



FOREST HEALTH PROTECTION
TASK BOOK FOR THE POSITIONS OF

**AERIAL SURVEY OBSERVER
AND
FIXED WING FLIGHT MANAGER – SPECIAL USE**

TASK BOOK ASSIGNED TO: _____ Individual's Name	

Individual's duty station and phone number	
SUPERVISED BY: _____ Name and title	

Duty station and phone number	
TASK BOOK INITIATED BY (if different from above): _____ Official's Name	

Official's title, duty station, and phone number	
TASK BOOK POSITION INITIATED FOR:	DATE COMPLETED:
<input type="checkbox"/> Aerial Survey Observer	_____
<input type="checkbox"/> Fixed-Wing Flight Manager—Special Use	_____

The material contained in this book describes the performance measurements required to be successfully completed by the trainee. This task book is approved for use as a position qualification document.

FINAL EVALUATOR
DO NOT COMPLETE THIS UNLESS YOU ARE RECOMMENDING THE TRAINEE FOR CERTIFICATION

VERIFICATION/CERTIFICATION OF COMPLETED TASK BOOK FOR THE POSITION OF:

FHP AERIAL OBSERVER

FINAL EVALUATOR'S VERIFICATION

I verify that all tasks have been performed and are documented with appropriate initials.
I also verify that _____
has performed as a trainee and should therefore be considered for certification in this position.

FINAL EVALUATOR'S SIGNATURE AND DATE

FINAL EVALUATOR'S PRINTED NAME AND TITLE

FINAL EVALUATOR'S DUTY STATION AND PHONE NUMBER

AGENCY CERTIFICATION

I certify that _____
Has met all requirements for qualification in this position and that such qualification has been issued.

CERTIFYING OFFICIAL'S SIGNATURE AND DATE

CERTIFYING OFFICIAL'S NAME AND TITLE

DUTY STATION AND PHONE NUMBER

Additional copies of this publication may be ordered from:
Forest Health Assessment & Applied Sciences Team
ATTN: Jeff Mai
2150 Centre Ave., Bldg. A, Suite 331
Ft. Collins, CO 80526-1891

FINAL EVALUATOR

DO NOT COMPLETE THIS UNLESS YOU ARE RECOMMENDING THE TRAINEE FOR CERTIFICATION

VERIFICATION/CERTIFICATION OF COMPLETED TASK BOOK FOR THE POSITION OF:

FHP FIXED-WING FLIGHT MANAGER—SPECIAL USE

FINAL EVALUATOR'S VERIFICATION

I verify that all tasks have been performed and are documented with appropriate initials.

I also verify that _____

has performed as a trainee and should therefore be considered for certification in this position.

FINAL EVALUATOR'S SIGNATURE AND DATE

FINAL EVALUATOR'S PRINTED NAME AND TITLE

FINAL EVALUATOR'S DUTY STATION AND PHONE NUMBER

AGENCY CERTIFICATION

I certify that _____

Has met all requirements for qualification in this position and that such qualification has been issued.

CERTIFYING OFFICIAL'S SIGNATURE AND DATE

CERTIFYING OFFICIAL'S NAME AND TITLE

DUTY STATION AND PHONE NUMBER

FOREST HEALTH PROTECTION
AERIAL OBSERVER
and/or
FIXED-WING FLIGHT MANAGER—SPECIAL USE
DUAL POSITION AERIAL SURVEY POSITION TASK BOOK

Introduction

The USDA Forest Service requires all aircraft users, other than point-to-point use, to complete training and demonstrate skills and knowledge of identified positions through successful performance of related job tasks. The National Interagency Incident Management System Coordinating Group ensures personnel are qualified for various aviation positions through the use of both formal training and the task book system. Forest Health Protection (FHP) endorses this system as a valuable method to ensure FHP personnel are qualified to conduct safe and accurate aerial sketch map surveys and remote sensing missions. Though typically not required of state personnel, private contractors and other federal cooperators, the position task book (PTB) is recommended as a training tool to these entities in an effort to reduce risk. This PTB does not supersede other State and local requirements.

This dual PTB outlines the performance requirements (tasks) for the specific positions of Aerial Observer and Fixed-Wing Flight Manager—Special Use for FHP. The information is presented in a format that allows a trainee to be evaluated and nominated for certification for each identified FHP position.

