

CHAPTER 117. CONDUCT A FEDERAL AVIATION REGULATIONS PART 137 BASE INSPECTION

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODE: 1616

3. OBJECTIVE. The objective of this task is to determine that the principal base of operations for an applicant for a Federal Aviation Regulations (FAR) Part 137 operating certificate or for an existing operator meets the regulatory requirements of the certificate. Successful completion of this task results in an indication of satisfactory or unsatisfactory in the operator's district office file.

5. GENERAL.

A. FAR Requirements. The FAR do not specify what type of physical facilities an agricultural operator must have. This is usually governed by state and local regulations and to some extent by regulations of the Environmental Protection Agency (EPA).

B. Inspection Coverage. If the inspector is familiar with state and local or EPA regulations, he or she should determine the operator's compliance with them. At the very least, the inspector should bring any discrepancies with non-aviation regulations to the attention of the operator. However, Federal Aviation Administration (FAA) inspectors have no enforcement capability for state, local, or EPA areas.

C. Aviation Safety. The inspector's duty is to determine that the operator's practices and procedures at the base of operations conform to the FAR insofar as it applies.

7. SPECIFIC AREAS OF CONCERN.

A. Preparation. Before going to an agricultural operator to conduct surveillance, it is important that the inspector review the district office file on the operator. This will give the inspector insight into the type of operation being conducted, i.e., private, commercial, congested area operation, etc. In the case of a newly certificated operator, weak areas noted in the certification report should be studied then closely examined during the inspection.

B. Examination of Operator Records.

(1) A discussion with the operator and review of the records should indicate to the inspector if any names other than the ones appearing on the certificate are being used.

(2) The records shall be located where the operator has designated the principal base of operations. Unusual circumstances may dictate that the records may temporarily be at a different location, and the inspector must use some judgement in evaluating such a situation.

(3) Private agricultural operators are not required to maintain records in accordance with FAR § 137.71. When reviewing commercial operator records, the inspector may find that the records are copies of bills or invoices sent to the operator's customers. Since there is no set procedure on what form commercial operator records must be, any method used by the operator is satisfactory as long as it maintains the minimum requirements of FAR 137.71(a)(1), (2), and (3).

(a) Name and address of person to whom services were rendered

(b) Date of service

(c) Name and quantity of material dispensed

(4) Pilot records are usually kept separate from the operating records, and they must meet the requirements of FAR § 137.71(a)(4).

(5) An operator, including a private operator, must present evidence that each person used in the agricultural operations has been informed of their duties and responsibilities. A written record of this may be necessary to determine compliance with FAR § 137.41.

C. Private Operators. Since a private operator is not required to keep records, the inspector must discuss the private operator's operations in sufficient detail for the inspector to ensure that operations for compensation or hire are not being conducted. The inspector must verify that only the property or the crop, in which the operator has an interest or owner-

ship, is all that is being serviced. Leases or other written agreements can be accepted as proof of bona fide property interest. This has been a weak area in the past, but in the attempt to ensure compliance, the inspector must take care not to make the discussion seem accusatory. If, on the other hand, the inspector has received complaints about the private operator, the appropriate investigatory procedures must be followed. (Refer to chapter 181, Conduct a Complaint Investigation, or chapter 182, Conduct a Violation Investigation, as appropriate.) The use of partial ownership should not be used as a way to circumvent the regulation.

D. Aircraft Inspection. A detailed examination of the aircraft is usually conducted by an airworthiness inspector. However, when circumstances prevent airworthiness from being represented during the inspection, the operations inspector should assure that all available aircraft and their logbooks are examined for at least a current annual inspection, for installation of seat belts and shoulder harnesses, and for a facsimile of the certificate on board.

(1) Airworthiness and registration certificates need not be kept in the aircraft, but they must be available at the site from which dispensing operations are conducted.

(2) With respect to certain aircraft modifications, including fuel jettisoning, airworthiness inspectors must be consulted.

E. Poison Control. The inspector should check the operator's procedures or facilities for poison control.

(1) Ideally, pilots should not be assigned the duty of loading pesticides into the aircraft. They may be assigned the responsibility to observe the loading of poison; however, in many small operations, the pilot is the only person dispatched to a dispensing site and will have to do the loading. In either case, loading should be accomplished with little or no residual contamination of the loading area. There should be a source of water, which can be used to remove any poison from the skin.

(2) The inspector should check the method the operator uses to destroy or dispose of poison containers. EPA labels on pesticides indicate the EPA-approved method of disposal, but state and local laws may also be involved.

(3) The operator should have the emergency phone numbers of the nearest poison control center. Local numbers where emergency medical attention can be obtained should also be available.

F. Air Traffic Control (ATC) Coordination. The inspector must ensure that the operator has made prior arrangements with airport management and ATC before operating in and around airports.

