



Defence Fire and Rescue Tactics Techniques & Procedures

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| Stakeholders: | <table><tr><td>DFR HQ</td><td>✓ Capita Fire and Rescue</td></tr><tr><td>RN Aircraft Handler¹</td><td>RAF Fire and Rescue</td></tr><tr><td>DFRS LEC</td><td>✓ Other FRS Providers²</td></tr><tr><td>DFRS (DFSR, DIO, RN)³</td><td>DFRS (USVF)</td></tr></table> | 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) |
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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 DFSR, DIO & RN, are included for information purposes only.

Version Control History



AIRCRAFT TACTICS TECHNIQUES PROCEDURES (ATTP/A43)

Puma HC Mk2 – Brunei Operations

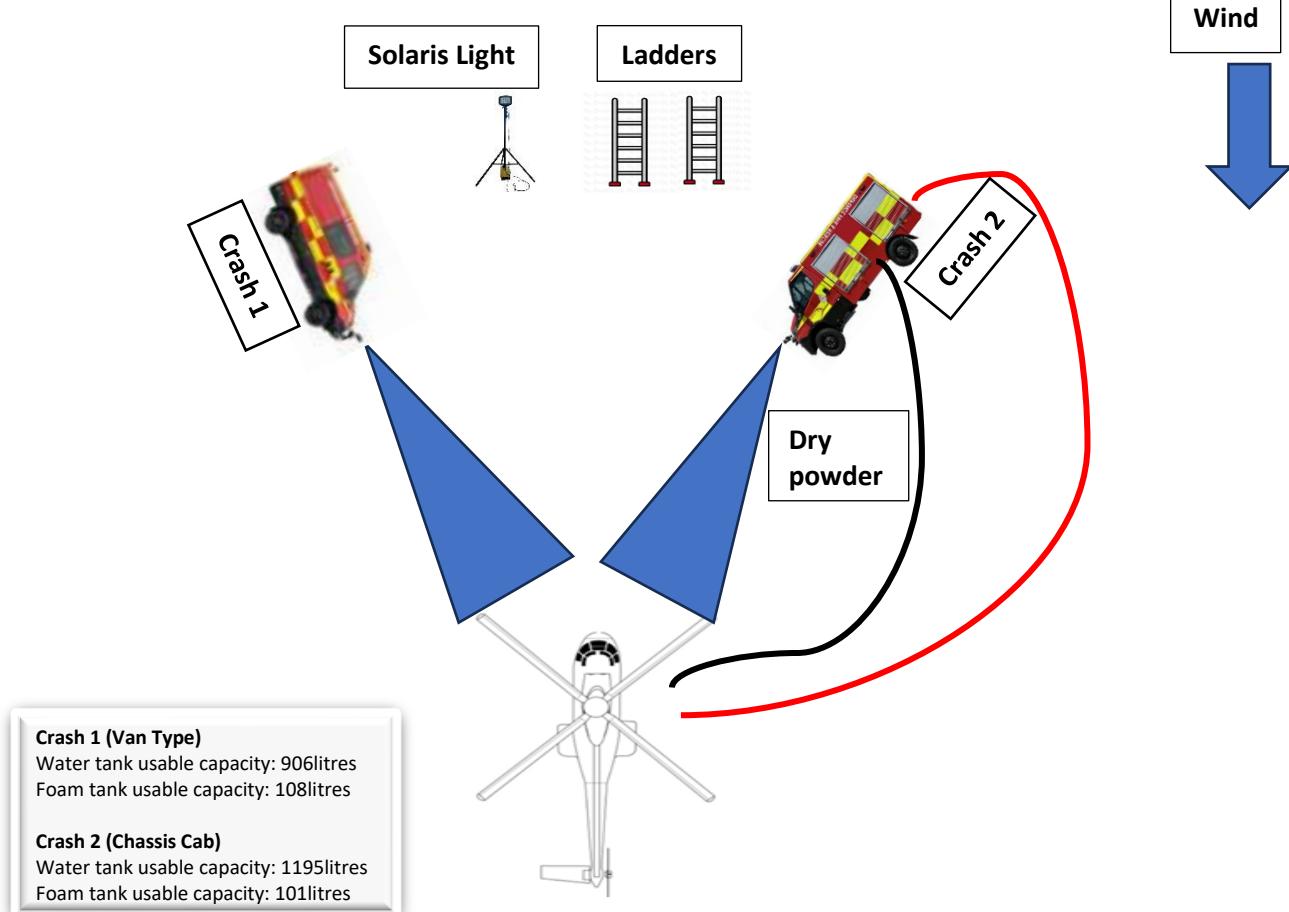
RRV (Crash1)

