STATE AIRCRAFT UNIT
V I C T O R I A

ATTACHMENT 18

Very Large Airtanker Project
Victoria 2010

VLAT-Project Operations Program | ***Standard Operating Procedures***

Departure and transit Bomber 391

BDG 393 establishes contact and obtains briefing from Incident AAS located over fire area.

BOM 391 departs NOB and maintains listening watch, confirms altimeter settings and establishes communication with BDG 393.

Through the reporting process BOM 391 and BDG 393 confirm altitudes and other resources at F-CTAF, air attack supervisor platform, helicopter and fixed wing fire bombing aircraft.

Standard reporting procedures for BOM 391:

- 40 NM inbound call to lead plane- dist. & altitude- (S*ubject to distance and location of the incident.)*
- Subsequent reporting calls are provided at 30, 20 & 12 NM inbound and entry calls to the F-CTAF.

At 12 NM BOM 391 is configured for pre staged for entry into the fire area- flaps set and speed reduced to 150 knots.

From the 12 NM BOM 391 enters the F-CTAF area at the assigned altitude and altimeter settings.

BOM 391 receives further instructions from BDG 393.

Entry into F-CTAF

When bringing in and positioning BOM 391 there may be a need to orbit not only the SEATS and helitankers in a higher orbit, but other supervisory aircraft; air attack supervisor and air observer platforms.

If SEATS and helitankers are already on scene, the Incident AAS should have them orbit above and out from BOM 391's manoeuvring altitude. If unable to orbit them above, then place them in a specific orbit away from the BOM 391's Initial Point[18] and manoeuvring area or re-task to other sectors on the fire.

This includes media aircraft as well.

Bomber 391 join up with Lead plane Birddog 393

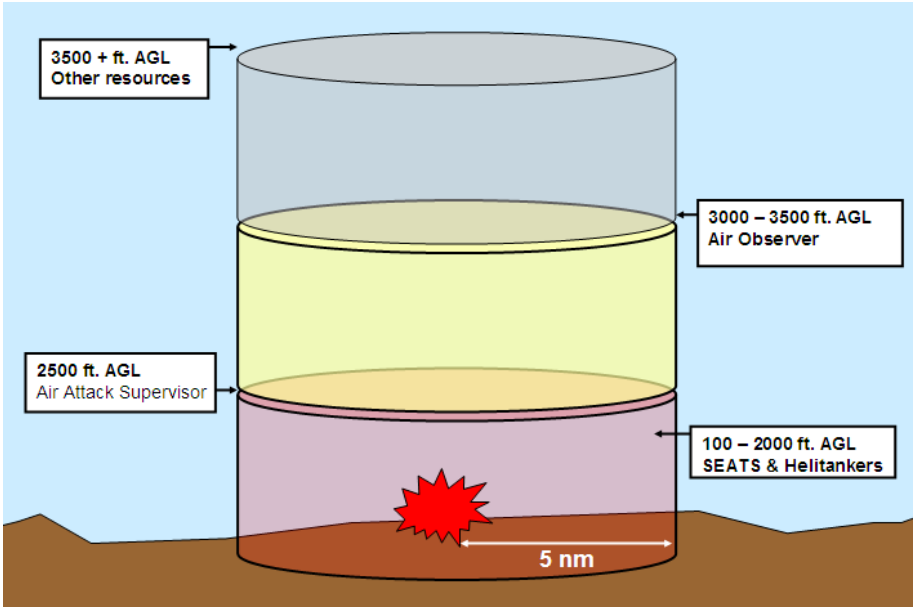
During the join up with BOM 391 confirms altitude and headings and requirements for the drop process.

BDG 393 confirms with the Incident Air Attack Supervisor and BOM 391 the drop configuration including the quantity and coverage level and the start and stop for the drop and whether it is a split or salvo.