G. Night Operations. Although rare, night operations may be conducted under certain conditions. The following is guidance which is useful for the aviation safety inspector in assessing the basic safety considerations of such operations.

(1) Agricultural aircraft operating between sunset and sunrise must adhere to the provisions of FAR 91.33(c)(3) and 91.73. However, FAR § 137.47 permits an agricultural aircraft to operate without position lights if prominent unlighted objects are visible for at least one mile.

(a) Agricultural aircraft without position lights may conduct takeoffs and landings at airports with a functioning control tower only as authorized by ATC.

(b) Takeoffs and landings at uncontrolled airports can be conducted only with the permission of the airport management and when other aircraft operations, requiring position lights, are not in progress.

(c) The agricultural aircraft operator may request district office maintenance personnel to approve the installation of aircraft lights and other equipment items pertinent to night operations. Approvals of such installations must be conducted in accordance with the applicable FAR and internal directives. (See FAA Order 8300.10, Airworthiness Inspector's Handbook.)

(2) The operator should be encouraged to establish safety practices and procedures for the operator's particular operation, including night operations. The following guidelines are some, but certainly not all, suggestions for these practices and procedures.

(a) Night operations should be conducted only when a prominent horizon exists, or there should be sufficient surface lighting to reduce the possibility of spatial disorientation.

(b) The field where night operations are to be conducted should be checked from the ground in daylight with the flagmen, if flagmen are used, or with the supervisor of the operation. A plan for working the field should be developed. The pilot may find it advantageous to diagram the field and indicate the approximate locations of any obstructions which could affect the safety of the operation.

(c) Immediately before a night operation, the pilot should obtain any information available concerning the possibility of a temperature inversion in the

area of operation. Inversions cause suspension in the air of dust particles and liquid droplets, which can result in an uncontrollable drift problem. Operations should not be conducted in areas of temperature inversions.

(d) When chemical dust is dispensed, the resulting cloud could spread in such a way that the horizon, flagmen, or other ground references become obscured. If this condition occurs, the operation must be halted until ground references are once again visible.

(e) The operator should establish minimum flight experience qualifications for pilots conducting night operations. For example, an operator may require pilots to acquire 15 to 25 hours in daylight operations in proximity to the area of proposed night operations. Another, more specific qualification would be to require a pilot to work an area during daylight before working the same area at night.

(f) Operators should also consider establishing minimum field sizes, based on the number, location, and kind of obstructions, for night dispensing operations. For example,

(i) A relatively small field (1,500 feet by 1,500 feet) may be safe if bounded on only two sides by obstructions.

(ii) A larger field (1,500 feet by 2,500 feet) could be safe with obstructions on three sides.

(iii) Operations at fields with obstructions on all four sides should be considered only if the field is 2,500 feet by 2,500 feet or larger.

(iv) These dimensions are only suggestions and are not standards established by the FAA. The operator should establish standards appropriate to the geographical area where operations are conducted.

9. GUIDELINES FOR BASE INSPECTIONS.

A. *Coordination.* When an airworthiness inspector cannot attend the base inspection, the operations inspector should tailor the inspection to examine the aspects of an inspection that the airworthiness inspector would normally do. For example,

(1) The inspector should be prepared to examine the equipment, i.e., the aircraft and spray rig, etc.

(2) The inspector should also observe preflight checks performed by the pilots, such as verifying the integrity of the spray rig, loading of the appropriate amounts (weight) of chemicals, etc.

(3) The inspector should coordinate with an airworthiness inspector to ensure follow-up inspections

of any items outside of the operations inspector's expertise.

B. Levels of Deficiency and Appropriate Corrective Action. Following are some examples of various deficiencies that might occur in an inspection and the appropriate action to take for the situation. The actions described are based on two assumptions.

(1) First, if a discrepancy is found, the base inspection is completed anyway. After inspection, all the deficiencies and recommended corrective actions would be summarized in a note to the file and/or in remarks to the Program Tracking and Reporting Subsystem (PTRS) Data Sheet.

(2) Second, an unsatisfactory report often calls for an enforcement investigation. Unsatisfactory reports are usually based on obvious violations found during the inspection. There are intermediate stages between satisfactory and unsatisfactory results, any of which may result in a satisfactory inspection with corrective action.

(a) A spot correction involves a discrepancy which was noted and corrected during the inspection and which was not a violation. Because it was corrected "on the spot," it may require no further action. An example of a spot correction might be: The inspector does not find a facsimile of the agricultural aircraft operator's certificate on board the aircraft. The corrective action would consist of the inspector notifying the operator of this discrepancy. During the remainder of the inspection, the operator makes a copy of the certificate and places it in the aircraft. No other corrective action would be necessary if the inspector found that no agricultural operations were conducted without the facsimile was on board. However, the inspector shall mark the PTRS sheet with an "I" to indicate "information." The inspector shall note the discrepancy and the spot correction on the transmittal form and/or the job aid.