RRV (Crash 2)

| | |
|---|----------------|
| Document Control | Page 02 |
| TTP 1 - Engine Fire | Page 03 |
| TTP 2 - Wheel Assembly Incidents | Page 06 |
| TTP 3 - Internal Fire | Page 09 |
| 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 MIP
- Direct firefighting actions
- Consider contacting aircraft commander via Ops Room
- 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
- Consider deploying the portable Solaris lighting system in hours of darkness.
- Consider deploying ladders to gain access into aircraft.
- Consider deploying life - saving equipment.

Crash 1 - RRV Actions:

- Crewing Incident Commander and ERD Driver
- Deploy vehicle to rescue side of the aircraft
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Be prepared to operate bumper monitor or deploy media with 1 x 45mm hose with G force branch as determined by the IC's DRA and prepare for use as covering jet outside of the aircraft
- Be prepared to act as pump operator on Crash 2 vehicle (if tasked)
- Driver Crash 1 prepares ladder for use.

Crash 2 - RRV Actions:

- Crewing: Firefighter and ERD Driver
- Deploy vehicle to point of Hazard.
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Operate the monitor
- Consider method of entry if PAX remain on board
- Don BA and utilise Rapid Deployment Procedures if required
- Deploy 2 x 45mm lengths of hose with G force branch/dry powder for engine fire at IC's direction 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
- Maintain contact with IC.

Specific Aircraft Hazards:

- Flammable liquids and pressurised gases
- Presence of Man-Made Mineral Fibres
- Rotor blades.

Further Considerations:

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

Supporting Information:

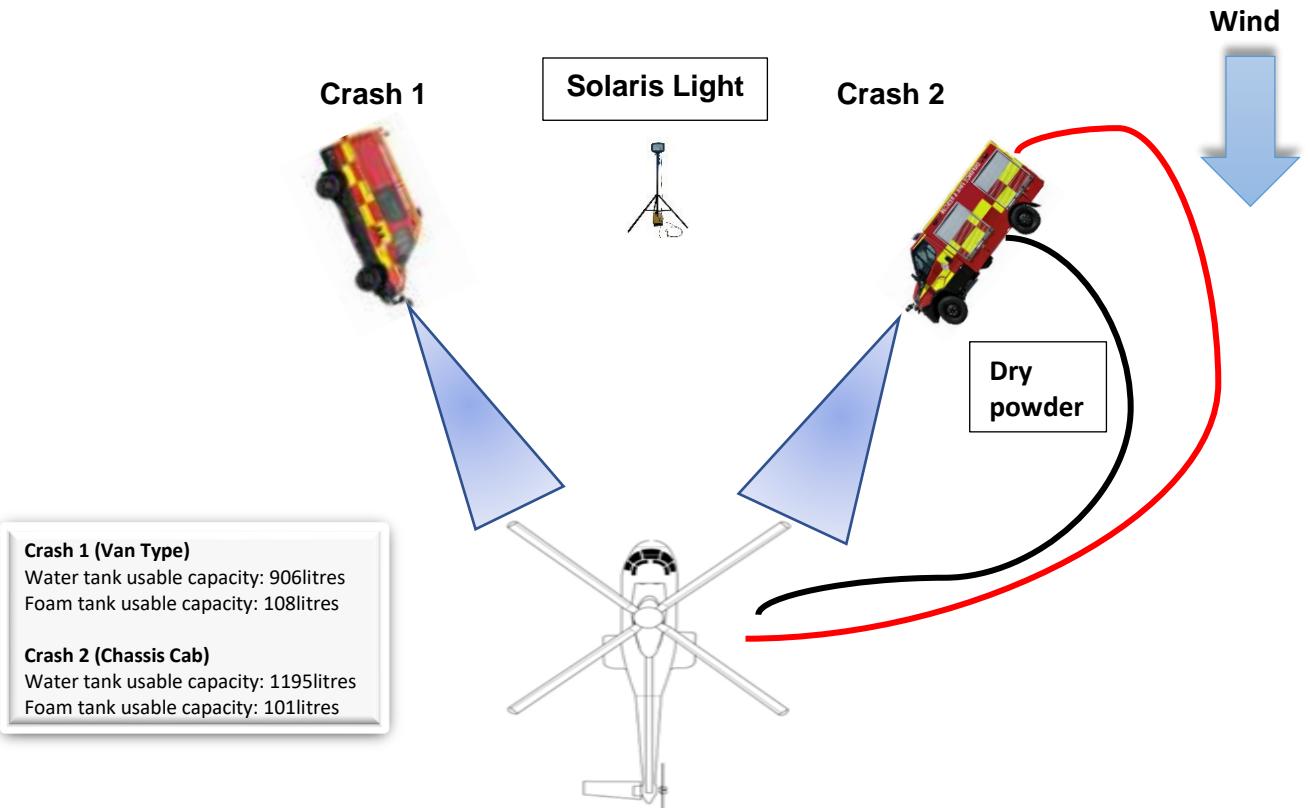
- DFR-OG 009 - Aircraft Fires
- ARFF TOG
- Ops Instruction 001 - Aircraft Incidents
- Ops Instruction 002 - CFR HSE Policy
- Ops Instruction 005 - Low Speed Manoeuvring
- Ops Instruction 006 - MPRV ARFF Positioning Deployment & Task
- Ops Instruction 007 - MPRV Vehicle Operations
- Ops Instruction 009 - Oshkosh Striker HRET Positioning Deployment & Task
- Ops Instruction 012 - Oshkosh Striker HRET Controls
- Ops Instruction 016 - Oshkosh Striker HRET Operator Considerations
- 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 A43.

Training:

- Aircraft familiarization
- Aircraft lecture - 6 monthly lesson.
- Redkite CMS
- Deployment exercise(s)

TTP 2 – Wheel Assembly Incidents

Event Plan - Initial Deployment



Incident Commander Considerations:

- Conduct and complete DRA
- Declare Tactical Mode
- Formulate tactics dependent if fire is present and where escalation is likely
- Consider required agencies
- Consider implementing MIP
- Direct firefighting actions
- Consider contacting aircraft commander via Ops Room
- 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
- Consider deploying the portable Solaris lighting system in hours of darkness.

Crash 1 - RRV Actions:

- Crewing Incident Commander and ERD Driver
- Deploy vehicle to rescue side of aircraft.
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Be prepared to operate monitor or deploy media with 1 x 45mm hose with G force branch as determined by IC's DRA and prepare for use as covering jet outside the aircraft.
- Be prepared to act as pump operator on Crash 2 vehicle.

Crash 2 - RRV Actions:

- Crewing: Firefighter and ERD Driver
- Deploy vehicle to point of Hazard.
- Be aware of PAX exiting the aircraft
- Be prepared to operate monitor
- Be aware of PAX and assist them with exiting the aircraft
- Consider method of entry if PAX remain on board
- Don BA and utilise Rapid Deployment Procedures if required
- Deploy 2 x 45mm lengths of hose with G force branch/dry powder for wheel assembly fire at IC's direction and prepare for entry into aircraft
- Make access to aircraft and confirm survivable conditions
- Confirm/make safe aircraft systems
- Utilise Medics to triage casualties on board if survivable conditions are present
- Aid Medics in extricating casualties.

