



U.S. Department
of Transportation
**Federal Aviation
Administration**

Engine and Propeller Directorate
New England Region

400 Airport Drive, Room 102, Bldg. 201
ANE-MIDO-44
New Cumberland, Pennsylvania 17070
(717) 782-4425, Fax: (717) 782-2231

March 14, 2005

Mr. Donald D. Lichty
Quality Assurance Manager
Thrane & Thrane, Inc.
509 Viking Drive
Suite K, L & M
Virginia Beach, VA 23452

Dear Mr. Lichty:

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

In accordance with the provisions of 14 CFR, Part 21, Subpart K, we have found that the design data, based on Identity via licensing agreement between Gulfstream, A General Dynamics Company and Thrane & Thrane, Inc. dated March 3, 2005, document number (GAC PMA File 008) submitted by Thrane & Thrane, Inc. (hereinafter referred to as "the Manufacturer") on March 4, 2005 meets the airworthiness requirements of the regulations applicable to the products which the parts are to be installed. Additionally, it has been determined that Thrane & Thrane, Inc., has established the fabrication inspection system required by Part 21, § 21.303(h) at 509 Viking Drive, Suite K, L & M, Virginia Beach, Virginia.

Accordingly, Parts Manufacturer Approval (PMA) is hereby granted to the manufacturer, to produce the replacement parts (or modification parts, as applicable) listed in the enclosed supplement in conformity with the FAA-approved design data. Any subsequent changes to these design data must be approved in a manner acceptable to the FAA.

The following terms and conditions are applicable to this approval:

1. The manufacturer's fabrication inspection system, methods, procedures and manufacturing facilities, including suppliers, are subject to FAA surveillance or investigations. Accordingly, the manufacturer must advise their suppliers that their facilities are also subject to FAA surveillance and investigation.
2. The manufacturer must notify our district office (Federal Aviation Administration, ANE-MIDO-44, Bldg. 201, Room 102, 400 Airport Drive, New Cumberland, PA, 17070-3419) in writing within 10 days from the date the manufacturing facilities at which parts are

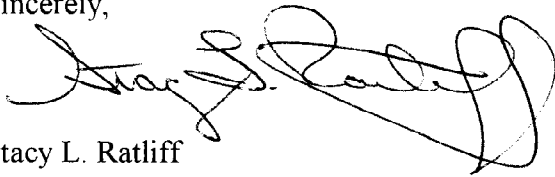
manufactured are relocated or expanded to include additional facilities at other locations. This requirement also applies to the manufacturer's suppliers, but only those who have been delegated major inspection authorization and those who furnish parts or related services where a determination as to safety and conformance to the approved design cannot or will not be made upon receipt at the approved receiving facility.

3. The manufacturer must make available to the FAA, upon request, any pertinent information concerning their suppliers who furnish parts/services, including:
 - a. A description of the part or service;
 - b. Where and by whom the part or service will undergo inspection;
 - c. Any delegation of inspection duties;
 - d. Any delegation of materials review authority;
 - e. Name and title of FAA contact at the supplier facility;
 - f. The inspection procedures required to be implemented
 - g. Any direct shipment authority
 - h. Results of the manufacturer's evaluation, audit, and/or surveillance of their suppliers;
 - i. The purchase/work order number (or equivalent);
 - j. Any feedback relative to service difficulties originating at the manufacturer's suppliers.
4. Parts, appliances, or manufacturing services furnished by any suppliers located in a foreign country may not be used in the production of any part or appliance listed in the enclosed supplement unless:
 - a. That part or service can and will be completely inspected for conformity at the manufacturer's U.S. facility; or
 - b. The FAA has determined that the location of the foreign supplier facility places no undue burden on the FAA in administering applicable airworthiness requirements. When the use of such foreign suppliers are contemplated, the manufacturer must advise the FAA at least 10 days in advance to allow the FAA to make this determination; or
 - c. The parts/services furnished by the foreign supplier are produced under the "components" provisions of the U.S. bilateral airworthiness agreements, and approved for import to the U.S. in accordance with Part 21, § 21.502.
5. Parts produced under the terms of this approval must be permanently marked with the identification information as required by 14 CFR, Part 45, § 45.15, i.e., with the letters "FAA-PMA", the name, trademark, or symbol of the company, the part number, and the name and model designation of each type certificated product on which the part is

