



Ministry
of Defence



Defence Fire and Rescue Tactics Techniques Procedure

Document No:	ATTP-A036-2024			
Title:	Augusta Westlands AW189			
Date Issued:	07 11 2024			
Supersedes:	05 Jan 2022			
Review Date:	01 09 2029			
Stakeholders:	DFR HQ	✓	Capita Fire and Rescue	✓
	RN Aircraft Handler ¹	✓	RAF Fire and Rescue	✓
	DFRS LEC	✓	Other FRS Providers ²	
	DFRS (DFSR, DIO, RN) ³	✓	DFRS (USVF)	
Technical Author(s):	Fire Station SMEs			
Approved Authority:	DFR Sponsored Ops Policy Committee			

Sponsor Details: Strategic Lead Operational Capability & Development
Defence Fire & Rescue (DFR) Headquarters
Sedgemoor Building, Marlborough Lines,
Monxton Road,
Andover,
Hampshire,
SP11 8HT

Contact: dfr-hqocd@mod.gov.uk

Conditions of Release

1. This information is Crown Copyright and the intellectual property rights for this publication belong exclusively to the Ministry of Defence (MOD). No material or information contained in this publication should be reproduced, stored in a retrieval system or transmitted in any form outside MOD establishments except as authorised by both the sponsor and the MOD where appropriate.
2. This information is released by the United Kingdom Government to a recipient Government for defence purposes only. It may be disclosed only within the Defence Department of a recipient Government, except as otherwise authorised by the MOD.
3. This information may be subject to privately owned rights.
4. This ATTP has been subject to a DFR HQ Equality Impact Assessment.
5. On initial release a publication will be reviewed at the 12-month point, following which reviews will be 5 yearly or where changes in circumstances warrant a review.

¹ RN (AH) stakeholders are the Operational Responders based at the Culdrose, Predannack, Yeovilton and Merryfield aerodromes

² Other FRS Providers include Babcock, Mitie and QinetiQ Fire Services. In addition, this publication will also be shared with AWE and QinetiQ FRS for information purposes only.

³ For the purposes of this ATTP, DFRS Fire Officers employed within DFRS, DIO & RN, are included for information purposes only.

VERSION CONTROL HISTORY

[illegible]



AIRCRAFT TACTICS TECHNIQUES PROCEDURES (ATTP/A36)

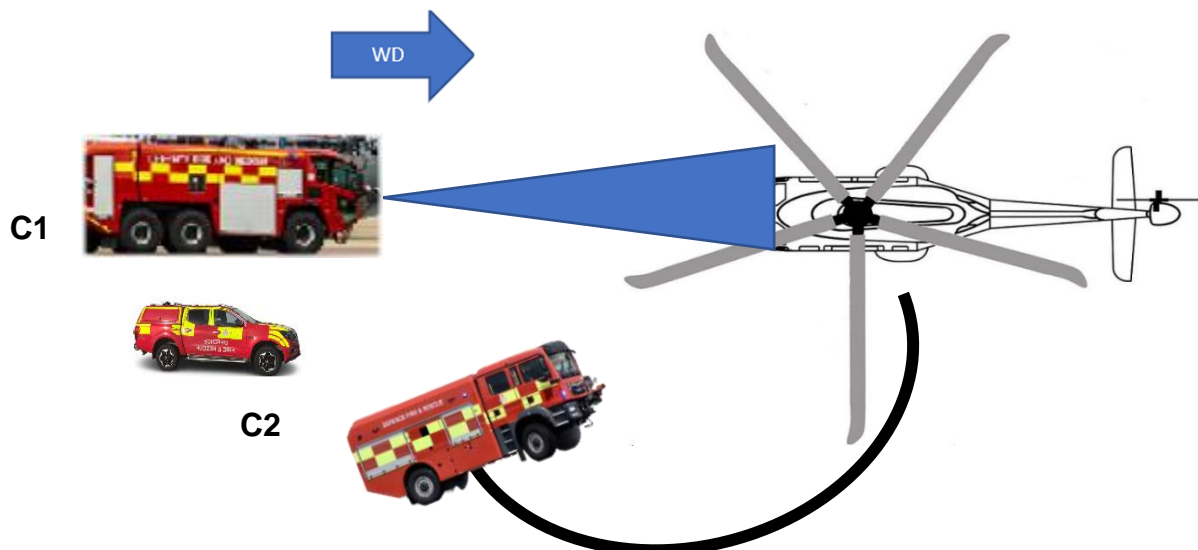
Agusta Westland AW189

1 x SUV 1 x MPRV 1 x Striker (HRET)

