

ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
SOUTHERN REGION

SO 8000.28C

6/29/84

SAFETY OF AIRCRAFT OPERATIONS DURING AIRPORT IMPROVEMENT PROGRAM
SUBJ: (AIP) PROJECTS

1. PURPOSE. This order delineates the responsibilities of Flight Standards regional field offices in the processing and execution of AIP projects to ensure safe aircraft operations. It further provides the opportunity of input for alternative actions and navigation aids to enhance safety during the project.
2. DISTRIBUTION. This order is distributed to the Branch level in the Regional Flight Standards, Airports, and Airway Facilities Divisions, and all Flight Standards and Airports District Offices.
3. CANCELLATION. Order SO 8000.28B is canceled.
4. BACKGROUND. Increased emphasis on aircraft operational safety is necessary to ensure the flying public and aircraft operators safe access to airports during construction projects.

5. GENERAL.

a. Flight Standards is the focal point for recommendations concerning operational safety on airports during the construction process including temporary visual or electronic aids. These recommendations or alternative solutions should normally be discussed by all responsible divisions.

b. Each Flight Standards District Office (FSDO) shall designate an individual to coordinate AIP projects and attend the required meetings for airports within their respective areas. The FSDO will forward the name of the FSDO designee and alternate to ASO-204 for recordkeeping purposes.

c. It is impossible to include in various Orders, Notices, and Advisory Circulars every conceivable situation that may arise during a construction project. Dependence is placed on the individuals involved to use their expertise and experience when dealing with airport construction projects.

d. The guidance and the standards contained herein are to be considered minimum standards, not maximum standards.

e. Deviations from these standards are permissible when alternate safety measures are taken to mitigate the problem based on sound techniques and judgments.

6. PROCESSING OF GRANTS: There are four major steps leading to an AIP construction project. They are:

6/29/84

a. The Preapplication for Federal Assistance. The sponsor and the Airports District Office (ADO) discuss projects to be accomplished and arrive at a very tentative funding level for the project(s). This results in a formal "Preapplication for Federal Assistance," including cost estimates and a general description of the scope of the project.

The ADO circulates a preapplication package including a copy of the sponsor's request, and any other pertinent data to the Flight Standards and other Divisions for coordination. The comments and recommendations resulting from this coordination will be considered in the project approval or disapproval. ASO-204 will identify the appropriate FSDO as primary Flight Standards contact.

b. The Predesign Conference. This is the second step in the process. The airport sponsor will hold a Predesign Conference for those participants who have an interest in the project, such as the Contractor, ADO, Flight Standards representative, and others.

It is this phase of the AIP that is most important to have Flight Standards representatives in attendance to assure the necessary aviation safety and operational requirements are defined for the project.

Flight Standards input should be included in the safety plan which will appear in the Plan and Specifications of the project.

The ADO representative is the FAA coordinator for the conference and is responsible for notifying the proper FSDO two weeks in advance of the meeting. If the FSDO representative is unable to attend, ASO-204 shall be notified and will resolve scheduling conflicts.

In the interest of best manpower utilization, the ADO will schedule items requiring FSDO input early in the conference.

c. Plans and Specifications. This third step in processing an AIP grant is a review of the final project. These plans and specifications are coordinated by the ADO in the same manner as the preapplication and predesign phases. Coordination of complete plans and specifications shall be effected with the FSDO in whose area of responsibility the project airport is located. Identification of the FSDO which will coordinate plans and specifications will be indicated on the SO Form 5100-22 included with the preapplication package. ASO-204 will identify the appropriate FSDO as primary contact, based on airport class and nature of the construction project.

This is normally the last time in the process that changes can be made in the scope of the project. This is also the opportunity to review the plans and specifications to ensure FSDO's comments and recommendations are included in the project.

d. Preconstruction Conference. A preconstruction conference should be held by the airport sponsor for all AIP construction. The purpose of this conference is to provide an opportunity for all affected parties to discuss the technical, legal,

and safety requirements associated with the proposed development. At this time, the contractors should be briefed on the need to comply with the safety recommendations of the FAA. The ADO representative is the FAA coordinator for the conference and is also responsible for advising the sponsor of the necessity for holding the conference. Two weeks minimum advance notice should be given to all participants. The ADO is responsible for notifying the Local Coordinator, FSDO, Airway Facilities, and other divisions. In the interest of best manpower utilization, the ADO will schedule items requiring FSDO input early in the conference.

e. The Construction Phase. After the Notice to Proceed is issued, the contractors begin construction under an FAA approved resident engineer. The ADO through its project engineers monitors the work by performing periodic visits to the construction site. Any safety problem related to the construction work should be called to the attention of the airport sponsor, ASO-204, and the ADO. Effects on IFR operations shall be coordinated with ASO-204.

7. FLIGHT STANDARDS PROCESSING.

a. When the ADO notifies ASO-204 of a project through the issuance of a preapplication for federal assistance, ASO-204 will:

(1) Review the preapplication, furnish comments as appropriate, designate the appropriate FSDO to review the plans and specifications, and return the completed SO Form 5100-22 to the ADO.

(2) Send an information copy of the completed preapplication package to the designated FSDO for review and additional comments, if appropriate. If additional comments are made, the FSDO will send them directly to the ADO with information copy to ASO-204.

b. Pre-design Conference. The ADO will notify the appropriate FSDO of the time and place for the meeting.

