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Washington, DC 20330-5000

Air Force Job Qualification Standard
13HX Aerospace Physiologist
18 January 2023

AIR FORCE JOB QUALIFICATION STANDARD (AFJQS)

AEROSPACE PHYSIOLOGIST (13HX)



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AIR FORCE JOB QUALIFICATION STANDARD

AEROSPACE PHYSIOLOGIST

13H

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PART I

SECTION A – GENERAL INFORMATION

1. **Purpose.** This Air Force Job Qualification Standard (AFJQS) identifies tasks and duty requirements for an upgrading 13H1 officer. It provides specific training requirements and standards necessary to successfully perform as a fully qualified, 13H3, Aerospace Physiology (AP) Officer. This AFJQS shall be used to clarify the 43A CFETP, dated 1 August 2018, until the new 13H CFETP is published. It is critical to note that Aerospace Physiology recently (2021) underwent an Air Force Specialty Code (AFSC) transition from a Medical AFSC to a Line of the Air Force AFSC. This AFJQS must be utilized by the Flight Commanders of all 13H1 AP Officers as a roadmap for training.

SECTION B – TRAINING REQUIREMENTS

2. 13H1s must meet, at a minimum, the following prescribed training requirements within this AFJQS to be considered fully mission qualified for upgrade to 13H3. This applies to any 13H1 currently in upgrade. The following must be completed within 22 months (Sections 2.1 – 2.3, & Attachment 1). Unit Squadron Commanders in consultation with AP MAJCOM Program Managers (PMs) will submit a waiver request to the 13H Career Field Manager (CFM) if circumstances prevent an officer from completing upgrade requirements within the 22 month timeframe.
 - 2.1 **Initial Qualification Course:** AP Officer 101 Course (L3OBP13HX 00AB, 344th Training Squadron, Det 2, Wright Patterson AFB, Ohio)
 - 2.2 **Required Training.** The following training is required for upgrade to 13H3. Note: items with an * may be accomplished prior to the AP Officer 101 course when able.
 - 2.2.1 *SERE Course S-V97-A – Advanced SERE Skills Training
 - 2.2.2 *SERE Course S-V85-A - Emergency Parachute & Water Survival Training
 - 2.2.3 *Aircraft Mishap Investigation Course (AMIC) (WCIP05A)
 - 2.2.4 *Aviation Safety Program Management (ASPM) (WCIP09B)
 - 2.2.5 Night Vision Goggle Advanced Instructor Course (NVGAIC) - Randolph AFB
 - 2.2.6 *Crew Resource Management (CRM) Facilitator Training – attend any in-person USAF recognized CRM facilitator course (e.g., Crew Training International, or Pensacola/Little Rock CRM course)
 - 2.2.7 *Basic Instructor Course (E3AIRTXXXX OB3A – Keesler AFB or suitable alternate)
 - 2.2.8 *SAFTE-FAST (Sleep Activity Fatigue Task Effectiveness – Fatigue Avoidance Scheduling Tool) – Training Link (complete all 6 videos): [Training Academy | SAFTE-FAST \(saftefast.com\)](#)
 - 2.2.9 **Additional Information.** Flight Commanders of upgrading AP officers are expected to contact their Unit Training Manager (UTM) to obtain quotas for the above courses, where applicable. MAJCOM PMs will project training requirements and coordinate with appropriate offices to secure quotas. Except for items 2.2.6, and 2.2.8, the descriptions, administrative instructions/requirements, and/or security and equipment requirements for the above courses may be found on the AF Education and Training Course Announcement (ETCA) website: <https://usaf.dps.mil/teams/app10-etca/SitePages/home.aspx>.

