

STANDARD OPERATING PROCEDURES OVER A FIRE

The Spotter Pilot will take charge of all SEATs and Helicopters at the fire.

- The Spotter Pilot in conjunction with the IC/Air Branch director will assess the situation and formulate an action plan including whether additional aircraft and ground resources are required.
- All tactics and targets should consider the effectiveness of aerial attack.
- Care should be taken to avoid areas of severe heat, smoke, twisters, etc.
- The Spotter must circle the fire at a safe height to ensure separation from the SEATs.
- The Spotter Pilot must inspect the area the SEATs are operating in, and all obstacles must be reported to the SEAT Pilots.
- Where possible the Spotter pilot to observe, the loads being dropped and give feedback to helicopter and SEAT Pilots.
- The Spotter Pilot must clearly indicate the initial reporting point IP to all inbound SEATs.
- SEATs must set up an outbound point to separate traffic on route to the airstrip.
- SEAT to confine/limit his radio communications with Spotter Pilot to the phase of flight between the IP and egress from the operational fire area.
- IC to notify Spotter Pilot when to stand down resources/order more resources.
- Spotter Pilot to communicate to helicopter and SEATs of stand down and return to Air Base.
- Spotter to communicate stand down back to Dispatch.
- All Aircraft to return to their relevant Air Bases.
- Once overhead, spotter pilot confirms local QNH.
- All aircraft must always broadcast on required frequencies.

AIR OPERATIONS BRANCH DIRECTOR

ROLES & RESPONSIBILITIES

PRIMARY

- Coordinate airspace use with the relevant Aviation Authority.
- Request declaration (or cancellation) of Temporary Flight Restriction (TFR) in accordance with local laws and post notice to air personnel as required.
- Attend the Tactics and Planning meetings to obtain information for completing the Air Operations.
- Summary Worksheet (IMS 220), as needed.
- Participate in preparation of the IAP through the OSC.
- Ensure that the air operations portion of the IAP takes into consideration the Air Traffic Control (ATC) requirements of assigned aircraft.
- Coordinate with the COML to designate air tactical and support frequencies.
- Ensure dependable communication between air operations branch and air units.

SECONDARY

- Perform operational planning for air operations within the Planning Cycle.
- Prepare and provide Air Operations Summary Worksheet (IMS 220), if completed, to the Air Support Group (ASG) and Fixed Wing Bases.
- Supervise all air operations activities associated with the incident.
- Evaluate helibase and helispot locations.
- Establish procedures for emergency reassignment of aircraft.
- Coordinate approved flights of non-incident aircraft in the Temporary Flight Restriction (TFR) zone.
- Initiate airspace de-confliction.
- Coordinate with appropriate Command Centre(s) through normal channels on incident air operations activities.
- Consider requests for logistical use of incident aircraft.
- Report to the OSC on air operations activities.
- Report any special incidents or accidents.
- Develop an Aviation Site Safety Plan with SO.

TERTIARY

- Arrange for an accident investigation team, when warranted.
- Debrief with the OSC, as directed, at the end of each Operational Period.
- Ensure that SAFECOMS are documented and reported.
- Maintain Unit / Activity Log (IMS 214).

AIR TACTICAL GROUP SUPERVISOR

ROLES & RESPONSIBILITIES

PRIMARY

- Obtain a copy of the IAP from the Air Operations Branch Director (AOBD), including Air Operations Summary Worksheet (IMS 220), if completed.

SECONDARY

- Participate in air operations planning activities.
- Inform AOBD of group activities.
- Identify resources / supplies dispatched for the Air Tactical Group.
- Report special air tactical items from appropriate sources through the Logistics Section.
- Coordinate activities with the AOBD.
- Obtain assigned ground-to-air frequency for air base operations from the Communications Unit Leader (COML) or Radio Communications Plan (IMS 205).
- Inform AOBD of capability to provide night flying service.

TERTIARY

- Ensure compliance with each organisation's operations checklist for day and night operations.
- Debrief, as directed, at the end of each shift.
- Monitor for near misses and accidents and ensure that the AOBD receives information on them in a timely manner.
- Maintain Unit / Activity Log (IMS 214).

SAFETY DURING AERIAL WATER DROPS

A water drop from a Bambi bucket underneath a helicopter can be moving at speeds up to 100km/h and contain anything from 1000 litres to 2500 litres. Water drops from the Fixed Wing Air Tractor 802 can exceed 200km/h and contain as much as 3000 litres, the impact from these can cause death or serious injury.

To avoid injury when in the line of an incoming water drop:

- Alert the rest of the crew and other crews in the area of aerial water drops.
- Use a whistle to warn the crew of an approaching bomber.
- When in close proximity to an operating fire truck the sound of an approaching bomber may be drowned out, ensure you have lookouts watching for bombers.
- If possible move at least 10 metres adjacent to the aerial water drop line chosen by the pilot.
- DO NOT attempt to endure a water drop if on the edge of rocks, cliffs or on steep slopes.
- Lie or crouch down facing towards the incoming aircraft with your helmet strapped on and firmly in place.
- Keep watching the incoming aircraft.
- Ensure you are firmly balanced and tuck your head down only as the water hits.
- Place your handtool beside you but keep it held firmly so that it cannot fly into others when the water hits.
- Be aware that Bambi buckets can hit the ground.
- Be aware of loose objects (branches/young tree tops/rolling rocks) that may be thrown around from the falling load of water.
- Be aware that the ground can become slippery if water wetting agents or retardants are used and care should be taken when working in these areas.
- Be aware that flare ups can happen from the down draft of rotor blades.

