

**SECTION J**  
**ATTACHMENT 20**

**AIRFORCE - QUALITY ASSURANCE**  
**SURVELLIANCE PLAN**

# AIRCRAFT MAINTENANCE

## QUALITY ASSURANCE SURVEILLANCE PLAN



## 23rd FLYING TRAINING SQUADRON FT RUCKER AL

## **1. Introduction**

1.1. The Quality Assurance Surveillance Plan (QASP) has been developed to implement AF Instruction 63-124 and AETC Instruction 21-107. The purpose of the QASP is to provide a planned process for surveilling the contractor's actual performance and comparing that performance against the contractual requirements to determine conformity with the technical requirements of the contract.

1.1.1. This QASP provides a systematic method to evaluate the services the contractor is required to furnish and not the details of how the contractor accomplishes the work. The OI uses a combination of surveillance methods that adequately assures the government of the contractor's performance.

1.1.2. This QASP is based on the premise that the contractor, not the government, is responsible for management and quality control actions to meet the terms of the contract. QAs are to be objective, fair, and consistent in evaluating contractor performance, against technical and regulatory requirements and the terms of the contract.

1.2. Revisions to this QASP are the joint responsibility of the Chief QA, Functional Commander, and Contracting Officer (CO).

## **2. Chief QA Responsibilities**

2.1. The Chief QA is to ensure surveillance of contract performance and report noncompliance or abnormalities to the Functional Commander and the CO. Specifically, the Chief QA:

2.1.1 Verifies the contractor is meeting contract obligations specified in the SOW by ensuring continuous surveillance.

2.1.2. Reviews evaluation guides annually for adequacy and updates as needed.

2.1.3 Reviews the contractor's aircraft maintenance portion of the Quality Support program for acceptable quality level in all phases of the contract and recommends acceptability to the CO through the Functional Commander.

2.1.4 Initially evaluates each QA to determine past qualifications, experience, and ability to accomplish technical inspections and contract surveillance functions.

2.1.5 Performs annual, as a minimum, "over the shoulder" evaluation of each QA in one of his/her primary or alternate surveillance areas. Document the results of the evaluation in the QA's training records.

2.1.6 Ensures a QA training program is established and implemented.

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2.1.7 Assists the CO in managing the applicable government-furnished property clause of the contract.

2.1.8 Ensures a monthly summary of QA surveillance activities is forwarded to HQ AETC/LGP and HQ AETC/LGM not later than the 15th workday of the month. Send a copy to 19AF/LG, CO, and the Functional Commander.

2.1.9. Calculates award fee data at the end of each quarterly award fee period.

2.1.10. Performs surveillance activities as required.

2.1.11. Ensures development and maintenance of the QASP in coordination with the Functional Commander, CO, and HQ AETC/LGP.

2.1.12. Reviews and evaluates contractor-submitted value engineering change proposals.

2.1.13. Provides assistance to the wing safety office, or equivalent, in mishap and incident reporting.

2.1.14. Reviews contractor regulations and/or instructions prior to acceptance and publication.

2.1.15. Verifies the statistical information provided by the contractor that concerns the standards specified in the Technical Exhibit of the contract.

### **3. QA Responsibilities**

3.1 QAs are the "eyes and ears" of the Functional Commander and CO relative to the actual performance of the contract; however, they are not a quality control function. QAs will not direct work or reaccomplishment of work, change the contract, or formally interpret the contract. The CO resolves these types of issues. Specifically, the QA will:

3.1.1. Know the specifications and requirements of the contract.

3.1.2. Know and maintain proficiency in contract surveillance procedures and requirements.

3.1.3. Know and apply the procedures for documenting surveillance.

3.1.4. Perform surveillance according to the QASP.

3.1.5. Maintain technical competency in his/her assigned surveillance areas.

3.1.6. Attain qualification in the appropriate areas before performing evaluations, inspections, or surveillance duties unsupervised.

3.1.7. Review incoming and outgoing official government and contractor correspondence, as applicable.

3.1.8. Review the deficiency, Time Compliance Technical Order (TCTO), and mishap contractor reports for accuracy, adverse trends, and mission accomplishment. Additionally, reviews contractor logistics reports to higher headquarters for possible indicators of performance trends.

3.1.9. Evaluate the effectiveness of the contractor's involvement in mishap investigations. (AFI 91-204, Safety Investigations and Reports).