- 2.3 **Instructor Upgrade Requirements.** Attachment 3, Table 3.1 outlines the AFMAN 11-403, *Aerospace Physiological Training Program*, required courses that must be signed off to obtain 13H3 upgrade. Sign-off must be done by the Flight Commander of the upgrading officer. All courses must be signed off within 22 months. All course material, instructor guides, and student guides can be found at the AETC bookstore: [:: AETC Flying Training Special Publications - Home :: \(af.mil\)](http://www.aetcmil.af.mil/AETC_Flying_Training_Special_Publications_Home).
- 2.4 **Additional Instructor Courses (Based on Location).** While not required for upgrade to 13H3, qualification on the Tracks outlined in Attachment 3, Table 3.2 are highly encouraged prior to PCS. The tracks covered are J (Jumper), H (Helicopters), E (Executive), and R (RPA). All courses must be signed off prior to instructing Aircrew who fall within the specific track. All course material, instructor guides, and student guides can be found at the AETC bookstore: [:: AETC Flying Training Special Publications - Home :: \(af.mil\)](http://www.aetcmil.af.mil/AETC_Flying_Training_Special_Publications_Home).

SECTION C – TRAINING STANDARDS

3. **Task Qualification.** Attachments 1 and 2 specify course/training content and the standard of proficiency (where applicable) which each officer is expected to complete. The Flight Commander must complete the following columns in Attachments 1 and 2: *Training Start Date, Training Complete Date, and Trainer's Initials*.

SECTION D – TRAINING DOCUMENTATION

4. **Documentation.** Flight Commanders are required to notify their respective Squadron Commander in addition to their MAJCOM AP Program Manager when officers in their Flights have completed UGT requirements. An example memo to the MAJCOM AP PM signed by the Squadron Commander stating all upgrade requirements have been met can be found on Attachment 4. Following receipt of the memorandum and approval, the AP MAJCOM PMs will request that the Squadron Commander initiate the process for the officer's AFSC status to be upgraded to 13H3. This process requires the submission of an AF Form 2096 *Classification & On-the-Job Training Action*, through the chain of command at the officer's primary duty location. Questions regarding AFSC change procedures and local AF Form 2096 coordination should be directed to the local Unit Training Manager (UTM) and/or the Military Personnel Section. AFMAN 36-2100 is the source guidance for AF Form 2096 administration. AP MAJCOM PMs will notify the 13H CFM whenever an officer in their MAJCOM has been approved for upgrade.

SECTION E - DUTY BADGES

5. **Operational Support Badge.** 13H officers wear the Operations Support Badge (OSB) in accordance with DAFI 36-2903. The wear of this badge is optional.

- 5.1 Basic Badge. The basic badge is awarded upon successful completion of technical school.
- 5.2 Senior Badge. The senior badge adds a star to the top of the badge. Wear the senior badge after 7 years in the career field.
- 5.3 Master Badge. The master badge indicates the final step in the occupational series. Wear the master badge after 15 years in the career field.
- 5.4 Prior Enlisted Officers. When serving as an officer in the same career field as when enlisted, count both time in the enlisted and officer career fields to determine the earned badge level.

6. **Non-Rated Officer Aircrew Badge.** AP officers will be assigned to duty positions with an AFSC prefix of "X" (basic aircrew). Wear in accordance with AFMAN 11-402, *Aviation and Parachutist Service*, which states that non-rated officers may wear the basic officer aircrew member badge upon completion of aircrew qualification. In addition, per DAFI 36-2903, wear of an aeronautical badge is mandatory. Coordinate with your local Flight Commander and/or Host Aviation Resource Management office to accomplish any necessary requirements.

THOMAS V. MASSA, Colonel, USAF
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Attachment 1: Required 13H1 Training Standards
Attachment 2: Assignment Specific 13HX Training
Attachment 3: Instructor Teaching Upgrades
Attachment 4: Training Documentation Example

PART II

Table 1. Proficiency Code Key.

Proficiency Code Key		
	Scale Value	Definition: The individual
Task Performance Levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (Extremely Limited)
	2	Can do most parts of the task. Needs only help on hardest parts. (Partially Proficient)
	3	Can do all parts of the task. Needs only a spot check of completed work. (Competent)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (Highly Proficient)
Task Knowledge Levels	a	Can name parts, tools, and simple facts about the task. (Nomenclature)
	b	Can determine step-by-step procedures for doing the task. (Procedures)
	c	Can identify why and when the task must be done and why each step is needed. (Operating Principles)
	d	Can predict, isolate, and resolve problems about the task. (Advanced Theory)
Subject Knowledge Levels	A	Can identify basic facts and terms about the subject. (Facts)
	B	Can identify relationship of basic facts and state general principles about the subject. (Principles)
	C	Can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D	Can evaluate conditions and make proper decisions about the subject. (Evaluation)
Explanations 1. A task knowledge level value may be used alone or with a task performance level value to define a level of knowledge for a specific task. (Example: b and 1b) 2. A subject knowledge level value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks. 3. ‘-’ This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or activity.		