Specific Aircraft Hazards/Procedures:

- Flammable liquids and pressurised gases
- Presence of Man-Made Mineral Fibres
- Rotor blades.

Further Considerations:

- Aircraft position and wreckage
- Leaking fuel
- 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?

Training:

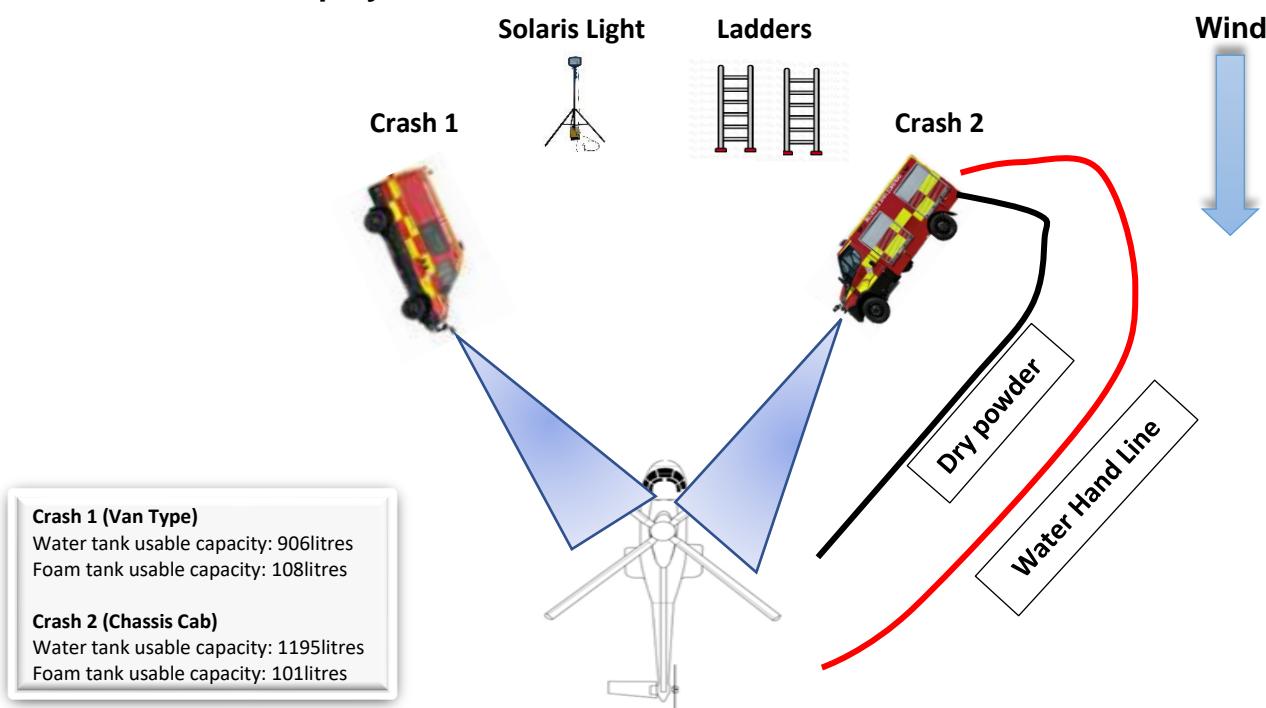
- Aircraft familiarization
- Aircraft lecture - 6 monthly lesson.
- Redkite CMS
- Deployment exercise(s)

Supporting Information:

- DFR-OG 009 - Aircraft Fires
- ARFF TOG
- Ops Instruction 001 - Aircraft Incidents
- Ops Instruction 002 - HSE Policy
- Ops Instruction 024 - RRV Vehicle Operations
- Ops Instruction 026 - RRV ARFF Positioning Deployment & Task
- 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 A43.

