Passengers will only be carried if in compliance with domestic and international aviation guideline.

## Oxygen Requirements

### Supplemental Oxygen in the Case of Non -Pressurized Aircraft

### General

Auric Air will not operate a non-pressurized aircraft at altitudes above 10 000 feet and up to 12 000 feet for longer than 30 minutes, or above 12 000 feet unless supplemental oxygen equipment, capable of storing and dispensing the oxygen supplies required, is provided.

The amount of supplemental oxygen for sustenance required for a particular operation must be determined on the basis of flight altitudes and flight duration, consistent with the operating procedures established for each operation in the operations manual and with the routes to be flown, and with the emergency procedures specified in the operations manual if applicable.

### Oxygen Supply Requirements

1. Flight Crew Oxygen Requirements

All flight crew members performing duties essential to the safe operation of an aircraft in flight shall use breathing oxygen continuously whenever conditions require its supply.

For pressurized aircraft operating above an altitude where the atmospheric pressure is less than 376 hPa, all flight crew members must have a quick-donning oxygen mask readily available at their flight duty station, capable of supplying oxygen on demand.

1. Passengers

Passenger will be supplied with oxygen from a portable source carried for the specific flight for the duration

1. Cabin Crew

Cabin crew shall be safeguarded to ensure a reasonable probability of retaining consciousness during any emergency descent necessitated by a loss of pressurization. Additionally, they shall have means of protection to administer first aid to passengers during stabilized flight following the emergency.

## Basic Standard Operating Procedures

This section only provides for general guidelines, for detailed aircraft specific operating procedures refer to the applicable OM-B.

### Cockpit Communication

* 1. Sterile cockpit rules shall be observed from start-up to TOC and from TOD until engine shutdown after landing and in emergency situations.
  2. All flight deck members shall have their headphones ON from start up to shut down.

### Reset Of An Approach Minimum

Reset of an approach minimum is not allowed after the standard “500” feet callout and a go-around shall be executed if visual references are not visible and identifiable.

### Stabilization On Final Approach

All flights must be stabilized by 1,000 ft above airport elevation in instrument meteorological conditions (IMC) and by 500 ft above airport elevation in visual meteorological conditions (VMC). An approach is stabilized when all of the following criteria are met:

1. The aircraft is on the correct flight path;
2. Only small changes in heading/pitch are required to maintain the correct flight path;
3. The aircraft speed is not more than VREF + 20 kt indicated airspeed and not less than VREF;
4. The aircraft is in the correct landing configuration;
5. Sink rate is no greater than 1,000 fpm; if an approach requires a sink rate greater than 1,000 fpm, a special briefing should be conducted;
6. Power setting is appropriate for the aircraft configuration and is not below the minimum power for approach as defined by the aircraft operating manual;
7. All briefings and checklists have been conducted;
8. Specific types of approaches are stabilized if they also fulfill the following: instrument landing system (ILS) approaches must be flown within one dot of the glideslope and localizer; a Category II or Category III ILS approach must be flown within the expanded localizer band; during a circling approach, wings should be level on final when the aircraft reaches 300 ft above airport elevation; and,
9. Unique approach procedures or abnormal conditions requiring a deviation from the above elements of a stabilized approach require a special briefing.

**An approach that becomes un-stabilized below 1,000 ft above airport elevation in IMC or below 500 ft above airport elevation in VMC requires an immediate go-around.**

### Missed Approach

**General**

The decision to initiate a missed approach shall be clearly announced by the command “go-around”. The missed approach shall always be flown by the pilot flying. Once the decision to perform a missed approach has been made during final approach, no decision to abandon this missed approach may be taken.

Another approach after missed approach due to meteorological reasons shall only be commenced if the Commander has reason to believe that a second approach will lead to a successful landing. More than two approaches shall only be made if the meteorological conditions have considerably improved, giving greater probability of a successful landing.

#### Initiation of prescribed missed approach

1. If the required visual reference has not been established upon reaching DH/DA for precision approaches.
2. If the required visual reference has not been established upon reaching MDA or passing the MAP
3. While flying level on MDA for non-precision approaches.
4. If the reported RVR (visibility) when overhead the outer marker or equivalent is below the applicable minimum.
5. If the surface wind reported prior landing, including maximum winds (“gusts”) exceeds the applicable limit(s).
6. If the approach success becomes doubtful, i.e. approach not stabilised or localizer and/or glide path tolerances are exceeded.
7. Upon instruction of the appropriate ATC unit.
8. If any time after descent below DH/DA respectively MDA visual reference to the ground or lights cannot be maintained.
9. If any element of the ground navigation system or airborne equipment required for approach under actual conditions becomes inoperative/is suspected to be malfunctioning.
10. If a reset of the approach minimum after the standard “500” feet callout would be required and visual reference has not been established.

Please note that the Company advocates a non-punitive go-around policy. Pilots should therefore use this tool should safety and better judgement require so.

### Enroute Limitations with One Engine Inoperative

Auric Air Services Limited shall ensure strict compliance with enroute limitations for flights operating with one engine inoperative. This policy outlines the procedures and requirements to be adhered to for safe operations under such circumstances:

1. **Net Flight Path Gradient**
   * The net flight path shall maintain a positive gradient at 1500 feet above the aerodrome where a landing is assumed after engine failure.
   * When meteorological conditions necessitate the operation of ice protection systems, the effect of their use on the net flight path shall be accounted for.
2. **Terrain and Obstruction Clearance**
   * The net flight path must maintain a positive gradient at least 1000 feet above all terrain and obstructions within 9.3 km (5 nm) on either side of the intended route.
3. **Flight Continuation Requirements**
   * The net flight path must allow the aircraft to continue flight from cruise altitude to a designated aerodrome, ensuring clearance of terrain and obstructions by at least 2000 feet within 9.3 km (5 nm) of the route. This shall include:
     + Accounting for engine failure at the most critical point along the route.
     + Considering the effects of winds on the flight path.
     + Allowing fuel jettisoning if necessary, provided it is conducted safely and enables the aircraft to meet required fuel reserves.
     + Ensuring the designated aerodrome meets performance requirements for the expected landing mass and has suitable weather and field conditions for a safe landing at the estimated time of arrival.
4. **Increased Margins for Navigational Accuracy**
   * Where navigational accuracy does not meet the 95% containment level, the lateral margins shall be increased to 18.5 km (10 nm) on either side of the intended route.

### Fuel Dumping

Auric Air Services does not have an aircraft that has this capability.

## Minimum Equipment List (MEL)

1. The Auric Air Services MEL has been prepared in accordance with the manufactures MMEL and is on board of every Auric Air Services aircraft as a separate document .
2. The MEL pre-flight status is terminated when starting taxi (aircraft moves under its own power). Any decision to continue a flight following a failure or un-serviceability, which becomes apparent after starting taxi, shall be the subject of commanders judgement and good airmanship. The commander may continue to make reference to and use the MEL as appropriate.

**Note:** For some failure cases the MEL requires application of special limitations or operational procedures (e.g. one air-conditioning pack u/s). These limitations or operational procedures are mandatory to allow the operations of the aircraft.

For the same failure happening during flight, however, the limitation in the MEL does not necessarily apply but could be considered for an adequate decision making.

1. The MEL, approved by the TCAA permits operations with certain items or components inoperative provided an acceptable level of safety is maintained by appropriate operation, by a transfer of functions to another operating component, or by reference to other instruments or components providing the required information.
2. The MEL contains only those items of airworthiness significance which may be inoperative prior to aircraft operations, provided limitation and appropriate procedures are observed. Equipment obviously basic to aircraft airworthiness such as wings, rudder, flaps, etc. is not listed and must be operative for all flights. It is important to note that all items which are related to the airworthiness of the aircraft and not included in the MEL are automatically required to be operative.

Equipment obviously not required for safe operation of the aircraft, such as galley equipment, ash trays, etc. are defined as passenger convenience items.

1. The MEL is issued to assist the commander in determining when basic installation may be deficient. Normally it will apply when the aircraft is away from home base. However, in special circumstances, where undue delay or possible cancellation would be caused by lack of time, or manpower or by temporary non availability of spares, the commander may be requested to operate the aircraft with an allowable deficiency also departing from home base.
2. Except where otherwise indicated, permitted deficiencies apply under all operating conditions.
3. The decision of the commander to have allowable inoperative items corrected prior to flight will take precedence over the provisions contained in the MEL. The commander may request requirements above the MEL whenever in his judgement such added equipment is essential to the safety of a particular flight under the special conditions prevailing at the time; however, he

shall never accept requirements below. Every effort must be made to ensure that deficiencies are correctly determined and that no hidden defect exists.

1. Every effort shall be made by maintenance to correct all technical irregularities as early as practicable, but, in any case, repair should be accomplished within the repair time interval limits and/or according to the company procedures approved by the TCAA. The commander must be informed by maintenance personnel as soon as practicable, should it be impossible to repair the inoperative item prior to departure. Whenever an aircraft is released by maintenance for operations with items inoperative, the following is required:
   * + 1. The tech log aboard the aircraft must contain a detailed description of the inoperative item(s), special advise to the flight crew and information about corrective action taken. If inadvertent operation could produce a hazard, such equipment must be rendered inoperative (physically) as given in the appropriate maintenance procedure.
       2. Any unserviceable equipment in the aircraft must clearly and unmistakably labelled as defective. In the case of indicating devices, the label should be fitted that no reading can be taken during aircraft operations.
2. Before operating an aircraft with multiple MEL items inoperative, it must be checked that any interface or interrelationship between inoperative items will not result in a degradation of the level of safety and/or undue increase in crew workload. It is particularly in this area of multiple discrepancies and especially discrepancies in related systems, that good judgment, based on the circumstances of the case, including climatic and en-route conditions, must be used. If in doubt whether the aircraft can safely be operated for a specific flight, the Chief Pilot and Maintenance Organization must be contacted.
3. Occasion may arise where equipment not included in the MEL can be unserviceable. If any doubt exists as to the safety of the aircraft for return flight to home base, reference should be made to the CP
4. If any doubt exists on approved test or maintenance procedure to be applied, refer to Maintenance Coordinator.

### MEL Limitations

The Minimum Equipment List (MEL) shall not include instruments and equipment that are essential for safe operations under all conditions as specified by airworthiness certification requirements, required to be operable by an airworthiness directive unless otherwise stated, or necessary for specific operations.

### Use of Configuration Deviation List (CDL)

Auric Air shall ensure that a Configuration Deviation List (CDL), specific to the aircraft type and approved by the State of Design, is provided for use by flight crew, maintenance personnel, and individuals assigned operational control functions.

## Authorization to Operate with Inoperative Instruments and Equipment

The pilot-in-command (PIC) may be authorized to operate an aircraft with inoperative instruments and equipment, provided the PIC determines that the inoperative instruments and equipment do not pose a hazard to the safe operation of the aircraft, the inoperative instruments and equipment are deactivated and clearly placarded as “inoperative,” and, if removed from the aircraft, the associated cockpit controls are placarded accordingly, with the maintenance actions recorded in compliance with the applicable Airworthiness Regulations.

## Refueling Log

The dispatcher or the PIC shall enter quantities of the following consumables on the aircraft:

1. Fuel uplift, remaining fuel and fuel used per leg
2. Oil quantities used

## Tyre Pressures

For appropriate aircraft types, spaces are provided for the recording of tyre pressures when required

## Flight Following Procedures

This section serves as guidelines for flight tracking procedures at Auric Air Services Limited. Auric Air currently utilizes satellite tracking as a primary source of flight following for all flights. This has been implemented to keep a watch on all Company aircraft operating either within controlled airspace or outside controlled airspace. The flight following personnel must be familiar with the utilization of the software and must be aware of its limitations. The failure of the satellite tracking software calls for the secondary source of tracking which shall be via communication with the airstrip personnel if available and the relevant ATC unit. The Company shall ensure that flight following is the appointee’s primary responsibility and that he/she shall have minimal secondary responsibilities in order to be able to concentrate on flight following. The responsible person shall be trained on the Company’s Emergency Response and shall report directly to the emergency response team leader of the position of the aircraft and is also responsible for reporting any occurred deviations from the flight plan to the E.R.P team leader and the Director of Operations.The responsible person shall be clear about the planned route, the alternates, the endurance, persons on board the aircraft, the equipment carried on the aircraft, the dangerous goods carried if any. He shall access the manifest on the electronic check-in system.

#### Purpose Of Flight Following

The purpose of flight following is to be aware of the position of an aircraft that has started its engines for the purpose of a flight at all times. This shall serve as a source of information to keep track of any occurred deviations and to declare an “EMERGENCY”. The scope of flight following is a direct function of the emergency response unit.

#### Flight Following Procedures

### Flight Following Guidelines

The following guidelines outline the procedures and responsibilities for future flight following operations, ensuring accurate tracking of aircraft positions and timely response to deviations or emergencies.

**1. Flight Following Platform**  
Flight following will be conducted using v2track or any comparable tracking system, which will provide position reports for all aircraft via onboard software.

**2. Responsibilities of Dedicated Trackers**

* Appointed staff will act as dedicated trackers with no secondary duties. They will record aircraft positions in 15-minute intervals in the flight following log.
* Trackers will ensure they are capable of initiating the Emergency Response Plan (ERP) when required.
* The flight following log will include parameters such as speed, altitude, and track.

**3. Handling Deviations**

* Any deviations from the planned or estimated ETA will be reported immediately to the ERP Team Leader/Representative and the Director of Operations.
* Deviations may either trigger direct alerts on the system or appear as subtle issues, such as receiving the same coordinate reports for 30 minutes.

