

Task Profile - *Aerial Spotting*

Task Profile Name:	
Aerial Spotting (not below 200 ft)	Helicopter
Objectives of Task:	
<ol style="list-style-type: none"> 1. To determine the extent of locust activity including accurate geographic boundaries, location and density to inform agricultural operations (aerial spraying) with the aim of optimising the outcome of those agricultural operations. 2. Identify environmentally sensitive areas and inform agricultural operations to minimise any risk to these areas. 3. Identify aviation hazards and communicate these to the agricultural operator to augment information from the inspection component of aerial agricultural operations with the aim of reducing safety risk. 	
Description of Task:	
<p>The task will be conducted in an I&I NSW contracted aircraft allocated for the task and will be initiated as a result of information obtained from aerial and/or ground surveying and land-holder reports. The task involves both medium and low level flying operations to a minimum height of 200 ft above terrain depending on the degree of difficulty associated with achieving the objectives and the height of hazards in the area. The underpinning philosophy of the operation is to achieve the objectives without resorting to frequent exposure to operations at or below the level of wires and similar hazards in the course of maneuvering or landing and taking off.</p> <p>A detailed examination of this task is contained in the relevant SOP.</p>	
CASA Permit / Approval	
<p>Air Operating Certificate (AOC) endorsed for aerial work – aerial spotting with low level approval and using pilots with appropriate low level flying permit (to be confirmed with operators noting that the operation is not specifically included in existing CASA regulations).</p>	

Task Elements (sequence):

1. Planning include map reconnaissance for hazards
2. Briefing
3. Start/Taxi/Takeoff
4. Transit to area of operations not below 500 ft above terrain.
5. Conduct target identification and aerial hazard survey prior to descent below 500ft.
6. Descend to low level (not below 200ft agl) operations commensurate with task objectives and conduct further target identification.
7. Conduct continuous area aviation hazard assessment
8. Maintain communications with the agricultural operator on appropriate frequency.
9. Maintain visual contact, with the agricultural operator's aircraft.
10. Maintain agreed SAR communications.
11. If transit to an additional operational area, do so at a safe transit height but not below 500 feet above terrain.
12. Continue to conduct further hazard reconnaissance and target identification prior to descent to conduct further low level (not below 200ft agl) operations as above. Briefing prior to descent.
13. Return transit to operating base, but not below 500 ft above terrain.
14. Landing brief prior to descent.
15. Land/Shut down.
16. Debrief and report.

Task conditions or technical aspects:

Information from aerial spotting may, where practicable, be augmented by information obtained from ground based teams.

The task is normally conducted in conjunction with and immediately prior to agricultural operations to control the locusts.

The task entails the use of GPS derived locations to define the extent of the target locusts unless this is self evident.

Limitations:

Aerial Spotting (not below 200 feet) is only to be used in conjunction with Agricultural Operations.

The operation is preceded by an **appropriate risk assessment** including aerial aviation hazard identification and assessment, assessment of environmental risks and an assessment of the operational impact of conducting the operation within the conditions established by this task profile.

Descent to below 500 feet above terrain is not to be conducted prior to confirmation of a low level of risk considering aircraft performance, environmental conditions and the assessment of the risk associated with any aviation hazards to which the aircraft would be exposed while low flying.

Passengers (people without training or a designated role in the aircraft) are not to be carried on this task.

Landing to liaise with landholders is to be conducted only to low risk Helicopter Landing Site (HLS), Air Landing Ground (ALG) or aerodromes.

Aircraft are not permitted to fly with doors removed.

Height restrictions:

A minimum of 500 ft above terrain when in transit to and from the area of operations or when in transit between areas of operation.

A minimum of 200 ft above terrain when in transit between treatment areas that are immediately adjacent to each other with the requirement that a subsequent aviation hazard assessment of the adjacent area is to be conducted not below 500 ft above terrain prior to descending to complete spotting operations at not below 200 ft in that area.

A minimum of 200 ft above terrain when conducting spotting operations.

Crew Composition:

Subject to risk assessment by the responsible coordinator.

Minimum requirement is a Pilot and aviation trained observer.

No passengers during this operation.

Role of each crew member:

Pilot – fly the aircraft, identify hazards and maintain hazard clearance.

Trained Observer - identify location and other pertinent information relating to locusts including environmentally sensitive information and assist the pilot with hazard identification and avoidance.

(Note: an additional observer if carried will focus on locust activities and the trained front seat observer will focus on aviation matters such as hazard identification, communications and watching the location of the spray aircraft).

Landing zone details:

No landing will occur other than at initial take off and final landing and intermediate refueling points at designated landing sites and at low risk HLS or ALG with HLS to meet minimum requirements of CASA Civil Aviation Advisory Publication (CAAP) 92-2 (1) for basic HLS or in an emergency situation.

Communication and co-ordination requirements

Communications and where feasible, visual contact is to be established and maintained with other low flying aircraft in the immediate vicinity.

Sterile cockpit procedures are to be used when below 500 feet above terrain.

Sterile cockpit - No extraneous conversations or non-pertinent radio calls within the aircraft cabin. Hazard avoidance calls by anyone are exempt from the sterile cockpit procedures.

Communications are to be established and maintained with the agricultural aircraft and with the respective ground crew element as appropriate in order to facilitate the communication of operational and hazard related information.

SAR requirements

Flight following by the Aviation Coordinator using 30 min reporting schedules.

Any change to the flight operations must be communicated to the Aviation Coordinator immediately.

Personal Protective Equipment (PPE)

Helmets with built in communications and visor for applicable crew, nomex or equivalent flight suit, enclosed leather footwear, non-flammable underclothing and socks.

TRAINING

HUET – Where flight over a large body of water or extended flying in flood conditions is required, aircraft operators are to provide crew that are HUET qualified, who are to provide an over-water briefing including ditching procedures prior to each flight.

Aviation Trained Observer (minimum requirements) – work safely around aircraft (PUAFIR209A), aircraft familiarization and crew resource management (TDAZ503A and TDAF103A)

Restrictions / non - approved practice:

No flight below 200 feet above terrain except when landing and taking off from low-risk basic HLS, HLS, ALG or aerodrome or in an emergency situation.

No flight below 500 ft above terrain during transit between treatment areas or in transit to and from landing zone to treatment area.