Version Control	Page 2
TTP 1 - Engine Fire	Page 3
TTP 2 - Wheel Assembly Incidents	Page 6
TTP 3 - Internal Fire	Page 9
TTP 4 - External Fire	Page 12

TTP 1 – Engine Fire

Event Plan - Initial Deployment



Incident Commander Considerations:

- Conduct and complete DRA
- Declare Tactical Mode
- Consider required agencies
- Consider implementing Major Incident Plan
- Direct firefighting actions
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft
- Direct rescue crew
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Direct other agencies
- Consider water consolidation/replenishment
- Communicate hazards to all crews and agencies
- Instigate JESIP for multi-agency incident

Crash 1 – Striker Actions:

- Deploy vehicle to point of Hazard
- Operate monitor to extinguish flame mass using mass discharge
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Knock off monitor and deploy HRET at earliest opportunity
- Consider use of Hydro-Chem
- Utilise HRET as a covering line
- Consider use of FLIR to check for hotspots and provide cooling as necessary to prevent re-ignition
- Provide scene safety
- Maintain contact with IC

Crash 2 – MPRV Actions:

- Deploy vehicle to rescue side of aircraft
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Utilise monitor if required
- Consider method of entry if PAX remain onboard
- Don BA and utilise Rapid Deployment Procedures if required
- Deploy media with 45mm hose/hose reel as determined by IC DRA and prepare for entry into aircraft
- BA team access aircraft and create survivable conditions
- Confirm/make safe aircraft systems
- Utilise medics to triage casualties on board if survivable conditions are present
- Aid medics in extricating casualties
- Consider use of auxiliary equipment such as TIC
- Maintain contact with IC

Specific Aircraft Hazards: (Make use of AQRC):

- Aircraft position and wreckage
- Leaking fuel
- Flammable liquids
- Pressurised gases
- MMMF / Rotor blades

Further Considerations:

- Passengers
- Other agencies
- Contaminated PPE

Training:

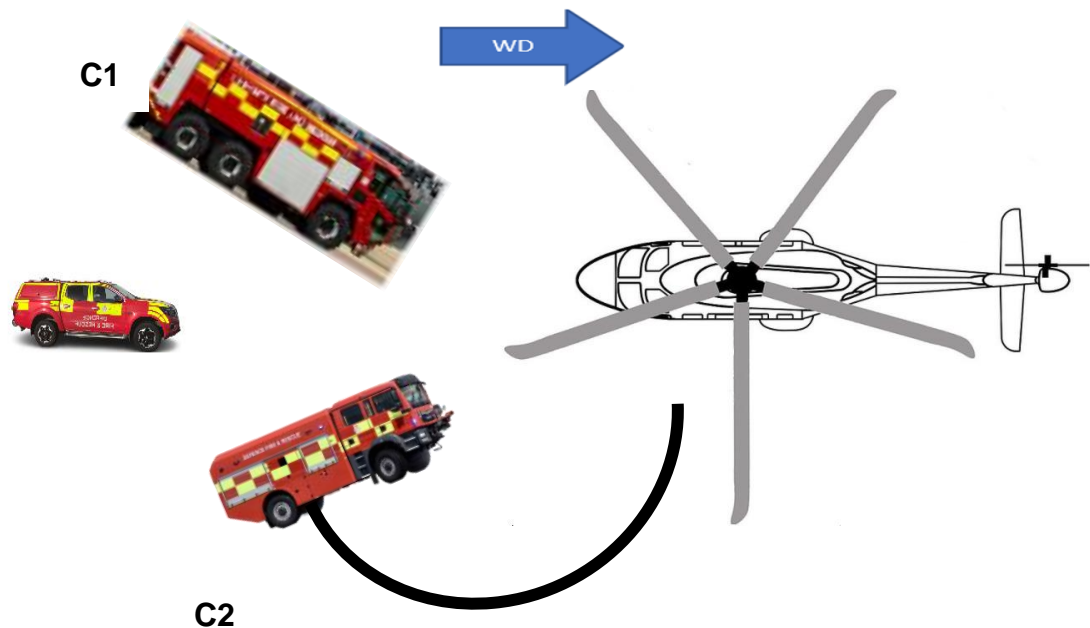
- Aircraft familiarisation
- Deployment exercise(s)
- Redkite CMS
- Aircraft lecture – 6 monthly lesson / familiarisation presentation