(1) The FSDO will send its designated representative to the meeting to provide Flight Standards input.

(2) Safety Recommendations: Appropriate safety recommendations made by the FSDO should be incorporated in the plans and specifications, airport safety plan section.

(a) If a safety recommendation by a FSDO cannot feasibly be adhered to by the airport sponsor, this recommendation may be reconsidered, and by alternate measures mitigate the situation.

(b) Any safety recommendation which cannot be resolved should be referred to ASO-204 who in turn will coordinate the recommendation within the division. ASO-204 shall be advised when any IFR operation will be affected.

(c) If a problem still exists, ASO-200 will coordinate at the division level and, if necessary, at the Director's level.

(d) Records of safety recommendations will be retained by the FSDO.

c. Plans and Specifications. The ADO will forward plans and specifications to the designated FSDO for review and comments. The plans and specifications shall contain a special section devoted to a construction safety plan.

(1) The designated FSDO will review plans and specifications, make appropriate comments, and return them to the ADO.

(2) Special emphasis should be given in reviewing the safety plan to ensure that recommendations made at the predesign conference were considered.

* (3) On all major projects, ASO-204 will coordinate with ASO-260. If the FSDO requires additional guidance, they shall contact ASO-260 for operational guidance and ASO-204 for items affecting instrument approach procedures. *

d. Preconstruction Conference. Upon notification of a preconstruction conference, the FSDO representative will ensure that the sponsor's representative has a clear understanding of the safety recommendations made during the earlier coordination of the project.

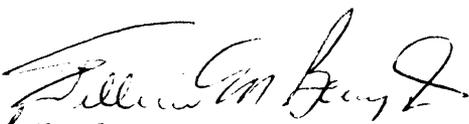
8. EVALUATING PROJECTS. Projects requiring review are those which may impact an aircraft operating area including runways, taxiways, ramp areas and any structure having impact on these areas.

a. Evaluation methods: Each FAA participant in this review process will utilize the advisory circulars and orders listed in Appendix 1 as guidelines in evaluating construction projects.

b. In addition, the phasing and scheduling of the project should be evaluated with respect to:

- Aircraft operating parameters
- Airline schedules
- Weather conditions and seasons
- Runway closures
- Temporary navigation aids
- Temporary visual aids
- Sponsor's safety plan
- NOTAM requirements
- Landing minimum changes

Appendix 1 contains some examples of some situations in relation to evaluation of such projects.



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APPENDIX 1 - SAFETY REQUIREMENTS DURING AIP PROJECTS

The following should be used at all predesign and preconstruction conferences to determine impact of construction on aircraft operating areas.

1. RUNWAY CONSTRUCTION. Any construction within the runway safety area will normally require that the runway be closed during the construction period, except when it is possible to temporarily displace the threshold to avoid the construction area.
2. DISPLACED THRESHOLDS. Depending on the location of the construction, height of the construction equipment and other parameters, the location of the threshold may vary. Guidelines for runway displacement are contained in AC 150/5300-4, Appendix 9, Paragraph 6. Runway closures and displaced thresholds should be marked in accordance with AC 150/5340-1E.
3. AIRCRAFT OPERATING AREAS (Runways, Taxiways, Ramps). The presence of construction equipment, rough grades, or open excavations in excess of 3 inches deep and 3 inches in width within the above areas, should require closure of the operation area. (Appendix 1, AC 150/5370-2B). Details for marking and lighting runway and taxiway closures may be found in AC 150/5340-1E. Warning signs should have flashing yellow lights and be located in taxi areas in advance of the construction site.
4. NOTAMS. It is the responsibility of the sponsor to provide the aviation community advance notice of runway, taxiway and ramp alterations and closures through the NOTAM system.
5. RESTRICTIONS TO AIRCRAFT OPERATIONS. Due to airport construction, it may be necessary to limit the type aircraft operating at an airport. The FSDO representative shall identify the critical aircraft and, in the case of a temporarily displaced threshold, determine if the aircraft can safely use the remaining runway. This inspector shall coordinate his findings with the Principal Operations Inspector (POI) of the air carriers operating such aircraft at the location in question.
6. ADAPTATION OF STANDARDS. Adaptation of standards should be considered only when it has been determined that (1) there is no other feasible alternative and (2) will not create an unacceptable level of safety.
7. PERIODIC INSPECTIONS OF CONSTRUCTION PROJECTS. There may be times when the sponsor/contractors do not comply with FAA advice concerning safe construction practices even when defined in the predesign and preconstruction conferences.

If any personnel notice serious safety hazards on airports that require immediate action, they should advise the airport sponsor and request that he take necessary corrective actions. Thereafter, the airport sponsor should advise ASO-204 and the ADO.

Appendix 1

8. REFERENCES:

- a. Order 8260.3B, as amended, U.S. Standard for Terminal Instrument Procedures.
- b. Advisory Circular 150/5300-4B, Utility Airports - Air Access to National Transportation.
- c. Advisory Circular 150/5300-12, Airport Design Standards - Transport Airports.
- d. Advisory Circular 150/5320-13, Locating Runway Approach Thresholds.
- e. Advisory Circular 150/5340-1E, Marking of Paved Areas on Airports.
- f. Advisory Circular 150/5340-24, Runway and Taxiway Edge Lighting System.
- g. Advisory Circular 150/5370-2B, Operational Safety on Airports During Construction.
- h. Advisory Circular 210-4A, National Notice to Airman System.