

Engineer's Authority and Specifications Conformance

AC 150/5370-10 and 150/5370-12

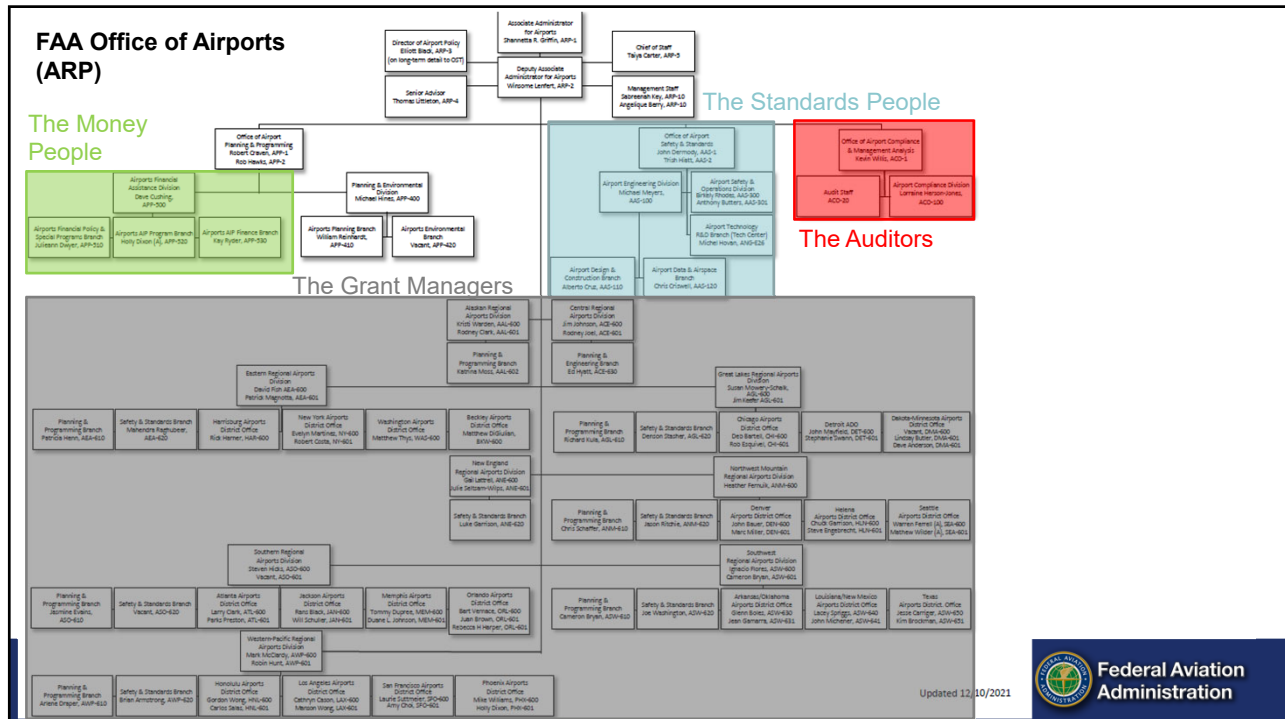
Presented to: ACPTP GA Concrete Workshop
Mankato, MN

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Date: May 3, 2023



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FAA Grant Programs

- FAA grants help airports maintain safe infrastructure to support the NAS
- Grants can be entitlements or discretionary
- FAA typically funds 75% to 90% of a project
- Grants represent a partnership between the FAA and a Sponsor
- FAA has vested interests that are conveyed to the Sponsor via assurances and grant conditions
- Monitoring and oversight establishes assurance that FAA interests are protected
- **Sponsor failure to monitor and oversee the expenditure of FAA grant funds can jeopardize future FAA participation in their projects**



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What does a Sponsor dread?

- “We consider that work in-eligible...”
- “Your project is going to be audited...”
- “You have violated Grant Assurances...”



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What are Grant Assurances?

