



Department of Primary Industries

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Procedure – Strategic Planning of Aviation Resources

Authorised by	Agricultural Protection Officer (Policy)	Authorisation date	31/7/2012
Authorisation period		Effective date	1/1/2012
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REVISION HISTORY

Version	Date	Amendments	
		Section	Details
1	2 Nov 11		For approval
2	31 Jul 12	All	Inclusion of NSW RFS State Air Desk and EOI; incident reports & investigations

1. Application / Scope

- This procedure will provide specific planning guidelines to the NSW DPI State Coordination Centre (SCC) to support effective and efficient use of aviation assets in biosecurity, natural disaster and plague locust emergency responses.
- SCC will work in conjunction with NSW Rural Fire Service (RFS) State Air Desk (SAD) in the effective and efficient use of aviation assets.
- Planning for aviation resources occurs at a number of levels including strategic and operational. The strategic planning occurs at the SCC level. The operational planning occurs at the Local Control Centre (LCC) and Forward Command Post (FCP) (when established).
- SCC planning for aviation resources in emergency responses encompasses the collation and interpretation of information enabling the contribution to an emergency action plan that provides direction, addresses risks and outlines response objectives.
- Effective planning practices are key to a successful response and should be implemented by trained and competent personnel who also possess a relevant knowledge of aviation resources. For example, aviation resource planning is most appropriately performed by the Air Operations Manager (as an aviation resource expert) with the Operations Manager and Resource Planning Officer from the Planning section.

2. Abbreviations / Definitions

- AAR - After Action Review
- AOL – Approved Operator List
- AOM – Air Operations Manager
- Briefing – SMEAC format – Situation, Mission, Execution, Administration, Command, Control and Communications
- DTIRIS – Department of Trade and Investment, Regional Infrastructure and Services
- EDM – Emergency and Disaster Management (server)
- Emergency action plan – strategic plan developed by the SCC using an IAP template
- FCP – Forward Command Post
- FOR – Flight Operations Return
- IAP – Incident Action Plan – operational plan developed at the LCC/FCP
- KPI – Key Performance Indicator – best aircraft for the task in the right place at the most appropriate time at the best cost in accordance with policies and procedures (on a risk based approach)
- LCC – Local Control Centre
- NSW RFS – NSW Rural Fire Service
- SAD - State Air Desk
- SCC – State Coordination Centre
- Sitrep – Situation Report

3. Resources / Equipment

- Access to NSW RFS Approved Operator List (AOL)
- Access to EDM server

4. Warnings

- Effective and efficient aviation resource planning at a strategic level will support a safer and more cost effective working environment as the correct resources will be allocated to aviation tasks.
- In large emergency responses, multiple agencies may be activated. Other agencies may have higher priorities for the limited aviation resources. Allocation of aviation assets rests with the NSW RFS SAD.

5. Procedure

5.1 Planning Inputs

SCC requires access to relevant information that can be used to inform the strategic planning process for aviation resources. Information sources include, but are not limited to:

- the Air Operator including pilots (see 5.1.1);
- the LCC (see 5.1.2.);
- resource availability and service providers available from the NSW RFS SAD and includes data from the NSW RFS AOL (see 5.1.3);
- National/State plans, legislation and legal advice;
- cost sharing and/or financial arrangements;
- other agencies (e.g. weather, mapping data);
- characteristics and spread predictions for the hazard (e.g. pest, disease, flood, fire);
- analysis of the current response situation;
- independent aviation experts/auditors;
- risk assessments of proposed response actions;
- local knowledge;
- pre-existing plans, policies and procedures;
- health and safety of response personnel and community;
- expectations of the Incident Management Team, Agency Executive, Consultative Committees etc;
- stakeholders including the community and industry groups; and
- NSW Department of Primary Industries and DTIRIS.

Strategic planning inputs will vary with area of operation and response size and type.

5.1.1 Air Operator

- initially provide data through the NSW RFS EOI process (held in NSW RFS AOL);
- provide operational data/records to the LCC associated to each task. Data/records will be located on the EDM server located in a folder named with the appropriate task request number. Examples of data provided include: Flight Operations Return (FOR), satellite location logs and spray records.
- Invoice and FOR – must be checked against EDM records for correctness by the LCC; and
- have input into the effective and efficient use and availability of aviation resources.