Evaluation and confirmation of the trainee's performance of all tasks may involve more than one evaluator. These tasks may be completed through mission flights, classroom simulation and other work situations. It is important that performance be objectively evaluated and accurately recorded by each evaluator. All tasks for the identified position must be evaluated before recommendation for certification. All alpha and numeric task statements must be successfully completed before that task can be signed off. Bullet items are intended to be examples of items to be completed for the more complex tasks.

It is recognized that there are many common tasks associated with conducting an aerial survey or remote sensing mission. However, it is acknowledged that unique geographic, climatic and resource conditions are found across each region and locale. Therefore, some of the tasks presented in this PTB address the conditions found in a particular regional or local setting, for example: disturbance signatures, host type and flight patterns. Thus there are both National and Regional tasks. The sections for All Positions, Aerial Observer and Fixed Wing Flight Manager fulfill the National FHP requirements by position. The Regional requirements are located in Appendix A.

It is understood that most FHP Regions have one aerial survey program, but the Northeastern Area has three programs hence the Program/Region reference.

The following is a more detailed description of the training process and individual responsibilities.

TRAINING REQUIREMENTS:

For a trainee to begin the PTB process, they must have completed the requirements for Aircrew Member (see FHP IAT Matrix <https://www.fs.fed.us/foresthealth/aviation/training.shtml>).

In addition to the PTB it is understood that all trainees must have completed all required training for the identified position, either Aerial Observer or Fixed-wing Flight Manager—Special Use, before their PTB can be signed off. This required training can be completed by attending Aerial Survey Aviation Safety and Management training (AS2M) held annually by FHP, or attend required modules at an Aviation Conference and Education (ACE) or by completing the on-line modules at the Interagency Aviation Training website www.iat.gov. AS2M is designed specifically for aerial survey mission specialists and should be taken at least once. To maintain currency requirements, the qualified Aerial Observer or Fixed-wing Flight Manager—Special Use employee can choose among the various training venues.

RESPONSIBILITIES:

1. The Home Unit (Program/Region) is responsible for:
 - Selecting trainees based on the needs of the Program/Region.
 - Ensuring that the trainee meets the training and experience requirements.
 - Initiating the PTB to document task performance.
 - Explaining to the trainee the purpose and processes of the PTB as well as the trainee's responsibilities.
 - Providing opportunities for evaluation and/or making the trainee available for evaluation.
 - Providing an evaluator for local assignments.
 - Tracking progress of the trainee.
 - Confirming PTB completion.
 - Determining certification per Program/Region requirements.
 - Issuing proof of certification (via signing off PTB).
2. The Trainee is responsible for:
 - Reviewing and understanding instructions in the PTB.
 - Identifying desired objectives/goals.
 - Providing background information to the evaluator.
 - Satisfactorily demonstrating completion of all tasks for the assigned position within three years.
 - Assuring the Evaluation Record (PTB) is complete.
 - Keeping the original PTB in personal records.

3. The Evaluator is responsible for:
 - Understanding the PTB system.
 - Being qualified and proficient in the position being evaluated.
 - Meeting with the trainee and determining past experience, current qualifications, and desired objectives/goals.
 - Reviewing the tasks in detail with the trainee.
 - Explaining to the trainee the evaluation procedures that will be utilized, which objectives may be attained and what constitutes success.
 - Identifying tasks to be performed during the evaluation period.
 - Accurately evaluating and recording demonstrated performance of tasks. Satisfactory performance shall be documented by dating and initialing completion of the task in the book.
 - Completing the Evaluation Record found at the end of the PTB.

4. The Final Evaluator is responsible for:
 - Signing the verification statement inside the front cover of this PTB when all tasks have been initialed and the trainee is recommended for certification.
 - Sending the completed PTB to the FHP Aviation Safety Manager for processing.

5. The FHP Aviation Safety Manager is responsible for:
 - Signing the trainee's PTB, retaining a copy and entering the information into the FHP Aviation Qualification Database.
 - Returning the PTB to the trainee for their records via the Final Evaluator.

POSITION TASK BOOK
FOREST HEALTH PROTECTION
AERIAL OBSERVER
or
FIXED-WING FLIGHT MANAGER—SPECIAL USE
Interagency Aviation Training (IAT) Definitions:

Fixed-wing Flight Manager—Special Use (FWFM-SU)

Government representative who works jointly with the pilot-in-command and aircrew members to ensure safe, efficient flight management of missions other than point-to-point flying (e.g. reconnaissance, infrared, aerial photo) and other missions requiring special training and/or equipment.

