A-311
Project Aviation Plans and Unit Aviation Planning

Participant Workbook

Prepared by Office of Aviation Services Training Division
and Interagency Aviation Training Partners
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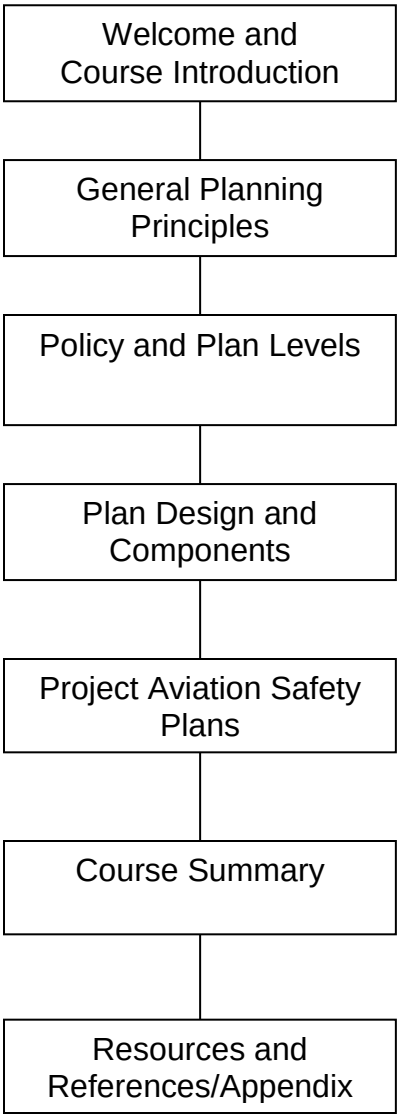
Course Map



Welcome and Course Introduction

Get to Know Your Classmates

Be prepared to share:

- Your name?
- Your position?
- How long have you been involved in aviation operations?
- In your position, how are you involved in Aviation Planning?

Course Purpose

The purpose of this course is to provide aviation personnel with an overview of the Aviation Planning Process for state and federal agencies, including how and when to prepare an aviation plan.

Course Prerequisite

It is highly recommended that the students complete the A205 Risk Management I course or have field experience in developing a risk assessment worksheet matrix prior to taking this course.

Objectives

At the conclusion of this course, you should be able to:

1. Define an aviation plan.
2. Explain the purpose of an aviation plan.
3. Identify the hierarchy of aviation planning levels.
4. Identify which levels of aviation plans affect your bureau or agency.
5. List three types of operational plans that might be included or referenced in a Unit Aviation Plan.
6. List two examples each of operational and non-operational aviation plans.
7. Explain the difference between operational decisions and discretionary decisions.
8. Identify at least three sources of reference that can assist in the development of an aviation plan.
9. Identify the six main components that should be included in any aviation plan.
10. List the seven sub-elements or chapters that should be addressed in a Project Aviation Safety Plan.
11. Identify at least three optional components that may be included in an aviation plan.
12. Explain when a Pre-Accident Response Plan (Mishap Response Plan) should be included.
13. Describe a situation in which an operational aviation plan might include a personal protective equipment waiver.
14. Describe the Review and Approval Process for Unit Aviation Plans.
15. Describe the Review and Approval Process for Project Aviation Safety Plan.
16. Describe the purpose of a Project Aviation Safety Plan.

Failing to Plan

Most aviation accidents and incidents are the result of the failure to follow policy and procedures.

This is a photo of an Idaho State Fish & Game accident that occurred when the pilot and the observer were looking for cougar tracks in the snow. Both the pilot and observer were focused on tracks and did not notice the lone snag that caused the accident. The pilot was fatally injured and the observer had both legs broken and sustained back injuries. The fuel truck driver was performing flight following duties but was not notified the proper protocol if there was a mishap, therefore no one was notified when the aircraft did not return. Not until after dark was anyone notified and the observer ended up unable to move and spent the night in the aircraft. No PPE was worn, the Survival kit was accessible however it was banded with a metal band and the observer had no means of opening the kit.

