

Israel Expedited Resolutions r1-r7,  
Intended effective date: March 15, 2001.

*Docket Number:* OST-2001-8924.

*Date Filed:* February 15, 2001.

*Parties:* Members of the International Air Transport Association.

*Subject:* PTC12 NMS-ME 0122 dated February 9, 2001, North Atlantic-Middle East Expedited Resolution 002w,

Intended effective date: March 15, 2001.

*Docket Number:* OST-2001-8926.

*Date Filed:* February 16, 2001.

*Parties:* Members of the International Air Transport Association.

*Subject:* PTC12 NMS-ME 0129 and PTC12 NMS-ME 0130 dated February 16, 2001, Mail Votes 108 and 109—Resolutions 010r and 010s (Amending), TC12 Mid/South Atlantic Special Amending Resolutions from Kuwait, Yemen, Intended effective date: March 15, 2001.

*Docket Number:* OST-2001-8931.

*Date Filed:* February 16, 2001.

*Parties:* Members of the International Air Transport Association.

*Subject:* PAC/Reso/410 dated December 21, 2000, Mail Vote A101 (Reso 850), Intended effective date: January 31, 2001.

**Dorothy Y. Beard,**

*Federal Register Liaison.*

[FR Doc. 01-5748 Filed 3-8-01; 8:45 am]

BILLING CODE 4910-62-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

[Policy Statement Number ACE-00-23.683-01A]

#### Proposed Issuance of Policy Memorandum, Discussion of Compliance Methods in Advisory Circular (AC) 23-17, Systems and Equipment Guide for Certification of Part 23 Airplanes, Paragraph 23.683, Operation Tests

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of policy statement; request for comments.

**SUMMARY:** This document announces a Federal Aviation Administration (FAA) proposed general statement of policy applicable to the type certification of normal, utility, acrobatic, and commuter category airplanes. This document advises the public, in particular manufacturers of normal, utility, acrobatic, and commuter category airplanes, of more information related to the compliance methods in Advisory Circular (AC) 23-17, Systems and Equipment Guide for Certification of

Part 23 Airplanes, Paragraph 23.683, Operation Tests. This notice is to tell the public about proposed FAA policy and give all interested people an opportunity to present their views on the proposed policy statement.

**DATES:** Comments sent must be received by April 9, 2001.

**ADDRESSES:** Send all comments on this policy statement to the individual identified under **FOR FURTHER INFORMATION CONTACT**.

#### FOR FURTHER INFORMATION CONTACT:

—Comments. Pat Nininger, FAA, Small Airplane Directorate, ACE-111, Room 301, 901 Locust, Kansas City, Missouri 64106; telephone (816) 329-4129; fax 816-329-4090; e-mail <Pat.Nininger@faa.gov>.

—Technical. Lester Cheng, FAA, Small Airplane Directorate, ACE-111, Room 301, 901 Locust, Kansas City, Missouri 64106; telephone (816) 329-4120; fax 816-329-4090; e-mail: <Lester.Cheng@faa.gov>

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

*How Do I Comment on This Proposed Policy?*

We invite your comments on this proposed policy statement. Send written data, views, or arguments. Mark your comments, "Comments to policy statement ACE-00-23.683-01A," and send two copies to the above address. We will consider all comments received by the closing date. We may change the proposals contained in this notice because of the comments received.

You may also send comments using the Internet to the following address: <Pat.Nininger@faa.gov>. Comments sent by fax or the Internet must contain, "Comments to policy statement ACE-00-23.683-01A" in the subject line. You do not need to send two copies. Writers should format in Microsoft Word 97 or ASCII any file attachments that are sent by the Internet.

Send comments using the following format:

- Organize comments issue-by-issue. For example, discuss a comment about proof of structure and a comment about load static tests as two separate issues.
- For each issue, state what specific change you are requesting to the proposed policy memorandum.
- Include justification (for example, reasons or data) for each request.

## Background

*What Events Have Caused This Proposed Policy?*

After reviewing the compliance methods in Advisory Circular (AC) 23-17, the directorate determined there was additional information related to the compliance methods in AC 23-17, paragraph 23.683, that might be beneficial. A proposed policy memorandum, ACE-00-23.683-01, was published on January 12, 2000 (65 FR 1941) for review and comment. We received several comments.