Note: IAT does not have an Aerial Observer position. The definition of an:

AIRCREW MEMBER

Personnel (not pilot/passenger) required to be on board the aircraft and perform an active mission function during a flight to ensure the successful outcome of the mission.

Additional FHP Information:

The intent is to provide a task book of requirements for an FHP Aerial Observer that can lead to the completion of the FWFM-SU position. The FHP Aerial Observer is an Aircrew Member. They are skilled in aerial species identification, data collection, and is the second person of a two-person team. They will not have the management duties but will always fly with a FWFM-SU in the course of their aerial survey duties. They may be a FWFM-SU trainee.

The FHP Fixed-wing Flight Manager—Special Use conducts aerial sketch map surveys, aerial photography or videography. Aerial survey FWFM-SU must be certified in both Aerial Observer and FWFM-SU positions.

FHP Remote Sensing Specialists, including manned aircraft photographers and sensor operators, shall complete portions of the task book required for “All Positions” and the “FWFM-SU position”. Note: completion of tasks pertaining to water and contour flight patterns and those specific to Aerial Observer are not required.

Forest Health Protection (FHP) FWFM-SU meets and exceeds equivalency for Fixed-wing Flight Manager—Special Use in the Interagency Aviation Training Guide. Additional courses and frequency required for the position are contained in the FHP IAT Matrix and Supplemental Information

documents. There are several means by which the training can be accomplished. The Aerial Survey Working Group (ASWG) recommends taking Aerial Survey Aviation Safety and Management (AS2M) every three years to maintain currency.

TASKBOOK ORGANIZATION: The following Task Book Qualification Record is broken up into four sections:

All Positions (Pg. 9)—Tasks on these pages are common to all positions and must be completed for all of the following positions:

Aerial Observer (Pg. 11)—For qualification, employee must complete tasks for All Positions, Aerial Observer and region specific tasks in the Program/Region Specific Requirements for the Observer position.

Fixed-Wing Flight Manager-Special Use (Pg. 14)—For qualification, employee must complete tasks for All Positions, Aerial Observer, and FWFM-SU including any region specific tasks in the Program/Region Specific Requirements section for the Observer and Manager positions.

- ◆ **FHP Remote Sensing Specialist (RSS)**—Note: For qualification, employee must complete tasks for All Positions and Fixed-wing Flight Manager - Special Use including any region-specific tasks in the Program/Region Specific Requirements for Manager (M position code), evaluator shall indicate whether the FWFM-SU also has a remote sensing emphasis. Note: completion of tasks pertaining to water and contour flight patterns and those specific to Aerial Observer are not required for RSS.

Program/Region Specific Requirements (Pg. 17)—Additional task book requirements specific to a region or program that must be completed for the position identified.

TABLE OF CATEGORIES FOR QUALIFICATION RECORD

- I. TRAINING
- II. FOREST SERVICE AVIATION SAFETY AND POLICY
- III. MISSION PLANNING
- IV. CONDUCTING THE AERIAL SURVEY
- V. DIGITAL MAPPING
- VI. SKETCHMAPPING
- VII. FLIGHT PATTERNS
- VIII. POST FLIGHT ACTIVITIES
- IX. GENERAL
- X. APPENDIX A: PROGRAM/REGION SPECIFIC REQUIREMENTS
- XI. CONTRACT ADMINISTRATION (Region 6 specific)

QUALIFICATION RECORD

POSITION: ALL POSITIONS

Code: A = Task can be completed in any situation (classroom, simulation, actual mission)

B = Task must be performed during, prior to, or after an actual survey mission.

C = Task must be performed during an actual aerial survey mission.

TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
<p>National FHP Requirements</p> <p>II. FOREST SERVICE AVIATION SAFETY AND POLICY</p> <p>A. Demonstrate knowledge and understanding of applicable Unit/National Aviation Mishap Prevention and Response Plans</p> <p>B. Demonstrate knowledge and understanding of the Program/Region FHP Aerial Survey Program Operation Plan, Aviation Management Plan, and/or current Project Aviation Safety Plan (PASP)</p> <p>C. Demonstrate knowledge and understanding of Safety Management Systems (SMS) and its four components: Safety Policy, Assurance, Promotion and Risk Management (A-100)</p> <p>D. Demonstrate knowledge and understanding of hazards influencing operational risk and identification of mitigations to reduce risk to acceptable level (participate in risk assessment).</p> <p>E. Demonstrate knowledge and understanding of the current risk assessment.</p> <p>F. Demonstrate how to complete the SAFECOM reporting process.</p>	<p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p>		
<p>III. MISSION PLANNING</p> <p>A. Demonstrate basic knowledge of overall planning process.</p> <ul style="list-style-type: none"> • Understand the Regional/Area program and its goals and objectives. <p>B. Demonstrate the ability to obtain and assemble data, materials and equipment needed for mission.</p> <ul style="list-style-type: none"> • Create comprehensive project file for DASM, or • Generate TPK files and Quick Keys for DMSM, or • Suitable paper base maps, as needed. 	<p>A</p> <p>A</p>		