**4. Contingency for Inoperative Tracking Systems**

* If the tracking system becomes unavailable, flight following personnel will:
  + Contact the relevant ATC Unit to obtain position reports.
  + Communicate with airstrip personnel to confirm the landing and take-off times of the aircraft.
* Contact information for ATC Units and airstrip personnel will be displayed in the office, included in the ERP, and available in the Tanzania A.I.P.

**5. Flight Tracking Log Management**

* Flight tracking logs will be completed for every flight and stored in the relevant file at the end of each day.

## **CFIT And CFIT Avoidance Techniques**

**Controlled Flight Into Terrain (CFIT)** refers to accidents where an aircraft under the crew's control in terms of direction and speed collides with the ground or water.

To avoid CFIT, the PIC must ensure a thorough understanding of the surrounding terrain during all phases of flight, including before the aircraft moves, before takeoff, after takeoff, in the cruise, during initial descent, intermediate and final approach, and in the event of a go-around. This can be achieved by:

1. Utilizing current charts and procedures during flight planning to ensure the intended flight path avoids terrain and obstacles.
2. Remaining aware of potential terrain and obstacle hazards along the intended route.
3. Using terrain display, TAWS, and/or GPWS on navigation displays as necessary to maintain situational awareness and avoid terrain and obstacles.
4. Planning any course diversion carefully, ensuring proper terrain and obstacle clearance to the new destination.
5. Understanding aircraft performance limitations associated with CFIT accidents.

## Aircraft Registration Markings

Auric Air shall not operate any aircraft registered in the United Republic of Tanzania or any foreign-registered aircraft in Tanzanian airspace unless the aircraft displays the proper registration markings as prescribed in the Civil Aviation (Aircraft Registration and Marking) Regulations.

## Operation Near Laser Beams or Directed High-Intensity Lights

The pilot-in-command shall not deliberately operate an Auric Air aircraft into a laser beam or any other directed high-intensity light unless flight safety is assured. The use of laser beams or other directed high-intensity lights requires a mutual agreement between Auric Air of the light source, the pilot-in-command, and the relevant authority.

## Runway Braking Action Reporting

The pilot-in-command (PIC) shall report a special air-report (AIREP) regarding runway braking action when the braking action encountered is less favorable than previously reported.

## Reporting Hazardous Flight Conditions

The pilot-in-command (PIC) shall report any hazardous flight conditions encountered, other than those associated with meteorological conditions, to the appropriate aeronautical station as soon as possible. These reports must include details pertinent to ensuring the safety of other aircraft.

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# DANGEROUS GOODS AND WEAPONS

## General

### Conveyance of Dangerous Goods

Auric Air Services LTD is not a dangerous goods carrier, guidelines have been provided below in order to recognize dangerous goods. Dangerous goods can only be carried according to the International Civil Aviation Organization’s Technical Instructions for the Safe Transport of Dangerous Goods by Air (Technical Instructions), irrespective of whether the flight is wholly or partly within or wholly outside the territory of a State. An approval must be granted by the Authority before dangerous goods can be carried on an aircraft, except as identified in paragraphs below.

1. An approval is not required for dangerous goods which are required to be aboard the aircraft such as items for airworthiness or operating reasons or for the health of passengers or crew, such as batteries, fire extinguishers, first aid kits, insecticides, air fresheners, lifesaving appliances and portable oxygen supplies.
2. An approval is not required for dangerous goods which are carried in flight for medical aid or a patient, such as gas cylinders (Oxygen/Nitrogen), drugs, medicines, other medical material (e.g. sterilizing wipes), providing:

* the gas cylinders have been manufactured specifically for the purpose of containing and transporting that particular gas;
* the drugs and medicines and other medical matter are under the control of trained personnel during the time when they are in use.
* Proper provision is made to stow and secure all the equipment during take-off , landing and at all other times when deemed necessary by the aircraft commander in the interest of safety.

NOTE: The dangerous goods carried may differ from those identified above due to the needs of the patient. They are not those which are a part of the normal equipment of the aircraft.

1. An approval is not required for those dangerous goods which, according to the Technical Instructions, can be carried by passengers or crew members, which are:
2. Alcoholic beverages not exceeding 70% alcohol by volume, when packed in receptacles of less than 5 litres.
3. Non-radioactive medicinal or toilet articles (including aerosols, hair sprays, perfumes, medicines containing alcohol); and, in checked baggage only, aerosols which are non-flammable, non-toxic and without subsidiary risk, when for sporting or home use. The net quantity of each single article must not exceed 0.5 litres or 0.5 kg and the total net quantity of all articles must not exceed 2 litres or 2 kg.
4. Safety matches or a lighter for the person’s own use and when carried on him. Strike anywhere’ matches, lighters containing unabsorbed liquid fuel (other than liquefied gas), lighter fuel and lighter refills are not permitted.
5. A hydrocarbon gas powered hair curler, providing the safety cover is securely fitted over the heating element, gas refills are not permitted.
6. Radio isotopic cardiac pacemakers or other devices (including those powered by lithium batteries) implanted in a person, or radio-pharmaceuticals contained within the body of a person as a result of medical treatment.
7. A small medical or clinical thermometer containing mercury, for the person’s own use, when in its protective case.
8. When carriage is allowed by the operator, wheelchairs or other battery powered mobility aids with non-spill able batteries, providing the equipment is carried as checked baggage. The battery must be securely attached to the equipment, be disconnected and the terminals insulated to prevent accidental short circuits.
9. When carriage is allowed by the operator, wheelchairs or other battery powered mobility aids with spill able batteries, providing the equipment is carried as checked baggage. When the equipment can be loaded, stowed, secured and unloaded always in an upright position, the battery must be securely attached to the equipment, be disconnected and the terminals insulated to prevent accidental short circuits. When the equipment cannot be kept upright, the battery must be removed and carried in a strong, rigid packaging, which must be leak tight and impervious to battery fluid. The battery in the packaging must be protected against accidental short circuits, be held upright and be surrounded by absorbent material in sufficient quantity to absorb the total liquid contents. The package containing the battery must have on it battery wet, with wheelchair or Battery wet, with mobility aid’, bear a corrosive’ label and be marked to indicate its correct orientation. The package must be protected from upset by securement in the cargo compartment of the aircraft. The PIC must be informed of the location of a wheelchair or mobility aid with an installed battery or of a packed battery.
10. Auric Air Services allows, cartridges for sporting weapons, providing they are in Division 1.4S (see Note), they are for that person’s own use, they are securely in boxes and in quantities not exceeding 5 kg gross mass and they are in checked baggage. Cartridges with explosive or incendiary projectiles are not permitted.

NOTE: Division 1.4S is a classification assigned to an explosive. It refers to cartridges which are packed or designed so that any dangerous effects from the accidental functioning of one or more cartridges in a package are confined within the package unless it has been degraded by fire, when the dangerous effects are limited to the extent that they do not hinder firefighting or other emergency response efforts in the immediate vicinity of the package. Cartridges for sporting use are likely to be within Division 1. 4S.

1. E-cigarettes are to be carried in hand luggage only.

## Carriage Of Dangerous Goods By Passengers

A short brief will be given to passengers during check-in regarding items allowed on board in reference to the dangerous goods items allowed on board.

## Dangerous Goods Not Permitted In Passenger Baggage

The following table lists the types of goods not permitted to be carried in passenger hand baggage in any circumstances

|  |  |
| --- | --- |
|  | |
| Classification | Examples |
| Explosive | Fireworks, flares, toy guns & caps |
| Flammable or non-flammable gas | Aerosols including aerosol paints, filled aqualung cylinders, carbon dioxide cylinders for soda siphons, butane gas cylinders, lighter refills |
| Deeply refrigerated gas | Liquid Nitrogen |
| Flammable liquid | Paints, thinners, solvents |
| Flammable solids | Firelighters, non – safety strike anywhere matches |
| Oxidizing material | Bleaches |
| Poisons | Arsenic, cyanide, weed killer, tear gas |
| Infectious substances | Viruses, bacteria |
| Radioactive materials | Instruments containing a radio-isotopes for research |
| Corrosive materials | Acids, alkalis, metallic mercury, wet-cell batteries, thermometers containing mercury, barometer |
| Miscellaneous | Magnetized materials and formalin |
| Organic peroxides | Resin kits |

## Types Of Baggage That May Contain Dangerous Goods

|  |  |
| --- | --- |
| Types of Baggage | Possible Contents |
| Industrial type packages (wooden or fibre-board boxes, metal flasks, cans) | Paints, thinners, solvents, acid, mercury, resin kits etc |
| Unusually strong attaché cases (metal banding or edges) | Industrial samples, resin kits, pyrotechnics etc |
| Rucksacks, kitbags or similar types of camping baggage | Gas stoves, lanterns, Primus stoves, paraffin, methylated spirits matches, flares |

## Risk Assessment of Items Transported In The Cargo Compartment

Auric Air shall implement policies and procedures for the transport of items in cargo compartments, supported by a specific safety risk assessment. The safety risk assessment shall be conducted in accordance with the procedures outlined in the SMS Manual. This assessment shall address hazards related to the properties of transported items, operator capabilities, operational considerations (including area and diversion time), aircraft systems and cargo compartment suppression capabilities, fire containment characteristics of unit load devices, packing and packaging standards, supply chain safety, and the quantity and distribution of dangerous goods to be transported.

## Mitigation of Cargo Compartment Fire Risk

### Policy Overview

Auric Air is committed to ensuring the highest safety standards in the transport of cargo by implementing robust measures to mitigate the risk of fire in cargo compartments. This policy establishes clear guidelines and procedures for assessing, preventing, and responding to fire risks associated with cargo operations, in compliance with regulatory requirements and internal safety management protocols.

### Procedures

1. **Risk Assessment**

Before approving items for transport in the cargo compartment:

* Conduct a comprehensive safety risk assessment in line with the SMS manual.
* Evaluate hazards associated with the properties of cargo items, including flammability and reaction potential.
* Assess operational considerations, including route specifics, diversion capabilities, and environmental factors.
* Confirm the fire suppression capabilities of the aircraft’s cargo compartment.
* Verify that packing, packaging, and containment meet TCAA safety standards.

1. **Cargo Screening and Documentation**

* Ensure all cargo is screened for prohibited or hazardous materials before loading.
* Verify the accuracy of cargo documentation, including manifests and declarations.
* Dangerous goods must adhere to TCAA Dangerous Goods Regulations.

1. **Packing and Securing Cargo**

* All items must be securely packed to prevent movement or damage during flight.
* Flammable and hazardous materials must be transported in approved containment units.
* Ensure proper weight distribution in the cargo compartment to maintain aircraft stability.

1. **Pre-Flight Safety Checks**

* Inspect the cargo compartment for any signs of risk or irregularities.
* Confirm that fire detection and suppression systems are armed and functional.
* Verify that cargo complies with loading standards and is within approved weight limits.

1. **Fire Prevention Measures**

* Ensure adequate ventilation within the cargo compartment where permissible.
* Minimize the transport of high-risk materials whenever possible.
* Confirm that fire suppression equipment is readily accessible and fully operational.

1. **Emergency Procedures for Cargo Compartment Fire**

In the event of a fire in the cargo compartment:

1. **Detection:**
   * Respond immediately to fire detection system warnings.
   * Confirm the fire’s location using onboard systems or visual checks.
2. **Fire Suppression:**
   * Activate the cargo fire suppression system as per the aircraft's standard operating procedures.
   * Monitor system effectiveness and remain alert to changes in cabin conditions.
3. **Aircraft Configuration:**
   * Seal the cargo compartment to deprive the fire of oxygen.
   * Adjust aircraft configuration for safety, including air conditioning and ventilation settings.
4. **Diversion:**
   * Identify and plan a diversion to the nearest suitable airport.
   * Notify ATC of the situation and request emergency support on landing.
5. **Passenger and Crew Safety:**
   * Brief passengers on emergency procedures and ensure seatbelts are fastened.
   * Assign crew responsibilities for monitoring and managing the fire situation.
6. **Post-Landing:**
   * Evacuate the aircraft if suppression efforts fail or as a precaution.
   * Engage ground firefighting services upon landing.
   * Conduct a thorough inspection of the cargo area and the aircraft.
7. **Reporting and Post-Incident Review**
8. Immediately report any cargo compartment fire incidents to the SMS and the **TCAA**.
9. Conduct a detailed post-incident investigation to determine the cause and implement corrective actions.
10. Review and update cargo policies and procedures as necessary based on investigation findings.

## Carriage of Weapons, Ammunition, and Munitions of War

Auric Air prohibits the carriage of munitions of war on its aircraft. No person shall take, cause to be taken on board, or deliver for carriage any goods known or suspected to be munitions of war. For the purposes of this policy, "munitions of war" refers to weapons, ammunition, articles, materials, or devices intended or adapted for use in warfare.

Weapons not classified as munitions of war, including sporting weapons and ammunition, may be carried under the following conditions:

* They are stowed in a part of the aircraft inaccessible to passengers during the flight.
* Firearms must be unloaded.
* Stowed in a location of least risk in the event of an explosion

All reasonable steps must be taken to ensure that Auric Air is made aware of the intended carriage of sporting weapons and ammunition. The PIC must be informed of any weapons or ammunition on board.

In exceptional cases, sporting weapons and ammunition may be carried in a location accessible to passengers if it is deemed impracticable to store them otherwise, subject to conditions stated by the Tanzania Civil Aviation Authority (TCAA). Additionally, weapons and ammunition may be carried when the company is engaged in specific tasks involving the Tanzania Police or Tanzania Wildlife Service, in compliance with TCAA requirements.