Attachment 1

REQUIRED 13H1 TRAINING STANDARDS

Tasks, Knowledge, Activities,and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT <i>(If learning activity is coded '4', then enter training start/complete dates, and initials below)</i>			
		TrainingStart	Training Complete	Trainee Initials	Trainer Initials
1. Applicable AFI / Policy Review^{4,6}: Within each publication, focus on areas that highlight awareness, duties, and areas of concern AP personnel must be familiar with to optimize their performance.					
1.1. Read AFPAM 11-406 ^{4,6}	C				
1.2. Read AFMAN 11-403 ^{4,6}	C				
1.2. Read DAFMAN 11-401 ^{4,6}	A				
1.3. Read local APTU Operating Instructions ^{4,6}	B				
1.4. Read AFMAN 11-202v3 ^{4,6}	B				
1.5. Read AFMAN 11-290 ^{4,6} , DAFPD 10-9 ^{4,6}	A				
1.6. Read assigned MDS AFMAN 11-202 (volumes 1 and 3) ^{4,6}	B				
1.7. Read AFMAN 11-404 ^{4,6}	B				
1.8. Read AFPAM 11-419 ^{4,6}	B				
1.9. Read AFMAN 11-409 ^{4,6}	A				
1.10. Read AFMAN 11-210 ^{4,6}	A				
1.11. Read AFI 65-503 ^{4,6} & AFI 16-1301 ^{4,6}	A				
1.12. Read AFPAM 11-417 ^{4,6}	B				
1.13. Read DAFI 91-204 ^{4,6} , AFI 91-202 ^{4,6} , and AFI 90-802 ^{4,6}	A				
1.14. Read AFI 11-301v1 ^{4,6} & AFMAN 11-301, vols 2-4 ^{4,6}	B				
1.15. Read AFI 48-101 ^{4,6}	B				

¹The mark '-' indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ²'Y' stands for "Yes", indicating the presence of an AF Qualification Training Package (QTP). ³In-residence education and training (formal course). ⁴On-the-job training (conducted and/or managed by AP Flight Commander or designee) ⁵Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions. ⁶May be completed at any time prior to APO 101

Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (If learning activity is coded '4', then enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
2. AP Mission Orientation Events⁴ – Training Reference: Flight Commander guidance					
2.1. Attend & Understand Purpose of Flying Squadron Safety Meeting ^{4,6}	-				
2.2. Attend and Understand Purpose of Wing Safety Meeting ^{4,6}	-				
2.3. Attend and Understand Purpose of Local Instrument Refresher Course (IRC) ^{4,6}	-				
2.4. Schedule & Conduct 1v1 Mentoring Session with any Senior AP Leader (O5 and above) ⁴	-				
2.5. Gain access to AFSAS ^{4,6}	-				
2.6. Gain access to AETC Bookstore ^{4,6}	-				
2.7. Gain access to AP Sharepoint ^{4,6}	-				
¹ The mark '-' indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² 'Y' stands for "Yes", indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee) ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions. ⁶ May be completed at any time prior to APO 101 if able					

