



Ministry
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Defence Fire and Rescue Tactics Techniques Procedure

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

VERSION CONTROL HISTORY

Version	Date	Amended by	Role	Change	Status
V1.0	13/10/2024	S Ash	WM	Initial Issue	Draft
V1.1	16/10/2024	Phil McGuinness	CFR Hd of Response	1. New Cover and layout. 2. Change of Sponsor. 3. Combined Engine / External Fire ATTP 4. Footnotes added to page 3	For review
V1.1	06/11/2024	Shane Cook	AM for DFR HQ	Stakeholder Review	Forwarded for issue
V1.1	07/11/2024	Phil McGuinness	CFR Hd of Response	Re-issued	Re-issued



AIRCRAFT TACTICS TECHNIQUES PROCEDURES

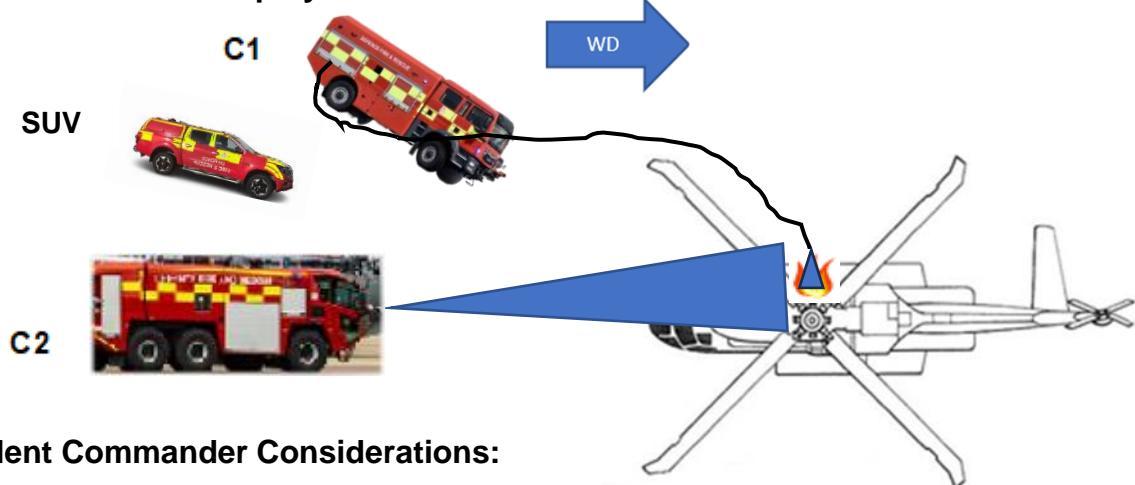
SIKORSKY S92

1 x SUV⁴ 1 x MPRV 1 x Striker (MPA - ICAO 5)

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TTP 2 - Wheel Assembly Incidents	Page 5-8
TTP 3 - Internal Fire	Page 9

TTP 1 – Engine / External Fire

Event Plan - Initial Deployment⁵



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 secondary agents
- Consider water consolidation/replenishment
- Communicate hazards to all crews and agencies
- Consider aircraft role (SAR / Passenger / Casualties etc.)

⁴ The IC may (or may not) elect to utilise SUV for convenience

⁵ For H3 operations 1 x MPRV and 1 x Striker HRET

- Instigate JESIP for multi-agency incident
- Consider preservation of evidence

Crash 1 - MPRV Actions:

- Deploy vehicle to rescue side of aircraft taking into consideration wind direction and gradient
- If directed by IC deploy main monitor and / or initiate dual application
- Be aware of PAX and assist them with exiting the aircraft
- Direct personnel away from airframe
- Consider method of entry if PAX remain onboard
- Don BA and utilise Rapid Deployment Procedures, where necessary
- For engine fire: Deploy 45mm lengths of hose with Akron branch/dry powder at IC's direction
- External fire: Deploy media either 45mm hose / hose reel as determined by IC DRA and prepare for entry into aircraft
- BA team access aircraft and maintain 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

Crash 2 - Striker Actions:

- Deploy vehicle near the point of hazard commensurate with safety (nose on and upwind)
- Create survivable conditions - Operate monitor to extinguish flame mass
- 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
- Utilise HRET as a covering line
- Consider use of FLIR to check for hotspots and provide cooling if needed to prevent re-ignition
- Provide scene safety / maintain foam blanket
- Support Crash 1 Firefighting and rescue actions
- Maintain contact with IC

Specific Aircraft Hazards: (Make use of AQRC):

- Rotors / Composite Materials
- Pyrotechnics
- Flammable liquids / Hydraulic fluids
- Flammable/pur pressurised gases
- Inflatable Systems
- Oleo Leg Collapsing

Further Considerations:

- Passengers
- Maintaining foam blanket and limiting the disturbance of the blanket
- Other agencies
- Contaminated PPE
- Environmental conditions
- Scene preservation

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 009 - Oshkosh Striker HRET Positioning Deployment & Task
- Ops Instruction 010 - Oshkosh Striker HRET Incident Commander Considerations
- Ops Instruction 012 - Oshkosh Striker HRET Controls
- Ops Instruction 014 - Oshkosh Striker HRET Safety Considerations
- Ops Instruction 016 - Oshkosh Striker HRET Operator Considerations
- Ops Instruction 018 - SUV 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 007 - Aircraft Engine Fire
- MOD Aircraft Crash Hazards Document Set
- NATO STANAG / TO 00-105E-9-Chapter 13 (revision 16)
- DSA 1000m assessments
- DSA Water assessments
- DSA Response assessments