QUALIFICATION RECORD

POSITION: ALL POSITIONS

Code: A = Task can be completed in any situation (classroom, simulation, actual mission)

B = Task must be performed during, prior to, or after an actual survey mission.

C = Task must be performed during an actual aerial survey mission.

TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
IV. CONDUCTING THE AERIAL SURVEY A. Demonstrate the knowledge that safety is the highest priority, not the mission. B. Demonstrate the knowledge and ability to check aircraft and pilot qualifications. C. Demonstrate the ability to evaluate pilot performance and correct as needed.	A A C		
IX. GENERAL A. Establish and maintain positive interpersonal and interagency working relationships.	B		
X. PROGRAM/REGION SPECIFIC REQUIREMENTS A. Has met Program/Region-specific requirements (see Program/Region Appendix A) where applicable.			

QUALIFICATION RECORD

POSITION: FHP AERIAL OBSERVER

Code: A = Task can be completed in any situation (classroom, simulation, actual mission)

B = Task must be performed during, prior to, or after an actual survey mission.

C = Task must be performed during an actual aerial survey mission.

TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
National FHP Requirements			
I. TRAINING			
A. Aircrew Member—All trainees must complete Interagency Aviation Training's Aircrew Member training prior to participating in the Aerial Observer training program.	A		
V. DIGITAL MAPPING			
A. Acquire AGOL license and user or group account for software and data downloads/uploads.	A		
B. Demonstrate ability to update sketchmap program, conduct uploads and synchronization of collected data.	A		
C. Demonstrate knowledge of tablet startup and operations including selecting the appropriate background imagery, selecting the proper capture method (point, polygon or cell). Demonstrate ability to troubleshoot tablet.	C		
D. Familiarity with help resources i.e. users guide, digital mapping and GIS standards documents, utilizing Forum to exchange information, issues and updates.	A		
E. Demonstrate the ability to download geographic coordinates for use with ground based GPS unit.	B		
VI. SKETCHMAPPING			
A. Demonstrate the ability to see and recognize local tree damage signatures.	C		
<ul style="list-style-type: none"> • Detect, observe and identify faded trees, defoliation, wind throw, fire and other important signatures and host when applicable. 			

QUALIFICATION RECORD

POSITION: FIXED-WING FLIGHT MANAGER— SPECIAL USE

Code: A = Task can be completed in any situation (classroom, simulation, actual mission)

B = Task must be performed during, prior to, or after an actual survey mission.

C = Task must be performed during an actual aerial survey mission.

TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
<p>National FHP Requirements</p> <p>I. TRAINING</p> <p>A. Prior to Task Book completion all trainees must have completed the Fixed-wing Flight Manager—Special Use (FWFM-SU) required training (see FHP Matrix) or have attended FHP’s Aerial Survey Aviation Safety and Management (AS2M) training. Additional FWFM-SU requirements may also be identified as necessary.</p>	A		
<p>II. FOREST SERVICE AVIATION SAFETY AND POLICY</p> <p>A. Demonstrate knowledge and understanding of the National Aviation Management Plan.</p> <p>B. Demonstrate knowledge and understanding of the Regional Aviation Management Plan.</p>	A A		
<p>III. MISSION PLANNING</p> <p>A. Demonstrate the ability to plan a daily mission applying risk management principles giving consideration to:</p> <ul style="list-style-type: none"> • Airspace coordination (NOTAM, FTAs, TFRs, MTRs, MOAs, DROTAMs, wild fires, etc.) • Basic meteorological principles (knowledge of/check forecasts). • Evaluating flying weather (winds aloft, clouds, smoke) as related to go-no go decision. • Efficient layout of daily operations area while prioritizing safety. <p>B. Demonstrate the ability to brief dispatch.</p> <ul style="list-style-type: none"> • Identify appropriate flight following centers. 	A B		

QUALIFICATION RECORD

POSITION (POS): FIXED-WING FLIGHT MANAGER— SPECIAL USE

Code: A = Task can be completed in any situation (classroom, simulation, actual mission)

B = Task must be performed during, prior to, or after an actual survey mission.