3.1.10. Develop monthly surveillance schedules.

#### **4. QA Training**

4.1. QA Training Requirements: Newly assigned QAs must complete Phase I and Phase II training before performing surveillance duties on new or existing contracts. He/she will attend the AETC Quality Assurance Evaluator course within 90 days of assignment to fulfill Phase I training. The CO will conduct Phase II training. The CO will provide any required refresher training. QAs will receive familiarization training in his/her areas of responsibility and in areas outside of his/her expertise. Air Force/AETC directives, Statement of Work, and Technical Orders will be used to complete OJT in areas where the individual QA lacks extensive knowledge. Newly assigned QAs will be entered into training using the initial QA training plan as a guideline for progression through training. OJT will be conducted until the QA demonstrates satisfactory knowledge and proficiency in each work area.

4.2. To remain proficient in his/her alternate areas, QAs will perform the observation area inspection at least semiannually. These semiannual inspections will be accomplished jointly by the primary and alternate QA whenever possible.

4.3. QA training will be documented on the preprinted AF Form 797. Training progress will be documented on the AF Form 623a for QAs in the grade of TSgt and below.

#### **5. Quality Assurance Surveillance**

5.1. Surveillance Methods: The QA will ensure contract compliance through the guidance contained in this QASP, AFI 63-124, AETCI 21-107, and the terms of the current contract. This OI has two basic surveillance requirements: Technical Inspections and Observation Area Inspections. Minimum surveillance areas, sample sizes, and frequencies are listed in AETCI 21-107, Table A2.1 for technical inspections and A4.1 for observation areas.

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5.2. Cost of Reimbursable Items: QAs will verify the costs of reimbursable items and contractor proposals at the request of the CO.

5.3. Duty Hours: Normal duty hours are from 0730-1630; however, night shift will be evaluated on a periodic basis. NOTE: There will be additional QA coverage on weekend days designated as normal flying days.

5.4. QAs will regularly, yet randomly, sample supply management aids for signs of waste, abuse, or poor supply discipline. These documents are available on the network and will be reviewed by each QA in his/her respective areas during quarterly scheduled area observations.

5.5. The 23<sup>rd</sup> FTS QAs will conduct a minimum of five aircraft, five engines, one Aerospace Ground Equipment (AGE) Foreign Object (F.O.) Technical Inspections per month. These inspections will be after the fact. Results will be incorporated into the Monthly Summary of Contract Services. A report from the QA database of all F.O. inspections will be forwarded to the unit Foreign Object Damage (FOD) officer monthly.

5.6. Environmental Compliance: Ft Rucker must comply with all EPA, Federal, State, and Local laws, rules, and regulations governing the generation, handling, storage, treatment, and disposal of hazardous and toxic materials/waste.

5.6.1. QAs will inspect and evaluate the contractor's operations for proper identification, collection, segregation, storage, and disposition of hazardous and toxic materials/waste.

5.6.2. As a minimum, QAs will inspect those areas having the potential of generating hazardous waste during the performance of observation area inspections. QAs will follow the guidance in the Ft Rucker Hazardous Waste Management Plan, applicable OIs, and the Statement of Work.

5.7. Surveillance of Contractor Training Courses: The QAs will conduct a minimum of one Technical Inspection of the contractor's training class in session per month. Emphasis will be placed on the adequacy of training provided. The surveillance will be assigned either an acceptable or unacceptable rating based on whether or not the training observed meets contract requirements, the standards and intent of the contractor's training plan, and the objectives of the training being provided. Two or more minor discrepancies or one major discrepancy will result in an unacceptable rating.

5.7.1. Task qualification training and certification training, to include special certification will be surveilled during scheduled area observations.

5.8. Reports and Data Reviews: The QA will review the contractor's reports and maintenance data for accuracy and adverse trends. The QA will monitor contractor performance and mission reports, review higher headquarters logistics reports, AETC maintenance evaluation reports, and AETC maintenance summary for possible indicators of performance trends.

## **6. Surveillance Schedules**

6.1. Surveillance Schedule: QA will develop a monthly schedule of surveillance based on the requirements of AETCI 21-107, and this OI. The monthly schedule will be completed, printed, and forwarded to the Functional Commander not later than seven calendar days prior to the beginning of the period it covers. After the Functional Commander reviews the schedule, it will be forwarded to the CO prior to the beginning of the period it covers. The schedule is "FOR OFFICIAL USE ONLY" and is not releasable to anyone other than authorized government personnel.

6.2. The Chief QA will obtain approval from the CO, thru the FC, prior to implementing changes to monthly schedule.

6.3. Actual aircraft, engines, and aerospace ground equipment will be selected at random from those available during the month of inspection. The Chief QA will monitor monthly results to ensure no particular workcenter is being disproportionately inspected. The Chief QA may, however, deviate from random selection to ensure a broad cross section of the fleet is being inspected to investigate potential problems or if trends indicate a need.

6.4. "As Observed" inspections are unscheduled inspections and or observations. They occur when discrepancies or deficiencies are observed or discovered that are not directly associated with a scheduled inspection. "As Observed" deficiencies must be documented and reported.