Nevertheless, after the closing date of comments (February 11, 2000), the FAA received a few requests to extend the comment period and accept more comments on the proposed policy statement. On April 25, 2000, AC 23-17 incorporated paragraph 23.683 and cancelled AC 23.683-1.

After publishing the proposed policy, we learned it would be beneficial to clarify that this modified method, which accounts for the deformation effects of adjacent structure through testing, may not be necessary for some designs. In some cases, analysis may be used to account for these effects. This clarification is inserted under the "General Statement of Policy" of the policy memo ACE-00-23.683-01.

This notice announces the revised policy memo and gives all interested persons the opportunity to present their comments.

*What Is the General Effect of This Proposed Policy?*

The FAA is presenting this information as a set of guidelines suitable for use. However, this document is not intended to establish a binding norm; it does not constitute a new regulation and the FAA would not apply or rely on it as a regulation. The FAA Aircraft Certification Offices (ACO's) that certify normal, utility, acrobatic, and commuter category airplanes should try to follow this policy when appropriate.

Applicants should expect the certificating officials to consider this policy when making findings of compliance relevant to new certificate actions. Applicants also may consider the material contained in this proposed policy statement as a supplement to that contained in AC 23-17, paragraph 23.683, when developing a means of compliance with the relevant certification standards.

As with all advisory material, this statement of policy identifies one method, but not the only method, of compliance.

Because this proposed general statement of policy only announces what the FAA seeks to establish as policy, the FAA considers it an issue suitable for public comment. Therefore, the FAA invites comments on the following proposed general statement of policy relevant to compliance with § 23.305, paragraph (a), and other related regulations.

### The Proposed Policy

#### General Statement of Policy

The method of showing compliance with § 23.683 presented in AC 23-17, paragraph 23.683, Operation Tests, discusses only the control system. It does not explicitly specify the consideration of loading on adjacent structures and elements. This is consistent with the wording in § 23.683 of the regulations. Testing, not analysis, must be used to show compliance with § 23.683. There are other regulations, related to § 23.683, which must also be met. These include the following:

The first one, which is noted in AC 23-17, is section 23.305, paragraph (a), [Subpart C—Structure, General] Strength and Deformation. It requires that “At any load up to limit loads, the deformation may not interfere with safe operation.”

Section 23.307, [Subpart C—Structure, General] Proof of Structure, states that “Compliance with the strength and deformation requirements of § 23.305 must be shown for each critical load condition. Structural analysis may be used only if the structure conforms to those for which experience has shown this method to be reliable. In other cases, substantiating load tests must be made.”

Section 23.655, paragraph (a), [Subpart D—Design and Construction, Control Surfaces] Installation, requires that “Moveable surfaces must be installed so that there is no interference between any surfaces, their bracing, or adjacent fixed structure, when one surface is held in its most critical clearance positions and the others are operated through their full movement.”

Section 23.681, paragraph (a), [Subpart D—Design and Construction, Control Surfaces] Limit Load Static Tests, requires that “Compliance with the limit load requirements of this part must be shown by tests in which—

(1) The direction of the test loads produces the most severe loading in the control system; and

(2) Each fitting, pulley, and bracket used in attaching the system to the main structure is included.”

To ensure that these requirements will be satisfied in the conduct of the

control system operation test, inclusion of loads on the adjacent structures or elements in the testing set-up is generally required.

While testing is required for demonstration of compliance to § 23.683, in some cases, analysis may be acceptable for showing compliance with § 23.305, paragraph (a). Section 23.307, paragraph (a), provides the criterion for when analysis is not acceptable and testing must be performed.

It is not appropriate to define specific quantitative criterion to determine when testing is required to demonstrate compliance with § 23.305, paragraph (a), in accordance with § 23.307, paragraph (a). One specific criterion will not work for all possible airplane designs. It is better that such determinations are made on a case-by-case basis, in which the appropriate details of a particular design can be considered.