eligible for installation. Alternate means of identification, if the part is too small or if it is otherwise impractical to mark, must be approved by the FAA. In the case of a part based on an STC, the identification of installation-eligible type certificated products must include reference to the STC on the shipping document. If a PMA is granted for an assembly, detail parts of the assembly sold separately must also be marked in accordance with the requirements of Part 45, § 45.15 and reference the assembly PMA part number on the shipping document.

6. This approval is not transferable and it may be withdrawn for any reason which would preclude its assurance; or at any time that the FAA finds that the fabrication inspection system is not being maintained; or if unsafe or nonconforming parts are accepted under the fabrication inspection system.
7. Our district office must be notified within 10 days from the date that the address shown in this approval has been changed.
8. The manufacturer must maintain their fabrication inspection system in continuous compliance with the requirements of Part 21, § 21.303(h), and ensure that each part conforms to the approved design data and is safe for installation on type-certificated products.
9. The manufacturer is eligible for the appointment of qualified individuals in their employ to represent the FAA as Designated Manufacturing Inspection Representatives (DMIRs) or Organizational Designated Airworthiness Representatives (ODARs) for the purpose of issuing Export Airworthiness Approvals for Class II and Class III products.
10. The manufacturer shall report to our district office in a timely manner, information concerning service difficulties on any part produced under this approval, in addition to any failures, malfunctions, and defects required to be reported in accordance with Part 21, § 21.3.
11. All technical data required by Part 21, § 21.303-(c) (3), for the parts to be produced under this approval, must be readily available to the FAA at the facility at which the parts are being produced.
12. The manufacturer shall notify our district office immediately in writing of any changes to the Fabrication Inspection System that may affect the inspection, conformity, or airworthiness of the parts approved in this letter.
13. The manufacturer shall produce all parts in accordance with Thrane & Thrane, Inc., Inspection Procedure Manual, Manual Number TT-98-120485, Revision C, dated February 22, 2005, which has been presented as evidence of compliance with Part 21, § 21.303(h). Accordingly, any revisions to these data must be submitted for acceptance by this office prior to implementation.

Sincerely,

A handwritten signature in black ink, appearing to read "Stacy L. Ratliff", with a large, stylized loop at the end.

Stacy L. Ratliff
Manager

Enclosure:

PMA Supplement # 1, issue date March 14, 2005

Cc: ANE-170, AFS-613

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

Thrane & Thrane, Inc.
509 Viking Dr., Suite K, L, & M
Virginia Beach, Virginia 23452

Project No. PQ2077NE
Supplement No. 1
Date: March 14, 2005

Part Name	Part Number	Approved Replacement for Part Number	Approval Basis & Approved Design Data	Make Eligibility	Model Eligibility
Satellite Data Unit	405035A	Modification Part	Identity per 14 CFR 21.303, Licensing agreement between Gulfstream Aerospace Corp and Thrane & Thrane, Inc. File# 008 dated 3-3-05 <u>DWG No:</u> 405035A <u>Rev:</u> B08 <u>Date:</u> 10/08/2004 or later FAA approved revisions.	Gulfstream Aerospace LP (Israel Aircraft Industries, LTD)	Gulfstream 200 (Galaxy)
Configuration Module	405035A-001	Modification Part	Identity per 14 CFR 21.303, Licensing agreement between Gulfstream Aerospace Corp and Thrane & Thrane, Inc. File# 008 dated 3-3-05 <u>DWG No:</u> 405035A-001 <u>Rev:</u> D00 <u>Date:</u> 10/08/2004 or later FAA approved revisions.	Gulfstream Aerospace LP (Israel Aircraft Industries, LTD)	Gulfstream 200(Galaxy)
High Power Amplifier	405014A	Modification Part	Identity per 14 CFR 21.303, Licensing agreement between Gulfstream Aerospace Corp and Thrane & Thrane, Inc. File# 008 dated 3-3-05 <u>DWG No:</u> 405014A <u>Rev:</u> B09 <u>Date:</u> 10/08/2004 or later FAA approved revisions.	Gulfstream Aerospace LP (Israel Aircraft Industries, LTD)	Gulfstream 200 (Galaxy)