- A declaration by the grant applicant that they will abide by specific written requirements
- A standard component of the Grant Agreement that becomes Sponsor obligation upon execution of the associated grant agreement
- Applicable to State Block Grants



ASSURANCES AIRPORT SPONSORS

A. General.

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this grant agreement.



#17 – Construction Inspection/Approval

- **Sponsor must:**
 - Provide and maintain **competent technical supervision** at construction site throughout the **project duration** to assure work conforms to P&S and project schedule
 - Subject the construction work funded by the Grant to inspection and approval by the FAA
 - Report on costs and progress of the project
- **Sponsor Certifications are use to ensure proper supervision was provided**
 - FAA Form 5100-129: Construction Project Final Acceptance
 - FAA Form 5100-132: Project Plans and Specs
 - FAA Form 5100-134: Selection of Consultants



#34 – Policy, Standards & Specifications

- **Sponsor will carry out the project in accordance with:**
 - Policies, standards, and specifications approved by the Secretary including, but not limited to;
 - Current FAA Advisory Circulars for AIP projects included with the Grant Agreement
 - Applicable state policies, standards and specifications approved by the Secretary
- **§ 47105 (b) – An application for a project grant may propose airport development only if the development complies with standards the Secretary prescribes or approves**



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Applicable FAA Guidance

- **FAA Orders that apply to Construction Administration and Observation**
 - 5100.38 *Airport Improvement Program Handbook*
 - 5300.1 *Modification to Agency Design, Construction, and Equipment Standards*
- **FAA ACs that apply to Construction Administration and Observation**
 - 150/5370-12 *Quality Management for Federally Funded Airport Construction Projects*
 - 150/5370-10 *Standard Specifications for Construction of Airports*



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Construction Management Program

AC 150/5370-12B

- **Sponsor must submit a Construction Management Program (CMP) when paying costs of a project exceed \$500,000**
 - Sample CMP is provide in 150/5370-12B
 - This is separate from CQCP required in 150/5370-10
- **Plan should include at minimum:**
 - Who has overall responsibility for construction administration and authority to take action
 - Testing Lab and engineer firms with QA responsibility
 - Procedures for determining testing labs meet appropriate ASTM standards
 - Qualifications of all engineering supervision and construction inspection staff
 - List of all tests required by the specifications
 - Procedures for ensuring testing is done properly



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General Contract Provisions

AC 150/5370-10H

- **Section 10 – Definition of Terms**
- **Section 20 – Proposal Requirements and Conditions**
- **Section 30 – Award and Execution of Contract**
- **Section 40 – Scope of Work**
- **Section 50 – Control of Work**
- **Section 60 – Control of Materials**
- **Section 70 – Legal Regulations and Responsibility to Public**
- **Section 80 – Execution and Progress**
- **Section 90 – Measurement and Payment**



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Definition of Terms

Section 10

- **10-25 Engineer:** *The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering, inspection, and/or observation of the contract work and acting directly or through an authorized representative.*
- **10-48 Quality Assurance Inspector:** *An authorized representative of the Engineer and/or Resident Project Representative (RPR) assigned to make all necessary inspections, observations, tests, and/or observations of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.*
- **10-50 Resident Project Representative:** *The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observation of tests of the contract work performed, or of the materials furnished, or being furnished by the Contractor, and acting directly or through an authorized representative*