Supporting Information:

- DFR-OG 009 - Aircraft Fires
- Ops Instruction 001 - Aircraft Incidents
- Ops Instruction 002 - CFR HSE Policy
- Ops Instruction 005 - Low Speed Manoeuvring
- Ops Instruction 006 - MPRV ARFF Positioning Deployment & Task
- Ops Instruction 007 - MPRV Vehicle Operations
- Ops Instruction 033 - BA Operations
- Ops Instruction 066 - Fire Contaminants
- Ops Instruction 069 - Polymer-Composites-and-MMMF
- Op Guidance 001 - Aircraft Incidents
- Op Guidance 002 - Incidents Involving Rotary Wing Aircraft
- Op Guidance 003 - Aircraft Fuel Fires and Foam Application
- Op Guidance 006 - Aircraft Internal Fires
- Op Guidance 007 - Aircraft Engine Fire
- Op Guidance 008 - Aircraft Undercarriage Incidents
- MOD Aircraft Crash Hazards Document Set
- NATO STANAG/TO 00-105E-9-Chapter 13 (revision 16)
- AQRC A36
- DSA 1000m assessments
- DSA Water assessments
- DSA Response assessments

TTP 2 – Wheel Assembly Incidents

Event Plan - Initial Deployment



Incident Commander Considerations:

- Conduct and complete DRA
- Declare Tactical Mode
- Consider required agencies
- Consider implementing Major Incident Plan
- Direct firefighting actions
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft
- Direct rescue crew
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Direct other agencies
- Consider water consolidation/replenishment
- Communicate hazards to all crews and agencies
- Instigate JESIP for multi-agency incident

Crash 1 – Striker Actions:

- Deploy vehicle to point of Hazard
- Be prepared to operate HRET
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Knock off monitor and deploy HRET at earliest opportunity (If utilised)
- Consider use of Hydro-Chem
- Utilise HRET as a covering line
- Consider use of FLIR to check for hotspots and provide cooling as necessary to prevent re-ignition
- Provide scene safety
- Maintain contact with IC

Crash 2 – MPRV Actions

- Deploy vehicle to rescue side of aircraft
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Utilise monitor if required, consider Dry Powder
- Consider method of entry if PAX remain onboard
- Don BA and utilise Rapid Deployment Procedures if required
- Deploy media with 45mm hose/hose reel as determined by IC DRA and prepare for entry into aircraft
- BA team access aircraft and create survivable conditions
- Confirm/make safe aircraft systems
- Utilise medics to triage casualties on board if survivable conditions are present
- Aid medics in extricating casualties
- Consider use of auxiliary equipment such as TIC
- Maintain contact with IC

Specific Aircraft Hazards – (Make use of AQRC):

- Rotors / Composite Materials
- Flammable liquids / Hydraulic fluids
- Flammable/pressurised gases
- Inflatable Systems

Further Considerations:

- Aircraft position
- Leaking fuel/Hydraulic fluids
- Passengers
- Other agencies.
- The actions during this incident will be dependent on the following conditions:
 1. Is the wheel assembly on fire?
 2. Is the fire confined to one area or is escalation likely?