### Carriage of a Concealed Weapon

A person shall not, while on board an aircraft being operated in commercial air transport operation, carry a deadly or dangerous weapon, either concealed or unconcealed.

## Dangerous Goods Training

All staff including 3rd parties handling cargo and baggage should undergo familiarization training, which must be aimed at providing familiarity with the general provisions. As a minimum, personnel should be able to identify dangerous goods at the check in counter or when brought to the office for transport by air. They should be also informed of

the operational approval and limitations with regard to the transport of dangerous goods. Recurrent training must take place biennially. All training records shall be maintained in personnel files. The minimum requirements for training courses are per AASL/OMD.

## Reporting and Investigating Dangerous Goods Incidents

Auric Air shall adhere to the procedures for investigating, compiling information, and reporting accidents or incidents involving the transport of dangerous goods, in compliance with the Civil Aviation (Aircraft Accident and Incident Investigation) Regulations and the latest edition of the TechnicalInstructions.

1. **Investigation and Reporting**:
   * Any accident or incident involving dangerous goods within the United Republic, especially those originating from or destined for another State, shall be investigated and reported as per the detailed provisions of the **Technical Instructions**.
   * Reports on such occurrences must be prepared and submitted in line with the latest amendments to the **Technical Instructions**.
2. **Prohibition Against Obstruction**:
   * No individual shall hinder the investigation or compilation of information regarding undeclared or mis-declared dangerous goods.
3. **Authority Procedures**:
   * The Authority is responsible for establishing procedures to investigate and compile information on undeclared or mis-declared dangerous goods within the United Republic.
4. **Undeclared or Mis-declared Goods**:
   * Instances involving undeclared or mis-declared dangerous goods in cargo must be reported in accordance with the **Technical Instructions**, ensuring all relevant details are accurately documented.

# 

# RULES OF THE AIR

## Visual Flight Rules

### Visibility and Distance from Cloud

Every VFR flight shall be so conducted that the aircraft is flown with visual reference to the surface by day and to identifiable objects by night and at no time above more than three eighths of cloud within a radius of five nautical miles of such aircraft.

|  |  |  |  |
| --- | --- | --- | --- |
| Airspace | Flight Visibility | Distance From Clouds | Ground Visibility And Ceiling |
| Control zones | Five km | Horizontally 2000 ft Vertically 500 ft | Except in a case mentioned in foot not 1, no aircraft shall take-off from, land at, or approach to land at an aerodrome or fly within the control zone when the ground visibility at the aerodrome concerned is less than five km and the ceiling is less than 1 500 feet. |
| Within an aerodrome traffic zone (which does not also comprise a control zone or part of a control zone) or an aerodrome traffic area. | Five km | Horizontally 2000 feet vertically 500 ft | Except in a case mentioned in footnote 2, no aircraft shall take-off from, land at, or approach to land at an aerodrome or fly within the aerodrome traffic zone or aerodrome traffic area within the ground visibility within such aerodrome traffic zone or aerodrome traffic area is lee than five km and the ceiling is less than 1 5000 feet. |

### Minima not Applicable to Special VFR Flights

When a pilot in an aircraft maintains two-way radio communication with the aerodrome control tower or aerodrome flight information service unit, the pilot may, in respect of a cross country flight, leave or enter the aerodrome traffic zone or aerodrome traffic area, as the case may be, when the ground visibility is equal to or greater than five km and the ceiling is equal to or higher.

|  |  |  |  |
| --- | --- | --- | --- |
| Altitude band | Airspace class | Flight visibility | Distance from cloud |
| At and above 3 050 m (10 000 ft) AMSL | A\* B C D E F G | 8 km | 1,500 m horizontally 300 m (1,000 ft) vertically |
| Below 3050 m (10000 ft) AMSL and above 900 m (3 000 ft) AMSL, or above 300 m (1 000 ft) above terrain, whichever is the higher | A\*B C D E F G | 5 km | 1,500 m horizontally 300 m (1,000 ft) vertically |
| At and below 900 m (3 000 ft) AMSL, or 300 m (1 000 ft) above terrain, whichever is the higher | A\*B C D E | 5 km | 1,500 m horizontally 300 m (1,000 ft) vertically |
| F G | 5 km | Clear of cloud and with the surface in sight |

### Aircraft Equipment

Aircraft shall be equipped with suitable instruments and radio navigation apparatus appropriate to the route to be flown

## Instrument Flight Rules

### Instrument Approach Requirements

A pilot shall not conduct an instrument approach at an aerodrome unless it is in accordance with the instrument flight rules (IFR) weather minima and instrument approach procedures specified in the air operator certificate holder's operations specifications. All aircraft operated under IFR must comply with the instrument flight procedures approved by the Authority in the State where the aerodrome is located. One or more instrument approach procedures, designed in accordance with the classification of instrument approach and landing operations, must be approved and promulgated by the Authority for each instrument runway or aerodrome utilized for IFR operations.

### Cloud Break and Let-Down Procedures

Unless otherwise authorized by the responsible air traffic service unit, aircraft operated under IFR must comply with the IFR procedures applicable to the relevant airspace. The pilot-in-command (PIC) may execute or attempt a cloud break or let-down procedure at an aerodrome or nominate an aerodrome as an alternate, provided all requirements for cloud break or let-down procedures and flights under IMC, as published by the TCAA in the NOTAM, are met.

### Take off Clearance Under IFR

A pilot operating an aircraft in commercial air transport shall not accept a clearance to take off from an aerodrome under IFR unless authorized by the Authority and the weather conditions are at or above the following landing minima:

For aircraft with two engines or less: 1,500 meters visibility.

For aircraft with more than two engines: 800 meters visibility.

These subsections ensure compliance with IFR procedures, promote safe operations, and maintain regulatory adherence during instrument flight operations.

### Commencing IFR Approach

A pilot shall not commence the final approach segment of an instrument approach procedure unless a weather report from an Authority-approved source indicates that visibility meets or exceeds the prescribed minima for the procedure. For operations requiring visibility below 800 meters, RVR information must be provided. If weather conditions fall below minima after beginning the final approach, the pilot may continue to the decision height or minimum descent altitude. All instrument approach procedures must be approved and promulgated by the responsible State authority.

## Territorial Application Of Rules Of The Air

Auric Air makes use of the Jeppesen Airway Manual for standards with regard to the territorial application of rules of the air. The Jeppesen Airway Manual standards are calculated according to standards published by particular states, and as such fulfil local and international requirements.

## Communication And Communication Failure Procedures

### Mandatory Radio Communication in Controlled Airspace

The PIC of an aircraft to be operated in or crossing a controlled airspace shall ensure that, before the aircraft enters such airspace, two way radio contact is established with the responsible air traffic service unit on the designated radio frequency and shall ensure, while the aircraft is within, and until it leaves, the controlled airspace, that continuous radio watch is maintained and that such further two-way radio communication as such air traffic service unit may require, is established.

### Mandatory Radio Communication in Advisory Airspace

The PIC of an aircraft to be operated in advisory airspace shall ensure that, before the aircraft approaches or enters such airspace.

1. Two-way radio communication with the responsible air traffic service unit is established on the designated radio frequency.
2. If such communication is not possible, two way radio communication is established with any air traffic service unit which is capable of relaying messages to and from the responsible air traffic service unit; or
3. If such communication is not possible broadcasts are made on the designated radio frequency giving information on the aircraft’s intention to enter the airspace, and such PIC shall ensure that, while the aircraft is within the advisory airspace and until it departs there from a continuous radio watch is maintained of the designated radio frequency and that such further two way radio communication as the responsible air traffic service unit may require, is established with any other air traffic service unit which is capable of relaying messages to and from such responsible air traffic service unit; if such communication is not possible, such further two way radio communication is established with any other air traffic service unit which is capable of relaying messages to and from the responsible air traffic service unit, as such responsible air traffic service unit may require; or
4. If such communication is not possible, broadcasts are made on the designated radio frequency giving information on passing reporting points and when leaving the airspace concerned.

Provided that:

An aircraft maintaining a Selcal watch while operating within an advisory route in the Dar es Salaam Flight Information Region and whose Selcal call sign has been communicated to the Dar es Salaam Flight Information Centre, shall be deemed to be maintaining a continuous radio watch; and

In the case for a radio failure, a flight for which an air traffic service flight plan was filed and activated by an air traffic service unit on receipt of a departure time, may continue in advisory airspace if the communication failure procedures are complied with.

### Procedure for Communication Failure and Continuation of Flight

In the event of receiver failure onboard an aircraft, the flight may continue in controlled airspace if communication failure procedures are followed. The aircraft shall transmit scheduled or position reports on the frequency in use, preceded by the phrase "TRANSMITTING BLIND DUE TO RECEIVER FAILURE." The intended message shall be transmitted, followed by a complete repetition, including the time of the next intended transmission.

If the flight is under air traffic control or advisory service, the pilot-in-command (PIC) shall transmit information regarding their intentions for the continuation of the flight. Additionally, if the aircraft is equipped with a secondary surveillance radar (SSR) transponder, the PIC shall set the transponder to Code 7600 to indicate radio communication failure.

### Communication Failure Instrument Meteorological Conditions

In the event of communication failure, an aircraft in Instrument Meteorological Conditions (IMC) or when a pilot of an IFR flight considers it inadvisable to continue under VMC procedures shall maintain the last assigned speed and level (or minimum flight altitude, if higher) for 20 minutes in non-radar airspace or 7 minutes in radar airspace after reaching the last assigned level, setting transponder code 7600, or failing to report at a compulsory reporting point, whichever is later. The aircraft shall then adjust its level and speed per the filed flight plan and rejoin the route at the next significant point, considering minimum flight altitudes when being radar-vectored or directed to proceed offset using RNAV. It shall proceed to the designated navigation aid or fix serving the destination aerodrome, hold as necessary, commence descent as close as possible to the last acknowledged expected approach time or estimated time of arrival, complete a normal instrument approach procedure, and land within 30 minutes of the estimated or acknowledged approach time. In Visual Meteorological Conditions (VMC), the aircraft shall continue in VMC, land at the nearest suitable aerodrome, and report arrival to the appropriate air traffic services unit by the most expeditious means.

### Operation of Radio in Aircraft

Auric Air shall ensure that the operation of radio stations in its aircraft complies with applicable regulations. The radio station shall only be operated under the conditions specified by the State of registry and by personnel duly licensed or otherwise permitted under the law of that State.

During flight, a continuous radio watch shall be maintained on the designated frequency by a flight crew member whenever the aircraft is required to be equipped with radio communication equipment. This watch shall only be discontinued or shifted to another frequency as directed by an aeronautical radio station or as permitted by a received message. The use of automated devices to maintain the watch shall be acceptable, provided the aeronautical station is informed and raises no objections.

Flight crew members shall operate radio and radio navigation equipment as instructed by the appropriate air traffic control unit or as required in the airspace in which the aircraft is flying. Emissions from the radio station shall not interfere with aeronautical telecommunications or navigational services and shall be limited to:

- Class and frequency emissions in accordance with international aeronautical practices.

- Distress, urgency, and safety messages.

- Messages related to the flight of the aircraft.

- Public correspondence messages permitted under the aircraft radio station licence.

When operating in controlled airspace below flight level 150 or during take-off and landing, pilots and flight engineers shall not use hand-held microphones for communication or intercommunication.

If an aircraft's radio station has a defect that impairs safety, the aircraft shall not undertake any flight until the issue is rectified. If such a defect occurs during flight, the aircraft shall land as soon as possible unless the radio can be swiftly and safely restored to proper functioning.

## Interception Of Civil Aircraft

The pilot-in-command of a civil aircraft, when intercepted, shall comply with prescribed requirements and respond appropriately by interpreting and adhering to the visual signals specified for such situations.

### Visual Interception Signals

|  |  |  |
| --- | --- | --- |
| Signal by intercepting aircraft | Meaning | Response by intercepted aircraft |
| Day  Rocking wings while in front and to left of intercepted aircraft  Rocking wings while in front and to right of intercepted aircraft  When (a) and (b) have been acknowledged, making a slow level turn onto desired course  Night  As for day, and in addition flashing navigation and if available, landing lights at irregular intervals.  As for day, and in addition flashing navigation and if available, landing lights at irregular intervals.  As for day, and in addition flashing navigation and, if available, landing lights at irregular intervals when (a) and (b) have been acknowledged | First series  Follow me away from a prohibited area  Follow me to a landing terrain  Follow me away from a prohibited or restricted area  Follow me to a landing terrain | Rocking wings  Rocking wings  Follow intercepting aircraft  Rocking wings if considered safe and showing steady landing light if carried  Rocking wings if considered safe and showing steady landing light if carried  Follow intercepting aircraft |

Weather conditions or the terrain may require the intercepting aircraft to take up a position in front and to the right of the intercepted aircraft to complete the successive turn to the right.

|  |  |  |
| --- | --- | --- |
| Signal by intercepting aircraft | Meaning | Response by intercepted aircraft |
| Day or night  An abrupt break away for 90º or more without crossing the line for flight of the intercepted aircraft  Day  Circling landing area, lowering landing gear and over flying the direction for landing  Night  As for day and showing steady landing light  Day  First or second series dependent on what further action intercepting aircraft requires to be taken either  “Follow me”, or  “You may proceed | Second series  You may proceed  Third series  Land on this landing area  Fourth series  Landing terrain unsuitable | Rocking wings if considered safe, at night showing steady landing light if carried  Same as interceptor and proceed to land (where applicable) if considered safe, at night showing study landing light if carried  Rocking wings (if fixed landing gear) or raising gear (whichever applicable) while passing over landing terrain at a height exceeding 1 000 feet but into exceeding 2 000 feet. |

### Identification and Interception of Aircraft

The visual signals must be used as follows:

1. When an aircraft has been intercepted for identification only, the intercepting aircraft will use the second series to show that the aircraft may proceed;
2. When an aircraft is to be led away from a prohibited or restricted area the appropriate part of the first series will be used and the second series when the purpose has been achieved and the aircraft is released;
3. When an aircraft is required to land, the appropriate part of the first series will initially be used, followed by the third series when in the vicinity of the designated landing area;
4. When the pilot for the intercepted aircraft considers the landing area designated as unsuitable for his or her aircraft type, she will use the fourth series to indicate this and new instructions will then be given by the intercepting aircraft;
5. When an intercepted aircraft is in distress, the distress signals should be used, where practical.