Tasks, Knowledge, Activities, and Technical References	Certification for OJT (If learning activity is coded '4', then enter training start/complete dates, and initials below)			
	Training Start	Training Complete	Trainee Initials	Trainer Initials
3. APO Written Assignments. Training Reference: (Air Force myLearning Link) (This link refers to papers to be written by each upgrading 13H1 Officer. The following items must be completed. (The officer must follow guidance from this website, unless specified below; No more than 3 pages/6 hours should be allocated for each item)				
3.1. Fatigue Countermeasures in Aviation ^{4,5} ("CFETP Item 11.1")				
3.2. Human Factor Trend Analysis ^{4,5} ("CFETP Item 11.2")				
3.3. Human Performance Improvement ^{4,5} ("CFETP Item 11.3")				
3.4. Concepts in Aviation Psychology & Aeronautical Engineering ^{4,5} ("CFETP Item 11.4")				
3.5. Application of HSI ^{4,5} ("CFETP Item 11.5")				
3.6. HUD AGSM Review and GLOC Assessment ^{4,5} ("CFETP Item 11.6")				
3.7. ADRAC (Altitude Decompression Sickness Risk Assessment Computer) Usage ^{4,5} ("CFETP Item 11.7")				
¹ The mark '-' indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² 'Y' stands for "Yes", indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee). ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions. ⁶ May be completed at any time prior to APO 101 if able				

Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (If learning activity is coded '4', then enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
4. Reduced Oxygen Breathing Device (ROBD) and Hypoxia Familiarization Trainer (HFT)⁴ References: AFPAM 11-406, Chapter 22 & 23, Dec 2020; AFMAN 11-403 Chapter 8, Aug 2020; Qualification Training Package (QTP) 43AX-1 (Reduced Oxygen Breathing Device & Hypoxia Familiarization Trainer), Aug 2016; ROBD Ops Checklist, Apr 2013, ROBD2 Ops Checklist 26 Apr 2013.docx (dps.mil) ; Air Force myLearning Link					
4.1. ROBD & HFT Purpose ^{4,5}	B				
4.2. ROBD Background ^{4,5}	B				
4.3. ROBD Components ^{4,5}	B				
4.4. Theory of Operation ^{4,5}	B				
4.5. Configure and Startup ROBD ^{4,5}	3c				
4.6. Configure HFT & X-Plane Software ^{4,5}	3c				
4.7. Program ROBD Training Profile ^{4,5}	3c				
4.8. Manage ROBD Reactions and EPs ^{4,5}	3c				
4.9. Shutdown ROBD ^{4,5}	3c				
4.10. Store ROBD ^{4,5}	B				
4.11. Conduct ROBD Training Session ^{4,5}	3c				
¹ The mark '-' indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² 'Y' stands for "Yes", indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee) – may be completed at any time prior to APO 101 if able. ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions. ⁶ May be completed at any time prior to APO 101 if able					

Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (If learning activity is coded '4', then enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
5. AFPAM 11-406 Emphasis Items⁴ References: AFPAM 11-406, Dec 2020; T.O. 43D8-3-2-81 (Operation and Maintenance Instructions – Hypobaric Training Assembly, Nov 2015)					
5.1. Hypobaric Chamber Operations					
5.1.1. Perform Supervised APO Duties 10 times (mix of Refresher & Initial is optimal) ⁴	3c				
5.1.2. Inside Observer Duties (must be done in the following order: IO2 → IO1 → IO3; “Simulated” refers to no change in barometric pressure; “Real-World” refers to operational training flight)					
5.1.2.1 Perform IO2 (2 Simulated Flights followed by 3 Real-World Flights) ⁴	3c				
5.1.2.2 Perform IO1 (1 Simulated Flight followed by 1 Real-World Flight) ⁴	3c				
5.1.2.3 Perform IO3 (3 Simulated Flights followed by 3 Real-World Flights) ⁴	3c				
5.1.3. Obtain qualification on Recorder Duties, Responsibilities, & Emergency Procedures ^{4,6}	3c				
5.1.4. Understand Crew Chief Duties, Responsibilities, & Emergency Procedures ^{4,6}	B				
5.1.5. Understand Chamber Operator Duties, Responsibilities, & Emergency Procedures ^{4,6}	B				
5.1.6. Understand Lock Operator Duties, Responsibilities, & Emergency Procedures ^{4,6}	B				
5.1.7. Understand Lecturer Duties, Responsibilities, & Emergency Procedures ^{4,6}	B				
5.1.8. Demonstrate Ability to Treat Hypoxia ⁴	3c				
5.1.9. Demonstrate Ability to treat Hyperventilation ⁴	3c				
¹ The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² ‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee) ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions. ⁶ May be completed at any time prior to APO 101 if able					

Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (If learning activity is coded '4', then enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
5. AFPAM 11-406 Emphasis Items⁴ References: AFPAM 11-406, Dec 2020; AFMAN 11-403 Aug 2020; T.O. 43D8-3-2-81 (Operation and Maintenance Instructions – Hypobaric Training Assembly, Nov 2015)					
5.1.10. Demonstrate Ability to treat Anxiety/Claustrophobia ⁴	3c				
5.1.11. Demonstrate Ability to treat Barotitis Media ⁴	3c				
5.1.12. Demonstrate Ability to treat GI discomfort ⁴	3c				
5.1.13. Demonstrate Ability to treat barodontalgia ⁴	3c				
5.1.14. Demonstrate ability to treat DCS ⁴	3c				
5.1.15. Demonstrate ability to treat unconscious/unresponsive reactor ⁴	3c				
5.1.16. Demonstrate ability to respond to Fire/Smoke/Fumes ⁴	3c				
5.1.17. Demonstrate Politzer Bag Treatment Method ⁴	3c				
5.1.18. Demonstrate ability to respond to hypobaric chamber power loss ⁴	3c				
5.1.19. Demonstrate ability to respond to loss of Oxygen supply to hypobaric chamber ⁴	3c				
5.1.20. Demonstrate ability to respond to hypobaric chamber pump failure ⁴	3c				
5.1.21. Execute DCS Reactor Plan and Notification ⁴	3d				
5.1.22. Plan/Conduct Joint APTU and EMS Chamber Reactor Response Exercise ⁴	C				

¹The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ²‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³In-residence education and training (formal course). ⁴On-the-job training (conducted and/or managed by AP Flight Commander or designee)

⁵Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions. ⁶May be completed at any time prior to APO 101 if able

Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (If learning activity is coded '4', then enter training start/complete dates, and initials below)				
		Training Start	Training Complete	Trainee Initials	Trainer Initials	
5. AFPAM 11-406 Emphasis Items⁴ References: AFPAM 11-406, Dec 2020; AFMAN 11-403 Aug 2020; T.O. 43D8-3-2-81 (Operation and Maintenance Instructions – Hypobaric Training Assembly, Nov 2015)						
5.2. Barany Chair Operations						
5.2.1 Train Student on Graveyard Spiral Illusion ⁴	3c					
5.2.2 Train Student on Coriolis Illusion ⁴	3c					
5.2.3 Train Student on Nystagmus ⁴	3c					
5.3. Forms (intent is to gain understanding on each)						
5.3.1. DD Form 114 (Hazardous Duty Pay Authorization) ^{4,6}	B					
5.3.2. AF Form 4026 (Aircrew Training Devices Utilization) ^{4,6}	B					
5.3.3 AF Form 1274 (Physiological Training Record) ^{4,6}	B					
5.3.4. AF Form 95 (Significant Historical Data) ^{4,6}	B					
5.3.5. AF Form 334 (Helmet and Oxygen Mask Connector Inspection Data) ^{4,6}	B					
5.3.6. AF Form 244/245 (Industrial/Support Equipment Record) ^{4,6}	B					
5.3.7. APTU Quarterly Report, e.g. SPARTAN ^{4,6}	B					
¹ The mark '-' indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² 'Y' stands for "Yes", indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee) ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions. ⁶ May be completed at any time prior to APO 101 if able						

Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (If learning activity is coded '4', then enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
5. AFPAM 11-406 Emphasis Items⁴ References: AFPAM 11-406, Dec 2020; AFMAN 11-403 Aug 2020; T.O. 43D8-3-2-81 (Operation and Maintenance Instructions – Hypobaric Training Assembly, Nov 2015)					
5.4. Perform Supervised Fit, Clean, Inspection, and Maintenance of Aircrew Helmets (1 time) ^{4,6}	1b				
5.5. Perform Supervised Fit, Clean, Inspection, and Maintenance of Oxygen Masks (5 times) ^{4,6}	1b				
5.6. Become familiar with Joint Deficiency Reporting of events in hypobaric chamber ^{4,6}	B				
¹ The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² ‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee) ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions. ⁶ May be completed at any time prior to APO 101 if able					

