

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [62 FR 39101 NO. 140 07/22/97]

[Docket No. 92-CE-41-AD; Amendment 39-10080; AD 97-08-06 R1]

RIN 2120-AA64

Airworthiness Directives; Louis L'Hotellier, S.A., Ball and Swivel Joint Quick Connectors

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document clarifies information in Airworthiness Directive (AD) 97-08-06 that applies to Louis L'Hotellier S.A. (L'Hotellier) ball and swivel joint quick connectors installed on gliders and sailplanes that are not equipped with a "Uerling" sleeve or an LS-safety sleeve. These connectors allow the operator of the gliders and sailplanes to quickly connect and disconnect the control systems during assembly and disassembly for storage purposes. AD 97-08-06 currently requires enlarging the safety pin guide hole diameter, and fabricating and installing a placard that specifies the requirement of securing the control system connectors with safety wire, pins, or safety sleeves prior to each flight. The actions specified in that AD are intended to prevent the connectors from becoming inadvertently disconnected, which could result in loss of control of the sailplane or glider. This document clarifies the applicability and modification instructions of AD 97-08-06 by including additional instructions to accomplish the same actions. This correction of the AD results from several operators expressing uncertainty about the applicability and modification instructions.

DATES: Effective August 1, 1997.

FOR FURTHER INFORMATION CONTACT: Mr. J. Mike Kiesov, Project Officer, Sailplanes/Gliders, Small Airplane Directorate, Aircraft Certification Service, FAA, 1201 Walnut, suite 900, Kansas City, Missouri 64106; telephone (816) 426-6932; facsimile (816) 426-2169.

SUPPLEMENTARY INFORMATION: On April 2, 1997, the Federal Aviation Administration (FAA) issued AD 97-08-06, Amendment 39-9994 (62 FR 17537, April 10, 1997), which applies to gliders and sailplanes utilizing the L'Hotellier ball and swivel joint quick connectors, and that are not equipped with a "Uerling" sleeve or an LS-Safety sleeve.

That AD requires the following:

-- Enlarging the safety pin guide hole diameter to a minimum of 1.2 mm (0.05 in.) to accommodate a safety wire or pin, as applicable.

-- Fabricating a placard (using 1/8 inch letters) with the following words:

"All L'Hotellier control system connectors must be secured with safety wire, pins, or safety sleeves, as applicable, prior to operation."; and

-- Installing this placard in the glider or sailplane within the pilot's clear view.

The AD resulted from several in-flight accidents involving inadvertent disconnection of these connectors that are installed on certain gliders and sailplanes. The actions required by AD 97-08-06 are intended to prevent the connectors from becoming inadvertently disconnected, which could result in loss of control of the sailplane or glider.

Need for the Correction

Since the issuance of AD 97-08-06, the FAA received several reports from operators stating that they are not clear as to whether the AD applies to their sailplane or glider.

The FAA also did not distinguish that there are two styles of ball and swivel joint quick connectors (locking plates and locking cams), which has led to confusion for affected sailplane and glider operators in complying with the AD.

In addition, paragraph (a) of AD 97-08-06 requires the operator to enlarge the safety pin guide hole of the quick connectors to accommodate a safety wire or pin for those sailplanes or gliders equipped with the affected quick connectors that have a safety pin guide hole. Paragraph

(b) of this AD requires fabricating and installing a placard that specifies the requirement of securing the control system connectors with safety wire, pins, or safety sleeves, as applicable, prior to each flight. If a sailplane or glider is equipped with a quick connector that does not have a safety pin guide hole, it would be impossible for the owner /operator to comply with paragraph (b) of AD 97-08-06 without drilling guide holes.

Consequently, the FAA saw a need to clarify the applicability of AD 97-08-06, to more fully explain the intent of the modification requirements of AD 97-08-06, and to add the requirement of drilling safety pin guide holes if not already equipped.

Correction of Publication

This document clarifies the applicability and modification instructions of AD 97-08-06, and adds the AD as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13).