### Time System

Universal Coordinated Time (UTC) is used by air navigation services and in documents published by the Aeronautical Information Service. Reporting of time is expressed to the nearest minute, e.g. 12: 40: 35 is reported as 1241.

Local time is UTC + 3 hours.

## Geodetic Reference Datum

### Name/Designation of Datum

The geodetic reference datum used in Tanzania is the the World Geodetic System 1984 (WGS\_84)

### Area of Application

The area of application for the published geographical coordinates coincides with the area of responsibility of the Aeronautical Information Service, i.e. the entire territory of the Tanzania as well as the airspace over the high seas encompassed by the Tanzania Oceanic FIR in accordance with the regional air navigation agreement.

### Use of an Asterisk to Identify Published Geographical Coordinates

An asterisk (\*) will be used to identify those published geographical coordinates which have been transformed into WGS\_84 coordinates but whose accuracy of original field work does not meet the requirements in ICAO Annex II, Chapter 2 and ICAO Annex 14, Volumes I and II, chapter 2.

## ATC Clearances, Adherence to Flight Plan and Position Reports

### Air traffic control clearance

Air traffic control clearance must be requested through the submission of a flight plan to the appropriate air traffic control unit. If priority clearance is requested, a report explaining the necessity for such priority must be submitted upon request. Any anticipated changes to the route or destination before departure must be notified to the relevant air traffic control unit by including the revised information in the flight plan. Aircraft operating at controlled aerodromes must not taxi on the maneuvering area without clearance from the aerodrome control tower and must comply with all instructions issued by the tower.

### Compliance with Traffic Control Clearance and Instructions

The PIC of an aircraft shall-

* Comply with any air traffic control clearance which is obtained, unless the PIC obtains an amended clearance;
* Not operate the aircraft contrary to an air traffic control instruction in an area in which an air traffic control service is provided; and
* When deviating from an air traffic control clearance or instruction, notify the air traffic control unit of the deviation, as soon as practical.

### Adherence To Current Flight Plan

An aircraft must adhere to its current flight plan or the applicable portion of the plan submitted for a controlled flight unless a change has been requested and cleared by the appropriate air traffic control unit, or an emergency situation arises requiring immediate action. In such emergencies, the appropriate air traffic services unit must be notified as soon as circumstances allow, with details of the actions taken under emergency authority. Unless otherwise directed or authorized, controlled flights should operate along the defined centerline of established ATS routes or directly between navigation facilities and points defining non-ATS routes. For ATS route segments defined by VORs, the aircraft should switch navigation guidance from the facility behind to the facility ahead at or near the designated changeover point. Any deviation from these requirements must be reported to the appropriate air traffic services unit.

### Deviations from the Current Flight Plan

For controlled flights that inadvertently deviate from the current flight plan, the following actions must be taken: If the aircraft is off track, the heading must be adjusted immediately to regain the correct track. Any deviations from an ATC-assigned Mach number or indicated airspeed must be reported to the appropriate air traffic services (ATS) unit. If the sustained Mach number or true airspeed at cruising level varies by ±Mach 0.02 or ±10 knots true airspeed, the ATS unit must be informed. Additionally, if the time estimate for the next reporting point, FIR boundary, or destination aerodrome changes by more than 2 minutes (or a regionally specified threshold), the ATS unit must be notified unless ADS-C services are active. When ADS-C services are operational, the ATS unit will automatically receive updates when changes exceed predefined thresholds.

Requests for changes to the flight plan must include details such as aircraft identification, new cruising level or speed, and revised time estimates at subsequent reporting points or FIR boundaries, as applicable.

### Position Reporting

The Pilot-in-Command (PIC) of an aircraft operating in controlled or advisory airspace, or on a flight for which alerting action is being provided, shall ensure that position reports are made to the responsible air traffic service unit as soon as possible. These reports shall include the time and level of passing each designated compulsory reporting point, along with any other required information. Position reports must also be made:

* At additional reporting points if requested by the air traffic service unit.
* At intervals specified by the responsible air traffic service unit in the absence of designated reporting points.

Aircraft providing position information via data link communications shall only provide voice position reports when explicitly requested by the air traffic service unit.

### Weather Deterioration Below VMC

If a VFR flight operated as a controlled flight encounters conditions where flight in VMC under the current flight plan becomes impracticable, the following actions shall be taken: The pilot must request an amended clearance to continue in VMC to the destination, an alternate aerodrome, or to leave controlled airspace. If such clearance cannot be obtained, the aircraft must continue to operate in VMC and notify the appropriate ATC unit of actions taken to either leave the airspace or land at the nearest suitable aerodrome. In a control zone, the pilot may request authorization to operate as a special VFR flight or request clearance to operate under instrument flight rules.

### Termination of control

A controlled flight shall, advise the appropriate ATC unit as soon as it ceases to be subject to

air traffic control service except when landing at a controlled aerodrome.

### ATC Clearance Adherence After Unlawful Interference

An aircraft subjected to unlawful interference shall notify the appropriate ATS unit of the situation, any significant circumstances, and any deviations from the current flight plan to ensure priority handling and minimize conflicts with other aircraft. The pilot-in-command must attempt to land as soon as practicable at the nearest suitable aerodrome or a designated aerodrome assigned by the appropriate authority, unless onboard considerations dictate otherwise.

## Visual Signals

### Used to Warn an Unauthorized Aircraft Flying in, or About to Enter a Restricted, Prohibited or Danger Area

By day and by night, a series for projectiles discharged from the ground at intervals of 10 seconds, each showing, on bursting, red and green lights or stars will indicate to an unauthorized aircraft that it is flying in or about to enter a restricted, prohibited or danger area, and that the aircraft is to take such remedial action as may be necessary.

### Aircraft Observing another Aircraft in Distress

An aircraft observing another aircraft in distress, making a crash landing, or ditching, aircrew ejecting or bailing out, or a dinghy, shall (where possible) take action as follows:

* keep the aircraft or personnel in distress in sight.
* At sea if a surface vessel is in sight and can be contacted without losing sight of the distressed personnel, guide it to the position;

If the aircraft in distress has not been able to transmit a distress signal, or if the Pilot in Command of the aircraft observing the distress believes that further help is needed,

* transmit it a message containing all relevant information to the controlling ground station on the frequency in use;
* Obtain as accurate a position as possible by the best available means and transmit if necessary, the correct position to the condoling ground station; and
* Carry out instructions from the controlling ground station, or remain in position until instructed to return, or until circumstances compel departure.

### Aircraft Intercepting a Distress Call

An aircraft intercepting a distress call is to take the following action:

1. Take a bearing on the transmission if possible; Plot the position given;
2. Listen out on the frequency use by the distress aircraft;
3. If no acknowledgement of the distress message is heard, all the aircraft ins distress and acknowledge receipt;
4. Then retransmit the distress message on behalf of the distressed aircraft. This call must be followed by the distress message which must include the call sign of the aircraft in distress;
5. Listen out for instructions from a ground station and for further transmission from the distressed aircraft; and

At the discretion of the pilot in command, and if practicable, proceed to the position mentioned in the distress signal while awaiting instructions from the ground station.

### Signals for Aerodrome Traffic

Light and Pyrotechnic Signals Instructions

|  |  |  |
| --- | --- | --- |
| Light | From aerodrome control to | |
| Aircraft in flight | Aircraft on the ground |
| Steady green  Steady red    Series for green flashes  Series for red fleshes  Series of white fleshes    Steady red on final approach | Cleared to land  Give way to other aircraft and continue circling  Return for landing  Aerodrome unsafe, do not land  Land at this aerodrome and proceed to apron  Notwithstanding any previous instructions, do not land for the time being | Cleared for take-off  Stop  Cleared to taxi  Taxi clear of landing area in use  Return to starting point on the aerodrome |
| \*Clearance to land and to taxi will be given in due course | | |

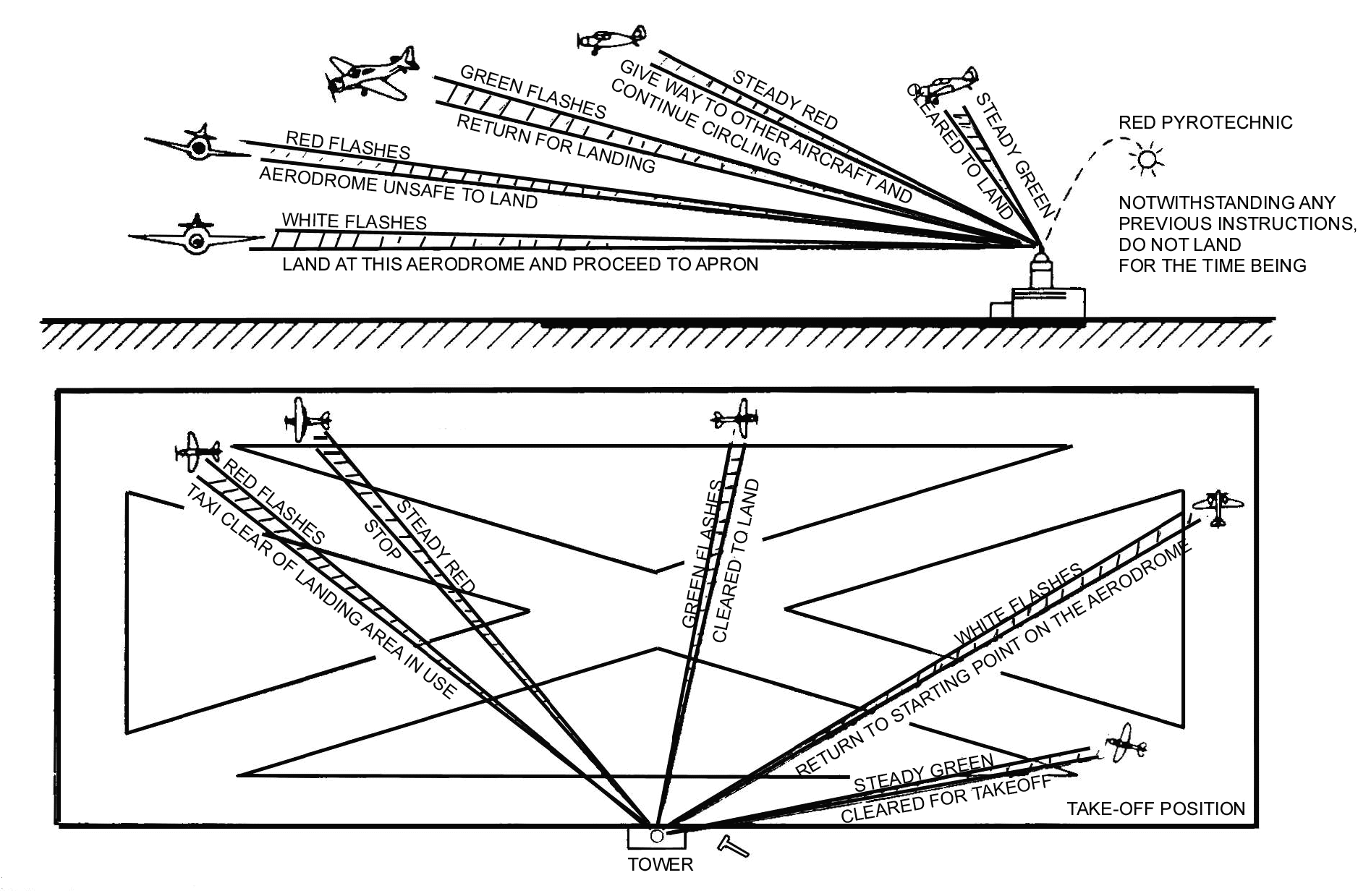


Figure 1

#### Acknowledgement by aircraft

1. When in flight:
2. During the hours of daylight:

By rocking the aircraft’s wings:

Note: This signal should not be expected on the base and final legs of the approach

1. During the hours of darkness.

By flashing on and off twice the aircraft landing lights, or it not so equipped by switching on and off twice its navigation lights.

1. When on the ground:

(i) During the hours of daylight

By moving the aircraft’s ailerons or rudder

(ii) During the hours of darkness.

By flashing on and off twice the aircraft’s landing lights on if not so equipped, by switching on and off twice its navigation lights.

### Visual Ground Signals

1. Prohibition of landing

A horizontal red square panel with yellow diagonals (Figure 1.1.) when displayed in a signals area indicates that landings are prohibited and that the prohibition is liable to be prolonged.