Attachment 2

ASSIGNMENT SPECIFIC 13HX TRAINING

The OJT items listed below are specific to an AP assignment and are not considered core 13H upgrade requirements. The AP officer should receive OJT (as applicable) as soon as possible after being assigned to the specified base.					
Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT <i>(Enter training start/complete dates, and initials below)</i>			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
1. Gyro Integrated Physiological Trainer (IPT) II Operations⁴ Assignment applicability: Columbus AFB, Laughlin AFB, Randolph AFB, Sheppard AFB, Vance AFB Reference: Gyro IPT II Operations & Maintenance (O&M) Manual, v. Apr 2015, AFPAM 11-417, <i>Orientation in Aviation</i> , 9 Apr 2015					
1.1. Crew Chief⁴					
1.1.1. Training requirements and system Components ⁴ (ref: O&M manual, 1.4.)	-				
1.1.2. Run daily and start procedure checklists ⁴ (ref: O&M manual, 2.2.1. and 3.3.1.)	-				
1.1.3. Emergency procedures ⁴ (ref: O&M manual, 2.2.5.-2.2.7.)	-				
1.1.4. Run daily shut-down procedure checklist ⁴ (ref: O&M manual, 2.2.4.)	-				
1.1.5. Session operations and safety briefing ⁴ (ref: O&M manual, xvi & 2.2.2.2.)	-				
1.2. Operator⁴					
1.2.1. Training requirements and system components ⁴ (ref: O&M manual, 1.4.)	-				
1.2.2. Session operations ⁴ (ref: O&M manual, 2.3.5.)	-				
1.2.3. Emergency procedures ⁴ (ref: O&M manual 2.2.5.-2.2.7.)	-				
¹ The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² ‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee). ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions.					

The OJT items listed below are specific to an AP assignment and are not considered core 13H upgrade requirements. The AP officer should receive OJT (as applicable) as soon as possible after being assigned to the specified base.

Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (Enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
1.2.4. Post-flight procedures ⁴ (ref: O&M manual, 2.2.5.-2.2.7.)	-				
1.3. Lecturer⁴					
1.3.1. Training requirements ⁴	-				
1.3.2. Vestibular systems and sensory illusions ⁴ (ref: AFPAM 11-417)	-				
1.3.3. Complete Basic Flight Course Computer-Based Training ⁴	-				
1.3.4. 10-min familiarization flight in Gyro IPT II using local procedures ⁴	-				
1.4. Vestibular Illusions⁴ (ref: O&M manual, Table 1-1)					
1.4.1. Somatogravic Illusion⁴					
1.4.1.1. Fly Somatogravic Illusion profile ⁴	-				
1.4.1.2. Practice Somatogravic Illusion lecture ⁴	-				
1.4.2. Leans Illusion⁴					
1.4.2.1. Fly Leans Illusion profile ⁴	-				

¹The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ²‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³In-residence education and training (formal course). ⁴On-the-job training (conducted and/or managed by AP Flight Commander or designee) – may be completed at any time prior to APO 101 if able. ⁵Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions.

The OJT items listed below are specific to an AP assignment and are not considered core 13H upgrade requirements. The AP officer should receive OJT (as applicable) as soon as possible after being assigned to the specified base.					
Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (Enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
1.4.2.2. Practice Leans Illusion lecture ⁴	-				
1.4.3. Coriolis Illusion⁴					
1.4.3.1. Fly Coriolis Illusion profile ⁴	-				
1.4.3.2. Practice Coriolis Illusion lecture ⁴	-				
1.4.4. Graveyard Spin Illusion⁴					
1.4.4.1. Fly Graveyard Spin Illusion profile ⁴	-				
1.4.4.2. Practice Graveyard Spin Illusion lecture ⁴	-				
1.4.5. Graveyard Spiral Illusion⁴					
1.4.5.1. Fly Graveyard Spiral Illusion profile ⁴	-				
1.4.5.2. Practice Graveyard Spiral Illusion lecture ⁴	-				
¹ The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² ‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee) – may be completed at any time prior to APO 101 if able. ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions.					