(b) A follow-up action would involve deficiencies or lack of pilot knowledge or skill that do not involve a violation but which require action other than a spot correction. For example, during the inspection the inspector noted that a required placard was not in place on the aircraft and a replacement for the placard was not readily available. However, there was no evidence that the aircraft had been operated without the placard. The corrective action would consist of the inspector verbally advising the operator that the placard must be in place before the aircraft is operated again. At the office the inspector would confirm this in writing to the operator and schedule a follow-up inspection to determine if the placard was replaced.

The inspector shall mark the PTRS transmittal form with an "F" to indicate a follow-up action.

(c) A blatant violation would be cause for a finding of "Unsatisfactory" for the base inspection. For example, during the inspection the inspector finds that a new chief supervisor has been designated and has acted in that capacity but has not completed the knowledge and skill test. The inspector shall mark the PTRS transmittal sheet with an "E" to indicate the inspection resulted in an enforcement investigation. (See chapter 182 and FAA Order 2150.3, Compliance and Enforcement.)

C. Presence of Chief Supervisor and Other Pilots During Inspection. It is desirable to be able to spot check the knowledge and skill of the chief supervisor and other pilots. Spot checks of pilots are necessary to verify continuing compliance. This is especially important for FAR Part 137 operations because there is no requirement for proficiency checks other than the biennial flight review.

(1) The inspector should ask all available pilots questions involving agricultural aircraft operations. (Refer to chapter 118, Administer a Knowledge and Skill Test to an Agricultural Aircraft Pilot, for knowledge areas.)

(2) The inspector may request any pilot to demonstrate skill in agricultural aircraft operations. (Refer to chapter 118 for skill areas.)

D. Discrepancies Between District Office Files and Operator Files. When a discrepancy is found between office records kept on the operator and records maintained by the operator, the inspector shall determine which set of records is current, approved, and correct. The outdated records must be brought up to date. For example, the operator's records indicate a change in the address of the base of operations, of which the FAA was not aware. District office records must be altered to reflect the correct address. The inspector must determine whether an enforcement action is necessary.

11. INITIAL CERTIFICATION VS. LATER SURVEILLANCE. When this task is performed as the base inspection for an original certification (during the demonstration and inspection phase of the certification process), there are necessarily some items that cannot be inspected. For example, an applicant for an agricultural aircraft operator's certificate would not have a certificate or certificate facsimiles to be examined. For an original certification, the inspector marks the "N/A" column on the job aid (figure 117-1) for items that cannot be evaluated.

SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites. This task requires knowledge of the regulatory requirements of Federal Aviation Regulations (FAR) Part 137 and Federal Aviation Administration (FAA) policies and qualification as an aviation safety inspector (ASI) (operations).

B. Coordination. This task requires coordination with the airworthiness unit.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References.

- FAR Parts 1, 61, and 91
- PTRS Procedures Manual (PPM)

B. Forms.

- FAA Form 8000-36, Program Tracking and Reporting Subsystem Data Sheet

C. Job Aids.

- FAR Part 137 Base Inspection Job Aid (figure 117-1)

5. PROCEDURES.

A. Preinspection Activities.

(1) Determine the need for the inspection.

- (a) District office work program schedule
- (b) Requested by the regional office
- (c) As a result of complaints
- (d) As part of the certification process

(e) As per FAA Order 1800.56, Flight Standards Evaluation System

(2) Determine if the inspection is to be conducted with or without notice to the operator. (Conduct initial certification inspections as per the submitted schedule of events.)

(a) If the inspection is to be conducted with notice to the operator, notify the operator by telephone of the day, time, and nature of the inspection. Record the notification on FAA Form 1360-33 and place it in the operator's file.

(b) If the inspection is to be conducted without notice to the operator, schedule the day and time.

(3) Review the district office file on the operator for previous violations, complaints, accidents, and

other inspection reports. Note any areas which require special attention.

(4) Review with the airworthiness or avionics units for a plan of action and for any specific problem areas.

(5) Open Program Tracking Reporting Subsystem (PTRS) file.

B. Conduct Base Inspection. Use the job aid in figure 117-1 to assist during the inspection.

(1) Inspect aircraft. (Airworthiness)

(2) Determine if chief supervisor and other pilots are qualified. (FAR § 137.19(b) and (c))

(a) Determine if knowledge and skill tests have been conducted and their results. (FAR § 137.19(e)(1) and (2))(b) For congested area operations, determine that each pilot-in-command (PIC) meets the experience requirements. (FAR § 137.53(b)(1) and (2))

(3) If the operator conducts congested area operations, determine that the congested area plan has been FAA approved as per chapter 120, Evaluate a FAR Part 137 Congested Area Operations Plan.

(4) Determine that the applicant understands the limitations involved with agricultural aircraft operations.