C = Task must be performed during an actual aerial survey mission.

TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
<p>V. DIGITAL MAPPING</p> <p>A. Demonstrate the ability to interpret post-sync data and to monitor survey progress within and adjacent to areas of operation to optimize efficiency and ensure coverage.</p> <p>B. Demonstrate knowledge and ability to anticipate TPK needs and to generate or acquire TPK layers for the operational area.</p>	<p>C</p> <p>B</p>		
<p>VII. FLIGHT PATTERNS</p> <p>Demonstrate the ability to apply proper flight pattern to achieve survey objectives per Program/Region Specific Requirements such as:</p> <p>1. Grid (parallel)</p> <ul style="list-style-type: none"> • Commonly used in low relief terrain. • Primarily done following lines of latitude or longitude. • Mostly done with two observers, one on each side of the aircraft. <p>2. Contour (terrain)</p> <ul style="list-style-type: none"> • Commonly used in terrain with significant relief. • Drainage pattern directs the flight pattern, or • Ridges direct the flight pattern. <p>3. Flying techniques in “typical terrain”</p> <ul style="list-style-type: none"> • Added emphasis for mountainous terrain in the western US. • Mountain flying is more dangerous than flat land flying. • Trainee must understand flying hazards such as winds, down drafts, terrain, escape routes, weather changes and density altitude (factors to be considered in any terrain). <p>4. Water Pattern</p> <p>Used primarily in Region 10, Alaska.</p> <ul style="list-style-type: none"> • River and shoreline (interior), or • Inlets and bays (marine). 	<p>B</p> <p>B</p> <p>B</p> <p>B</p>		

QUALIFICATION RECORD

POSITION (POS): FIXED-WING FLIGHT MANAGER— SPECIAL USE

Code: A = Task can be completed in any situation (classroom, simulation, actual mission)

B = Task must be performed during, prior to, or after an actual survey mission.

C = Task must be performed during an actual aerial survey mission.

TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
VIII. POST-FLIGHT ACTIVITIES A. Demonstrate the ability to debrief pilot. B. Demonstrate the ability to debrief flight crew. C. Demonstrate the ability to make close out calls with flight followers (dispatch) when flight leg is finished. D. Demonstrate the ability to conduct a post-flight walk around. E. Demonstrate the ability to process flight invoices to ensure prompt payment. F. Demonstrate the ability to track and report all annual flight hours to National FHP Safety Manager.	B B B B A A		
X. PROGRAM/REGION SPECIFIC REQUIREMENTS A. Has met Program/Region specific requirements (see Program/Region Appendix A) where applicable.			

QUALIFICATION RECORD

APPENDIX A: PROGRAM/REGION SPECIFIC REQUIREMENTS

Position (POS):

- A = All positions
- O = Aerial Observer
- M = Fixed-wing Flight Manager—Special Use or Remote Sensing Specialist

Code:

- A = Task can be completed in any situation (classroom, simulation, actual mission)
- B = Task must be performed during, prior to, or after an actual survey mission.
- C = Task must be performed during an actual aerial survey mission.

P O S	TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
	<u>REGION ONE:</u>			
M	I. TRAINING Complete Pinch Hitter course.	A		
M	III. MISSION PLANNING • Ability to determine pre-flight MOA accessibility and request deconfliction.	B		
M	• Notify border patrol agencies of impending flights.	C		
M	IV. CONDUCTING THE AERIAL SURVEY Ability to navigate efficiently across large expanses utilizing GPS and latitude/longitude coordinates.	C		
M	VII. FLIGHT PATTERNS # 1, 2, and 3 are required.	C		
	<u>REGION TWO:</u>			
M	I. TRAINING Complete Pinch Hitter course.	A		
M	VII. FLIGHT PATTERNS # 1, 2, and 3 are required.	C		
	<u>REGION THREE:</u>			
M	I. TRAINING Complete Pinch Hitter Course	A		
M	III. MISSION PLANNING • Ability to determine pre-flight MOA accessibility.	A		
M	• Notification to appropriate land managers.	C		
M	IV. CONDUCTING THE AERIAL SURVEY D. Crew Communication • Demonstrate the ability to communicate with crew on flight progress and any changes.	B		
O	• Demonstrate the ability to communicate with other observers about what is being mapped.	B		
M	VII. FLIGHT PATTERNS # 1, 2, and 3 are required.	B		