**Figure 2**

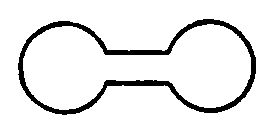
1. Need for special precautions while approaching or landing

A horizontal red square panel with one yellow diagonal (Figure 1.2) when displayed in a signal area indicates that owing to the bad state of the maneuvering area, or for any other reason, special precautions must be observed in approaching to land or in landing.

**Figure 3**

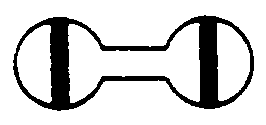
1. Use of runways and taxiways.

A horizontal white dumb-bell (Figure 1.3) when displayed in a signal area indicates that aircraft are required to land, take-off and taxi on runways and taxiways only.

****

**Figure 4**

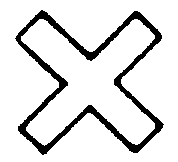
The same horizontal white dumb-bell as in Figure 4 but with a black bar placed perpendicular to the shaft across each circular portion of the dumb-bell (Figure 1.4) when displayed in a signal area indicates that aircraft are required to land and take-off on runways only, but other maneuvers need to be confined to runways and taxiways.



**Figure 5**

1. Closed runways to taxiways

Crosses of a single contrasting colours, yellow or white (Figure 6) displayed horizontally on runways and taxiways or parts thereof indicate an area unfit for movement of aircraft.

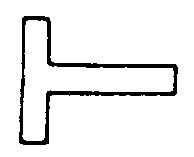


**Figure 6**

1. Directions for landing or take-off

A horizontal white or orange landing T (Figure 7) indicates the direction to be used by aircraft for landing and take-off, which must be in a direction parallel to the shaft of the T towards the cross arm.

Note: When used at night, the landing T is either illuminated or outlined in white coloured lights.



**Figure 7**

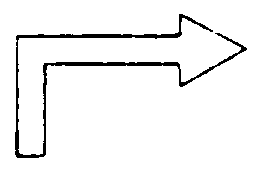
1. A set of two digits (Figure 8) displayed vertically at or near the aerodrome control tower indicates to aircraft on the manoeuvring area the direction for take-off, expressed in units of 10 degrees to the nearest 10 degrees of the magnetic compass.

09

**Figure 8**

1. Right-hand traffic

When displayed in a signal area, or horizontally at the end of the runway of strip in use, a right – hand arrow of conspicuous colour (Figure 9) indicates that turns are to be made to the night before landing and after take-off.



**Figure 9**

1. Air traffic services reporting office.

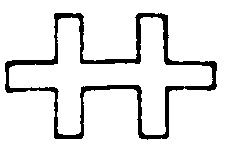
The letter C displayed vertically in black against a yellow background (Figure 10) indicates the location of the air traffic services reporting office.

C

**Figure 10**

1. Glider flights in operation

A double white cross displayed horizontally (Figure 11) in the signal area indicates that gliders are using the aerodrome and that glider flights are being performed.



**Figure 11**

1. Agricultural flights in operation.

A figure A (Figure 12) in the signal area indicates that the aerodrome is being used for agricultural flights.

6m

A

**38cm**

**Figure 12**

### Ground/Air Visual Codes for Use By Survivors.

The Search and Rescue Signals to be used are those prescribed in the Regulations, which are identical to those contained in appendix “A” to Annex 12 to the Convention on International Civil Aviation.

The following code is the internationally accepted code for survivors to use to communicate with aircraft.

|  |  |  |
| --- | --- | --- |
| No. | Message | Code Symbol |
| 1 | Require assistance | V |
| 2 | Require medical assistance | X |
| 3 | No or Negative | N |
| 4 | Yes or affirmative | Y |
| 5 | Proceeding in this direction. |  |

The following code will be used by rescue units to communicate with aircraft when no other means of communication exists.

|  |  |  |
| --- | --- | --- |
| No. | Message | Code Symbol |
| 1 | Operation completed | LLL |
| 2 | We have found all personnel | LL |
| 3 | We have found only some personnel | II |
| 4 | We are not able to continue. Returning to base | XX |
| 5 | Have divided into 2 groups each proceeding in direction indicated. |  |
| 6 | Information received that aircraft is in this direction |  |
| 7 | Nothing found. Will continue to search | NN |

### Distress Signals

The following signals used either together or separately, mean that grave and imminent danger threatens, and immediate assistance is requested.

A signal made by radiotelegraphy or by any other signalling method consisting of the group SOS (••• – – – ••• in the Morse Code)

A signal sent by radiotelephony consisting of the spoken word MAYDAY.

Rockets or shells throwing red lights, fired one at a time at short intervals.

A parachute flare showing a red light.

Alarm signals for actuating radiotelegraph and radiotelephone auto-alarm systems.

1. **3268:** The radiotelegraph alarm signal consists of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between consecutive dashes one second. It may be transmitted by hand but its transmission by means of an automatic instrument is recommended.
2. **3270:** The radiotelephone alarm signal consists of two substantially sinusoidal audio frequency tones transmitted alternately. One tone has a frequency of 2 200 Hz and the other a frequency of 1 300 Hz, the duration of each tone being 250 milliseconds.
3. **3271:** The radiotelephone alarm signal, when generated by automatic means, must be sent continuously for a period of at least thirty seconds but not exceeding one minute; when generated by other means, the signal must be sent as continuously as practicable over a period of approximated one minute.

### Emergency/Distress Frequencies

VHF – 121.5 MHz

UHF – 243.0 MHz

UHF – 500 kHz, 2182 kHz (maritime service) 8364 kHz

### Transponder Codes

Mode A, Code 7700 – emergency

Mode A, Code 7600 – two-way communication failure

Mode A, Code 7500 – unlawful interference.

Note: None of the provisions in this paragraph prevent the use, by an aircraft in distress, of any means at its disposal to attract attention, make known its position to obtain help.

### Urgency Signals

The following signals used either together or separately, mean that an aircraft wishes to give notice of difficulties, which compel it to land without requiring immediate assistance.

The repeated switching on and off of the landing lights; or

The repeated switching on and of the navigation lights in such manner as to be distinct from flashing navigation lights.

The following signals used either together or separately, mean that an aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or of so person on board or within sight.

A signal made by radiotelegraphy of by any other signalling method consisting of the group XXX.

A signal sent but radiotelephony consisting of the spoken word PAN, PAN.

None of the provisions in this paragraph prevent the use, by an aircraft in distress, of any means at its disposal to attract attention, make known its position and obtain help.

### Prohibited and Restricted Areas Proximity

Auric Air Services Limited shall not operate an aircraft in any prohibited or restricted area whose particulars have been duly published, except in strict compliance with the stated restrictions or with explicit permission from the State governing the airspace.

If an aircraft is ordered to vacate such an area, it shall leave the area by flying to the least possible extent over the restricted zone. During this maneuver, the aircraft shall not begin to descend while remaining within the prohibited or restricted area.

# HANDLING OF ACCIDENTS, INCIDENTS AND OCCURRENCES

All processes here are to be used in conjunction with the processes outlined in the ERP and SMSM.

## Accidents

### Definition of Accident

The following is the TCARs definition of an accident and also the definition of a Tanzanian ‘Reportable Accident’:

An occurrence associated with the operation of an aircraft which takes place between the time when any person boards the aircraft with the intention of flight and such times where all persons have disembarked there-from in which:

1. A person suffers death or serious injury while in or upon the aircraft or by direct contact with any part of the aircraft (including any part which has become detached from the aircraft) or by direct exposure to jet blast, except when the death or serious injury is from natural causes, is self-inflicted or is inflicted by other persons or when the death or serious injury is suffered by a stowaway hiding outside the areas normally available in flight to the passengers and members of the crew of the aircraft.
2. The aircraft incurs damage or structural failure other than:
3. Engine failure or damage when the damage is limited to the engine, its cowling or accessories.
4. Damage limited to propellers, wing tips, antennae, tyres, brakes, fairings, small dents or punctured holes in the aircraft skin which adversely affect its structural strength, performance or flight characteristic and which would normally require major repair or replacement of the affected component.
5. The aircraft is missing or is completely inaccessible.
6. Significant damage is caused to the property or any third party.

Note: Significant damage in this respect may be taken to mean any damage caused which may be subject to an insurance claim.

However, expressly excluded from this accident definition, shall be the loss of an under-clung or externally carried load which does not result in any significant damage or injury other than damage to the load or loss of the load itself.

### Definition of Injury

Serious injury means an injury which is sustained by a person in a reportable accident and which:

1. Requires a stay in hospital for more than 48 hours commencing within 7 days from the date on which the injury was received.
2. Results in a fracture of any bone (except simple fractures of fingers, toes or nose).
3. Involves lacerations which cause nerve muscle or tendon damage or severe hemorrhage.
4. Involves injury to any internal organ.
5. Involves second or third degree burns or any burns affecting more than 5 % of the body surface.

## Pilot Post Accident Procedures

Immediately after an accident on land, or a ditching and following the evacuation of the passengers to either a sheltered location upwind or the aircraft, or into the life-raft, the pilot should carry out or delegate the following duties either to a crew member or a selected passenger:

1. Subject to safety and the prevailing situation, the aircraft should be left in a safe condition with fuel off and aircraft batteries disconnected and equipment such as first aid kits, survival packs and fire extinguishers removed.
2. A headcount should be made to account for all persons on board at the time of the accident. In the event of a person or persons being unaccounted for, action should be taken to recover them or locate their whereabouts.
3. The needs of any injured should be administered to as far as is possible, and such persons should be made as comfortable as possible.
4. The bodies of any victims should be decently set apart and covered.
5. If appropriate, activate the distress beacon and establish the feasibility of using the aircraft radio equipment. Prepare pyrotechnics for immediate use. Select, mark and prepare a rescue helicopter landing site. If a site is not available, lay out appropriate search and rescue signals.
6. If people dwellings or communication facilities are very close to the scene of the accident, consider sending for assistance having regard to the local situation, distress messages transmitted and received from and to local search and rescue facilities.
7. If rescue is likely to be delayed for reasons of distance or failing daylight, prepare suitable shelters and distribute necessary rations of food and water, if necessary, ascertain the availability of fresh water in the immediate vicinity of the accident.
8. Subsequent to rescue and subject to the location of the accident, the police should be informed and assistance sought in the placing of guards on the aircraft. Alternatively, consideration should be given to hiring local watchmen.
9. Auric Air shall ensure that, in the event an aircraft becomes involved in an accident or incident, all related flight recorder records are preserved to the extent possible. The associated flight recorders shall be retained in safe custody until their disposition is determined in accordance with the Civil Aviation (Aircraft Accident and Incident) Regulations.

### Aircraft Accident Reporting

Following an accident or incident involving company aircraft, the commander shall complete the Company Accident Report, in addition to complying with the laws and regulations of the country of registration and the country in which the accident or incidents took place as classified by the company, for reporting purposes, in accordance with the definitions as in this section.

If there is any doubt as to the classification, the occurrence should be reported as an accident. The Flight Operations Officer will re-classify accidents and incidents where necessary.

## Accident Reporting Procedures

Safety reports of accidents or serious incidents must be shared with regulators and whenever an accident occurs, the following sequence of reporting actions must be followed:

1. Fax or telex the company immediately using the prefix ACCIDENT.
2. If appropriate, telephone the company
3. Where necessary, notify the competent authority of the country in which the accident occurs and/or in the country of registration. The accident message should indicate whether such notification has been made or is intended. Instructions regarding the required notification will be found in the appropriate local regulations, for example in Tanzania – The Civil Aviation (Investigation of Accidents) Regulations 2016
   * 1. The relevant parts of the regulations and requirements (including fax and telex addresses and telephone numbers) are held by the Director of Operations.
4. Complete and dispatch the Company Accident Report Form as soon as possible but, in any case within 72 hours of the accident.
   * 1. Where items of the report cannot be completed due to lack of information, they should be marked ‘to be completed’ and the missing information forwarded when obtained, rather than delaying the report.Safety reports

### Reporting of Incidents in Foreign States

The pilot-in-command shall submit where required by the State in which the incident occur shall within ten days submit a report on any such violation to the appropriate authority of such State and a copy of it to the Authority.

## Responsibility for Accident Reporting

After any accident, it is the responsibility of the pilot involved or the senior staff member on site to ensure that the appropriate reporting procedures are followed without delay. Accidents must be notified to the company by the quickest means.

The Director of Operations / Higher company authority will issue instruction regarding any requirement to notify the appropriate and local authorities.

## Reporting Accidents by Fax/Telex

When reporting accidents to the company, follow these guidelines:

**Contact Information**

* **Fax Number:** [Insert Fax Number]
* **SITA:** [Insert SITA Address]

**Message Format**

The accident report should follow this standardized structure:

Reference:

**ACCIDENT**

Details to Include:

1. **AA:** Date of Accident
2. **BB:** Aircraft Registration
3. **CC:** Pilot’s Name
4. **DD:** Other Crew Members
5. **EE:** Number of Passengers
6. **FF:** Location of Accident
7. **GG:** Time of Accident
8. **HH:** Brief Description of Pilot’s Injuries
9. **II:** Brief Description of Crew/Passenger Injuries
10. **JJ:** Brief Description of Accident (including flight phase and tax)
11. **KK:** Brief Description of Extent of Damage
12. **LL:** Post-Accident Procedures Carried Out
13. **MM:** Actions Taken on Site to Notify Authorities
14. **NN:** Immediate Actions Requested from the Company

**Additional Information**

Include any other relevant details that might influence the company’s response or provide a clearer understanding of the situation.