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Control of Work

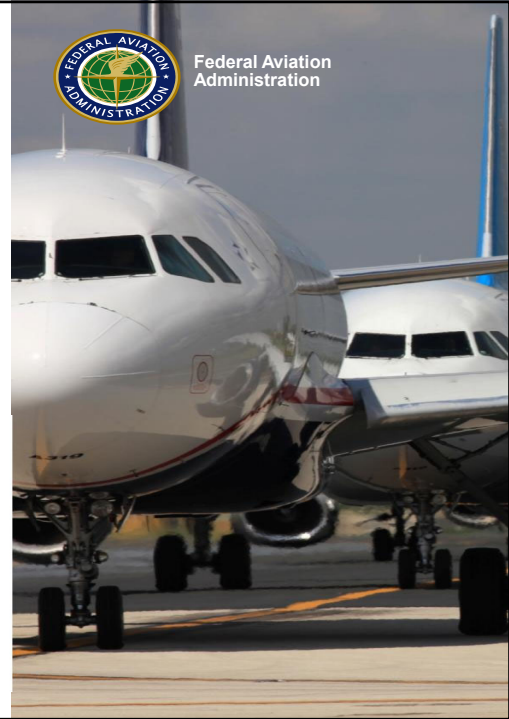
Section 50-01 Authority of the RPR

- *The RPR has **final authority** regarding the interpretation of project specification requirements.*
- *The RPR shall determine the **acceptability** of the quality of material furnished, method of performance of work performed, and the manner and the rate of performance of the work.*
- *The RPR **does not** have the authority to accept work that **does not** conform to specification requirements.*



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Did the work meet specifications?



Control of Work

Section 50-02 Conformity with Plans and Specs

- *All work and all materials furnished shall be in **reasonably close conformity** with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances in the contract, plans, or specifications).*
- *The term “reasonably close conformity” shall not be construed as waiving the Contractor’s responsibility to complete the work in accordance with the contract, plans, and specifications.*
- *The term shall not be construed as waiving the RPR’s responsibility to insist on strict compliance with the requirements of the contract, plans and specifications during the Contractor’s execution of the work, when, in the RPR’s opinion, such compliance is essential to provide an acceptable finished portion of the work.*

Control of Work

Section 50-02 Conformity with Plans and Specs

- The term “reasonably close conformity” is also intended to provide the RPR with the authority, **after consultation with the Sponsor and FAA**, to use **sound engineering judgement** in their determination to accept work that is **not in strict conformity**, but will provide a finished product **equal to or better than** required by the requirements of the contract, plans and specifications.
- If the RPR’s technical analysis is thorough and logical once the Sponsor and FAA are consulted the RPR can approve the “reasonably close conformity” work within their authority established in 50-01.

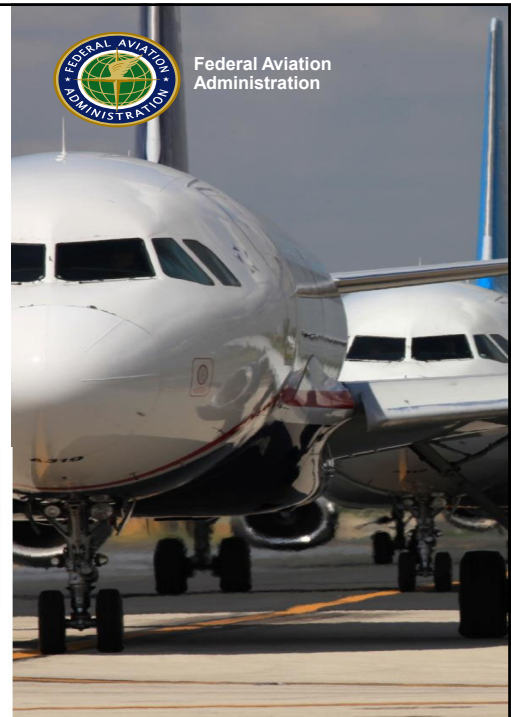


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Is this close enough?