Interaction/Activity: What would you have added to a plan to ensure a safer operation?

_____

_____

_____

Module 1: General Planning Principles

Notes

Objectives

1. Define an aviation plan.
2. Explain the purpose of an aviation plan.

Definition of a Plan

- A scheme for achieving an objective: a method of doing something that is worked out usually in some detail before it is begun and that may be written down in some form or simply retained in memory.

- An orderly arrangement of parts of an overall design or objective.

What is an Aviation Plan?

A written description of the procedures and methods by which an organization will conduct safe and efficient aviation operations

The Purpose of an Aviation Plan

- Provides standard practice and procedures so everyone who manages or uses aviation activities are aware of requirements
- Enables others to understand the responsibilities of positions
- Important orientation and briefing tool
- Increases safety by giving the critical information to perform their jobs
- Reduces risk through planning and forethought

Module 2: Policy and Plan Levels

Objectives

3. Identify the hierarchy of aviation planning levels.
4. Identify which levels of aviation plans affect your bureau or agency.
5. List three types of operational plans that might be included or referenced in a Unit Aviation Plan.
6. List two examples each of operational and non-operational aviation plans.
7. Explain the difference between operational decisions and discretionary decisions.

Aviation Plan Levels

There are multiple levels to Aviation Plans. The highest level, National Aviation Plan, is the starting point. Each level supersedes those below it and indicates (in the content) whether a plan at the next lower level is required. Operational Plans (i.e. Project Aviation Safety Plans, Mishap Response Plans, etc.) would be required any time there is a non-point-to-point flight operation. Commercial flights and point-to-point passenger transport flights usually require only information regarding the flight to be written, i.e. a flight strip.

Operational vs. Non-Operational Aviation Plans

PASP's and Mishap Response Plans (AKA Pre-Accident Response Plans) are operational (contain sub-elements that non-operational plans wouldn't contain, such as cost, radio frequencies, etc.). There are several types of Base Operating Plans (Helibase, Tanker Base, SEAT Base).

Sub-Unit/District Aviation Plans and all superseding plans are considered non-operational (i.e. they provide only general direction regarding aviation policy, but no language regarding specific flight operations). A Local/Base Aviation Plan could be considered either operational or non-operational, but is most often considered operational.

Example: A USFS exclusive use Helitack Crew operates not only under a Unit (District) Aviation Plan, but also a Helibase Operations Plan. The Helibase Operations Plan is considered an operational plan because it contains specific language regarding initial attack or other emergency operations that occur daily. When the bell goes off for a dispatch, you wouldn't want to have to stop and write a PASP and get it approved before you launch the helicopter. That language is already written into the Base Plan, so the only actions needed prior to launch would be mission planning and a risk assessment. A specific PASP would only need to be written for any flight operations that were not included in the Base Plan.

Interaction/Activity: Plan Levels

Identify which of the levels apply to your bureau or agency:

- National Aviation Plan
- Regional/State Aviation Plan
- Unit Aviation Plan
- Sub-Unit Aviation Plan
- Base Operations Plan
- Project Aviation Plan

Discretionary vs. Operational Decisions

Discretionary: You do not have the discretion to change the policy. The discretion is made at a higher organizational level. For example: Your plan cannot omit the requirements for Personal Protective Equipment (PPE) or flight following, as that decision has been made at the Department level.

Operational: You can make operational decisions, for example instead of 15 minute check-in time for flight following, you can require a flight following check-in of every 10 minutes.

Choosing to make a discretionary decision could result in an employee working outside the scope of their employment, which can lead to personal liability issues. It is important to follow policy and only make those decisions for which you are authorized, i.e. operational.

Interaction/Activity: Decision Types

List two examples each of operational and discretionary decisions (other than those already provided).