**Example Message**

**ABC 123**  
**ACCIDENT**

* **AA:** 14/10/99
* **BB:** 5H – XXX
* **CC:** Petal
* **DD:** NIL
* **EE:** Six
* **FF:** Five Miles NE of Aberdeen
* **GG:** 1120
* **HH:** Minor cuts and abrasions
* **II:** Two passengers with minor cuts
* **JJ:** Heavy landing following severe wind shear on approach at 100 feet
* **KK:** Undercarriage irreparable; will revert with full details and replacement parts required
* **LL:** Pilots and passengers recovered by vehicle; guard placed on aircraft
* **MM:** Local TCAA and client advised
* **NN:** No company action required at this time

**Note on Communication Delays**

In areas with difficult communication or potential delays, if no fatalities or serious injuries have occurred, the accident message may be held for up to six hours to compile more comprehensive information.

Follow – up Information

In view of postal uncertainties and possible delay in the arrival of the Accident Report, the person responsible shall provide the Director of Operations with follow-up information either by telephone, fax or telex. This should include:

1. Additional information which may come to light or updating earlier information already sent
2. Any apparent mechanical failure discovered
3. The form of investigation which may be taking place and aspects which are receiving special consideration
4. Recommendation regarding the pilot’s return to duty as prescribed in ‘Flying after an Accident’ below.

It is emphasized that this follow-up procedure is an essential requirement to enable the General Manager to decide what further action is appropriate.

Follow-up messages addressed to the company on matters concerning accidents/incidents shall be prefixed ‘Re Accident’ or ‘Re Incident’ followed by the aircraft registration to which the information refers.

### In the event of an accident in which fatalities or serious injuries are sustained or persons are missing or where grave political international embarrassment or serious adverse publicity may result, the company must be informed, day or night, without delay.

### Completing the Accident Report Form

All sections of the report shall be completed. Appendices I, II and III should be completed as appropriate. Statements need not be restricted simply to the questions which are suggested therein.

### Accident Report Distribution

All accident reports are to be addressed to the Director of Operations.

### Flying after an Accident

After being involved in an accident, the crew shall not carry out further flying duties. Crew members are to remain on site, unless to undergo medical treatment or examination and may not be scheduled for flying duties until authorized by the Director of Operations after the preliminary findings of the investigation are known or apparent.

## Incidents

### Definition of Incident

An occurrence not covered by the definition of Aircraft Accident, which:

1. Has jeopardized the safety of passengers, crew or aircraft but which has terminated without serious injury or substantial damage
2. Under slightly varied circumstances, may have jeopardized the safety of passengers, crew or aircraft or may have resulted in an aircraft accident
3. Was caused by damage to, or failure of any major component not resulting in substantial damage or serious injury but which requires the repair or replacement of that component.

Examples:

1. A precautionary or forced landing without subsequent substantial damage to the aircraft or third parties, nor serious injury to the crew, passengers or other persons
2. An engine failure or stoppage which does not consequently result in substantial damage or serious injury
3. A tail rotor control failure in flight which does not consequently result in substantial damage nor serious injury
4. An external part of the aircraft becoming detached in flight or causing substantial damage or serious injury to a third party
5. Instances of contaminated fuel or absence of fuel quality control
6. A forced, unscheduled, change of flight plan caused by the failed aircraft instruments, navigation aids or other technical failure
7. Loss of external load with no third party claim
8. Bird strikes, Airprox or in-flight icing.

It must be realized that an incident report is not required to apportion blame but to prevent a similar incident from recurring when the consequences may be more serious. The company, however, would take a very serious view of any failure to report any incident which subsequently came to light.

### Serious Incidents

A serious incident is described as an incident which:

1. Has jeopardized the safety of passengers, crew or aircraft and narrowly avoids being an accident (by good handling, good luck, etc.)
2. Has serious potential, technical or operational implications
3. May result in formal disciplinary action against air crew or engineers.

The decision to classify an ‘incident’ as serious will normally be made by the FLIGHT OPERATIONS OFFICER. This decision must be made as soon as possible after the event and before the crew or aircraft fly again.

The Director of Operations is to relieve the crew from flying duties until they have been interviewed and assessed fit for duty. Any such action would be principally to preserve the crew’s recollection of the incident or to ensure their fitness for duty rather than for disciplinary reasons.

If, following a serious incident, the aircraft lands away from base, a replacement of any flight status recording device or CVDR, if appropriate, is to be installed before the aircraft flies again and the records installed at the time of the incident, returned to base for action. If the crew or engineers attending the incident know or suspect that the incident may be classified as ‘serious’, they should ensure that any flight status recording device or CVDR, if fitted, is disabled after shut down to prevent any relevant data being overwritten when power is re-applied to the aircraft.

## Incident Investigation

The purpose of incident reporting is to improve the safety and reliability of aircraft and their operation and thereby to avoid accidents and serious incidents. It is not the purpose of the incident reporting scheme to apportion blame but it must be appreciated that where there is clear evidence of serious negligence or incompetence, the company has a duty to take any action that may be necessary to ensure the future safety of its aircraft and their occupants.

All incidents must be investigated if the purpose of the incident reporting scheme is to be served, the depth of the investigation required depending on the seriousness of the incident. It is important that all incident reports should include sufficient information for the incident to be fully assessed by the flight operations. Both, aircrew and engineers are to be given a full account of the incident, its causes and consequences, both, actual and potential.

The investigation of all incidents is to be carried out as a coordinated exercise between Auric Air Services Limited and the maintenance sub-contractor. In the case of serious incidents, the investigation is to be conducted formally by the Director of Operations and the Managing Director of the maintenance sub-contractor and both are to be present at all interviews, component inspections, etc and their report should be jointly produced.

## Incident Reporting Procedures

The pilot involved is to complete the Incident Report Form within three days of the occurrence. The Accountable Manger, Director of Operations and the maintenance sub-contractor should add the report of their local investigation together with comments and recommendations, stating any immediate preventive action which may have been taken. Certain incidents may be subject to insurance or warranty claiming; in this case the appropriate page of the Accident Report should also be completed. The completed Incident Report should be dispatched to the Accountable Manager within 5 days of this occurrence.

### Local Assessment

In order that Accident and Incident reports can be more easily assessed, it is extremely important that management gives careful consideration t the circumstances of the event before the report is forwarded to the General Manager. Their comments and recommendations are a very necessary part of the report and should include opinion as well as any relevant background information which may not be otherwise apparent from the text of the pilot’s or engineer’s report.

Failure to do this may result in erroneous or incomplete assessment of the incident which in turn can give rise to protracted correspondence before the file on the event can be finally be closed.

### Supporting Information

Where they may be relevant, the following documents and information should accompany Accident or Incident reports:

1. Photographs of the aircraft and area
2. Position of cockpit controls and switches
3. Sketch map of the area
4. Passenger / eye witness report
5. Post accident medial reports in respect of crew and passengers
6. Copy of the standard or multiple sector load sheet
7. Any relevant extracts from local legislation
8. Weather report
9. Passenger seat plan in the aircraft
10. Extract from radio log
11. Engine power checking data for the 30 days preceding the accident / incident
12. Post accident procedures carried out

### Accident and Incident Report Distribution

All Accident and Incident reports shall be addressed to the Director of Safety. The sections comprising the Accident Report must remain intact and not be separately posted to the respective department heads. Supporting information should be attached to the Accident/Incident report and, if possible, sent under the same cover. Upon receipt, the reports will undergo immediate internal distribution and will be summarized and shared with all pilots, engineers, and other relevant personnel on a monthly basis. These monthly Accident/Incident summaries are confidential documents and must not be copied or shown to non-company personnel. The confidentiality of these reports ensures sensitive information is protected. The closure of any accident file can only be authorized by the Director of Safety, and any disciplinary measures arising from such events must originate from or be approved by the Director of Safety.

## Mandatory Occurrence Reporting Scheme

### The Tanzania Civil Aviation Authority Mandatory Occurrence Reporting Scheme (MORS)

is related to all registered public transport aircraft having a maximum certified weight of more than 2300 kgs. The company policy is that, reports will be submitted for appropriate occurrences to all Tanzanian registered company aircraft operating for public transport, regardless of maximum certified weight. The occurrences should be reported to the Ground Handling Manager, who will forward, within 72 hours of the event (unless exceptional circumstances prevail) the MOR to the Civil Aviation Authority.

### Objectives of the Scheme

1. To ensure that the TCAA is advised of hazardous or potentially hazardous incidents and defects referred to as ‘occurrences’.
2. To ensure that knowledge of these occurrences is disseminated so that other persons and organizations may learn from them.
3. To enable an assessment to be made by those concerned of the safety implications of each occurrence, both in it and in relation to previous similar occurrences, so that they may take or initiate any necessary action.

The overall objective of the MORS is to use the reported information to improve the level of flight safety and not to attribute blame.

### Definition of a Reportable Occurrence

A reportable occurrence is:

1. Any incident not being a notifiable Accident under the current Civil Aviation (Investigation of Air Accidents) Regulations 2016.
2. Any defect in or malfunctioning of the aircraft or any part of the aircraft or of its equipment, being an incident, malfunctioning or defect endangering or which if not corrected would have endangered the aircraft, its occupants or any other person.
3. Failure or inadequacy of facilities or services on the ground, used or intended to be used for , or in connection with the operation of the aircraft.
4. Any incident arising from the loading or the carriage of passengers, cargo or fuel.

The overriding criterion to determine whether an occurrence is reportable is if it ‘endangered or, if not corrected, would have endangered the aircraft, occupants or other persons’.

### Informing Base of Occurrences

This guidance is for aircraft commanders handling technical malfunctions or other issues away from base. If a flight cannot continue normally, commanders must seek advice from managerial or engineering staff, with the \*\*Director of Operations\*\* as the first point of contact. Unless the aircraft is deemed serviceable to public transport standards, it shall not be ferried back to base until thoroughly assessed. A return without passengers is only permitted with managerial authorization and the commander’s concurrence, as the commander retains the ultimate “NO-GO” decision.

To avoid miscommunication, crew should discuss issues via radio or telephone, alerting base personnel in advance. In-flight unserviceability that can be rectified upon return must still be reported to allow engineers to prepare. Crew must inform the operating base of incidents, such as bird strikes, minor illnesses, or technical defects, before continuing the flight or as soon as possible after take-off.

### Air proximity, Bird strike and Lightning strike Reports

* 1. Because of the specialist and detailed nature of the information required for Airprox, Bird strike and Lightning strike occurrences, they are to be reported on the Specialized Report Forms CA 1094 and CA 1282 or the Lightning strike Report Form. Copies of these forms are to be held on each operation and may be obtained from the Director of Operations.
  2. The address to which the completed forms should be sent is printed on each form. In the case of bird strikes, damage photographs should be submitted if possible. A duplicate copy is to be sent to the Director of Operations attached to a company Incident Report.
  3. The submission of Airprox or Bird strike or Lightning strike reports constitutes compliance with the Mandatory Occurrence Reporting Scheme. The CAA will, by internal arrangements, ensure that the information when appropriate is incorporated into the Mandatory Occurrence Scheme.
  4. It should be noted that certain items of information following an Airprox should immediately be reported by radio to the ATS unit being worked, if this is not possible, the initial report should be made immediately after landing by telephone.
  5. The initial report should be confirmed within seven days by submitting the completed form.

### Wake Turbulence

Reports of wake turbulence encounters at any stage of flight should be sent to:

1. the appropriate ATC unit
2. the Director of Operations

## Special Notification Requirements in the Event of an Accident or Occurrence when Dangerous Goods are being Carried

### Information in the Event of Aircraft Accident or Incident

If an airplane which is carrying dangerous goods is involved in an accident, information about the dangerous goods on board must be sent to the state where the accident occurred as soon as possible.

If an airplane which is carrying dangerous goods is involved in an incident, information about the dangerous goods on board must be sent to the state where the incident occurred when they request it.

The information must be sufficient to enable any hazards created by the dangerous goods to be minimized and include the proper shipping name, UN/ID number, class/division; any identified subsidiary risks, the compatibility group for explosives and the quantity and location on board the airplane.

### Reporting of Dangerous Goods Occurrences

In the event of a dangerous goods accident or incident, a report must be sent to the authority within 72 hours, unless exceptional circumstances prevent this. Any type of dangerous goods accident or incident must be reported irrespective of whether the dangerous goods are in cargo, mail, passenger’s baggage or crew baggage.

The discovery of undeclared or mis-declared dangerous gods must also be reported. The initial report may be made by any means, but a written report must be made as son as possible. It must contain all the information known at the time it is compiled, including:

1. The date, location, flight number and flight date (when these are applicable)
2. The reference number or the air waybill, pouch, baggage tag, ticket, etc.
3. A description of the goods, including the proper shipping name and UN/ID number, class/division and any subsidiary risk.
4. The type of packaging and the packaging specification marking (when these are applicable) and quantity involved.
5. The name and address of the shipper, passenger etc.
6. The suspected cause of the accident or incident.
7. The action taken, if any.
8. Any other reporting action taken.
9. Any other relevant details.
10. The names, title, address and contact number of the person making the report.
11. Copies of the relevant documents and any photographs taken must be attached to the report.

### In – Flight Emergency

If an in-flight emergency occurs and the situation permits, the commander must inform the appropriate ATS unit of any dangerous goods on board. This information should include the proper shipping name and/or UN/ID number, class/division, identified subsidiary risk(s), compatibility group for explosives, quantity and location on board.