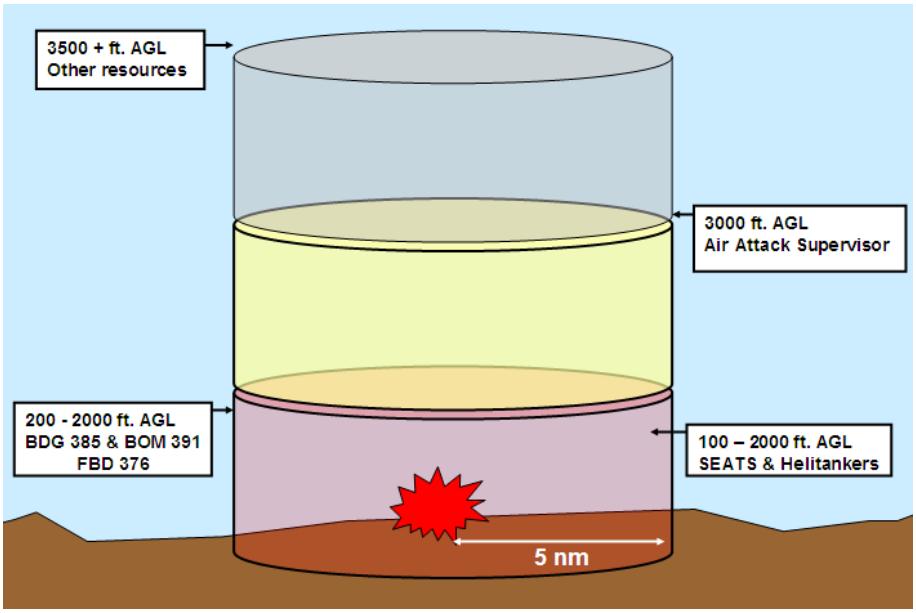
[18] Holding area for Bomber 391 prior to entry.

During the set up for the drop both BDG 393 and BOM 391 confirm escape routes & hazards- including the location of other aircraft.

Indicative vertical airspace management pre entry BOM 391 & BDG 385



Indicative vertical airspace management BOM 391 & BDG 385 operational



Integration

The following procedures listed below are to be considered when using BOM 391 and the lead plane.

Establish flight paths:

Avoid creating hazards to other aerial resources within the F-CTAF along with persons or property on the ground due to any potential wake turbulence created by BOM 391.

When possible:

Drop payloads from all SEATS and helitankers prior to the arrival of BOM 391.

Separation:

When SEATS, helitankers, BOM 391 and the lead plane are on scene, place them in geographically separated circuits.
Additionally the SEAT and helitanker resources may be utilized on other sectors of the fire until the completion of the drop BOM 391 and wake test from and BDG 393.
If geographic separation is not possible place the SEATs and helitankers in an orbit above BOM 391 and BDG 393).

Ensure

Maintain separation of air attack platforms by requesting they maintain an orbit altitude 1000 feet above BOM 391's orbit.

Wake turbulence

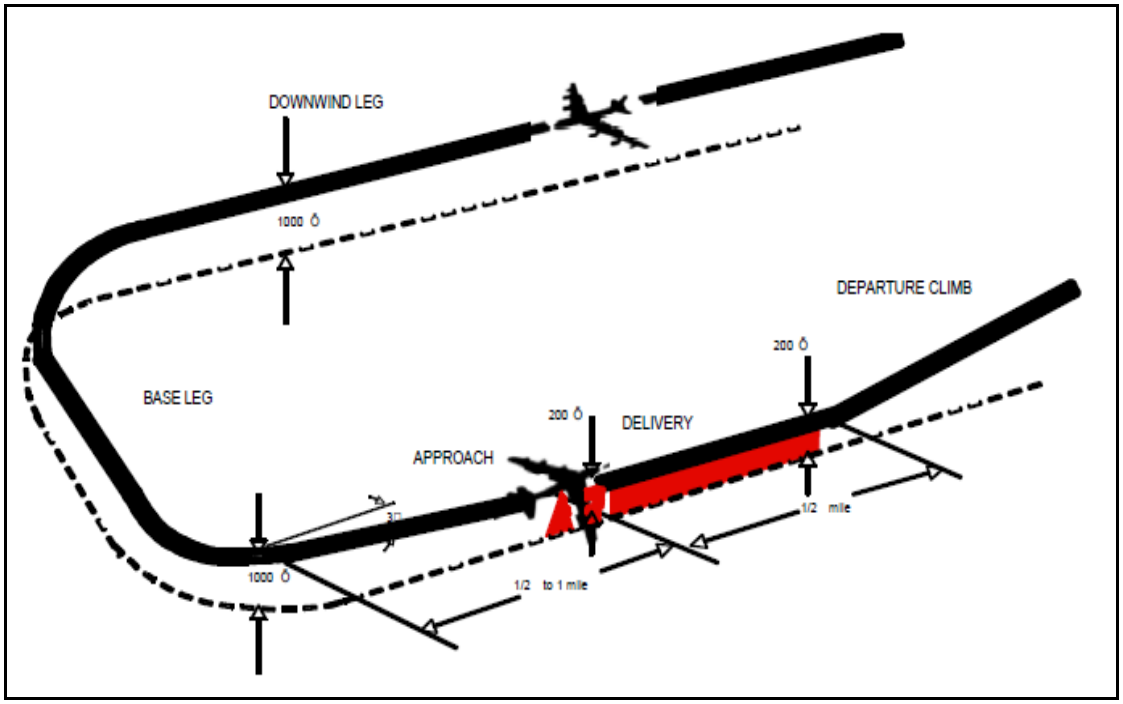
It is recommended to wait 5 minutes, but no less than 3 minutes, after the VLAT has dropped to resume conventional aerial resource operations. BDG 393 should remain on scene to perform high and low recconnssiance of the general fire area. This should be done after the recommended wait time for wake turbulence. BDG 393 will then convey air conditions over the fire F-CTAF area.

