



Ministry
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Defence Fire and Rescue Tactics Techniques & Procedures

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DFR HQ ✓ Capita Fire and Rescue ✓
RN Aircraft Handler ✓ RAF Fire and Rescue ✓
DFRS LEC ✓ Other FRS Providers¹ ✓
DFRS (Retained Officers) DFRS (USVF)

Technical Approved Defence Fire and Rescue (CFR HQ)
Operations Committee

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¹ Other FRS Providers include Babcock Fire Services, Mitie Fire Service, QinetiQ Fire Service.

Document Control

Version	Date	Author	Role/Name	Status	Changes
V 1.0	31/01/2022	D Slessor CU FTM	WM	Initial	
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V1.1	23/01/2024	M Williams	POA (AH) Trg Mgr	Review	No Change

Defence Fire and Recue



AIRCRAFT TACTICS TECHNIQUES PROCEDURES (ATTP/A42)

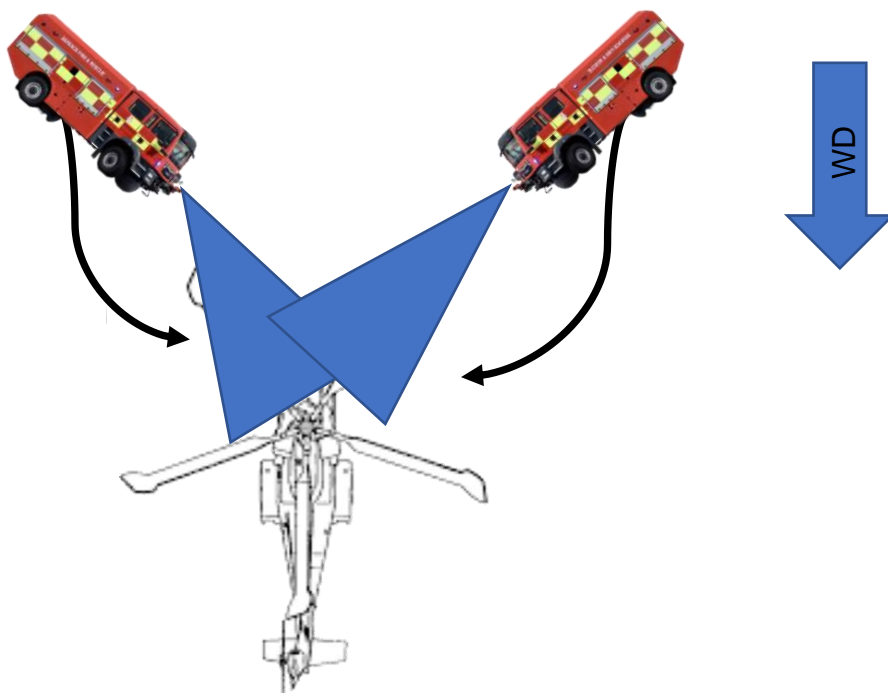
This TTP refers to the operation of the Merlin Mk2 utilising 2 MPRV vehicles at H3/5

MPRV (Crash1) 1X CM 1X DVR 2X BA	MPRV (Crash 2) 1X WM (IC) 1X DVR
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TTP 1 - External Fire

Event Plan - Initial Deployment



Crash 2 - Incident Commander Considerations:

- Confirm whether armaments and countermeasures are present
- Conduct and complete DRA
- Order BA Team to don BA using Rapid Deployment
- Declare Tactical Mode
- Consider required agencies and resources
- Consider implementing Major Incident Plan
- Direct firefighting actions to create survivable conditions
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft
- Direct BA rescue crew
- Direct Medical Teams
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Direct other agencies using JESIP
- Consider water replenishment
- Consider media run-off and water courses on scene.
- Consider preservation of evidence

Crash 2 - MPRV Actions:

- Deploy vehicle at 45 degrees to the aircraft
- Be aware of PAX exiting the aircraft
- Operate monitor and extinguish fire utilising mass discharge
- Deploy sufficient lengths of 45mm hose and extinguish any remaining fire
- Cool airframe if required
- Assist rescue BA team.
- Consider use of TIC