### Irregularities, Ground and Navigational Facilities and Hazardous Conditions

The commander shall notify the appropriate ground station (ATC) as soon as practicable whenever a potentially hazardous condition is encountered during flight, for example:

1. an irregularity in a ground or navigational facility
2. a meteorological phenomenon
3. a volcanic ash cloud
4. a high radiation level

## Operational, Medical or Security In flight Emergencies

### Operational in-flight Emergency

In the event of an in-flight emergency crew members must refer to the appropriate

procedures as laid out in the OM-B, CCM, POH or AFM

### In-flight Medical Emergency

**C208B /PC12 operations**

* + 1. Stabilize the aircraft by engaging auto-pilot if not connected.
    2. Assess and establish the person's medical condition
    3. Request medical assistance from other passengers with medical training
    4. Administer basic first aid using onboard medical kits if necessary.
    5. Advise Air Traffic Services of an inflight emergency (request to communicate with ground medical experts if available)
    6. Keep passengers informed, and consider diverting to the nearest suitable airport if required
    7. Continuously monitor the person's condition, coordinate with emergency services upon landing.
    8. Document the incident via a safety report

For DH8 specific operations refer to appropriate CCM manual sections

### In flight Security Emergency

**C208B /PC12 Operations**

1. Squawk 7500
2. Lock the cockpit door (if so equipped)
3. Alert ATC about the security emergency (if able)
4. Maintain aircraft control by engaging the auto pilot.
5. Do not argue or attempt to physically subdue the offender(s) unless the aircraft or its occupants are in imminent danger.
6. Communicate discreetly with passengers, keeping them calm and informed while avoiding divulging sensitive information.
7. If the offender(s) has no demands regarding final destination, consider diverting to the nearest suitable aerodrome if the flight cannot be continued safely
8. Coordinate with ground authorities upon landing to ensure a safe resolution of the security emergency
9. Document the incident via a safety report

For DH8 specific operations refer to appropriate CCM manual sections

### Accident/Occurrence Confidentiality

Staff is not to discuss the circumstances concerning any accident/occurrence with anyone outside the company other than authorized investigators.

# INSTRUMENTS AND EQUIPMENT

## Introduction

The Auric Air Instruments and Equipment Chapter outlines the minimum requirements for instruments and equipment necessary for the safe and efficient operation of Auric Air's aircraft. This chapter ensures compliance with the Civil Aviation (Instruments and Equipment) Regulations, 2024, and provides guidance for equipping aircraft with essential instruments and equipment for various types of operations conducted by the airline. All operational aircraft must adhere to these requirements to maintain safety, reliability, and regulatory compliance.

## Required Equipment

Auric Air shall ensure that all aircraft are equipped with the required emergency and operational equipment as specified by applicable regulations. In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, all instruments, equipment, and flight documents mandated by these regulations shall be installed or carried as appropriate. The equipment and instruments shall align with the aircraft's intended use and the circumstances under which the flight is conducted.

## Operational Equipment Requirements

Auric Air shall ensure that a flight does not commence unless the required equipment:

1. is in operable condition for the specific operation being conducted, except as provided in the minimum equipment list;
2. is installed to ensure that the failure of any single unit required for communication or navigation purposes does not compromise the ability to communicate or navigate safely on the planned route; and
3. meets the minimum performance standards and complies with the operational and airworthiness requirements specified in the Civil Aviation (Airworthiness of Aircraft) Regulations.

## Flight Crew Equipment Installation

Where equipment is required for use by a flight crew member at their station during flight, Auric Air shall ensure that the equipment is installed in a manner that allows it to be readily operable from that station.

## Shared Flight Crew Equipment

Where a single item of equipment is required to be operated by multiple flight crew members, Auric Air shall ensure that the equipment is installed in a manner that allows it to be readily operable from any station where its operation is necessary.

## Required Documentation on Board

An aircraft registered in the United Republic shall carry a certified true copy of the Air Operator Certificate as specified in the Civil Aviation (Air Operator Certification and Administration) Regulations, along with a copy of the operations specifications relevant to the aircraft, issued in conjunction with the certificate.

## Minimum Equipment List (MEL)

Auric Air shall include in the operations manual Minimum Equipment List (MEL) approved by the Authority. The MEL shall enable the pilot-in-command to determine whether a flight may commence or continue from any intermediate stop if any instrument, equipment, or system becomes inoperative.

Operating Manual

Auric Air shall provide operations staff and flight crew with an aircraft operating manual for each aircraft type operated. This manual shall contain normal, abnormal, and emergency procedures related to the operation of the aircraft. Additionally, it shall include details of the aircraft systems and associated checklists, designed in accordance with human factors principles to ensure clarity and usability.

## First Aid Kit Requirements for Auric Air Aircraft

Auric Air shall ensure that its aircraft are equipped with adequate and accessible medical supplies, including:

1. **First-Aid Kits**: One or more first-aid kits shall be available for cabin crew to manage incidents of ill health.
2. **Universal Precaution Kits**:
   * For aircraft required to carry cabin crew, at least one universal precaution kit.

## Portable Fire Extinguishers

Auric Air shall ensure that all aircraft are equipped with portable fire extinguishers that, when discharged, do not cause dangerous contamination of the air within the aircraft. Each aircraft must have at least one fire extinguisher located in the pilot’s compartment and in every passenger compartment that is separate from the pilot’s compartment and not readily accessible to the flight crew. These provisions are essential for ensuring effective management of potential fire hazards during flight operations.

## Seat, Berth, and Safety Equipment

Auric Air aircraft shall be equipped with a seat or berth fitted with a safety belt for every person on board over the age of two years, a seat belt for each seat, and restraining belts for each berth. Additionally, each flight crew seat shall be equipped with a safety harness. For pilot seats, the safety harness must include a mechanism that automatically restrains the occupant’s torso during rapid deceleration and prevents an incapacitated pilot from interfering with the flight controls.

## Passenger Information and Instructions

Auric Air aircraft shall be equipped with passenger briefing cards, illuminated signs and public address systems, ensure passengers receive necessary information and instructions, including: when to fasten seat belts; when and how to use oxygen equipment if required; restrictions on smoking; the location and use of life jackets or individual flotation devices where applicable; and the location and operation of emergency exits.

### Passenger Briefing Cards and Exit Seat Information

Auric Air shall ensure that all passenger-carrying aircraft are equipped with printed briefing cards placed in convenient locations for each passenger. These cards shall supplement the oral safety briefing and include:

1. Diagrams and methods for operating emergency exits.
2. Instructions for the use of emergency equipment.
3. Information about restrictions and requirements for sitting in exit seat rows.

The briefing cards must contain information relevant only to the specific type and variant of the aircraft being operated on the flight.

Auric Air shall also provide passenger information cards at each exit seat in both English and Kiswahili, including:

1. **Emergency Functions for Passengers:**
   1. Locating and operating emergency exits.
   2. Recognizing and understanding the emergency exit opening mechanism.
   3. Safely assessing the opening of the emergency exit to avoid additional hazards.
   4. Operating and stabilizing escape slides to assist others.
   5. Exiting expeditiously through the emergency exit and selecting a safe path away from the aircraft.
2. **Passenger Reseating Requirements:**  
   Passengers must identify themselves for reseating if they:
   1. Are unable or unwilling to perform the emergency functions listed.
   2. Have conditions that prevent safe and effective execution of these functions.
   3. May incur bodily harm from performing such functions.
   4. Cannot understand the provided instructions in the designated language or format.

Auric Air crew members shall monitor passengers in exit seat rows and ensure that individuals who do not meet these requirements are reseated appropriately.

## Lavatory Fire Extinguisher minimum performance standards

Auric Air aircraft shall ensure that built-in fire extinguishers for lavatory disposal receptacles and portable fire extinguishers comply with the following requirements: extinguishing agents must meet the applicable minimum performance standards of the State of Registry and must not be of a type that depletes the ozone layer. These requirements apply to aircraft with certificates of airworthiness issued after 31 December 2011 for built-in extinguishers and after 31 December 2018 for portable extinguishers.

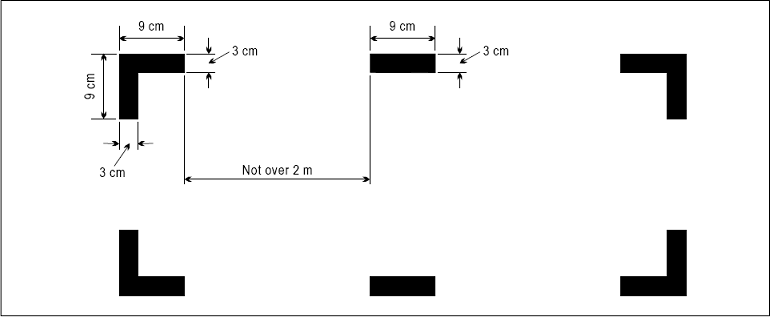
## Operating and Flight Documentation

Auric Air shall ensure that the following documents are carried onboard each aircraft to facilitate safe and efficient operations:

1. **Operations Manual**: The operator shall provide operations staff and flight crew with an aircraft operating manual for each aircraft type operated. This manual shall contain:
   1. Normal, abnormal, and emergency procedures related to the operation of the aircraft.
   2. Details of the aircraft systems and checklists to be used.
   3. A design that observes human factors principles.
2. **Aircraft Flight Manual**: The aircraft flight manual or equivalent documents containing performance data required for compliance with aircraft performance operating limitations and other necessary operational information. If such data is included in the operations manual, a separate flight manual may not be required.
3. **Charts and Route Information**: Current and appropriate charts covering the intended flight route and any potential diversion routes.

## Marking of Break-In Points

Auric Air shall ensure that all aircraft are equipped with clearly marked break-in areas on the exterior surface of the fuselage to facilitate emergency rescue operations. These areas must meet the following requirements:

1. Break-in areas shall be rectangular, marked with right-angled corner markings, each measuring 9 cm in length and 3 cm in width.
2. If the corner markings are more than 2 meters apart, intermediate lines of the same dimensions shall be inserted to maintain a maximum spacing of 2 meters.
3. The words **“CUT HERE IN EMERGENCY”** and **“KATA HAPA WAKATI WA DHARURA”** shall be prominently displayed across the center of each break-in area in capital letters.
4. Markings must be painted or affixed permanently, using red or yellow. If these colors do not contrast adequately with the background, they shall be outlined to ensure visibility.
5. All markings shall be kept clean and unobscured at all times to maintain visibility and effectiveness.

## General Guidelines for Flight Recorders and Cockpit Voice Recorders

### Flight Recorders Auric Air shall ensure the following standards for flight recorders:

1. Flight recorders must be constructed, located, and installed to maximize protection of recorded data, ensuring its preservation, recovery, and transcription.
2. They must meet prescribed crashworthiness and fire protection specifications.
3. Recorders shall remain operational during all flight time and must be deactivated after flight time following an accident or incident to preserve data.
4. Recorders shall not be reactivated until their disposition is determined in compliance with the Civil Aviation (Aircraft Accident and Incident Investigation) Regulations.
5. Operational checks and evaluations of flight recorder systems shall be conducted annually as per the Third Schedule to ensure continued serviceability.
6. Operators must provide flight data recorder (FDR) and airborne data recorder system (ADRS) documentation in electronic format to accident investigation authorities, adhering to industry specifications.

#### Flight Data Recorder Retention

Auric Air shall retain the most recent flight data recorder calibration, including its recording medium, and the correlation data for one representative aircraft of any group of similar aircraft, provided the flight recorder model, installation, and associated instrument design remain consistent.

### Cockpit Voice Recorders (CVR) Auric Air shall ensure the following measures for cockpit voice recorders:

* Flight crew members must monitor the built-in test features of the cockpit voice recorder before the first flight of the day.
* Annual inspections of the cockpit voice recorder must include:
  + Verification of proper operation for the nominal recording duration.
  + Replay and examination of recorded signals to confirm intelligibility and operational standards.
  + Testing of text signals from aircraft and external sources to ensure all required signals meet intelligibility standards while the recorder is installed in the aircraft.
  + Examination of in-flight recordings for acceptable signal intelligibility.
  + Operational checks and evaluations to maintain the recorders' continued serviceability.
* A report on the annual inspections shall be submitted to the Authority.

## Equipment Requirements for Aircraft Operated as Visual Flight Rule (VFR) Flights

Aircraft operated as VFR flights shall be equipped with:

1. A magnetic compass.
2. An accurate timepiece indicating hours, minutes, and seconds.
3. A sensitive pressure altimeter.
4. An airspeed indicator.
5. Additional instruments or equipment as may be prescribed by the Authority.

For VFR flights operated as controlled flights, the aircraft must comply with the equipment requirements specified for instrument flight rules (IFR).

## Aircraft Operated at Night

Aircraft operated at night must be equipped with the following:

* All instruments and equipment required under **Regulation 35**.
* Lights specified in the **Civil Aviation (Rules of the Air) Regulations** for aircraft in flight or operating on an aerodrome's movement area.
* Two landing lights.
* Illumination for all instruments and equipment essential for the safe operation of the aircraft and used by the flight crew.
* Lighting in all passenger compartments.
* An independent portable light at each crew member station.