The OJT items listed below are specific to an AP assignment and are not considered core 13H upgrade requirements. The AP officer should receive OJT (as applicable) as soon as possible after being assigned to the specified base.					
Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (Enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
1.4.6. Nystagmus Illusion⁴					
1.4.6.1. Fly Nystagmus Illusion profile ⁴	-				
1.4.6.2. Practice Nystagmus Illusion lecture ⁴	-				
1.5. Maintenance (not required but encouraged if time permits)⁴					
1.5.1. Training requirements and system components ⁴ (ref: O&M manual, 1.4. and 2.1.)	-				
1.5.2. Torque setting ⁴ (ref: O&M manual, 3.6.)	-				
1.5.3. Troubleshooting ⁴ (ref: O&M manual, 4.2.)	-				
1.5.3.1. ETC contact info ⁴	-				
1.5.3.2. Power supply and emergency shut-off ⁴ (ref: O&M manual, 2.2.5.2.)	-				
1.5.3.3. Check and replace fuses ⁴ (ref: O&M manual, Table 5-2)	-				
1.5.3.4. Check and adjust pressure ⁴ (ref: O&M manual, 1.4.2.5. & 3.3.1., part 8)	-				
¹ The mark “-” indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² “Y” stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee) – may be completed at any time prior to APO 101 if able. ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions.					

The OJT items listed below are specific to an AP assignment and are not considered core 13H upgrade requirements. The AP officer should receive OJT (as applicable) as soon as possible after being assigned to the specified base.					
Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (Enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
1.5.3.5. View logs ⁴ (ref: O&M manual, 3.1.6.)	-				
1.5.4. Run daily checklist ⁴ (ref: O&M manual, 2.2.1.)	-				
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¹ The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² ‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee) – may be completed at any time prior to APO 101 if able. ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions.					

The OJT items listed below are specific to an AP assignment and are not considered core 13H upgrade requirements. The AP officer should receive OJT (as applicable) as soon as possible after being assigned to the specified base.						
Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (Enter training start/complete dates, and initials below)				
		QTP ²	Training Start	Training Complete	Trainee Initials	Trainer Initials
2. F-22 Ground Pressure Breathing for Altitude Training (GPBAT) Operations⁴ Assignment applicability: Langley AFB, VA & Tyndall AFB, FL Reference: AP Sharepoint (AerospacePhysiology - Home (dps.mil)): Ground-Level Pressure Breathing for Altitude Training Link.						
2.1. GPBAT Purpose ⁴	-	Y				
2.2. TTU-529/E Man-Side Test Unit⁴						
2.2.1. TTU-529/E Safety ⁴	-	Y				
2.2.2. TTU-529/E Configuration/Start-up ⁴	-	Y				
2.2.3. TTU-529/E Shut down ⁴	-	Y				
2.2.4. TTU-529/E Storage ⁴	-	Y				
2.3. GPBAT Lab and Profiles⁴						
2.3.1. Pre-GBPAT Lab Briefing ⁴	-	Y				
2.3.2. GPBAT Training Profile 1 ⁴	-	Y				
2.3.3. GPBAT Training Profile 2 ⁴	-	Y				
2.3.4. GPBAT Training Profile 3 ⁴	-	Y				
2.3.5. GPBAT Training Profile 4 ⁴	-	Y				
¹ The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² ‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee). ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions.						

The OJT items listed below are specific to an AP assignment and are not considered core 13H upgrade requirements. The AP officer should receive OJT (as applicable) as soon as possible after being assigned to the specified base.

Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (Enter training start/complete dates, and initials below)				
		QTP ²	Training Start	Training Complete	Trainee Initials	Trainer Initials
2.3.6. Post-GBPAT Lab Briefing ⁴	-	Y				
2.4. Manage GPBAT Reactions and EPs ⁴	-	Y				

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¹The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ²‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³In-residence education and training (formal course). ⁴On-the-job training (conducted and/or managed by AP Flight Commander or designee). ⁵Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions.