Crash 1 - MPRV Actions:

- Deploy vehicle to 45 degrees to aircraft depending on wind direction
- Operate monitor and extinguish fire utilising mass discharge if required
- Be aware of PAX exiting the aircraft
- Consider method of entry if PAX remain on board
- Don BA and utilise Rapid Deployment Procedures
- Deploy 45mm hose and prepare to make entry into aircraft
- Create survivable conditions by extinguishing fire & ventilating.
- Utilise Medics to triage casualties on board if survivable conditions are present
- Aid Medics in extricating casualties
- Cool airframe if required.

Specific Aircraft Hazards/Procedures:

- Rotors
- Flammable liquids
- Flammable/pressurised gases
- Composite aircraft materials.

Further Considerations:

- Aircraft position and wreckage
- Leaking fuel
- Aircrew
- Other agencies.

Supporting Information:

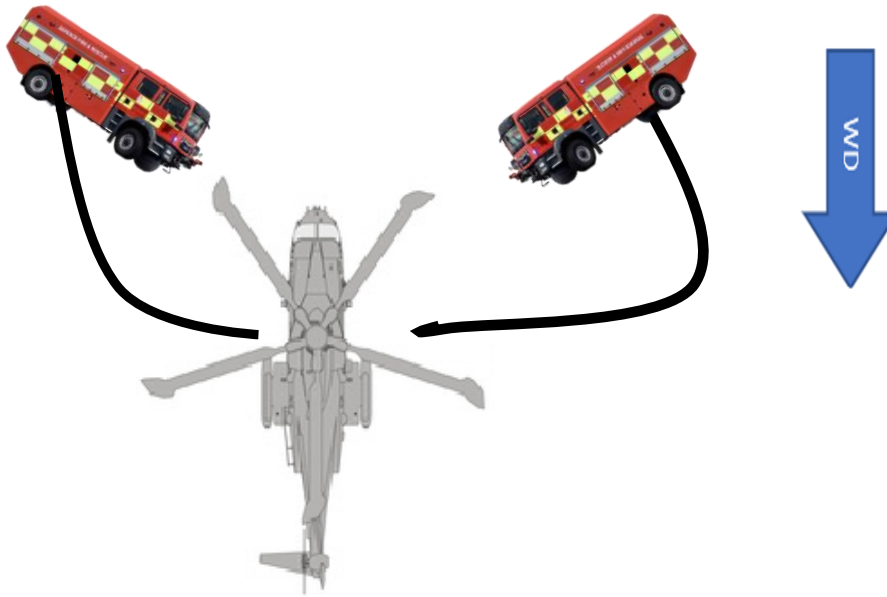
- NOG
- DFR BA Operations
- CFR Ops Instruction 001 – Aircraft Incidents
- CFR Ops Instruction 002 – CFR HSE Policy
- CFR Ops Instruction 005 – Low Speed Manoeuvring
- CFR Ops Instruction 006 – MPRV ARFF Positioning Deployment & Task
- CFR Ops Instruction 007 – MPRV Vehicle Operations
- CFR Ops Instruction 033 – BA Operations
- CFR Op Guidance 002 – Incidents Involving Rotary Wing Aircraft
- CFR Op Guidance 003 – Aircraft Fuel Fires
- CFR Op Guidance 007 – Aircraft Engine Fires
- MOD Aircraft Crash Hazards Document Set

Training:

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

TTP 2 – Internal Fire

Event Plan - Initial Deployment



Crash 2 - Incident Commander Considerations:

- Confirm whether armaments and countermeasures are present
- Conduct and complete DRA
- Order BA Team to don BA using Rapid Deployment
- Declare Tactical Mode
- Consider required agencies and resources
- Consider implementing Major Incident Plan
- Direct firefighting actions to create survivable conditions
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft from rear ramp
- Direct BA rescue crew
- Direct Medical Teams
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Direct other agencies using JESIP
- Consider water replenishment
- Consider media run-off and water courses on scene.
- Consider preservation of evidence