Since this action only clarifies the applicability and modifications instructions, it has no adverse economic impact and imposes no additional burden on any person than would have been necessary to comply with paragraph (b) of AD 97-08-06. Therefore, the FAA has determined that prior notice and opportunity for public comment are unnecessary.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Correction

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39--AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 USC 106(g), 40113, 44701.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by removing Airworthiness Directive (AD) 97-07-10, Amendment 39-9994 (62 FR 17537, April 10, 1997), and by adding a new AD to read as follows:

97-08-06 R1 Louis L' Hotellier, S.A.: Amendment 39-10080; Docket No. 92-CE-41-AD. Revises AD 97-08-06, Amendment 39-9994.

Applicability: All ball and swivel joint quick connectors installed in, but not limited to, the following gliders and sailplanes that are not equipped with a "Uerling" sleeve or an LS-Safety sleeve:

Manufacturer	Models
Alexander Schleicher	ASK21, ASK23, ASW 12, ASW15, ASW15B, ASW17, ASW19, ASW19B, AS 12, AS-K13.
Centrair, S.N	101, 101A, 101P, 101AP, and 201B.
Eiriavion	PIK 20, PIK 20B, and PIK 20D.
Glaser Dirks	DG100, DG400, and DG-500M.
Burkhart Grob	G102 Astir CS, G102, G103 Twin Astir, G103 Twin II, G103A Twin II Acro, G103C Twin III SL, G109, and G109B.
Intreprinderea ICA (Lark)	IS-28B2 and IS-29D2.
Rolladen Schneider	LS1-f and LS3-a.
Schempp-Hirth	Cirrus, Std. Cirrus, Nimbus 2, Nimbus 2B, Janus, Discus a, Ventus a/16.6.

Note 1: This AD applies to the L'Hotellier ball and swivel joint quick connectors. This AD only applies to U.S.type-certificated gliders and sailplanes that have the affected connectors installed. If the L'Hotellier connectors are not installed on a glider or sailplane, no action is

required by the owner/operator. This AD does not apply to gliders and sailplanes that do not have a U.S. type certificate (i.e., experimental category); however, the FAA strongly recommends compliance with the intent of this AD for airplanes involved in U.S. operation where a U.S. type certificate is not necessary.

Note 2: This AD applies to sailplanes and gliders equipped with the quick connectors identified in the preceding applicability provision, regardless of whether sailplane or glider has been modified, altered, or repaired in the area subject to the requirements of this AD. For sailplanes and gliders that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required within the next 30 calendar days after the effective date of this AD or upon installation of the affected quick connectors, whichever occurs later, unless already accomplished (compliance with AD 97-08-06).

To prevent the quick connectors from becoming inadvertently disconnected, which could result in loss of control of the sailplane or glider, accomplish the following:

Note 3: The paragraph structure of this AD is as follows:

Level 1: (a), (b), (c), etc.

Level 2: (1), (2), (3), etc.

Level 3: (i), (ii), (iii), etc.

Level 4: (A), (B), (C), etc.

Level 2, Level 3, and Level 4 structures are designations of the Level 1 paragraph they immediately follow.

(a) For all sailplanes and gliders equipped with the affected quick connectors, accomplish the following:

(1) For ball and swivel joint connectors with lock plates, accomplish the following:

(i) If the quick connectors have a safety pin guide hole, utilize the existing hole and install an aviation locking device (safety wire or safety pin). If the hole cannot accommodate the locking device, enlarge the hole to a diameter not to exceed 1.2 mm (0.05 inch), and install the locking device.

(A) If the locking device already fits the guide hole, then enlarging the hole is not necessary.

(B) The type of aviation locking device used is at the discretion of the certificated mechanic based on the installation accessibility of the locking devices and fittings.

(ii) If the quick connectors do not have a safety pin guide hole, drill a guide hole not to exceed 1.2 mm (0.05 inch) to accommodate the aviation locking device and install the locking device (Reference Figure 1). The type of aviation locking device used is at the discretion of the certificated mechanic based on the installation accessibility of the locking devices and fittings.

(2) For ball and swivel joint quick connectors with locking cams, accomplish the following:

(i) If the locking cam does not have a safety pin guide hole, drill the hole not to exceed 1.3 mm (0.055 inch) to accommodate the aviation locking device and install the locking device.

(A) When drilling the hole, assure that the ball is correctly inserted so that one edge of the hole is level with the main body of the joint and at least 1.5 mm (0.0625 inch) of material is left on the other side.

(B) When the ball is seated correctly, the hole is located aft of the centerline of the cam pivot point. (See the dashed line in Figure 2 of this AD).