- (a) Limitations on passenger carrying
- (b) Weight and Balance limitations
- (c) Limitations on operating without position lights
- (d) Limitations on dispensing in congested areas
- (e) Limitations on not observing standard airport traffic patterns

(f) FAR § 91.79 limitations concerning ferrying to and from dispensing sites

(5) Determine that commercial operator records meet the requirements of FAR § 137.71.

(6) If all items in the inspection are satisfactory, note the outcome on the job aid.

(7) If the inspection is not satisfactory, inform the operator immediately. Note the outcome on the job aid. Confirm unsatisfactory items in writing to the applicant (figure 117-2). Initiate an enforcement investigation, if appropriate. (See chapter 182.)

C. Debrief Operator. Discuss with the operator any areas needing improvement. Additionally, if applicable, discuss areas which may require an Enforcement Investigative Report, and the normal enforcement action process.

D. Inspection Reports. Place the job aid and a copy of any correspondence with the operator in the district office file for the operator.

E. PTRS. Close PTRS file.

7. TASK OUTCOMES. The satisfactory completion of this task results in either:

A. An indication in the district office file that all items were satisfactory.

B. An indication in the district office file of unsatisfactory items.

9. FUTURE ACTIVITIES.

A. Additional inspections on follow-up items.

B. Additional inspections as per program guidelines.

C. Possible enforcement investigation when inspections reveal a violation of the FAR or the conditions of the operating certificate.

**FIGURE 117-1
FAR PART 137 BASE INSPECTION JOB AID**

NAME OF OPERATOR	INSPECTION TEAM				
	Names		Specialty		
	_____		_____		
ADDRESS	_____		_____		
	_____		_____		
	_____		_____		
ITEMS INSPECTED	INSP. INITIAL	DATE	SAT	UNSAT	N/A
1. Certificate conforms to district office copy					
2. Chief Supervisor same as district office records					
3. Operator uses appropriate aircraft					
a. Aircraft certificated and airworthy					
b. Aircraft equipped for agricultural operations					
c. Inspection of load-carrying or attaching devices					
d. Inspection of optional equipment installation					
e. Airworthiness directives current					
f. Inspection of installation and function of spray or diffusion equipment and jettisoning device					
g. In-house or contract maintenance observed					
h. Any minimum equipment lists (MEL) current and appropriate					
i. Certificate facsimiles on board all aircraft used in agricultural operations					
4. Chief supervisor and other pilots					
a. Airman and medical certificates appropriate					
b. Knowledge test passed (FAR § 137.19(e)(1))					
c. Skill test passed (FAR § 137.19(e)(2))					
d. Pilots used in congested area operations meet requirements of FAR § 137.53(b)(1) and (2)					
5. Congested area operations conducted					
a. Operator has FAA approved plan					
b. Plan includes approval by appropriate government officials					
c. Plan provides for ATC coordination, if required					
d. Plan includes a complete description of the operation					

**FIGURE 117-1—Continued
FAR PART 137 BASE INSPECTION JOB AID**

ITEMS INSPECTED	INSP. INITIAL	DATE	SAT	UNSAT	N/A
e. Plan lists all aircraft used by make and model and N-number					
f. Plan lists all pilots used by name, certificate grade, and certificate number					
g. Plan includes appropriate maps, charts, diagrams					
h. Plan has a specific method for halting operation for real or apparent hazards					
i. Plan clearly describes who is conducting the operation and what is being contracted					
6. The operator conforms to:					
a. Limits on passenger carrying					
b. Weight and balance limits					
c. Limitations on operating without position lights					
d. Limitations on dispensing in congested areas					
e. Limitations on not observing standard traffic patterns					
f. Limitations on restricted category aircraft, if used (FAR § 91.39(b) and (c))					
g. FAR § 91.79 limitations on ferrying to and from dispensing sites					
7. Commercial Operator Recordkeeping					
a. Name of each person provided service					
b. Date services provided					
c. Name and quantity of material dispensed					
d. Name of each pilot used and date FAR § 137.19(e) was met					
e. Records kept for at least one calendar year					
8. Bona Fide Property Interest (Private Operators)					
REMARKS: _____ _____					
Inspectors' Signatures: _____					

FIGURE 117-2
LETTER TO OPERATOR CONFIRMING UNSATISFACTORY ITEMS

FAA Letterhead

[date]

Dear [operator's name]

This letter is to confirm those items that were unsatisfactory in the base inspection conducted on [indicate date].

[The inspector should list each item and indicate:

(a) whether sufficient corrective action has been taken by the operator

(b) that enforcement action may be initiated

(c) if a follow-up inspection is required to determine if corrective action has been completed, when that inspection will take place]

Sincerely,

[certification project manager's signature (if initial certification) or principal operations inspector's signature (if surveillance of an established operator)]

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