TTP 3 – Internal Fire

Event Plan – Initial Deployment



Incident Commander Considerations:

- Conduct and complete DRA
- Declare Tactical Mode
- Consider required agencies
- Consider implementing MIP
- Direct firefighting actions
- Consider contacting aircraft commander via Ops Room
- 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
- Water consolidation/replenishment
- Consider deploying the portable Solaris lighting system in hours of darkness.
- Consider deploying ladders to gain access into the aircraft.
- Consider deploying life - saving equipment.

Crash 1 - RRV Actions:

- Crewing: Incident Commander and ERD Driver
- Deploy vehicle to rescue side of aircraft.
- Be aware of PAX and assist them with exiting the aircraft
- Be prepared to operate bumper monitor or deploy media with 1 x 45mm hose with G force branch as determined by IC's DRA and prepare for use as covering jet outside the aircraft.
- Be prepared to act as pump operator on Crash 2 vehicle.
- Driver Crash 1 prepares the ladder for use.

Crash 2 - RRV Actions

- Crewing: Firefighter and ERD Driver
- Deploy vehicle to point of Hazard.
- Be aware of PAX exiting the aircraft
- Operate monitor
- Consider method of entry if PAX remain on board
- Don BA and utilise Rapid Deployment Procedures
- Deploy 2 x 45mm lengths of hose with G force branch/dry powder for internal fire at IC's direction and prepare for entry into aircraft
- Make access to aircraft and create survivable conditions by extinguishing fire and ventilating
- Remove any casualties from immediate danger
- Confirm/make safe aircraft systems
- Utilise Medics to triage casualties on board if survivable conditions are present
- Aid Medics in extricating casualties.

Specific Aircraft Hazards/Procedures:

- Flammable liquids and pressurised gases
- Presence of Man-Made Mineral Fibres
- Rotor blades.

Further Considerations:

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

Supporting Information:

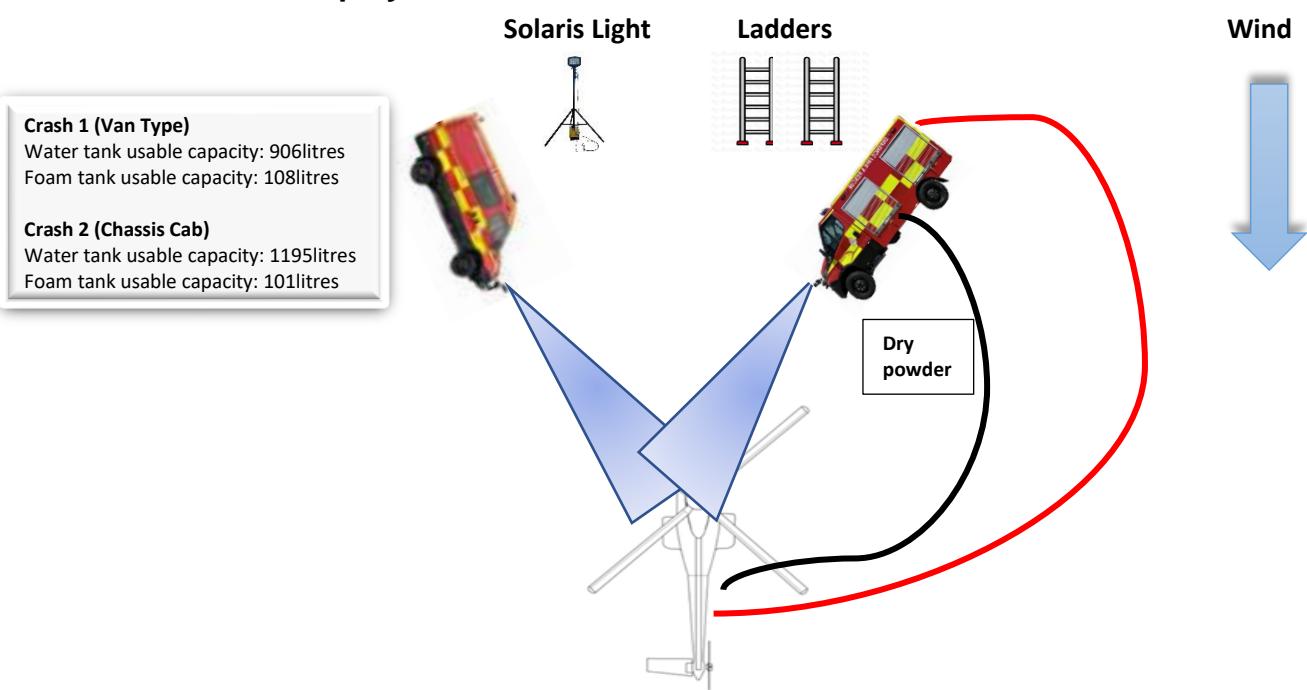
- DFR-OG 009 - Aircraft Fires
- ARFF TOG
- Ops Instruction 001 - Aircraft Incidents
- Ops Instruction 002 - HSE Policy
- Ops Instruction 024 - RRV Vehicle Operations
- Ops Instruction 026 - RRV ARFF Positioning Deployment & Task
- Ops Instruction 033 - BA Operations
- Ops Instruction 066 - Fire Contaminants
- 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 A43.