Operational:

_____

_____

Discretionary:

_____

_____

Module 3: Plan Design and Components

Objectives

8. Identify at least three sources of reference that can assist in the development of an aviation plan.
9. Identify the six main components that should be included in any aviation plan.
10. List the seven sub-elements or chapters that should be addressed in a Project Aviation Safety Plan.
11. Identify at least three optional components that may be included in an aviation plan.
12. Explain when a Pre-Accident Response Plan (Mishap Response Plan) should be included.
13. Describe a situation in which an operational aviation plan might include a personal protective equipment waiver.
14. Describe the Review and Approval Process for Unit Aviation Plans.
15. Describe the Review and Approval Process for Project Aviation Safety Plan.

Who Prepares the Plan?

In most cases, the senior level aviation manager is responsible for writing a non-operational plan at that level (i.e. a Unit Aviation Plan is written by a Unit Aviation Officer; a State Aviation Plan is written by a State Aviation Manager). An operational plan however can be written by various people, depending on what the operation is (i.e. a Mishap Response Plan might be written by a Dispatcher, Center Manager or Project Supervisor; a Base Operations Plan might be written by a Helitack Supervisor or a SEAT Base Manager; A PASP might be written by a Helitack Supervisor, SEAT Base Manager, UAO, FAO, or a number of other people). It will usually contain contributions from different subject matter experts (SME's). This will vary depending on the Bureau/Agency and the overall complexity of the plan. SMEs should be encouraged to participate in the drafting of chapters/topics of the plan in which they have specific knowledge.

The Aviation Manager's Role in Planning

Considerations

- Network with subject matter experts.
- Don't state policy via reference. Document chapter, verse, paragraph, and item number.
- Obtain copies of other "like" Unit Aviation Plans.
- Consider a team effort; take ownership.
- Solicit input and feedback.
- Conduct employee briefings on the plan.

Factors That May Determine Your Role

- What is the Line Manager's perception of Aviation Management on the Unit?
- What is the Staff's view of the aviation program?
- What is the history of aviation accidents on the Unit?
- How do personalities and attitudes affect the way aviation is perceived?

Be Part of the Process

- Interject yourself when your input is necessary or required.
- Make an effort to contact people who may need your help but don't know it.
- Maintain a channel of communication with line managers and others to ensure that cost effectiveness, accountability and safety measures are taken into account.
- Develop a rapport with users and let them know how you can assist them in the planning process.
- Involve yourself in land management planning.
- Assist agency/bureau managers in accomplishing their objectives safely, effectively and efficiently.

How to Build an Aviation Plan

Below is an outline of the critical elements needed to build an aviation plan.
Each is covered in more detail in the next section.

Outline:

1) Identify sources of reference.
2) Include the required plan components:
   a) Purpose
   b) Authority
   c) Objective/Mission Statement
   d) Responsibility
   e) Scope
   f) General Policy: Includes sub-elements or chapters; identifies and defines specific policies and procedures.
      i) Aircraft Justification
      ii) Organization (Responsibilities and Authorities)
      iii) Costs
      iv) Safety/Risk Management (Risk Assessment Worksheet Matrix)
      v) Job Hazard Analysis (JHA)
      vi) Pre-Accident Response Plan (Mishap Response Plan)
      vii) "Go/No-Go" Checklist
3) Include additional required elements as applicable:
   a) Training, Proficiency, Currency
   b) Flight Following, Frequencies, Check-in Procedures, Emergency Procedures
   c) PPE, any Deviations including waivers
   d) Preflight Briefing Checklist
   e) After Action Review (AAR) Checklist
4) Include optional components, depending on the complexity of the plan:
   a) Table of Contents
   b) References
   c) Definitions
   d) Appendices
5) Review and Approval
   a) Preparer(s)
   b) Reviewer(s)
   c) Approver(s)
   d) Line Officer – Final Approver

How to Build an Aviation Plan – Detailed Steps

1) Identify Sources of Reference

When writing your plan, you must research agency/bureau manuals to determine what policy will allow or disallow on the subject of your plan.

