EASA AIRWORTHINESS DIRECTIVE AD No.: 2005-0036 R1 Date: 29 May 2008 Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption]. Type/Model designation(s): Type Approval Holder's Name:

True Flight Holdings LLC AA-1 and AA-5 series aircraft

United States No.A11EA and A16EA TCDS Numbers:

Foreign AD: FAA 76-17-03, Amendment 39-2699.

Revision: This AD revises and replaces EASA AD 2005-0036 dated 22 December 2005. The original AD superseded CAA United Kingdom (UK) AD Gulfstream AA-1/AA-5 0527 PRE 78 REV 2, deviating from and thereby replacing the relevant State of Design FAA AD 76-17-03.

ATA 50	Structure – Bonded Joints – Inspection / Repair
Manufacturer(s):	American Aviation Corporation, Grumman American Aviation Corporation a Gulfstream American Corporation.
Applicability:	AA-1, AA-1A, AA-1B, AA-1C, AA-5, AA-5A, and AA-5B aircraft, all serial numbers.
Reason:	There have been at least 14 separate findings of delamination of bonded joints inside control surfaces, wing and empennage structures of AA-1 and AA-5 series aircraft registered in the UK. FAA AD 76-17-03 dated 30 Augus 1976 requires a non-repetitive inspection and rework of the control surface bonded joints in accordance with Grumman American Service Letter (SL) 74-2. However, the findings on the UK fleet showed that bonded joints of ot structural components, wings and empennage, are also prone to extensive delamination. This prompted the CAA UK to issue deviating AD 0527.
	Delamination of wing and empennage joints, if not detected and reworked, would lead to a loss of structural integrity and eventual catastrophic failure.
	EASA concurred with the CAA UK AD 0527, which is superseded, and has also been made aware of additional reports of delamination on foreign registered aircraft.
	This AD has been revised to clear up an apparent 'mismatch' between the Applicability and Compliance sections, which have led to confusion. Incidentally, the TC holder name has been changed and some editorial improvements have been implemented for reasons of standardisation.
Effective Date:	30 December 2005

EASA Form 110 Page 1/2

Required action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 150 flight hours (FH) or 12 months after the effective date of this AD, or after the last inspection as required by CAA UK AD 0527 Rev 2 or FAA AD 76-17-03, as applicable, whichever occurs first, and thereafter at intervals not to exceed 150 FH or 12 months, whichever occurs first, inspect all bonding lines, including all the trailing edges and ribs in the wings and empennage in accordance with the instructions of Grumman American SL 74-2 as follows: (a) On Models AA-1 and AA-1A aircraft, all serial numbers, Model AA-1B aircraft up to serial number (s/n) 0650 inclusive, and Model AA-5 s/n 0001: The mid span joint and cover strip is fully bonded with a single rib at the joint line. Removal of the mid span cover strips is not required, a detailed visual inspection of all bonding lines, including the external mid span strip using appropriate equipment from within the wing structure, is acceptable. (b) On Model AA-1B s/n 0651 and up, Model AA-1C, all serial numbers, Model AA-5, s/n 0002 and up, and Models AA-5A and AA5-B aircraft, all serial numbers: The mid span joint has two wing ribs close together at the joint line and the cover strip is riveted in place. To facilitate the inspection of all the wing rib bonding lines at the mid span joint, the metal strips covering the wing panel joints must be removed to allow detailed inspection of all bonding lines. Note 1: To minimise the damage caused by repeated de-riveting, the mid span cover strips may be re-fitted using riv-nuts in accordance with Fletchair Inc. Service Kit (SK) 155. Note 2: When ribs in the integral fuel tanks require reattachment the area of riveting must be sealed as specified in paragraph 7-20-03 of the TC holder's Service Manual. (2) When, during an inspection as required by paragraph (1) of this AD, any delamination is found, before next flight, accomplish the repair in accordance with the instructions of Grumman American SK No. 125A.
Ref. Publications:	Grumman American SL 74-2 and Grumman American SK No. 125A. Fletchair Inc. Service Kit 155 is available from: Fletchair Inc., 9000 Randolph Street, Houston, Texas 77061, United States of America; Telephone +1 713-641-2023.
Remarks :	 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. The original issue of this AD was posted on 11 November 2005 as PAD 05-020 for consultation until 11 December 2005. The Comment Response Document can be found at http://ad.easa.europa.eu/. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA; E-mail ADs@easa.europa.eu/. For any questions concerning the technical content of the requirements in this AD, please contact: True Flight Holdings LLC, 810 Pine Point Circle, Valdosta, Georgia 31602, United States of America; telephone +1 229-242-6337; e-mail info@trueflightaerospace.com; website www.trueflightaerospace.com.

EASA Form 110 Page 2/2