However, this policy will describe some of the factors that should be considered when determining if testing is required to demonstrate that clearance between controls and adjacent structure under load meets § 23.305, paragraph (a). These factors include, but are not limited to, the following:

(1) *The clearance between control surfaces and adjacent structure, when at rest.* Suppose an applicant has experience with other airplanes that have a half-inch of clearance between controls and adjacent structure at rest. However, a new design is similar except it now has only a tenth of an inch clearance when at rest. Testing to demonstrate compliance with § 23.305, paragraph (a), may be required because the new structure may not conform to those for which experience has shown this method to be reliable in the past. The accuracy of past methods may not be suitable for the smaller clearances. Conditions assessed in past analysis may not have included a condition that is critical for the new smaller clearance.

(2) *The amount of deformation (under limit loads) in the control surface or adjacent structure.* If analysis had been shown to be reliable in the past for a wing that had much smaller deflections than a current design, the current structure may not conform to those for which experience has shown this method to be reliable, and testing may be required. Previous analytical methods may no longer be reliable because the new design behaves in a more non-linear manner. It is possible that types of deflection that were neglected in past analysis may now become critical.

(3) *New control surface attachment configurations or other local design changes that could create new types of*

*deformation that are critical for the new design but were not included in past analysis.* If the FAA requires (or if an applicant voluntarily chooses) compliance with § 23.305, paragraph (a), to be shown by test, the following test procedure is one means to simultaneously demonstrate compliance with both § 23.305, paragraph (a), and § 23.683. It also demonstrates compliance with § 23.681, paragraph (a). This testing may be conducted as follows:

Except where otherwise specified, the tests described below in sections (1), (2), and (3) should be conducted within the following parameters.

a. Conduct the control system operation tests by operating the controls from the pilot's compartment.

b. All the control surfaces must be installed in accordance with the type design to their adjacent fixed surface on the airframe.

c. The entire control system and adjacent fixed structure should be loaded.

d. The adjacent fixed surfaces (wings, horizontal stabilizers, vertical stabilizers, and so forth) should be loaded to provide deflections equivalent to critical limit load flight conditions.

e. The structure deflections should correspond to the limit flight conditions that represent the worst case conditions for increased cable tension, decreased cable tension, and control/fixed surface proximity for each control system as appropriate.

f. The entire control system must be loaded to either the limit airloads or the limit pilot forces, whichever is less (§ 23.683, paragraph (b)(1)).

g. Minimum clearances around control surfaces and minimum tensions in cable systems should be defined to be incorporated in the airplane's instructions for continued airworthiness. The test article should incorporate these minimum clearances and tensions, unless you otherwise account for them.

h. If reductions in the minimum clearances described in paragraph g above are possible due to environmental conditions expected in service, you must account for this. This can be accomplished through analysis or during testing by adjusting the test article clearances to encompass these effects.

(1) The tests described in this section support the demonstration that the control system is free from jamming, excessive friction, and excessive deflection as required by § 23.683, paragraphs (a)(1), (2), and (3). They also support the demonstration that structural deformations not interfere

with safe operation as required by § 23.305, paragraph (a). Accomplish the following:

(i) Load the adjacent fixed aerodynamic surface (wing, horizontal tail, or vertical tail) in accordance with one of the conditions of paragraphs d and e above.

(ii) Support the control surface being tested while it is located in the neutral position.

(iii) Load the control surfaces to the critical limit loads, as described in paragraph f above, and evaluate their proximity to the fixed adjacent structure for interference (contact).

(iv) Load the pilot's control until the control surface is just off the support.

(v) Determine the available control surface travel, which is the amount of movement of the surface from neutral when the cockpit control is moved through the limits of its travel.

(vi) The control surface under loads described in paragraph f above should travel a minimum of 10 percent of the total unloaded travel, as measured from the neutral position. This should be demonstrated for both directions of travel.

(vii) To address the possibility of a critical intermediate control surface loading, gradually remove load from the control surface (while maintaining the load on the adjacent fixed surface) until maximum control surface travel is achieved.

(viii) The above procedure should be repeated in the opposite direction.

(ix) With limit load applied to the adjacent fixed surface and limit or intermediate load applied to the control surface, no signs of jamming, or of any permanent set of any connection, bracket, attachment, and so forth, may be present.

(x) The control system should operate freely without excessive friction.

(xi) Cable systems should be checked with the loads applied to ensure that excessive slack does not develop in the system.

(xii) Repeat this process for each of the critical loading conditions as defined by paragraphs d and f above.