Questions to consider:

- Are there DOT or FAA considerations?
- Are there any special dispatching concerns (for examples Law Enforcement operations)?
- Does the scope of work clause in the procurement document include your mission?

Reference documents must be listed to ensure compliance is met by the appropriate policy.

IMPORTANT! Make sure your plan does not supersede or conflict with a higher-level plan or violate policy. You need to ensure that you have not been more lenient in your direction or policy than existing policy.

2) Include the Required Plan Components

Every plan – regardless of the level – should include these six components:

a) **Purpose:** Why are we required to write a plan?

b) **Authority:** Which policy references are being used?

c) **Objective/Mission Statement:** What specifically is it we are trying to accomplish?

d) **Responsibility:** Who is responsible for carrying out the plan?

e) **Scope:** What is the duration of the project? Are other agencies involved?

f) **General Policy:** Includes sub-elements or chapters; identifies and defines specific policies and procedures. These are required as well for every plan.

i) Aircraft Justification
Reasons for using an aircraft vs. another method.

ii) Organization (Responsibilities and Authorities)
Who will fill the aviation positions needed to complete the mission?

iii) Costs

These will be an estimate but should be as accurate as possible.

iv) Safety/Risk Management (Risk Assessment Worksheet Matrix)
Specific to the project/mission.

v) Job Hazard Analysis (JHA)
Necessary in order to complete the risk assessment.

vi) Pre-Accident Response Plan (Mishap Response Plan)
This will provide actions to be taken for various emergency scenarios. It is specific to the project/mission. Every unit keeps a Mishap Response Plan on file. For some flights, that may be sufficient and referred to; however, that is not the case for all flights as the project or mission may require more specifics to be addressed.

vii) "Go/No-Go" Checklist
This sums up all of the items that are required to be checked prior to flight.

3) Include additional required elements as applicable:
These items are required depending on the type of plan.

a) Training, Proficiency, Currency
Training is required for each of the necessary positions under the plan.

b) Flight Following, Frequencies, Check-in Procedures, Emergency Procedures
Will Automated Flight Following (AFF) be in use?

c) PPE, any Deviations including waivers
PPE waivers are granted when the environmental conditions present are extreme enough that the risk and exposure to the employee would be higher if they adhered to the normal PPE policy.

d) Preflight Briefing Checklist
This is a good tool to ensure all required items are properly addressed.

e) After Action Review (AAR)
The best way to ensure success on future projects is to identify what works and what doesn't. Everyone involved should participate in the After Action Review.

The After Action Review should:

- Occur as soon as possible after the completion of the mission (while still fresh on everyone's mind).
- Monitor what went well with the plan.

- Provide an annual review and update of the project aviation plan (or more frequently if necessary).
- Reveal what could be improved with the plan.

4) Include optional components, depending on the complexity of the plan:

a) **Table of Contents**
A Table of Contents is usually helpful, especially if the plan is long, complex or for an extended series of events.

b) **References**
If there are multiple references and sources used, it may be better to add this section rather than trying to refer to them in the plan.

c) **Definitions/Glossary**
This section would be helpful if there are terms with which the readers/reviewers may not be familiar.

d) **Appendices**
Include any additional supporting documentation.

5) Review and Approval

The Review and Approval Process can be slightly different depending on Bureau/Agency. The next higher level of plan will determine the specifics. Generally a minimum of two reviewers (at a higher aviation level than the author of the plan) are required. The approver is generally required to be a line officer or line manager.

Note: It is the responsibility of the plan preparer to plan far enough in advance to include review and approval time.

Examples:
A USFS District Aviation Plan authored by a District Fire Management Officer (FMO) might get reviewed by the Forest Aviation Officer (FAO) and the Regional Helicopter Operations Specialist (HOS), and then be approved by the District Ranger.
A BLM Field Office (FO) Plan authored by an FO Unit Aviation Officer (UAO) might get reviewed by a District UAO and a State Aviation Manager (SAM) and get approved by District Manager.

a) Preparer(s)
b) Reviewer(s)
c) Approver(s)
d) Line Officer – Final Approver

Operational Plans

Interaction/Activity:
Scenario: Reference the image in the slide presentation of the helicopter toe-in landing.