5.1.2 LCC

LCC(s) provides to the SCC:

- Summary of aviation activities in the Air Control Log spreadsheet (located on EDM server) and in situation reports (Sitreps). Details to include:
 - Location of air operations;
 - Aircraft type and number of aircraft;
 - Personnel numbers and roles;
 - Weather;
 - Communications (including flight following);
 - Incidents/occurrences; issues
 - Other resources allocated eg fuel, accommodation
 - Planning efficiency – number of jobs versus hours flown;
 - Planning effectiveness – hrs flown versus hrs planned;
 - Task result (varies):
 - Spray – chemical type; quantity used and area covered;
 - Spot – area covered; type and number of potential targets identified;
 - Survey - area covered; type and number of potential targets identified;

- Shooting – animals identified for destruction; number destroyed; number remaining;
 - Transport – number of persons moved; number and weight of lifts including fodder, equipment and animals (type); distance moved; and/or
 - Muster – number and type animals moved/not moved; area covered.
- Aviation situation reports as summarised information from the Air Control Log to go in the LCC Sitrep.

5.1.3 SCC

Contracted and non-contracted aviation resource information is available from the NSW RFS AOL.

5.2 Planning

Planning for aviation resources needs to include information on suppliers, facilities, equipment, personnel and finances. Resources need to appropriately support the response objectives and key performance indicators (KPIs).

A variety of tools or processes can be used during the strategic planning process (see Appendix 1 Planning Cycle diagram) and may include, but are not limited to:

1. Cost Benefit Analysis;
2. appreciation (factor/options analysis and risk assessments);
3. technical advisers (e.g. other agency air controller, experienced pilot, meteorologist);
4. information management;
5. models, systems curves, time lines; and
6. resource tracking system.

Planning for aviation resources should consider the following, which will assist in the system reviews (daily, mid response or at the end):

1. Situation including forecast
2. Mission
3. Priorities including analysis
4. Resource/s required
5. Coordination
6. Resource/s location
7. Health, safety and well being
8. Incident/occurrence reports and investigations
9. Environmental safety
10. Resource availability including tracking
11. Politics
12. Alternatives
13. How often is the resource required
14. Limitations
15. Reporting - results and effectiveness i.e. measure of performance
16. Efficiency i.e. performance over time and/or cost.

5.3 Planning Outputs

All outputs should also be considered as inputs to ongoing planning as part of the planning cycle. Strategic planning outputs include, but are not limited to:

1. Aviation resources (aircraft, personnel, support requirements such as facilities) allocated to an LCC which are tracked.
2. Aviation related policy/procedure/task profiles – may include new and/or regular review of existing documents to ensure they are addressing response objectives and improvements based on the monitoring and evaluation.

3. Emergency Action Plan – the aviation contribution to this plan may include:
 - Communications plan (for aviation assets);
 - Medical plan; and
 - Critical incident response plan.
4. Risk assessments – analyse the potential risk associated with aviation resources using all hazards approach.
5. Cost Benefit Analysis – costs associated with response options and an analysis of the benefit achieved by certain activities.
6. Aviation Sitrep which is incorporated in the operations section of the LCC Sitrep. Then becomes included in the SCC Sitrep. These may not be separate documents, but aviation resource information must be included in the SCC Sitrep.
7. Visual displays – maps, whiteboards, smart boards or charts.
8. Maps for visual displays, dissemination to the LCC and inclusion in communication to stakeholders (e.g. Sitrep, public website).
9. Briefings – used to disseminate plan information in a recognised format to the LCC(s).
10. Incident/occurrence reports and investigations
11. Debrief or After Action Review (AAR) report – used to systematically collect information related to the efficiency and effectiveness of the aviation management system based on task completion and can occur daily or periodically during the response. All responses must have an AAR at its completion.

6. References

[Aviation Task Profiles and Risk Assessments](#)

[Aviation Policy and Procedures](#)

[Aviation Role Descriptions](#)

Forms

- [Incident Action Plan template](#)
- [Incident report form](#)
- [Situation report template](#)

Information

- [NSW DPI Aviation management system webpage](#)
- [NSW DPI Emergency management webpage](#)

7. Appendices

Appendix 1: Planning cycle diagram