TTP 2 – Wheel Assembly Incidents

Event Plan - Initial Deployment

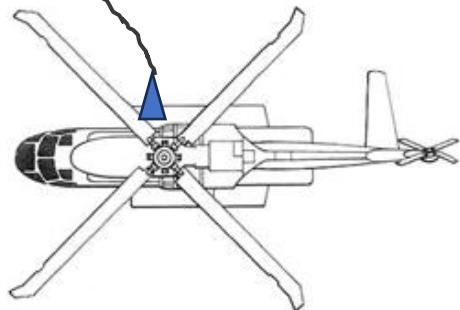
WD



C1



C2



Incident Commander Considerations:

- Conduct and complete DRA
- Declare Tactical Mode
- Consider required agencies
- Direct firefighting actions
- Be wary of oleo collapse
- The presence of inflatable systems
- Consider contacting aircraft commander via ATC or 121.6 if available
- Be aware of PAX exiting aircraft
- Direct firefighting/rescue crew (safe line of approach)
- Direct all operational control and implement ICS
- Provide M/ETHANE report
- Maintain safe operations and ensure scene safety
- Communicate hazards to all crews and agencies
- Consider aircraft role (SAR / Passenger / Casualties etc.)
- Instigate JESIP for multi-agency incident
- Consider preservation of evidence

Crash 1 – 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 necessary
- Adopt a safe line of approach to the affected wheel assembly
- Deploy media c/w 45mm hose/hose reel as determined by ICs DRA
- Prepare for entry into aircraft
- BA team access aircraft (if necessary to 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

Crash 2 – Striker Actions

- Deploy vehicle near to the point of hazard commensurate with safe operations (normally 45° angle to the aircraft nose)
- 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

Specific Aircraft Hazards – (Make use of AQRC):

- Rotors / Composite Materials
- Pyrotechnics
- Leaking fuel/Hydraulic fluids
- Flammable liquids
- Flammable/pressurised gases
- Composite Materials
- Oleo Leg Collapsing
- Inflatable Systems

Further Considerations:

- Aircraft position
- 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 familiarisation
- Deployment exercise(s)
- Redkite CMS

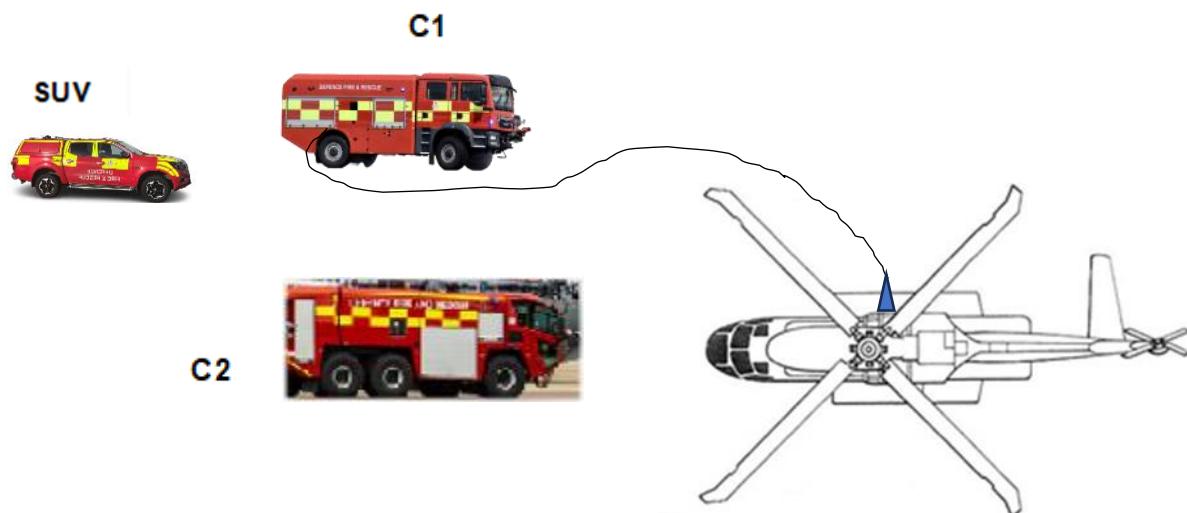
Aircraft lecture – 6 monthly lesson / familiarisation presentation

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 009 - Oshkosh Striker HRET Positioning Deployment & Task
- Ops Instruction 010 - Oshkosh Striker HRET Incident Commander Considerations
- Ops Instruction 012 - Oshkosh Striker HRET Controls
- Ops Instruction 014 - Oshkosh Striker HRET Safety Considerations
- Ops Instruction 016 - Oshkosh Striker HRET Operator Considerations
- Ops Instruction 018 - SUV 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 008 - Aircraft Undercarriage Incidents
- MOD Aircraft Crash Hazards Document Set
- NATO STANAG/TO 00-105E-9-Chapter 13 (revision 16)
- DSA 1000m assessments
- DSA Water assessments
- DSA Response assessments

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
- Consider aircraft role (SAR / Passenger / Casualties etc.)
- 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 – 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 ICs 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

Crash 2 – Striker Actions:

- Deploy vehicle to point of Hazard
- Operate monitor to extinguish flame mass using mass discharge
- Be aware of PAX / casualties (SAR) 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

Specific Aircraft Hazards – (Make use of AQRC):

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

Further Considerations:

- Aircraft position and wreckage
- Leaking fuel
- Passengers / Casualties
- 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
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- DSA 1000m assessments
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Training:

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