

Memorandum

U.S Department
of Transportation

Federal Aviation
Administration

Western-Pacific Region
Airports Division
P.O. Box 92007, WPC
Los Angeles, CA 90009

Subject: Western-Pacific Regional Policy Guidance
No. 22 - Quality Control During Airports
Program Construction

Date:
DEC 14 199M

From: Manager, Airports Division, AWP-600

Reply to
Attn. of:

To: All Division Employees

Attached is Western-Pacific Regional Policy Guidance No. 22 - Quality Control During Airports Program Construction for your use. This directive provides guidance to assist ADO/AWP-621 staff in ensuring projects funded under the Airport Improvement Program (AIP) are constructed with the highest level of quality and conformity possible.

This guidance supercedes Order WP AS 5370.1B, Quality Control during Airports Program Construction, dated January 1, 1990.

Please direct any questions or comments to Kevin Flynn via cc:mail or at x3632.

Herman C. Bliss

Attachment

WESTERN-PACIFIC REGION POLICY GUIDANCE NO. 22
QUALITY CONTROL DURING
AIRPORTS PROGRAM CONSTRUCTION

Dated: DEC 14 1999

1. PURPOSE: This directive provides guidance to assist ADO/AWP-621 staff in ensuring projects funded under the Airport Improvement Program (AIP) are constructed with the highest level of quality and conformity possible.

The information in this order shall be used as a reference tool and does not supercede sound judgement and efficient project management.

2. DISTRIBUTION: This order is distributed to branch level in Airports Division and one copy to each employee in the Airports District Offices in Western-Pacific Region.

3. CANCELLATION: Order WP AS 5370.1 B, Quality Control during Airports Program Construction, dated January 1, 1990, is cancelled.

4. ACTION: The Manager, Airports District Office (ADO)/ Supervisor Standards Section (AWP-621), is responsible for ensuring appropriate action under this order.

5. BACKGROUND: In some instances, construction work performed under the airports program is not being accomplished in conformance with approved/certified project plans and specifications. In certain cases, the discrepancies or omissions are not discovered until after construction is complete and accepted, too late for proper preventative or corrective action. The sponsor may be reluctant to accept his responsibility in dealing with a consultant and a contractor. Consequently, the FAA must make judgement to accept the work at full value, accept the work in part, or accept the work with qualifications. Regardless of the decision made at this point, a lesser quality of work than desired may result although a cost adjustment may be made, and relations with the sponsor may be seriously affected. In addition, political influences may be brought to bear by interested parties. This should be avoided whenever possible.

Adequate sponsor control during construction activities through the use of proper supervisory, inspection, and testing procedures should eliminate this problem. Primary causes of unsatisfactory results normally can be attributed to one or more of the following:

a. Lack of communication between the resident engineer or inspector, the contractor, the testing laboratory, the sponsor's engineer, the sponsor, and the FAA.

b. Delay by the testing laboratories in taking samples, making tests, and reporting failures.

c. Insufficient tests performed, or tests improperly performed.

d. Delay or lack of action by the resident inspector in response to tests indicating failure to meet specifications.

e. Untimely inspections by the sponsor's representative.

f. Lack of firm enforcement of the FAA requirement that the approved plans and specifications be adhered to.

6. PLANS AND SPECIFICATIONS: The plans and specifications shall be reviewed in accordance with Western-Pacific Regional Guidance No. 11 with special emphasis on adherence to standard FAA specifications, and quality control requirements.

It shall be emphasized to sponsors and their authorized representatives that the sole responsibility for compliance with the approved or certified plans and specifications rests with the sponsor and the construction contractor, as they are the two parties to the contract. There shall be no hesitation on the part of the sponsor's representative to order a work stoppage if test results are not acceptable. Coordination of timely sampling and testing of the contractor's work is a responsibility of the sponsor.

7. **SPONSOR QUALITY CONTROL PLAN:** Some grant agreements have a special condition requiring that a Sponsor Quality Control Plan be submitted to the Airports Division program engineer prior to the start of construction. This plan shall be reviewed for adequacy and completeness prior to the sponsor issuing the Notice to Proceed (NTP). A copy of this document shall be stored in the FAA project files.

8. **CONTRACTOR QUALITY CONTROL PLAN:** Advisory Circular 150/5370-10A, Standards for Specifying Construction of Airports, requires that the contractor submit a Contractor's Quality Control Plan for the project. This plan shall be reviewed for adequacy and completeness prior to the sponsor issuing the NTP. A copy of this document shall be stored in the FAA project files.