The OJT items listed below are specific to an AP assignment and are not considered core 13H upgrade requirements. The AP officer should receive OJT (as applicable) as soon as possible after being assigned to the specified base.					
Tasks, Knowledge, Activities, and Technical References	Proficiency Codes used to Indicate Required Training Level ¹	Certification for OJT (Enter training start/complete dates, and initials below)			
		Training Start	Training Complete	Trainee Initials	Trainer Initials
3. Centrifuge Operations⁴ Assignment applicability: Wright-Patterson AFB Reference: USAF ATFS-400-31 High Performance Human Centrifuge, 2017					
3.1. Centrifuge System Overview ⁴	-				
3.2. Controls, Checks, and Safety ⁴	-				
3.3. Run Modes & Operating Procedures ⁴	-				
3.4. System Utilities and Editors ⁴	-				
3.5. Tactical Flight & Auxiliary Applications ⁴	-				
3.6. Lockout Tagout Procedures ⁴	-				
3.7. Troubleshooting Procedures ⁴	-				
3.8. Control Room Video Display and Controls ⁴	-				
3.9. Cockpit Module Exchange ⁴	-				
3.10. Cockpit Module Configuration Change ⁴	-				
3.11. Conduct AFMAN 11-404 Acceleration Academic Instruction ⁴	-				
3.12. Conduct AGSM Performance Debrief and Critique ⁴	-				
¹ The mark ‘-’ indicates the course and/or OJT or QTP does not use proficiency codes and is a sat/unsat item. ² ‘Y’ stands for “Yes”, indicating the presence of an AF Qualification Training Package (QTP). ³ In-residence education and training (formal course). ⁴ On-the-job training (conducted and/or managed by AP Flight Commander or designee). ⁵ Supervisor will email usafsam.fepe.13H@us.af.mil for training materials and/or instructions.					

Attachment 3
INSTRUCTOR TEACHING UPGRADES

Table 3.1. Instructor Upgrade Requirements.

	Initial Track	Flt CC Initials/DATE		
Physiological Effects of Altitude	X			
Performance Threats	X			
Physiology Considerations of Aircrew Flight Equipment	X			
Vision	X			
Spatial Disorientation	X			
Noise and Vibration	X			
Attention Management Threats to Situational Awareness (SA)	X			
Acceleration	X			
Barany Chair/Spatial Disorientation (SD) Trainer	X			
Refresher Training Requirements by Tracks				
	Track A	Flt CC Initials/Date	Track T	Flt CC Initials/Date
Physiological Effects of Altitude	X		X	
Performance Threats	X		X	
Physiology Considerations of Aircrew Flight Equipment	X		X	
Vision	X		X	
Spatial Disorientation	X		X	
Noise and Vibration	X		X	
Attention Management Threats to SA	X		X	
Acceleration	X			
Officer Trainee : _____ Trainer/Flight CC: _____				

Table 3.2. Additional Instructor Courses (Based on Location – *not* required for 13H3 Upgrade).

Refresher Training Requirements by Tracks								
	¹ Track H	Flt CC Initials /Date	¹ Track J	Sign Off Initials /Date	¹ Track R	Sign Off Initials /Date	Track E	Sign Off Initials /Date
Physiological Effects of Altitude	X		X				X	
Performance Threats	X		X		X		X	
Physiology Considerations of Aircrew Flight Equipment	X		X				X	
Vision	X		X				X	
Spatial Disorientation	X				X		X	
Noise and Vibration	X		X				X	
Attention Management Threats to SA	X		X		X		X	
Officer Trainee: _____ Trainer/Flight CC: _____								
Notes: ¹ Track H, J, and R Initial certification will be included with its respective Refresher certification if going to/at a location where this is necessary								

Attachment 4
TRAINING DOCUMENTATION EXAMPLE

Host-Base/Wing
Letterhead

Date

MEMORANDUM FOR AP PROGRAM MANAGER (PACAF)
ATTENTION: COL GILLESPIE

FROM: 123 OSS/CC
Awesome AFB, HI

SUBJECT: Certification of 13H3 AFSC Upgrade Training Completion for 1Lt Brad

1. I certify that 1Lt Brad has completed all task, knowledge, activity, and experience requirements listed in the 13H AFJQS for upgrade to the 13H3 AFSC.
2. Please contact me at DSN 123-4567 if you have any questions.

//Signature//
STING Y. REY, Lt Col, USAF
Squadron Commander