QUALIFICATION RECORD

APPENDIX A: PROGRAM/REGION SPECIFIC REQUIREMENTS

Position (POS):

- A = All positions
- O = Aerial Observer
- M = Fixed-wing Flight Manager—Special Use or Remote Sensing Specialist

Code:

- A = Task can be completed in any situation (classroom, simulation, actual mission)
- B = Task must be performed during, prior to, or after an actual survey mission.
- C = Task must be performed during an actual aerial survey mission.

P O S	TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
	<u>REGION FOUR:</u>			
M	I. TRAINING Complete Pinch Hitter course.	A		
M	III. MISSION PLANNING Ability to determine pre-flight MOA accessibility and request deconfliction.	B		
M	IV. CONDUCTING THE AERIAL SURVEY Ability to navigate efficiently across large expanses utilizing GPS and latitude/longitude coordinates.	C		
M	VII. FLIGHT PATTERNS # 1, 2, and 3 are required.	C		
	<u>REGION FIVE:</u>			
M	I. TRAINING • Complete Pinch Hitter course.	A		
O	• Demonstrate familiarity with current Region Five FHP Aerial Survey Guidelines.	A		
M	III. MISSION PLANNING E. Demonstrate ability to understand weight and balance limitations.	A		
M	F. Understand fuel/fuel management, planning and reserve requirements.	A		
M	IV. CONDUCTING THE AERIAL SURVEY D. Crew Communication • Demonstrate the ability to communicate with crew on flight progress and any changes.	C		
O	• Demonstrate the ability to communicate with other observer about what is being mapped.	C		
M	E. Understanding Automated Flight Following concepts and limitations and demonstrate coordination with dispatch	A		
M	F. Demonstrate the ability to identify airspace issues and comply with restricted and controlled airspace.	A		
O	VI. SKETCHMAPPING I. Demonstrate ability to combine both surveyors' information to create a master map.	B		

QUALIFICATION RECORD

APPENDIX A: PROGRAM/REGION SPECIFIC REQUIREMENTS

Position (POS):

- A = All positions
- O = Aerial Observer
- M = Fixed-wing Flight Manager—Special Use or Remote Sensing Specialist

Code:

- A = Task can be completed in any situation (classroom, simulation, actual mission)
- B = Task must be performed during, prior to, or after an actual survey mission.
- C = Task must be performed during an actual aerial survey mission.

P O S	TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
	REGION FIVE: (continued)			
O	VI. SKETCHMAPPING (continued) J. Review flight maps for completeness and reconcile observer differences.	B		
M	VII. FLIGHT PATTERNS # 2 and 3 are required.	B		
	REGION SIX:			
M	I. TRAINING Complete Pinch Hitter course.	A		
M	III. MISSION PLANNING Notification of appropriate land managers	B		
M	IV. CONDUCTING THE AERIAL SURVEY D. Crew Communication	C		
O	<ul style="list-style-type: none"> • Demonstrate the ability to communicate with crew on flight progress and any changes. • Demonstrate the ability to communicate with other observer about what is being mapped. 	C		
O	VI. SKETCHMAPPING <ul style="list-style-type: none"> • Demonstrate ability to combine both surveyor's information to create a master map. 	B		
O	<ul style="list-style-type: none"> • Review flight maps for completeness and reconcile observer differences. 	B		
M	VII. FLIGHT PATTERNS E. Ridge Top <ul style="list-style-type: none"> • This is generally performed off of a grid pattern with two observers in mountainous terrain when major ridgelines are followed and two observers look down on either side of the ridge. 	C		

QUALIFICATION RECORD

APPENDIX A: PROGRAM/REGION SPECIFIC REQUIREMENTS

Position (POS):

- A = All positions
- O = Aerial Observer
- M = Fixed-wing Flight Manager—Special Use or Remote Sensing Specialist

Code:

- A = Task can be completed in any situation (classroom, simulation, actual mission)
- B = Task must be performed during, prior to, or after an actual survey mission.
- C = Task must be performed during an actual aerial survey mission.