9. **PRECONSTRUCTION CONFERENCE:** For complex construction, the Airports Division program engineer shall attend the preconstruction conference. Any discussions about non-standard materials or quality control measures shall be documented, evaluated, and addressed prior to the start of construction. Minutes of the meeting including attendees and topics discussed shall be included in the FAA project file.

10. **NOTICE TO PROCEED (NTP):** The following factors shall be considered by the Airports Division program engineer prior to the sponsor issuing a NTP:

a. Have you reviewed arrangements for engineering services, resident supervision, and testing services to assure adequate construction control?

b. Have you determined that the sponsor's resident inspector and testing personnel are qualified and will be on-site during the construction period? Will they be on-site Full time? Part time?

c. Have you determined that the sponsor's engineer, resident inspector, and testing personnel are familiar with the specification requirements and recognize the requirement for quality control through timely sampling, accurate testing, test reporting, and early suspension of the work when material or construction performance is not in accordance with plans and specifications?

d. Have you reiterated to the sponsor that federal participation is contingent upon the construction conforming to the project plans and specifications?

11. **CONSTRUCTION PROGRESS AND INSPECTION PROGRESS REPORT:** FAA Form 5370-1 shall be prepared by the sponsor and submitted to the ADO/AWP-621 on a weekly basis. These forms can cover periods greater than weekly upon mutual agreement between the sponsor and the Airports Division program engineer. Copies of the completed forms shall be included in the FAA project files.

12. **INSPECTIONS:** A principal purpose of a FAA construction inspection is to ascertain whether the sponsor is providing satisfactory supervision and inspection to ensure compliance with the requirements of the AIP project plans and specifications. Regulatory standards require that FAA ensure that airports program construction is in accordance with the approved plans and specifications.

a. **Interim Inspections.**

(1.) **Frequency of Inspections.** The frequency of inspections shall be a factor of the type of project, schedule or construction phase and the capability of the sponsor, sponsor's engineer, and contractor. Accordingly, the inspection frequency depends on the ADO/AWP-621's knowledge of the engineer's competence and capacity to complete the project in a satisfactory manner.

(2.) Extent of Inspections. The inspection shall entail a general overview of the project including, a review of the on-site project documents (inspector's daily records, test reports, as-built drawings, etc.), noting what testing is being accomplished and if the personnel conducting the tests are in accordance with the quality control plan, whether the appropriate safety precautions are being taken (in conformance with the safety plan if applicable), noting who is on-site representing the sponsor, sponsor's engineer, etc. The circumstances and findings of the inspection shall be documented and included in the FAA project files.

b. Final Inspections. In most cases, the Airports Division program engineer shall complete a final inspection of the project. This inspection shall include a review of the final test reports (pavement, electrical..), and a tour of the project to ensure that the final product is in conformance with the approved plans, specifications, and FAA Airport Design Standards.

The Airports Division program engineer shall confirm that the "Sponsor Certification for Construction Project Final Acceptance" (Attached) has been accurately completed and included in the project files.

Finally, and most importantly, the Airports Division program engineer shall confirm to see that the project and surrounding areas are properly cleaned, marked and lit and that the highest level of safety and standards has been restored.

The ADO/AWP-621 program engineer may find that on small or simple projects, a review of the test records, weekly inspection reports, and final construction report may suffice in lieu of an on-site, final inspection. The decision on whether to take this approach versus completing a final inspection will be determined on a case by case basis. This decision shall be authorized by the ADO Manager/AWP-621 and documented in the project file.

13. NONCONFORMANCE OR DEVIATIONS FROM PLANS, SPECIFICATIONS OR DESIGN STANDARDS:

a. When the Airports Division program engineer discovers that construction is not in conformance with plans and specifications, immediately notify both the sponsor and the sponsor's engineer. A letter to the sponsor shall state that the FAA is not obligated to participate financially in any work which does not meet the requirements of the plans and specifications.

b. Minor items of nonconformance often times can be remedied by the contractor by mutual agreement and formal notification to the sponsor can be reserved for more serious nonconformance items. Minor nonconformance items shall also be noted in the project file for a subsequent follow-up.

c. When the completed work does not conform to the the project plans and specifications, the ADO/AWP-621 program engineer must determine if the deviation is significant. If significant deviations which might adversely affect the end product are found, the sponsor must be informed in writing that the work is not acceptable to the FAA and there will be no federal participation in it's cost until the deficiency is corrected. If, in the judgement of the District Office Manager/Standard Section Supervisor, the deviation is minor and will not adversely affect the product, the deviation may be considered acceptable, and so documented in the project file.

14. WITHHOLDING FEDERAL PAYMENTS: Any decision about withholding federal payments shall not be communicated to the sponsor or its representatives without the concurrence of the ADO Manager/AWP-621 Supervisor.


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Manager, Airports Division