(C) The type of aviation locking device used is at the discretion of the certificated mechanic based on the installation accessibility of the locking devices and fittings.

(ii) If the locking cam has a safety pin guide hole, either utilize the existing hole and install an aviation locking device or enlarge the hole to a diameter not to exceed 1.3 mm (0.055 inch) to accommodate the appropriate aviation locking device and install the locking device.

(A) When enlarging the hole, assure that the ball is correctly inserted so that one edge of the hole is level with the main body of the joint and at least 1.5 mm (0.0625 inch) of material is left on the other side. It is recommended to have the ball and swivel joint connected when the hole is drilled.

(B) When the ball is seated correctly, the hole is located aft of the centerline of the cam pivot point. (See the dashed line in Figure 2 of this AD).

(C) The type of aviation locking device used is at the discretion of the certificated mechanic based on the installation accessibility of the locking devices and fittings.

Note 4: The applicable aircraft manufacturer has identified suitable locking devices based on the aircraft's specific type design features. The operator may contact the U.S. aircraft company representative or manufacturer for any technical information related to this matter.

Note 5: It is recommended, but not required by this AD, that the owner/operator inspect these connectors per L'Hotellier's "Instructions for the Maintenance L'Hotellier Ball and Swivel Joints." This technical data may be obtained from your U.S. sailplane dealer or from: L'Hotellier S.A., 93 Avenue Charles De Gaulle, 92270 Bois Colombes, France.

(b) Fabricate and install a placard (using 1/8 inch letters) in the glider or sailplane, within the pilot's clear view, with the following words:

"All L'Hotellier control system connectors must be secured with safety wire, pins, or safety sleeves, as applicable, prior to operation."

(c) Fabricating and installing the placard as required by paragraph (b) of this AD may be performed by the owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7), and must be entered into the sailplane's or glider's records showing compliance with this AD in accordance with section 43.9 of the Federal Aviation Regulations.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) An alternative method of compliance or adjustment of the compliance time that provides an equivalent level of safety may be approved by the Manager, Small Airplane Directorate, Aircraft Certification Service, FAA, 1201 Walnut, suite 900, Kansas City, Missouri 64106. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Small Airplane Directorate. Alternative methods of compliance approved in accordance with AD 97-08-06 are considered approved as alternative methods of compliance for this AD.

Note 6: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Small Airplane Directorate.

(f) Copies of this AD may be inspected at the FAA, Central Region, Office of the Assistant Chief Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri.

(g) This amendment becomes effective on August 1, 1997.

FOR FURTHER INFORMATION CONTACT: Mr. J. Mike Kiesov, Project Officer, Sailplanes/Gliders, Small Airplane Directorate, Aircraft Certification Service, FAA, 1201 Walnut, suite 900, Kansas City, Missouri 64106; telephone (816) 426-6932; facsimile (816) 426-2169.