In the given scenario, is the maneuver legal for DOI?
_____

What about for USFS? _____

Is it legal for your bureau?
_____

What kind of plan or approval process would you need for this type of operation?

_____

Module 4: Project Aviation Safety Plans

Objective

16. Describe the purpose of a Project Aviation Safety Plan.

Definition

A Project Aviation Safety Plan (PASP) is an aviation plan developed for a specific flight or project.

The PASP should be a tool to:

- Minimize risk;
- Increase efficiency; and
- Ensure the safety of all personnel.

It is developed based upon and directed by the Unit Aviation Plan above it. Not every Bureau or Agency requires a PASP Plan, however, it is a way of having your plan in writing so that nothing is left to chance or forgotten. It is also a great briefing tool.

Reasons for PASPs:

- Special training requirements for ground personnel
- Special pilot qualifications
- Special equipment needs
- Special job assignments and preparations

Interaction/Activity: What are some examples of missions where there are "special requirements" that require a PASP?

_____

_____

_____

_____

Summary

Objectives Review:

1. Define an aviation plan.
2. Explain the purpose of an aviation plan.
3. Identify the hierarchy of aviation planning levels.
4. Identify which levels of aviation plans affect your bureau or agency.
5. List three types of operational plans that might be included or referenced in a Unit Aviation Plan.
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10. List the seven sub-elements or chapters that should be addressed in a Project Aviation Safety Plan.
11. Identify at least three optional components that may be included in an aviation plan.
12. Identify when a mission-specific Pre-Accident Response Plan (Mishap Response Plan) is necessary.
13. Describe a situation in which an operational aviation plan might include a personal protective equipment waiver.
14. Describe the Review and Approval Process for Unit Aviation Plans.
15. Describe the Review and Approval Process for Project Aviation Safety Plan.
16. Describe the purpose of a Project Aviation Safety Plan.

If you have any questions regarding these objectives, ask the instructor for clarification.

Complete the course exam and return to the instructor.

Please be sure to complete and submit the Course Evaluation Form provided by the instructor.

Appendix A Resources and References

Electronic Attachments:

- PASP Template
- PASP Example
- PASP: “Aerial Recon” – Sam Houston NF
- PASP: “STEP Training HAVO 2013” – Hawaii Volcanos NP
- PASP: “Wolf Capture” – B-T NF
- 2012 NPS RM60
- 2012 BLM WY State Aviation Plan
- 2011 BLM ID State Aviation Plan
- 2009 YOSE HB OPS Plan
- PASP: “2008_PASP_YNP_Hoist_Final”

Helpful Links:

USFS FSM 5700 (http://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?5700)

BIA 2009 National Aviation Plan
(http://www.bia.gov/cs/groups/xnifc/documents/text/idc012332.pdf)

NPS RM60 (http://www.nps.gov/fire/aviation/resources/documents/Reference-Manual-60_2012.pdf)

BLM 2013 National Aviation Plan
(http://www.blm.gov/pgdata/etc/medialib/blm/nifc/aviation/administration.Par.39484.File.dat/NAP.pdf)

BLM WY 2012 State Aviation Plan
(http://www.blm.gov/pgdata/etc/medialib/blm/nifc/aviation/administration.Par.36957.File.dat/2012WY_AVPlan.pdf)

BLM ID 2011 State Aviation Plan
(http://www.blm.gov/pgdata/etc/medialib/blm/nifc/aviation/administration.Par.71799.File.dat/ID_AP.pdf)

Appendix A Resources and References

BLM Western States Aviation Plans
(http://www.blm.gov/nifc/st/en/prog/fire/Aviation/avlibrary.html)