Airfield or aerodrome with firefighting aircraft on standby

Helibase with firefighting aircraft on standby

Airfield usable by AT802 bomber and / or spotter aircraft

10 minute flight radius for Bell 'Huey' UH-1H (15 km)

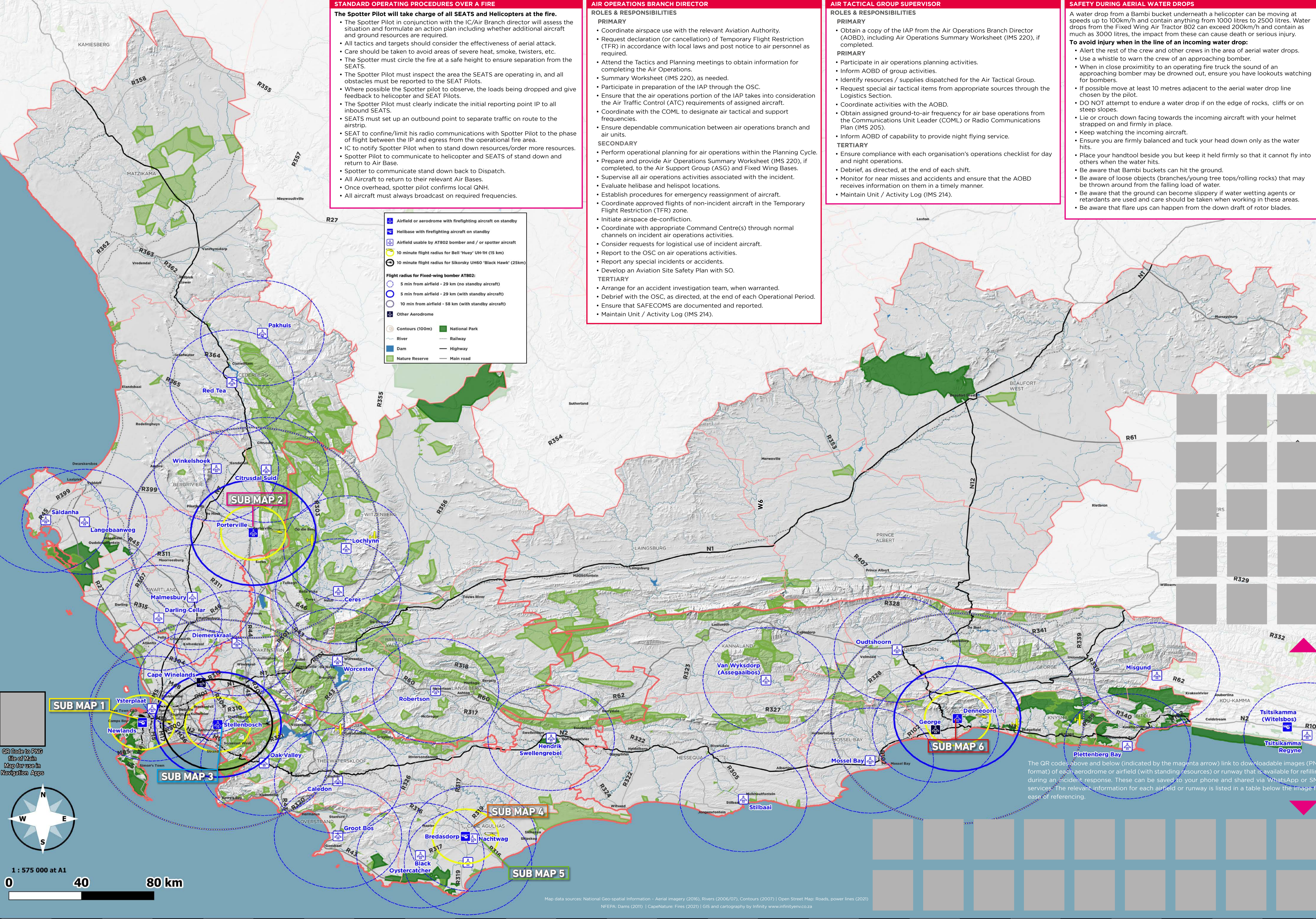
10 minute flight radius for Sikorsky UH60 'Black Hawk' (25km)

Flight radius for Fixed-wing bomber AT802:

- 5 min from airfield - 29 km (no standby aircraft)
- 5 min from airfield - 29 km (with standby aircraft)
- 10 min from airfield - 58 km (with standby aircraft)

Other Aerodrome

Contours (100m) National Park
 River Railway
 Dam Highway
 Nature Reserve Main road



QR Code to PNG file of Main Map for use in Navigation Apps

The QR codes above and below (indicated by the magenta arrow) link to downloadable images (PNG format) of each aerodrome or airfield (with standing resources) or runway that is available for refilling during an incident response. These can be saved to your phone and shared via WhatsApp or SMS services. The relevant information for each airfield or runway is listed in a table below the image for ease of referencing.

Map data sources: National Geo-spatial Information - Aerial imagery (2016), Rivers (2006/07), Contours (2007) | Open Street Map: Roads, power lines (2021) | NFEPA: Dams (2011) | CapeNature: Fires (2021) | GIS and cartography by Infinity www.infinityenv.co.za