Non-essential aerial resources should be moved to an area to avoid any turbulence created by BOM 391. It is recommended that these same resources do not return until the 5-minute wait period.

Drop area procedures and separation

Airspeed: BOM 391 – 150 KIAS.
Pattern Altitudes: Above Drop Altitude
BDG 393 – 800 Feet
. BOM 391 – 1000 Feet

Pattern legs



Source USFS

Pattern Legs - Wings level with a bank of no greater than 30° between legs.

The final to the drop point:

At least a one-half (½) mile with wings level.

Maintain constant descent on final.

No pushover maneuvers are permitted.

BOM 391 drop altitude:

Normally be 300 feet AGL and no lower than 200 feet AGL, and 200 feet above any hazard.

Crossing altitudes prior to drop point.

200 feet above any hazard or 300 feet AGL, which ever is greatest.

Departure

BOM 391 will maintain a consistent and typical flight pattern and maintain assigned altitude and air speed- maintaining 150 knots. for exit. The exit process is similar to entry procedures.

Further instructions

Returns shut down, return reload return, return and hold and released.

WATCHOUTS flight operations

The influence and dominance of prevailing winds will determine the success of flight operations, especially under mountain flying conditions.

Similarly the potential of turbulence associated with the wildfire conditions including downdrafts will require extra vigilance.

Emphasis is to be maintained in conditions were low visibility- smoke, cloud, remaining daylight, valley shadowing, sun glare may be present and including impending weather conditions which may include precipitation and lightning.

The presence of obstructions- powerlines, cables, tall trees, snags, towers or proximity to built up areas will restrict the potential for low level work.

The lead plane will determine the orientation of the drop based on prominent topographic/geographic or man made features.

The terrain type will be a limiting factor to run direction and safe exits, the lead plane will have identified hazards, escape routes and flight paths.

Prior to the intended drop reaffirm the objective and attack plan with the Incident Air Attack Supervisor.

If hazards pose too great a risk, the drop will be aborted and all resources will be advised.

The lead plane will determine the circuit pattern for the intended drop. In determining run directions in other than flat terrain, the team will ensure that all exits are downhill or straight out/ turning/breaking away from hazards.

Sterile Fire-CTAF

Consistent with SAUPs and current standard operating requirements a stronger emphasis is placed on maintaining a sterile Fire CTAF for the drop process.

This is to allow for the immediate advice alerting of inadvertent hazards or realignment of the flight line for the drop.

All aircrews should and attempt to maintain a "sterile Fire-CTAF" during the drop process.