Crash 1 - MPRV Actions:

- Deploy vehicle to 45 degrees to aircraft depending on wind direction
- Be aware of PAX exiting the aircraft
- Consider method of entry if PAX remain on board
- Don BA and utilise Rapid Deployment Procedures
- Deploy 45mm hose and prepare to make entry into aircraft
- Create survivable conditions by extinguishing fire & ventilating.
- Consider using secondary agents
- Remove any casualties from immediate danger
- Utilise Medics to triage casualties on board if survivable conditions are present
- Aid Medics in extricating casualties
- Cool airframe if required to prevent fire spread

Crash 2 - MPRV Actions

- Deploy vehicle to 45 degrees to aircraft depending on wind direction.
- Prepare to Operate Monitor if Fire Spreads Externally
- Be aware of PAX exiting the aircraft
- Deploy 45mm hose to prevent external fire spread
- Assist rescue BA team
- Consider use of TIC

Specific Aircraft Hazards:

- Rotors
- Flammable liquids
- Flammable/pressurised gases
- Composite aircraft materials.
- Electrical Radar Components
- Sonobuoys

Further Considerations:

- Aircraft position and wreckage
- Leaking fuel
- Aircrew
- Other agencies.

Supporting Information:

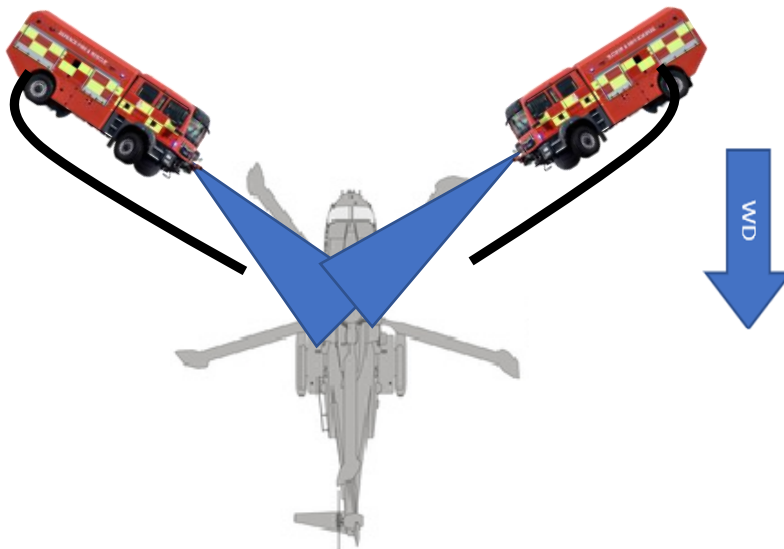
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- CFR Op Guidance 007 – Aircraft Engine Fires
- MOD Aircraft Crash Hazards Document Set

Training:

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

TTP 3 – Engine Compartment Fire

Event Plan - Initial Deployment



Incident Commander Considerations:

- Confirm whether armaments and countermeasures are present
- Conduct and complete DRA
- Order BA Team to don BA using Rapid Deployment
- Declare Tactical Mode
- Consider required agencies and resources
- Consider implementing Major Incident Plan
- Direct firefighting actions to create survivable conditions
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft
- Direct BA rescue crew
- Direct Medical Teams
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Direct other agencies using JESIP
- Consider water replenishment
- Consider media run-off and water courses on scene.
- Consider preservation of evidence

Crash 1 - MPRV Actions:

- Deploy vehicle at 45 degrees to the aircraft
- Operate monitor and extinguish fire utilising mass discharge if required
- Consider secondary agents
- Deploy 45mm hose and prepare for entry into aircraft
- Don BA and utilise Rapid Deployment Procedures and gain access
- 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 further media application

Crash 2 - MPRV Actions

- Deploy vehicle at 45 degrees to the aircraft
- Be aware of PAX exiting the aircraft
- Operate monitor and extinguish Fire if required
- Deploy sufficient lengths of 45mm hose and extinguish any remaining fire
- Cool Engines and prevent internal fire spread
- Assist BA team.
- Consider use of TIC

Specific Aircraft Hazards:

- Rotors
- Flammable liquids
- Flammable/pressurised gases
- Composite aircraft materials.
- Sonobuoys

Further Considerations:

- Aircraft position and wreckage
- Leaking fuel
- Safe Approach Angle
- Aircrew
- Other agencies.