## **7. Technical Area Inspections**

7.1. Technical Inspections: The QA will perform Technical Inspections (TIs) on assigned aircraft, engines, and support equipment, including follow-up inspections of Quality Support personnel. TIs will include both concurrent and after the fact inspections. The minimum numbers of inspections to be accomplished are outlined in AETCI 21-107, Table A2.1. Additional inspections may be performed to adequately evaluate any area where quality of contractor performance has been identified as less than acceptable. The Chief/Superintendent QA will determine the number of these inspections based on a review of the contractor's Quality Support reports or QA inspections for adverse trends and mission accomplishment. Discrepancies discovered during TIs will be documented on the aircraft AFTO Form 781 or equipment AFTO Form 244 and annotated on the AF Form 447. When aircraft forms are documented, the QA will ensure the "status today" block is updated and the contractor's supervision is briefed.

7.2 QAs will ensure the contractor fulfills the requirements of the Quality Control plan using the following two methods: 1) the quarterly area observation on the contractor's Quality Support office, and 2) performance of the following TIs as follow-up inspections on contractor Quality Support personnel with a frequency of one inspection per month:

A	B	C	D	E
Line	Item	Minimum QVI Evaluation	Notes	Minimum Personnel Evaluation
<b>AEROSPACE VEHICLES</b> (UH-1H & UH-1HI)				
1	Preflight, basic postflight, and through flight inspection	10%	2,3	Rep Sample
2	Hourly postflight inspection	7%	2,4	Rep Sample
3	Reserved			
4	Reserved			
5	Phased inspection	50%	2,4	Rep Sample
6	Liquid servicing			1
7	Gaseous servicing			1
8	Ground movement			1
9	Flight control rig/maintenance			1 per quarter
10	Landing gear maintenance			1
11	Throttle rig			1
12				1
13	A/C wash and corrosion control	5%	4	
14	Environmental & Electrical system maintenance			1
15	Avionics system maintenance			1
16	Propulsion system maintenance	5%		1
17	Fuel system maintenance			2 per year
18	Installed Engine Run			1
19	Document File Inspection	2.5%		
<b>ENGINES</b>				
20	Reserved			
21	Engine Installation	25%	2	1
22	Document File Inspection	5%		
<b>SPECIALIZED EQUIPMENT</b>				
23	Industrial equipment, and special tools	5%	9	
<b>SPECIAL INSPECTIONS</b>				
24	TCTOs	First 10%		Representative Sample thereafter
25	AETC Special Inspection	First 10%		
26	Transfer/acceptance inspection	5%		
27	Reserved			
28	Foreign object inspection (Aircraft)		7	
29	Foreign object inspection (Facilities, Hangar, Flight line)		7	
30	CTKs, Special Tools, Tool Facilities		7	
31	Weight and Balance			1

NOTES:

1. When computing frequency, round up requirements to the next whole number. Minimum evaluation requirements are for each MDS assigned.
2. Perform a document file inspection in conjunction with the inspection.
3. Any combination of preflight, BPO, thru flight, or 10 Hour/14-Day, 30 Hour, 100 Hour, etc., selected to meet the monthly inspection requirements; for example, 8 aircraft possessed equals two QVIs. One preflight, zero thru flights, and one BPO QVIs would meet the minimum requirement of two inspections for line 1 inspections.
4. Number of required inspections is based on the percentage of aircraft possessed or the percentage of inspections, washes, TCTOs, etc., scheduled monthly (whichever is higher). For UH-1 aircraft, provide equitable phase inspection distribution.
5. Number of required inspections is based on the percentage of inspections scheduled for the month.
6. Inspections are conducted primarily during reassembly of the engine.  
Number of required inspections is based on the total of the monthly average number of engine 500-hour hot section inspection during the previous 6 months. It consists of technical requirements that can be inspected without disassembly of the engine.
7. At least one inspection per week.
8. Each static display shall be inspected every 6 months.

7.3 A concurrent TI is an inspection performed by QAs when technicians are actually performing a task. An after the fact TI is performed after a specific task is completed and documented. After the fact inspections will not be performed after aircraft/equipment has been operated when such operation can invalidate conditions present when the task was accomplished.

7.4 TIs are assigned ratings of acceptable or unacceptable. Guidance for determining these ratings is defined in AETCI 21-107.