## Aircraft Operated in Accordance with Instrument Flight Rules

Aircraft operating under instrument flight rules (IFR) or in situations where maintaining a desired attitude requires reference to flight instruments must be equipped with the following:

1. A magnetic compass.
2. An accurate timepiece indicating time in hours, minutes, and seconds.
3. Two sensitive pressure altimeters with counter drum-pointer or equivalent presentation.
4. An airspeed indicating system with malfunction prevention for condensation or icing.
5. A turn and slip indicator.
6. An attitude indicator or artificial horizon.
7. A heading indicator or directional gyroscope.
8. A means to indicate whether the power supply to gyroscopic instruments is adequate.
9. A means to display the outside air temperature in the flight crew compartment.
10. A rate-of-climb and descent indicator.
11. Any additional instruments or equipment as required by the Authority.

The requirements for the turn and slip indicator, attitude indicator, and heading indicator may be satisfied through combinations of instruments or integrated flight director systems, provided safeguards against total failure equivalent to those offered by three separate instruments are maintained.

## Equipment Requirements for Aircraft Operated by a Single Pilot under IFR or at Night

Aircraft operated by a single pilot under instrument flight rules (IFR) or at night shall be equipped with the following:

1. A serviceable autopilot with at least altitude hold and heading select modes.
2. A headset with a boom microphone or equivalent.
3. A means of displaying charts that ensures readability in all ambient light conditions.

These provisions are subject to approval in accordance with regulations governing the operation of aircraft in commercial air transport.

## Instrument Meteorological Conditions (IMC) Equipment Requirements

Aircraft operating in conditions where landing in instrument meteorological conditions (IMC) is intended must be equipped with radio equipment capable of receiving signals that provide guidance to a point where a visual landing can be conducted. This equipment must ensure guidance is available for all planned landing aerodromes as well as any designated alternate aerodromes.

## Equipment Requirements for Aircraft on Flights Over Water

Landplanes must carry the following equipment under specific conditions:

1. When flying over water at a distance greater than 93 km (50 NM) from the shore for landplanes operating under regulations governing commercial air transport.
2. When flying en route over water beyond gliding distance from the shore for all other landplanes.
3. When taking off or landing at an aerodrome where the take-off or approach path, as determined by the Authority, involves a likelihood of ditching in the event of a mishap.

The required equipment includes one life jacket or equivalent individual flotation device for each person on board, stowed in a position easily accessible from the seat or berth of the person. Life jackets accessible from seats or berths located in crew rest compartments are required only if the seats or berths are certified for occupancy during take-off and landing.

## Equipment Requirements for Flights Over Designated Land Areas

Aircraft operating across land areas designated by the State as challenging for search and rescue operations must be equipped with appropriate signaling devices and life-saving equipment, including provisions to sustain life, suitable for the area being overflown.

## Oxygen Equipment Requirements for High-Altitude Flights

Aircraft operating at high altitudes with atmospheric pressures below 10,000 feet in personnel compartments must be equipped with oxygen storage and dispensing apparatus sufficient to meet the requirements specified for commercial air transport operations. For aircraft maintaining pressures above 10,000 feet, similar oxygen storage and dispensing apparatus is required.

Pressurized aircraft operating at altitudes below 25,000 feet must have a device to provide a positive warning to the flight crew in the event of a dangerous loss of pressurization. For aircraft operating above 25,000 feet, or those unable to descend safely within 4 minutes to 13,000 feet, automatically deployable oxygen equipment must be provided to meet regulatory requirements. Additionally, the total number of oxygen dispensing units must exceed the combined number of passenger and cabin crew seats by at least 10%.

## Aircraft in Icing Conditions

Aircraft operating in conditions where icing is reported or expected must be equipped with suitable de-icing or anti-icing devices to ensure safe operations.

## Pressurised Aircraft – Weather Radar Requirement

Pressurised aircraft carrying passengers must be equipped with operational weather radar when operating in areas where thunderstorms or other hazardous weather conditions, detectable by airborne weather radar, are expected along the route, either at night or under instrument meteorological conditions.

## Aircraft Equipped with Ground Proximity Warning Systems (GPWS)

Turbine-engined aircraft with a maximum certificated take-off mass exceeding 5700 kg or authorised to carry more than nine passengers must be equipped with a ground proximity warning system (GPWS) featuring a forward-looking terrain avoidance function. Operators are required to establish and implement database management procedures to ensure the timely distribution and update of terrain and obstacle data for the GPWS.

Additionally, turbine-engined aircraft with a maximum certificated take-off mass of 5700 kg or less, authorised to carry more than five but not more than nine passengers, must be equipped with a GPWS that provides warnings for excessive descent rates, altitude loss after take-off or go-around, unsafe terrain clearance, and includes a forward-looking terrain avoidance function.

## Aircraft Carrying Passengers - Cabin Crew Seats

Aircraft carrying passengers must be equipped with forward- or rearward-facing seats, within 15 degrees of the longitudinal axis of the aircraft, fitted with safety harnesses for each cabin crew member required for emergency evacuation procedures. These seats must be positioned near floor level and other emergency exits as specified by the State of Registry to facilitate efficient emergency evacuation.

## Microphones for Flight Crew Communication

Flight crew members on flight deck duty are required to communicate using boom or throat microphones when operating below the transition level or altitude.

## Communication Equipment Requirements

Aircraft shall be equipped with radio communication equipment that meets the following capabilities:

1. Two-Way Communication: Conduct two-way communication for aerodrome control purposes.
2. Meteorological Information: Receive meteorological information at any time during flight.
3. Continuous Communication: Conduct two-way communication at any time during flight with at least one aeronautical station and other aeronautical stations on frequencies prescribed by the Tanzania Communication Regulatory Authority.
4. Emergency Frequency: Provide for communications on the aeronautical emergency frequency 121.5 MHz.

Compliance with these requirements is achieved when communication capabilities are maintained under normal radio propagation conditions along the route.

## Navigation Equipment Requirements

Aircraft must be equipped with navigation equipment that enables compliance with:

1. Operational Flight Plan: Proceeding in accordance with the flight plan.
2. Air Traffic Services Requirements: Meeting the requirements set by air traffic services unless visual navigation by landmarks is permitted under VFR by the appropriate authority.

The navigation equipment must also provide redundancy, ensuring that in the event of a failure of one item during any stage of the flight, the remaining equipment can still facilitate safe and accurate navigation.

## Electronic Navigation Data Management

Operators shall only use electronic navigation data products processed for air and ground applications if the Authority has approved their procedures. These procedures must ensure that the processing methods and delivered products meet acceptable integrity standards and are compatible with the intended functions of existing equipment. Additionally, operators must implement procedures for the timely distribution and insertion of current and unaltered electronic navigation data across all applicable aircraft.

# 

# APPENDICES

## APPENDIX 1 Nominated Post Holders

* 1. Accountable Manager Sajid Hussein
  2. Quality Manager: Archibald Homwe
  3. Chief Pilot: Abdulnur Mtungi
  4. Director of Safety: Archibald Homwe
  5. Director of Maintenance: Barnabas Basikoro
  6. Director of Operations: Navid Anaraki
  7. Subcontracted AMO Head: Shiraz Yakub

Auric Air shall notify the Authority within ten days of any change in personnel or any vacancy in any of the positions listed above.

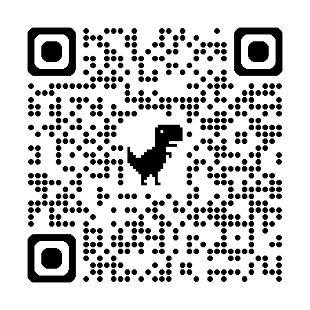
## APPENDIX 2: Master List of all Operational Documentation

The operations library includes the following approved manuals, as required under the TCARs:

1. **General Operations Manual – Part A**
   * Policies followed by Auric Air Services LTD for overall safe operations.
2. **Operations Manual – Part B**
   * Standard Operating Procedures (SOPs) for aircraft operations.
3. **Operations Manual – Part C**
   * Route and aerodrome procedures incorporated under Part A, Section 9.1.
4. **Operations Manual – Part D**
   * Training policies for all operational staff.
5. **Quality Manual**
   * Policies ensuring compliance with operational quality standards.
6. **Safety Management System Manual**
   * Safety procedures for managing safety throughout operations.
7. **Emergency Response Plan Manual**
   * Procedures to be followed in emergencies.
8. **Security Manual**
   * Procedures ensuring the security of operations.
9. **Ground Handling Manual**
   * Incorporated under Part A, Section 9.2.
10. **Maintenance Control Manual**
    * Procedures ensuring continued airworthiness of company aircraft.
11. **Cabin Crew Member Manual**
    * Guidelines for cabin crew duties.
12. **Approved Maintenance Programs:**
    * C208B, DHC8-103, DHC8-202, and PC12 programs approved by the Authority.
13. **Minimum Equipment Lists (MELs):**
    * Authority-approved MELs for the C208B, DHC8-100, DHC8-200, and PC12.

## APPENDIX 3: NAVIGATION LOG

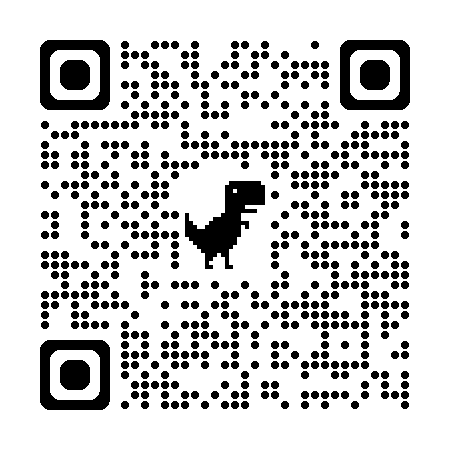
Electronic Copy Stored Separately



**Scan here to access a copy**

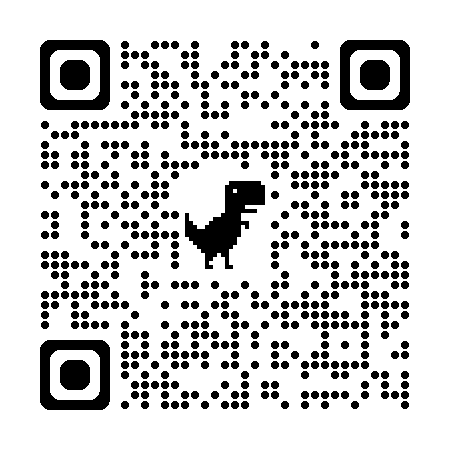
## APPENDIX 4: TECHNICAL LOG

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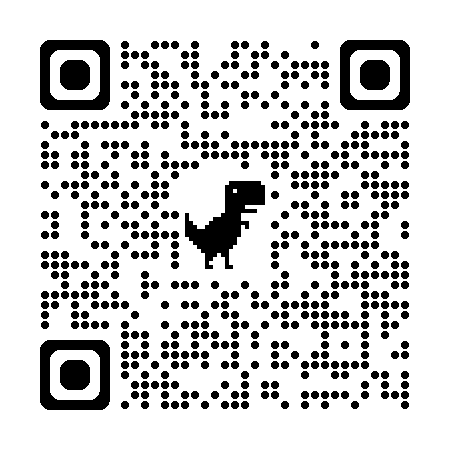
## APPENDIX 5: Weight and Balance Documentation

Electronic Copy Stored Seperately



## APPENDIX 6 : CHARTER AND SCHEDULE MANIFEST

Electronic Copy Stored separately.



## APPENDIX 7: AURIC AIR TOLD CARD (AASL/TOLD 1.0)



## APPENDIX 8: Unaccompanied Minor Form

|  |  |  |  |
| --- | --- | --- | --- |
| **Information about travelling child** | | | |
| Full name of Child: | Age/DOB | Gender (Boy/Girl) | Languages spoken by Child: |
|  |  |
| Permanent address of Child |  | | Any special information if applicable: |
| Home Telephone no of Child |  | |
| **Person seeing-off the child on Departure** | | | |
| Full Name: | | Telephone No: | |
| Physical Address: | | | |
| Relationship to child: | Identification/NIDA/Passport No: | | Signature: |
|  |
| **Person meeting the child on Arrival** | | | |  |
| Full name: | | Telephone no: | |  |
| Physical address: | | | |  |
| Relationship to child: | Country of residence: | | Signature: |  |
|  |

**LEGAL DISCLAIMER FROM GUARDIAN/PARENT GIVING CONSENT FOR CHILD TO TRAVEL**

I am the Parent/Guardian of the minor (child) traveler identified above. I certify that the information I am providing is accurate. I am informed that Auric Air Services Ltd does not provide flight connection services to other airlines and the child can only be accompanied to Auric Air destinations. I confirm that I have arranged for the child to be met upon arrival by the Guardian identified above. Should the child not be met as provided herein, I authorize Auric Air Services Ltd to take whatever actions its employees and agents consider appropriate to ensure the child safe custody, up to and including returning the child to the airport of departure. I also agree to indemnify and hold harmless Auric Air Services Ltd from and against all claims resulting from taking such action and to reimburse Auric Air Services Ltd for any reasonable costs incurred therefrom. I confirm that the child has all necessary travel documents. I acknowledge that Auric Air Services Ltd crew members do not administer any medication. I have instructed the child to comply with all crew member instructions and I hereby confirm that the child understands.

I have read and understood the rules for Unaccompanied Minors traveling on Auric Air Services Ltd aircraft.

**Parent/Guardian name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_\_\_\_\_\_\_\_\_Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_**

Fill out and print three (3) copies and bring all the copies to the airport with you.

**FOR AIRLINE USE ONLY**

Details of staff/flight crew taking custody of child at check-in:

|  |  |  |  |
| --- | --- | --- | --- |
| STATION/BASE: | FLIGHT NO: | FROM: | TO: |

Staff name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_\_\_\_\_\_\_\_\_\_\_\_­­­Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_