Supporting Information:

- DFR-OG 009 - Aircraft Fires
- Ops Instruction 001 - Aircraft Incidents
- Ops Instruction 002 - CFR HSE Policy
- Ops Instruction 005 - Low Speed Manoeuvring
- Ops Instruction 006 - MPRV ARFF Positioning Deployment & Task
- Ops Instruction 007 - MPRV Vehicle Operations
- Ops Instruction 033 - BA Operations
- Ops Instruction 066 - Fire Contaminants
- Ops Instruction 069 - Polymer-Composites-and-MMMF
- Op Guidance 001 - Aircraft Incidents
- Op Guidance 002 - Incidents Involving Rotary Wing Aircraft
- Op Guidance 003 - Aircraft Fuel Fires and Foam Application
- Op Guidance 006 - Aircraft Internal Fires
- Op Guidance 007 - Aircraft Engine Fire
- Op Guidance 008 - Aircraft Undercarriage Incidents
- MOD Aircraft Crash Hazards Document Set
- NATO STANAG/TO 00-105E-9-Chapter 13 (revision 16)
- AQRC A36
- DSA 1000m assessments

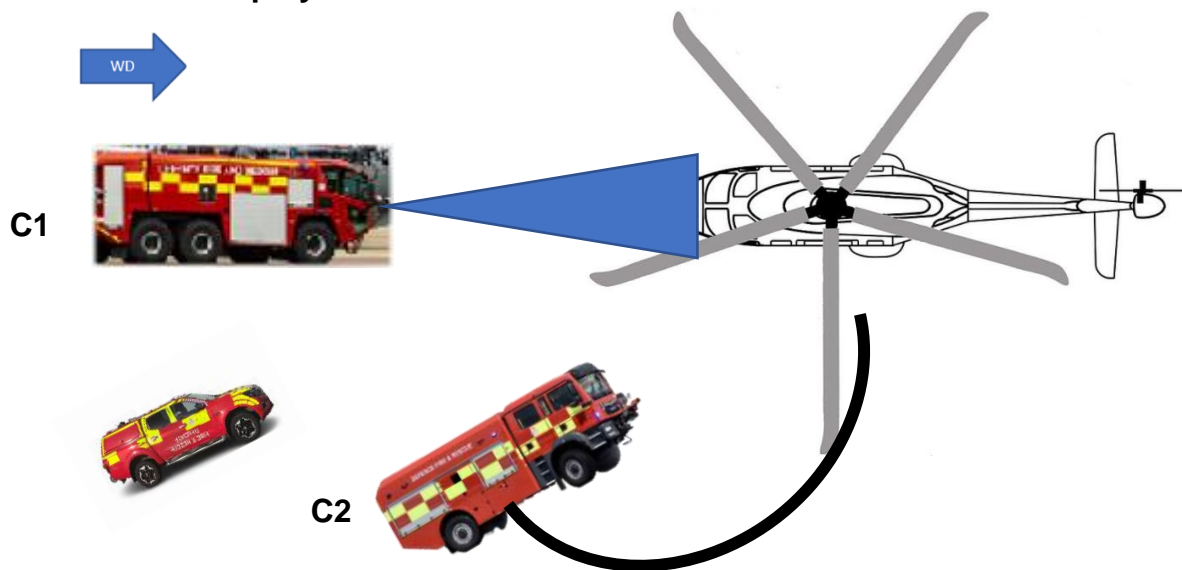
- DSA Water assessments
- DSA Response assessments

Training:

- Aircraft familiarisation
- Deployment exercise(s)
- Redkite CMS
- Aircraft lecture – 6 monthly lesson / familiarisation presentation

TTP 3 – Internal fire Incidents

Event Plan - Initial Deployment



Incident Commander Considerations:

- Conduct and complete DRA
- Declare Tactical Mode
- Consider required agencies
- Consider implementing Major Incident Plan
- Direct firefighting actions
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft
- Direct rescue crew
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Direct other agencies
- Consider water consolidation/replenishment
- Communicate hazards to all crews and agencies
- Instigate JESIP for multi-agency incident