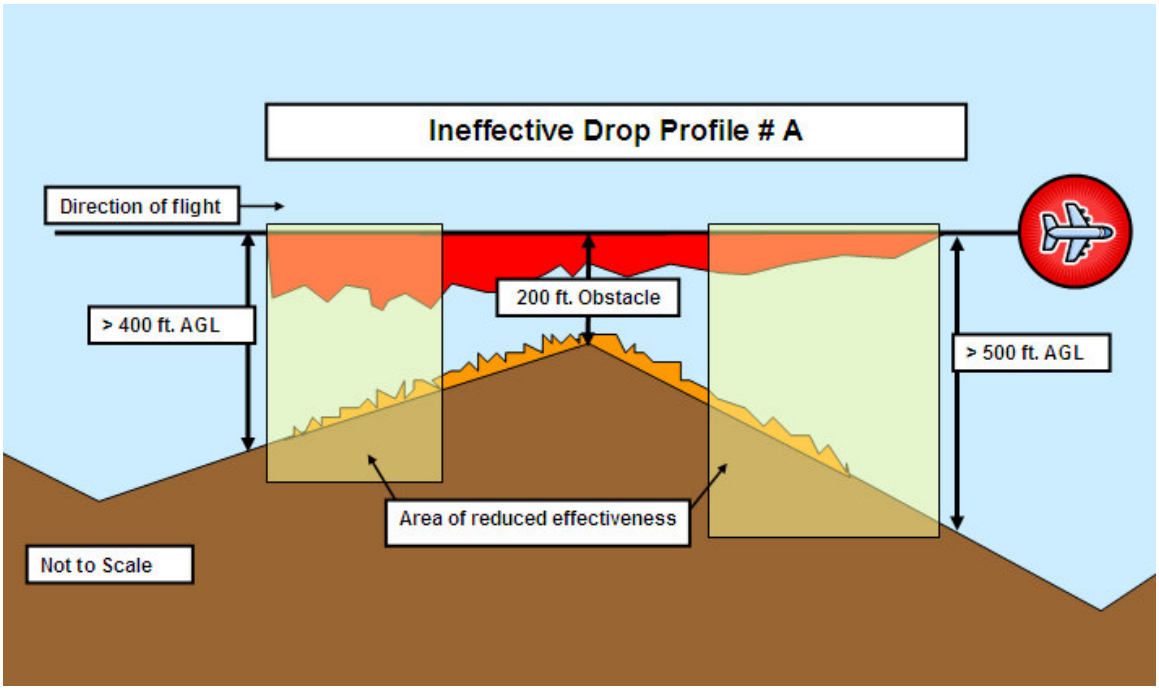
Tactical efficiencies

Thought has to be given to the efficient use of BOM 391 and any other larger capacity airtanker. The length of line to be provided in one drop is much greater than current resources. The projected length of a full drop at coverage level 8 may exceed 700 metres in length.

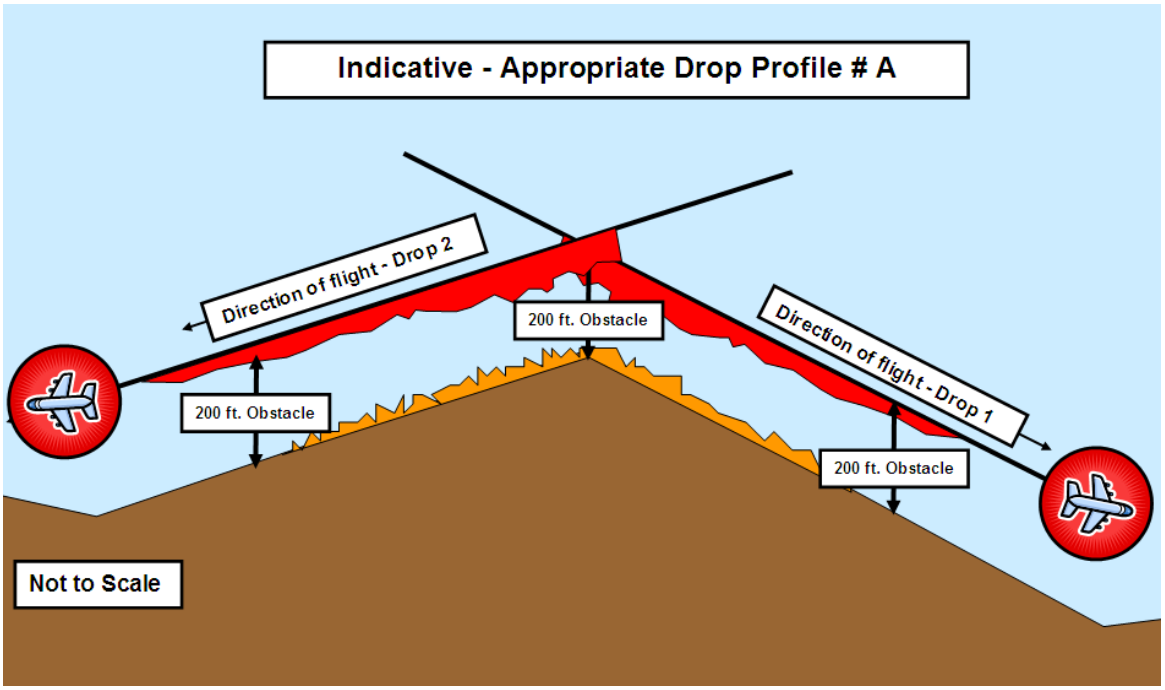
The application of one drop in undulating terrain with a fixed crossing point of the highest point or obstacle will result in ineffective coverage in the depressions, see Ineffective Drop Profile A and B.

Indicative solutions have been supplied to accommodate potential drop applications in undulating terrain. The solutions are a guide only and may not reflect an actual wildfire scenario.