(2) The tests described in this section support the demonstration that structural deformations not interfere with safe operation as required by § 23.305, paragraph (a). Accomplish the following:

(i) Load the adjacent fixed aerodynamic surface (wing, horizontal tail, or vertical tail) in accordance with one of the conditions of paragraph d and e above.

(ii) Operate the unloaded control system from stop to stop.

(iii) No signs of interference (contact) may be present.

(iv) The control system should operate freely without excessive friction.

(v) Repeat this process for each of the critical adjacent fixed surface loading conditions as defined by paragraphs d and e above.

**Note 1:** An alternate procedure may be used to accommodate the testing described in sections (1) and (2) above during structural tests of a partial airplane. This method requires that all control system components that are attached to or enclosed by the loaded test structure be installed per type design. A sufficiently representative mockup of remaining control system components must be used to ensure that the full length of any cables which extend from the loaded test structure are included. This is necessary to make a reasonable assessment that slack that could develop in control cables is not excessive enough to cause an entanglement or jam. The control surface activation may be input at any convenient location between the mockup terminus and the cockpit.

(3) The tests described in this section will demonstrate that the control system is free from excessive deflection as required by § 23.683, paragraph (a)(3). These tests complete the demonstration that the control system is free from jamming and excessive friction, as required by § 23.683, paragraphs (a)(1) and (2). They also demonstrate that structural deformations do not interfere with safe operation, as required by § 23.305, paragraph (a). These tests meet the limit load static test requirements of § 23.681, paragraph (a). Accomplish the following:

(i) With the adjacent fixed surface (wing, horizontal tail, or vertical tail) unloaded, support the control surface being tested while it is located in the neutral position.

(ii) Load the control surfaces to the critical limit loads, as described in paragraph f above, and evaluate their proximity to the fixed adjacent structure for jamming or contact.

(iii) Load the pilot's control until the control surface is just off the support.

(iv) Operate the cockpit control in the direction opposite the load to the extent of its travel.

(v) The above procedure should be repeated in the opposite direction.

(vi) The minimum loaded control surface travel from the neutral position in each direction is 10 percent of the total unloaded control surface travel.

(vii) Under limit load, no signs of jamming, or of any permanent set of any connection, bracket, attachment, and so forth, may be present.

(viii) The control system should operate freely without excessive friction.

**Note 2:** The tests described in section (3) above are normally accomplished using a

complete airplane. As a minimum, they must be completed using an airframe/control system that completely represents the final product from the cockpit controls to the control surface.

Regardless of the amount of travel of a control surface when tested as described above, the airplane must have adequate flight characteristics as specified in § 23.141. Any airplane that is a close derivative of a previous type certificated airplane need not exceed the control surface travel of the original airplane; however, the flight characteristics should be tested to ensure compliance.

Issued in Kansas City, Missouri, on February 22, 2001.

**David R. Showers,**

*Acting Manager, Small Airplane Directorate Aircraft Certification Service.*

[FR Doc. 01-5603 Filed 3-8-01; 8:45 am]

**BILLING CODE 4910-13-M**

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

#### Environmental Impact Statement: Champaign County, OH

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of intent.

**SUMMARY:** The FHWA is issuing this notice to advise the public that an Environmental Impact Statement may be prepared for a proposed transportation project in Champaign County, Ohio.

**FOR FURTHER INFORMATION CONTACT:** Mark L. Vonder Embse, Urban Programs Engineer, Federal Highway Administration, 200 North High Street, Room 328, Columbus, Ohio 43215, Telephone: (614) 280-6854.

**SUPPLEMENTARY INFORMATION:** The FHWA, in cooperation with the Ohio Department of Transportation, will prepare an Environmental Impact Statement (EIS) for a proposed improvement in the vicinity of the City of Urbana, Ohio, in the corridor of United States Route 68 (US-68). The project termini are approximately the Clark/Champaign County Line to the south and 1.5 miles south of the Champaign/Logan County Line to the north. The southern terminus overlaps with the recently-constructed final segment of the City of Springfield US-68 Bypass. The study area is approximately 14 miles in length.

The purpose and need of the project are to enhance access to highways in west-central Ohio, and improve roadway operations and safety in the