Crash 1 – Striker Actions:

- Deploy vehicle to point of Hazard
- Operate monitor to extinguish flame mass using mass discharge
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Knock off monitor and deploy HRET at earliest opportunity
- Consider use of Hydro-Chem
- Utilise HRET as a covering line
- Consider use of FLIR to check for hotspots and provide cooling as necessary to prevent re-ignition
- Provide scene safety
- Maintain contact with IC

Crash 2 – MPRV Actions:

- Deploy vehicle to rescue side of aircraft
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Consider method of entry if PAX remain on board
- Utilise monitor if required
- Don BA and utilise Rapid Deployment Procedures if required
- Deploy media with 45mm hose/hose reel as determined by IC DRA
- Consider use of handheld extinguisher
- BA team access aircraft and create survivable conditions
- Confirm/make safe aircraft systems
- Utilise medics to triage casualties on board if survivable conditions are present
- Aid medics in extricating casualties
- Consider use of auxiliary equipment such as TIC
- Maintain contact with IC

Specific Aircraft Hazards – (Make use of AQRC):

- Rotors / Composite Materials
- Flammable liquids
- Flammable/pressurised gases
- Inflatable Systems

Further Considerations:

- Aircraft position and wreckage
- Leaking fuel
- Passengers
- Other agencies
- Internal lighting
- Hydraulic Ventilation

Supporting Information:

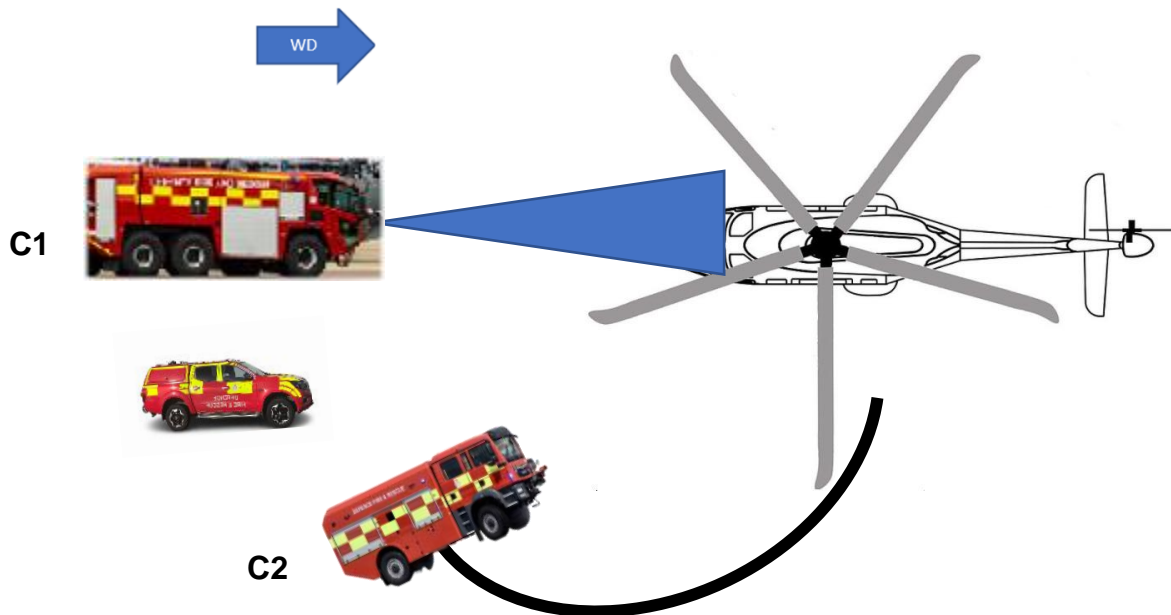
- DFR-OG 009 - Aircraft Fires
- Ops Instruction 001 - Aircraft Incidents
- Ops Instruction 002 - CFR HSE Policy
- Ops Instruction 005 - Low Speed Manoeuvring
- Ops Instruction 006 - MPRV ARFF Positioning Deployment & Task
- Ops Instruction 007 - MPRV Vehicle Operations
- Ops Instruction 033 - BA Operations
- Ops Instruction 066 - Fire Contaminants
- Ops Instruction 069 - Polymer-Composites-and-MMMF
- Op Guidance 001 - Aircraft Incidents
- Op Guidance 002 - Incidents Involving Rotary Wing Aircraft
- Op Guidance 003 - Aircraft Fuel Fires and Foam Application
- Op Guidance 006 - Aircraft Internal Fires
- Op Guidance 007 - Aircraft Engine Fire
- Op Guidance 008 - Aircraft Undercarriage Incidents
- MOD Aircraft Crash Hazards Document Set
- AQRC A36
- DSA 1000m assessments
- DSA Water assessments
- DSA Response assessments