Supporting Information:

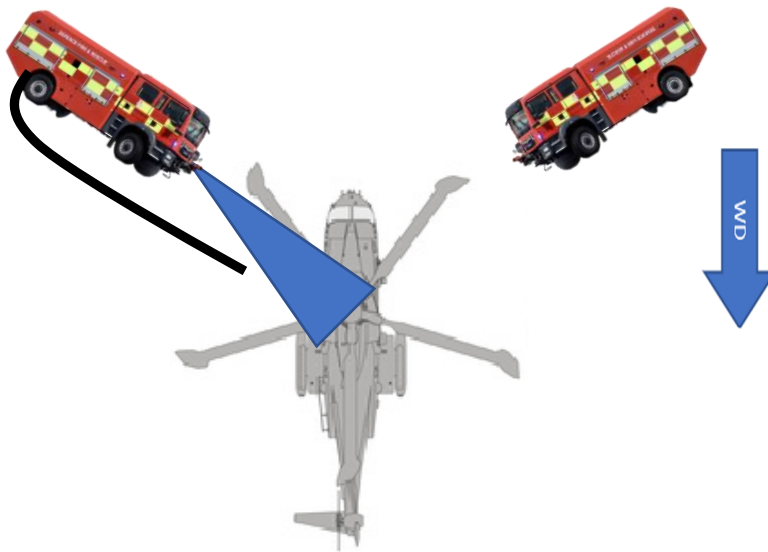
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- CFR Ops Instruction 007 – MPRV Vehicle Operations
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- CFR Op Guidance 007 – Aircraft Engine Fires
- MOD Aircraft Crash Hazards Document Set

Training:

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

TTP 4 – Wheel Assembly Fire

Event Plan - Initial Deployment



Incident Commander Considerations:

- Confirm whether armaments and countermeasures are present
- Conduct and complete DRA
- Order BA Team to don BA using Rapid Deployment
- Declare Tactical Mode
- Consider Secondary Agents
- Consider required agencies and resources
- Consider implementing Major Incident Plan
- Direct firefighting actions to create survivable conditions
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft
- Direct BA rescue crew
- Direct Medical Teams
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Direct other agencies using JESIP
- Consider water replenishment
- Consider media run-off and water courses on scene.
- Consider preservation of evidence
- Consider use of TIC

Crash 1 - MPRV Actions:

- Deploy vehicle and Firefighters at 45 degrees to the aircraft
- Operate monitor and extinguish fire utilising mass discharge if required to prevent spread to fuselage
- Don BA Rapid Deployment
- Deploy 45mm hose to fight fire from 45-degree angle
- Consider dual application of water and dry powder
- Create survivable conditions and be aware of PAX exiting airframe
- Confirm/make safe aircraft systems.
- Utilise Medics to triage casualties if required
- Consider further media application to prevent Fire Spread.

Crash 2 - MPRV Actions

- Deploy vehicle at 45 degrees to the aircraft
- Be aware of PAX exiting the aircraft
- Deploy sufficient lengths of 45mm hose if required
- Supply extra Dry Powder as required
- Assist BA team.
- Consider use of TIC

Specific Aircraft Hazards:

- Rotors
- Flammable liquids
- Flammable/pressurised gases
- Composite aircraft materials.
- Pressurised Wheel hub and fusible plugs

Further Considerations:

- Aircraft position and wreckage
- Leaking fuel
- Safe Approach Angle
- Aircrew
- Other agencies.

Supporting Information:

- NOG
- DFR BA Operations
- CFR Ops Instruction 001 – Aircraft Incidents
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- CFR Op Guidance 007 – Aircraft Engine Fires
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Training:

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