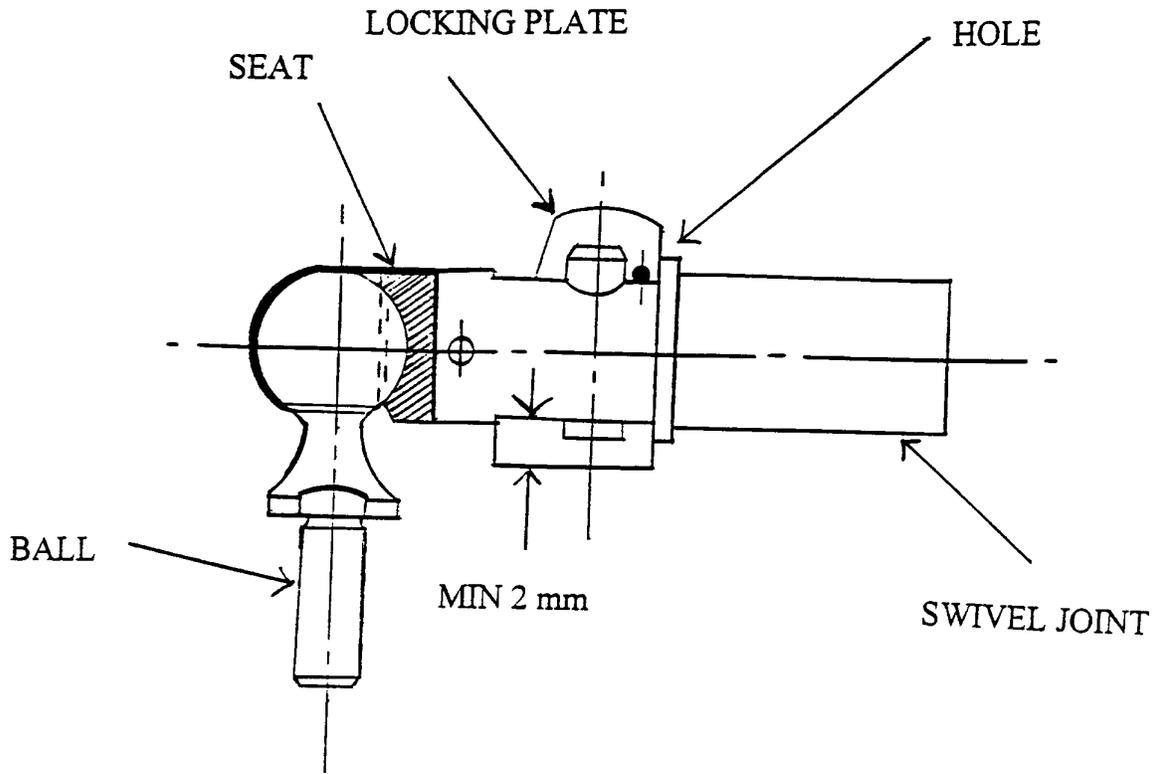


FIGURE 1

AD 97-08-06 R1

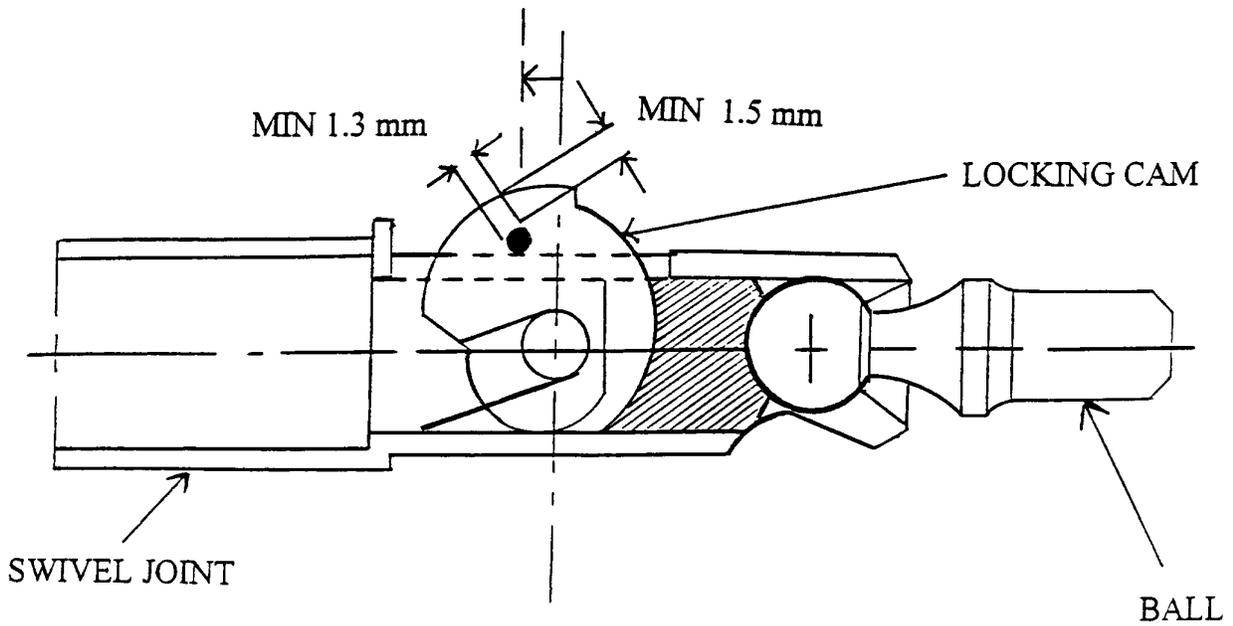


FIGURE 2