## **8. Observation Area Inspections**

8.1. Observation Area Inspections: To ensure a complete and comprehensive surveillance program, an evaluation guide covers each area. The minimum number of inspections to be accomplished is listed in AETCI 21-107, Table A4.1. Additional inspections may be performed to adequately evaluate those areas where quality of contractor performance has been less than acceptable. These observation areas will be determined by the Chief and Superintendent QA, based on review of contractors Quality Support reports or QA inspections for adverse trends and mission accomplishment. Areas having the potential for hazardous waste will be evaluated for compliance. As a minimum, each work area inspection will include the following critical items: CTK, F.O. and Housekeeping, Supply Procedures, TO Maintenance, AFTO Form Documentation, and recording of information in automated systems such as CAMS (and all subsystems), Physical Security, Conservation of Utilities, Fire Prevention, Environmental Protection, and Facilities Management. These items will be on a single general evaluation guide that will be used with each area's specific guide to perform the inspection. Discrepancies discovered during the inspection will be documented on the AETC Form 447.

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8.2. Changes, additions, and deletions to evaluation guides will be accomplished as needed. Sources of material for changes will be current directives, "TIG Briefs", noted weak/problem areas, incoming correspondence, and Inspector General ORI reports. The Chief or Superintendent QA will approve information to be included in the evaluation guides.

8.3. An observation area inspection will be considered complete when all areas on the general and specific evaluation guides have been accomplished.

8.4. Annotate evaluation guides with the following statement: "Area inspection is not limited to the content of the evaluation guide." Individual QAs will decide which additional items to include in the inspection based on previous performance and his/her knowledge of the workcenter's past performance.

8.5. Each area will be assigned either an acceptable or unacceptable rating. An unacceptable rating will be assigned when a major discrepancy is identified or seven or more minor discrepancies are identified. Refer to AETCI 21-107, Para 10 to determine severity of discrepancies.

## **9. Discrepancy Categories**

9.1. To ensure consistency when determining severity of discrepancies, criteria outlined in AETCI 21-107, Para 10 will be utilized.

9.2. A chargeable discrepancy will be considered:

9.2.1. A discrepancy that was a specific maintenance or inspection requirement, but was either improperly cleared during the inspection or maintenance task or was not detected.

9.2.2. A discrepancy that indicates prescribed maintenance actions were improperly accomplished before the performance of the task being inspected or evaluated.

9.2.3. An obvious defect readily detectable by the technician performing the inspection or task.

9.3. F.O. within 50 ft of an aircraft flightline parking area or engine operating area, or within 10 ft of an aircraft or engine in a maintenance area are a major discrepancy and will result in an unacceptable rating IAW AETCI 21-107.

## **10. Document File Inspections**

10.1. The Document File inspections outlined in Table A2.1 will be accomplished on aircraft, engines, and AGE.

10.2. A major discrepancy or more than three minor discrepancies will result in an unacceptable rating on aircraft and engine document files.

10.3. A major discrepancy or more than one minor discrepancy will result in an unacceptable rating on AGE document files.

### **11. Safety Violations**

11.1. QAs document safety violations that "clearly" present a potential to damage government resources as part of the inspection being performed or if appropriate "As Observed".

12. Reserved.

### **13. Documentation of Contractor Performance**

13.1 QA Inspection Findings: All surveillance is documented on the AF Form 447. The QA notifies the contractor as soon as surveillance is completed and has the contractor representative initial the AF Form 447. If the contractor representative refuses to initial, it is so noted by the QA. The contractor will respond to the AF Form 447s that have discrepancies. QAs will use completed AF Form 447s on successive inspections to identify repeat discrepancies. The monthly volume of AF Form 447 will be forwarded to the CO within five workdays after the end of each month.

13.2. Trend Analysis: Two or more consecutive months/quarters of unacceptable ratings in the same area will constitute a possible trend and an AF Form 370 if deemed appropriate by the Chief QA and/or the Functional Commander may notify the contractor. The AF form 370, Contractor Performance Evaluation Report, is used to document Air Force action for contractor nonconformance anytime contractor performance is unacceptable IAW performance thresholds in the contract. AF Form 370s will be immediately forwarded to the CO for resolution.

### **14. Other Surveillance Methods**

14.1. Services provided by the contractor not ordinarily surveilled by evaluation guides or technical inspections will be monitored by the QA, on the flightline, in maintenance hangars, in the engine shop, and in other shops that perform maintenance. Discrepancies discovered during these "As Observed" inspections will be documented on the AF form 447.

14.2. Budget Monitoring: A QA will assisted the CO in monitoring contractor parts and supply expenditures and advise the CO of budgetary trends that may be exceeded contract cost.

14.3. Reserved.

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14.4. Tool Control Inspections: QAs will accomplish tool control inspections IAW AFI 21-101 and AFI 21-101, AETC Supplement 1. These inspections will be performed during observation areas and technical inspections. Any of the following discrepancies will be considered a major discrepancy and will result in an unacceptable rating:

- Daily tool inventory not signed off
- Lost/Unaccounted For Tools
- Tools/CTK Items not etched/shadowed
- Overdue Calibration on TMDE/PMEL items
- F.O. in dispatch toolboxes