Training:

- Aircraft familiarization
- Aircraft lecture - 6 monthly lesson.
- Redkite CMS
- Deployment exercise(s)

TTP 4 - External Fire

Event Plan – Initial Deployment



Incident Commander Considerations:

- Conduct and complete DRA
- Declare Tactical Mode
- Consider required agencies
- Consider implementing MIP
- If external fire only then utilise RRV Monitor
- Direct firefighting actions
- Consider contacting aircraft commander via Ops Room
- 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
- Water consolidation/replenishment.
- Consider deploying the portable Solaris lighting system in hours of darkness.
- Consider deploying ladders to gain access into the aircraft.

Crash 1 - RRV Actions:

- Crewing: Incident Commander and ERD Driver
- Deploy vehicle to rescue side of aircraft.
- Be aware of PAX and assist them with exiting the aircraft.
- Direct personnel away from airframe.
- Be prepared to operate monitor or deploy media with 1 x 45mm hose with G force branch as determined by IC's DRA and prepare for use as covering jet outside the aircraft.
- Be prepared to act as pump operator on Crash 2 vehicle.
- Driver Crash 1 prepares the ladder for use.

Crash 2 - RRV Actions:

- Crewing: Firefighter and ERD Driver
- Deploy vehicle to point of Hazard.
- Deploy main monitor and extinguish fire utilising mass discharge.
- Be aware of PAX exiting the aircraft.
- Consider method of entry if PAX remain on board.
- Don BA and utilise Rapid Deployment Procedures (if required).
- Deploy 2 x 45mm lengths of hose with G force branch/dry powder for external fire at IC's direction and prepare for entry into aircraft.
- Make access to aircraft crew and confirm survivable conditions (if required).
- Confirm/make safe aircraft systems.
- Utilise Medics to triage casualties on board if survivable conditions are present.
- Aid Medics in extricating casualties.

Specific Aircraft Hazards/Procedures:

- Flammable liquids and pressurised gases
- Presence of Man-Made Mineral Fibres
- Rotor blades.

Further Considerations:

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

Supporting Information:

- DFR-OG 009 - Aircraft Fires
- ARFF TOG
- Ops Instruction 001 - Aircraft Incidents
- Ops Instruction 002 - HSE Policy
- Ops Instruction 024 - RRV Vehicle Operations
- Ops Instruction 026 - RRV ARFF Positioning Deployment & Task
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- MOD Aircraft Crash Hazards Document Set
- NATO STANAG/TO 00-105E-9-Chapter 13 (revision 16)
- AQRC A43.

Training:

- Aircraft familiarization
- Aircraft lecture - 6 monthly lesson.
- Redkite CMS
- Deployment exercise(s)