



Ministry
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Defence Fire and Rescue

Aviation Tactics Techniques & Procedures

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

Document Control					
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V0.1	20 May 2022	Michael Kelly		New/Draft	
V1.0	13 Oct 2022	Phil McGuinness	Hd of Response	For Issue	Layout and format only.
V1.1	09 Feb 2024	SM Blair	FSM - RAF Waddington		1. Change to POB on both Aircraft 2. Change to crewing levels (7 Fftrs vs 10) 3. Removal of some actions (Fftrs 8-10) 4. SOP 008 (HAWK AECS Make Safe)
V1.2	09 Feb 2024	Phil McGuinness	Hd of Response	Review	Tabs and format
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TACTICS TECHNIQUES PROCEDURES



RAF Waddington²

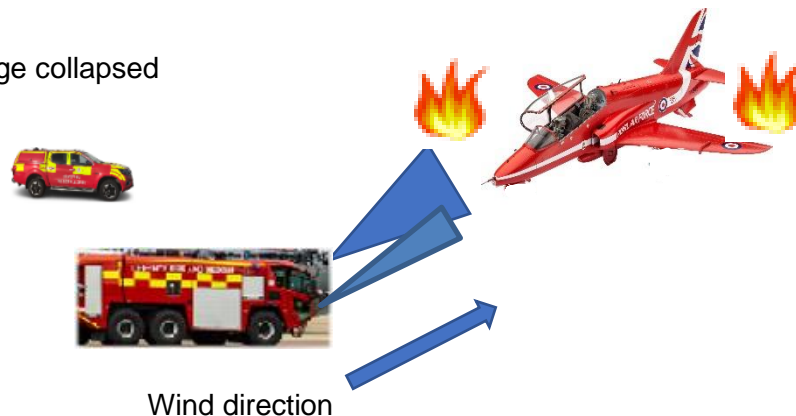
BAE Hawk T1 - RAFAT Formation Take-off

TTP 1 - Crash occurred during formation take off (Split Deployment).

SUV - 1 x IC	HRET - 1 CM + 1 Fftrs	MPRV 1 - CM + 3 FFtrs
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■ Event Plan – Site 1

Hawk AC Under Carriage collapsed
1 POB



■ Event Plan – Site 2

Hawk AC Under Carriage intact
1 POB



SUV Actions – Incident Commander

- Location of A/C
- Emergency declared
- Wind Direction
- Transit to incident
- Confirm with all crew's the nature of incident and locations where to deploy:
 - SUV and Striker to Site 1,
 - MPRV to Site 2

² Note: RAF Waddington operates ICAO7

- Informing ATC of Tactical Mode, requesting external resources as required.
- DRA followed by METHANE report.
- Consider implementing station CP1 (Major Incident Plan) through ATC.
- Repeat DRA as appropriate to the incident. Confirm when airframe temperature is reduced below 150°C to allow the replacement of BA with 3M RPE.
- Prepare for ARA.
- Declaring State of Airfield and ICAO capability.
- Call forward medical team to incident location as required.
- Request Sqn Support.
- Request LAFRS.
- Direct external resources on arrival.
- Consider water supplies for consolidation and/or replenishment.
- Ensure safe handover of incident, when declared safe to relevant authority.
- Debrief all crews post incident, identifying any further support required.

Striker Actions – Crash Two (Crew Mgr & 1 Fftrs)

- Deploy vehicle in accordance with weather conditions
- Utilise pump and roll using the bumper monitor on high output
- Once stationary deploy HRET, if needed and utilise FLIR.
- Vehicle Commander becomes a single wearer (BA1) to gain entry to A/C, single wearer gives tally to Driver who places it Rapid Board. IC will be responsible for single wearer.
- Striker driver remains on HRET to maintain all round fire cover.
- BA1 carry out making safe AAES and shutting down the A?C
- Once confirmed aircraft systems shutdown and airframe temperature is below 150°C by the IC BA1 can remove BA and replace with 3M RPE.
- Call medics to casualty on board if survivable conditions are present.
- Aid medics in extracting casualties

MPRV Actions – Crash One (Crew Mgr & 3 Fftrs)

- Deploy vehicle in accordance with weather conditions
- Utilise pump and roll using the bumper monitor on high output (pump and roll at IC discretion)
- IC conduct DRA
- MPRV Driver remains in vehicle to maintain all round fire cover
- BA1 and BA2 will don BA sets and deploy under Rapid Deployment procedures
- BA2 will remove ladder from gantry
- BA1 will entry to airframe and shut down aircraft systems and make safe with BA2 footing the ladder
- Once confirmed aircraft systems shutdown and airframe temperature is below 150°C by the IC BA team can remove BA and replace with 3M RPE.
- Call forward medics to triage casualties on board if survivable conditions are present
- Aid medics in extricating casualties.

Specific Aircraft Hazards

- AAES
- Flammable Liquids
- Pressurised Gases
- Solids
- Explosive Materials / Aircraft Weapons
- Polymer composites, scattered debris, and sharps
- Hydraulic Systems
- Running Engine
- Noise

Further Considerations

- Aircraft familiarisation with Sqn personnel
- Aircraft position and wreckage
- Leaking fuel
- Other agencies
- Current Eng Auth for AAES
- This ATTP is to be read in conjunction with ATTP A-10 Leeming³ and AQRC A10.
- When exposed to temperatures above 150°C polymer composite materials will decompose giving off toxic gases/ cyanide gas/ dust/ splinters.
- Firefighting techniques are as per standard aircraft crash procedures.
- Upwind approach at all incidents with inner and outer cordon set up.
- Following the extinction of fires, it may be permissible subject to a stringent Dynamic Risk Assessment (DRA) to move from SCBA to FFP3 once the wreckage has cooled to below 150°C⁴.

Supporting Information

- DFR OG 009 - 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 Commanders Considerations
- Ops Instruction 012 - Oshkosh Striker HRET Controls
- Ops Instruction 013 - Oshkosh Striker HRET Manual Recovery
- Ops Instruction 014 - Oshkosh Striker HRET Safety Considerations
- Ops Instruction 016 - Oshkosh Striker HRET Operator Considerations
- Ops Instruction 018 - SUV Positioning Deployment Task

³ Note: RAF Leeming operates at ICAO 5

⁴ This assumes the absence of fire and that the smoke plume has also dispersed.

- Ops Instruction 033 - BA Operations
- Ops Instruction 066 - Fire Contaminants
- Ops Instruction 069 - Polymer-Composites-and-MMMF
- Op Guidance 003 - Aircraft Fuel Fires
- Op Guidance 004 - Military Fast Jets
- Op Guidance 007 - Aircraft Engine Fires
- Standard Operating Procedure - 008 Hawk AAES
- MOD Aircraft Crash Hazards Document Set
- NATO STANAG/TO 00-105E-9 Chapter 9 (Revision 16).

Training

- Aircraft familiarisation - Sqn Engineers
- Deployment Exercise(s)
- Aircraft lecture - 6 monthly lesson / familiarisation presentation
- Redkite CMS