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Control of Work

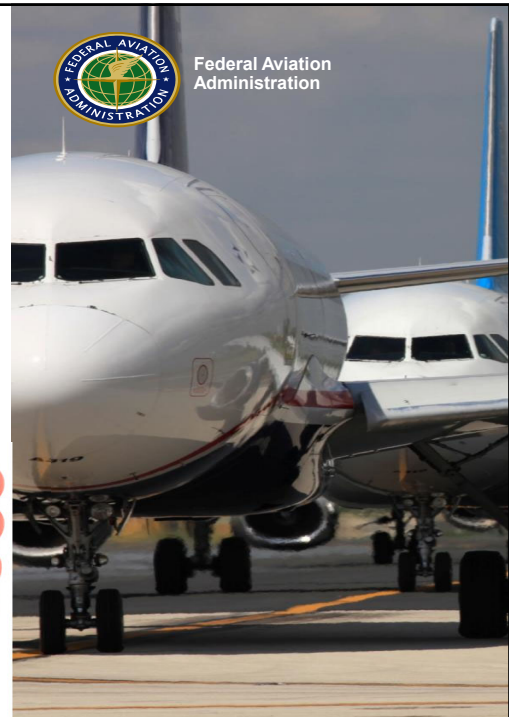
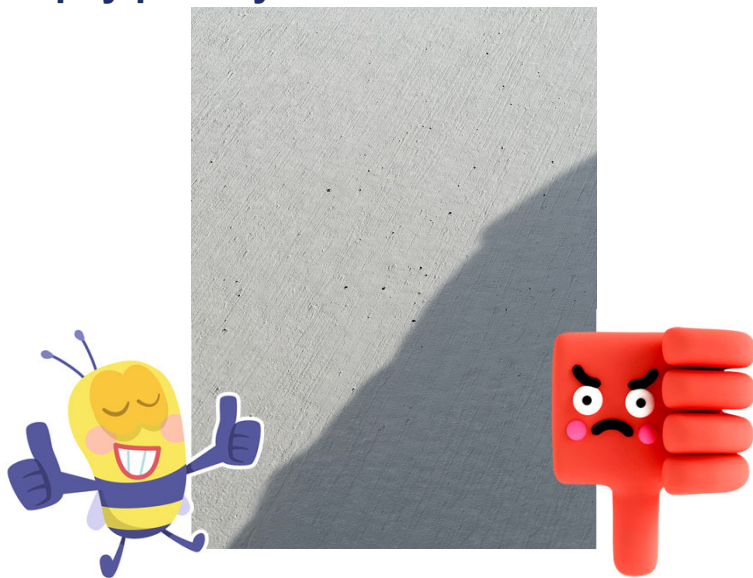
Section 50-02 Conformity with Plans and Specs

- If the RPR finds the materials furnished, work performed, or the finished product **not within reasonably close conformity** with the plans and specifications, **but** that the portion of the work affected will, **in their opinion**, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the owner, the RPR will advise the Owner of their determination that the affected work be accepted and remain in place.
- The RPR will document the determination and **recommend** to the Owner a **basis of acceptance** that will provide for an **adjustment in contract price** for the affected portion of the work. Changes in the contract price must be covered by contract change order or supplemental agreement as applicable.



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Can we let this remain and take a pay penalty?



Control of Work

Section 50-02 Conformity with Plans and Specs

- For Airport Improvement Program (AIP) contracts, the Owner must keep the FAA **advised** of the Engineer's (should be RPR) determination as to acceptance of work that is **not in reasonably close conformity** to the contract, plans and specifications
- All change orders, supplemental agreements, and contract modifications must **eventually** be reviewed by the FAA. Unless **specifically requested** by the FAA, the Owner does not have to obtain **prior FAA approval** for contract changes except for the Buy American review if required.
- However, if an Owner proceeds with contract changes without FAA approval it is at the Owner's risk.



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Control of Work

Section 50-08 Authorities and Duties of QA Inspector

- QA inspectors shall be authorized to inspect all work done and all materials furnished. Such QA inspection may extend to all or any part of the work, and to the preparation, fabrication, or manufacture of the materials to be used.
- QA Inspectors **are not authorized** to revoke, alter, or waive any provisions of the contract. QA inspectors **are not authorized** to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.
- QA inspectors **are authorized** to notify the Contractor or their representatives of any failure of the work or materials to conform to the requirements of the contract, plans or specifications and to reject such nonconforming materials in question until such issues can be referred to the RPR for decision.



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