P O S	TASK	C O D E	EVAL RECORD #	EVALUATOR: Initial & date upon completion
	REGION SIX: (continued)			
M	XI. CONTRACT ADMINISTRATION	A		
	A. Demonstrate thorough knowledge of aviation contract with aircraft vendors.			
M	B. Demonstrate knowledge of State cooperator agreements.	A		
	REGION EIGHT: No additional requirements.			
	NORTHEAST AREA: No additional requirements.			
	REGION TEN:			
	I. TRAINING			
M	• Complete Incapacitated Pilot training with approved flight school including hands-on piloting.	A		
A	• Attend R-10 General Aviation Users Training.	A		
A	• Complete IAT A-312 Water Ditching and Survival or equivalent.	A		
	III. MISSION PLANNING:			
M	C. Demonstrate ability to order aircraft through Dispatch.	A		
M	D. Demonstrate ability to understand weight and balance limitations.	A		
M	E. Demonstrate knowledge for proper planning of a week-long mission in a remote environ. • Plan an itinerary incorporating fuel range and refueling options. • Know and follow alternative flight following techniques using a satellite phone. • Demonstrate knowledge of proper supplies and equipment preparation.	A		
M	VII. FLIGHT PATTERNS # 4 is required.	C		

INSTRUCTIONS FOR EVALUATION RECORD

There are six separate blocks allowing evaluations to be made. These evaluations may be made on aerial survey days, simulation in classroom, or in daily duties. This should be sufficient for qualifications in the position if the individual is adequately prepared. If additional blocks are needed, a page can be copied from a blank task book and attached.

COMPLETE THESE ITEMS AT THE START OF THE EVALUATION PERIOD:

Evaluator's name, office, title, and agency: List the name of the evaluator, evaluator's position or office, title, and agency.

Evaluator's home unit address and phone: Self explanatory.

Evaluator Block #: The number in the upper left corner of the evaluator block identifies a particular experience or group of experiences. This number should be placed in the column labeled "Evaluation Record #" on the Qualification Record for each task performed satisfactorily.

Experience Location: Identify the location where the tasks were performed by state and general geographic location (e.g., "Wallowa Mountains, Daniel Boone NF").

Type of Survey: Mountain contour, grid pattern in flat terrain, etc.

COMPLETE THESE ITEMS AT THE END OF THE EVALUATION PERIOD:

Approximate Duration: Enter inclusive dates during which the trainee was evaluated.

Recommendation: Check as appropriate and/or make comments regarding the future needs for trainee development.

Date: List the date the record is being completed.

Evaluator's Initials: Initial here to authenticate your recommendations and to allow for comparison with initials in the Qualification Record.

Evaluator's Title: List your certification relevant to the trainee position you supervised (e.g., Program Manager, Unit Aviation Officer, FWFM-SU, etc.).

Evaluation Record

	TRAINEE NAME		TRAINEE POSITION	
#1	Evaluator's Name & Title: Agency & Office Address:			
Experience Location (state and general area)	Type of Survey	Approximate Duration (inclusive dates)	Other Information to Explain Experience	
Identify the Aerial Observer or Fixed Wing Flight Manager—Special Use (FWFM-SU) trainee position; indicate FWFM-SU “with Remote Sensing” for FWFM-SU having a remote sensing emphasis. The tasks initiated & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee. I recommend the following for further development of this trainee. _____ The individual has successfully performed all tasks for the position and should be considered for certification. _____ The individual was not able to complete certain tasks for the position (comments below) or additional guidance is required. _____ Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation. _____ The individual is deficient in tasks and/or training for the position requiring additional hands-on or classroom training (comments below) before additional trainee assignment(s) are scheduled. Recommendations: _____	to			
Date: _____ Evaluator's Initials: _____ Evaluator's Phone #: _____				

Evaluation Record

	TRAINEE NAME		TRAINEE POSITION	
#2	Evaluator's Name & Title: Agency & Office Address:			
Experience Location (state and general area)	Type of Survey	Approximate Duration (inclusive dates)	Other Information to Explain Experience	
		to		
Identify the Aerial Observer or Fixed Wing Flight Manager—Special Use (FWFM-SU) trainee position; indicate FWFM-SU “with Remote Sensing” for FWFM-SU having a remote sensing emphasis.				
The tasks initiated & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee. I recommend the following for further development of this trainee.				
<input type="checkbox"/> The individual has successfully performed all tasks for the position and should be considered for certification.				
<input type="checkbox"/> The individual was not able to complete certain tasks for the position (comments below) or additional guidance is required.				
<input type="checkbox"/> Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.				
<input type="checkbox"/> The individual is deficient in tasks and/or training for the position requiring additional hands-on or classroom training (comments below) before additional trainee assignment(s) are scheduled.				
Recommendations: _____				
Date: _____ Evaluator's Initials: _____ Evaluator's Phone #: _____				