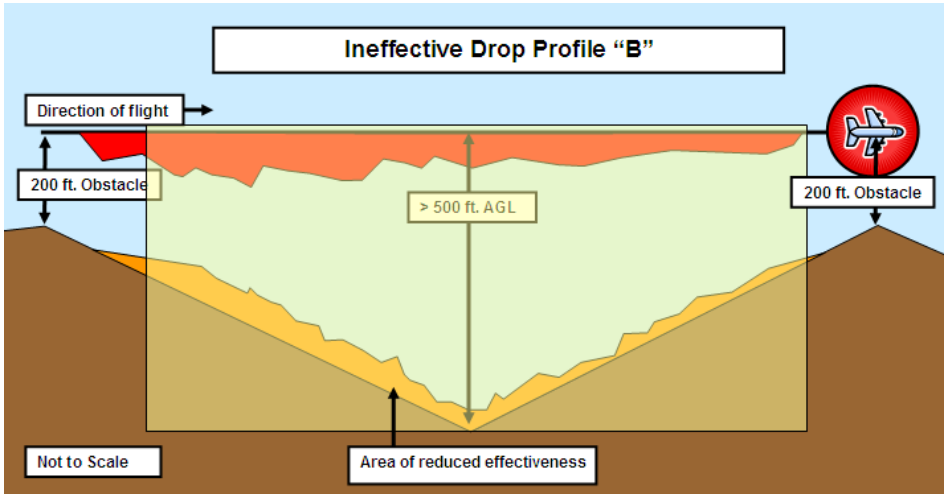
Ineffective drop Profile A



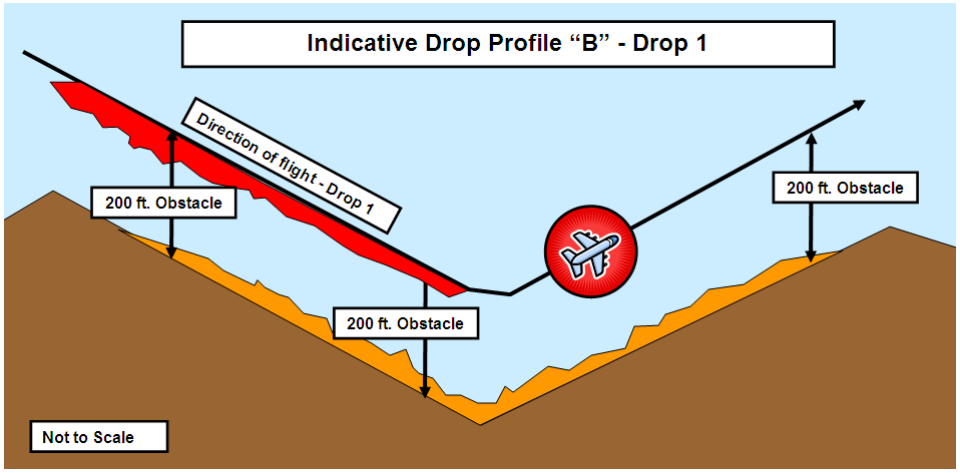
Indicative solution Profile A

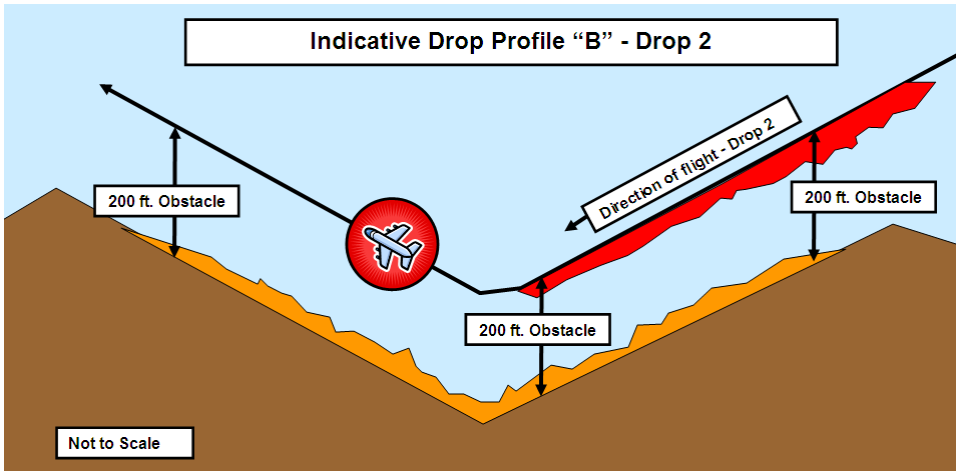


Ineffective drop Profile B



Indicative solution Profile B





Further information

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