Training:

- Aircraft familiarisation
- Deployment exercise(s)
- Redkite CMS
- Aircraft lecture – 6 monthly lesson / familiarisation presentation

TTP 4 – External fire Incidents

Event Plan - Initial Deployment



Incident Commander Considerations:

- Conduct and complete DRA
- Declare Tactical Mode
- Consider required agencies
- Consider implementing Major Incident Plan
- Direct firefighting actions
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft
- Direct rescue crew
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Direct other agencies
- Consider water consolidation/replenishment
- Communicate hazards to all crews and agencies
- Instigate JESIP for multi-agency incident

Crash 1 – Striker Actions:

- Deploy vehicle to point of Hazard
- Operate monitor to extinguish flame mass using mass discharge
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Knock off monitor and deploy HRET at earliest opportunity
- Consider use of Hydro-Chem
- Utilise HRET as a covering line
- Consider use of FLIR to check for hotspots and provide cooling as necessary to prevent re-ignition
- Provide scene safety
- Maintain contact with IC

Crash 2 – MPRV Actions:

- Deploy vehicle to rescue side of aircraft
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Consider method of entry if PAX remain on board
- Utilise monitor if required
- Don BA and utilise Rapid Deployment Procedures if required
- Deploy media with 45mm hose/hose reel as determined by IC DRA
- Consider use of handheld extinguisher
- BA team access aircraft and create survivable conditions
- Confirm/make safe aircraft systems
- Utilise medics to triage casualties on board if survivable conditions are present
- Aid medics in extricating casualties
- Consider use of auxiliary equipment such as TIC
- Maintain contact with IC

Specific Aircraft Hazards – (Make use of AQRC):

- Rotors / Composite Materials
- Flammable liquids
- Flammable/pressurised gases
- Inflatable Systems

Further Considerations:

- Aircraft position and wreckage
- Leaking fuel
- Passengers
- Other agencies
- The priority should be to engage in offensive firefighting actions prior to engaging pump & roll

Supporting Information:

- DFR-OG 009 - Aircraft Fires
- Ops Instruction 001 - Aircraft Incidents
- Ops Instruction 002 - CFR HSE Policy
- Ops Instruction 005 - Low Speed Manoeuvring
- Ops Instruction 006 - MPRV ARFF Positioning Deployment & Task
- Ops Instruction 007 - MPRV Vehicle Operations
- Ops Instruction 033 - BA Operations
- Ops Instruction 066 - Fire Contaminants
- Ops Instruction 069 - Polymer-Composites-and-MMMF
- Op Guidance 001 - Aircraft Incidents
- Op Guidance 002 - Incidents Involving Rotary Wing Aircraft
- Op Guidance 003 - Aircraft Fuel Fires and Foam Application
- Op Guidance 006 - Aircraft Internal Fires
- Op Guidance 007 - Aircraft Engine Fire
- Op Guidance 008 - Aircraft Undercarriage Incidents
- MOD Aircraft Crash Hazards Document Set
- AQRC A36
- DSA 1000m assessments
- DSA Water assessments
- DSA Response assessments

Training:

- Aircraft familiarisation
- Deployment exercise(s)
- Redkite CMS
- Aircraft lecture – 6 monthly lesson / familiarisation presentation