Evaluation Record

#3	TRAINEE NAME		TRAINEE POSITION	
Evaluator's Name & Title: Agency & Office Address:				
Experience Location (state and general area)	Type of Survey	Approximate Duration (inclusive dates)	Other Information to Explain Experience	
		to		
Identify the Aerial Observer or Fixed Wing Flight Manager—Special Use (FWFM-SU) trainee position; indicate FWFM-SU “with Remote Sensing” for FWFM-SU having a remote sensing emphasis. The tasks initiated & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee. I recommend the following for further development of this trainee. _____ The individual has successfully performed all tasks for the position and should be considered for certification. _____ The individual was not able to complete certain tasks for the position (comments below) or additional guidance is required. _____ Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation. _____ The individual is deficient in tasks and/or training for the position requiring additional hands-on or classroom training (comments below) before additional trainee assignment(s) are scheduled. Recommendations: _____ _____ _____				
Date: _____ Evaluator's Initials: _____ Evaluator's Phone #: _____				

Evaluation Record

	TRAINEE NAME		TRAINEE POSITION	
#4	Evaluator's Name & Title: Agency & Office Address:			
Experience Location (state and general area)	Type of Survey	Approximate Duration (inclusive dates)	Other Information to Explain Experience	
		to		
Identify the Aerial Observer or Fixed Wing Flight Manager—Special Use (FWFM-SU) trainee position; indicate FWFM-SU “with Remote Sensing” for FWFM-SU having a remote sensing emphasis.				
The tasks initiated & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee. I recommend the following for further development of this trainee.				
<input type="checkbox"/> The individual has successfully performed all tasks for the position and should be considered for certification.				
<input type="checkbox"/> The individual was not able to complete certain tasks for the position (comments below) or additional guidance is required.				
<input type="checkbox"/> Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.				
<input type="checkbox"/> The individual is deficient in tasks and/or training for the position requiring additional hands-on or classroom training (comments below) before additional trainee assignment(s) are scheduled.				
Recommendations: _____				
Date: _____ Evaluator's Initials: _____ Evaluator's Phone #: _____				

Evaluation Record

#5	TRAINEE NAME		TRAINEE POSITION	
Evaluator's Name & Title: Agency & Office Address:				
Experience Location (state and general area)	Type of Survey	Approximate Duration (inclusive dates)	Other Information to Explain Experience	
		to		
Identify the Aerial Observer or Fixed Wing Flight Manager—Special Use (FWFM-SU) trainee position; indicate FWFM-SU “with Remote Sensing” for FWFM-SU having a remote sensing emphasis. The tasks initiated & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee. I recommend the following for further development of this trainee. _____ The individual has successfully performed all tasks for the position and should be considered for certification. _____ The individual was not able to complete certain tasks for the position (comments below) or additional guidance is required. _____ Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation. _____ The individual is deficient in tasks and/or training for the position requiring additional hands-on or classroom training (comments below) before additional trainee assignment(s) are scheduled. Recommendations: _____ _____ _____ _____				
Date: _____ Evaluator's Initials: _____ Evaluator's Phone #: _____				

Evaluation Record

	TRAINEE NAME		TRAINEE POSITION	
#6	Evaluator's Name & Title: Agency & Office Address:			
Experience Location (state and general area)	Type of Survey	Approximate Duration (inclusive dates)	Other Information to Explain Experience	
		to		
Identify the Aerial Observer or Fixed Wing Flight Manager—Special Use (FWFM-SU) trainee position; indicate FWFM-SU “with Remote Sensing” for FWFM-SU having a remote sensing emphasis.				
The tasks initiated & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee. I recommend the following for further development of this trainee.				
<input type="checkbox"/> The individual has successfully performed all tasks for the position and should be considered for certification.				
<input type="checkbox"/> The individual was not able to complete certain tasks for the position (comments below) or additional guidance is required.				
<input type="checkbox"/> Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.				
<input type="checkbox"/> The individual is deficient in tasks and/or training for the position requiring additional hands-on or classroom training (comments below) before additional trainee assignment(s) are scheduled.				
Recommendations: _____				
Date: _____ Evaluator's Initials: _____ Evaluator's Phone #: _____				