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

Thrane & Thrane, Inc.
509 Viking Dr., Suite K, L, & M
Virginia Beach, Virginia 23452

Project No. PQ2077NE
Supplement No. 1
Date: March 14, 2005

Part Name	Part Number	Approved Replacement for Part Number	Approval Basis & Approved Design Data	Make Eligibility	Model Eligibility
High Speed Data Unit	405038A	Modification Part	Identity per 14 CFR 21.303, Licensing agreement between Gulfstream Aerospace Corp and Thrane & Thrane, Inc. File# 008 dated 3-3-05 <u>DWG No:</u> 405038A <u>Rev:</u> B01 <u>Date:</u> 1/04/2004 or later FAA approved revisions.	Gulfstream Aerospace LP (Israel Aircraft Industries, LTD)	Gulfstream 200 (Galaxy)
HSU TX Coupler	405038A-002	Modification Part	Identity per 14 CFR 21.303, Licensing agreement between Gulfstream Aerospace Corp and Thrane & Thrane, Inc. File# 008 dated 3-3-05 <u>DWG No:</u> 405038A-002 <u>Rev:</u> B01 <u>Date:</u> 10/07/2004 or later FAA approved revisions.	Gulfstream Aerospace LP (Israel Aircraft Industries, LTD)	Gulfstream 200 (Galaxy)
HSU RX Power Splitter	405038A-003	Modification Part	Identity per 14 CFR 21.303, Licensing agreement between Gulfstream Aerospace Corp and Thrane & Thrane, Inc. File# 008 dated 3-3-05 <u>DWG No:</u> 405038A-003 <u>Rev:</u> B01 <u>Date:</u> 10/07/2004 or later FAA approved revisions.	Gulfstream Aerospace LP (Israel Aircraft Industries, LTD)	Gulfstream 200 (Galaxy)

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

Thrane & Thrane, Inc.
509 Viking Dr., Suite K, L, & M
Virginia Beach, Virginia 23452

Project No. PQ2077NE
Supplement No. 1
Date: March 14, 2005

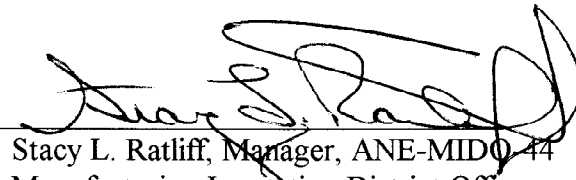
Part Name	Part Number	Approved Replacement for Part Number	Approval Basis & Approved Design Data	Make Eligibility	Model Eligibility
-----------	-------------	--------------------------------------	---------------------------------------	------------------	-------------------

Diplexer / Low Noise Amplifier	405012A-THR	Modification Part	Identity per 14 CFR 21.303, Licensing agreement between Gulfstream Aerospace Corp and Thrane & Thrane, Inc. File# 008 dated 3-3-05 DWG No: 405012A-THR Rev: D01 Date: 3/12/2004 or later FAA approved revisions.	Gulfstream Aerospace LP (Israel Aircraft Industries, LTD)	Gulfstream 200 (Galaxy)
--------------------------------	-------------	-------------------	---	---	-------------------------

----- End of Listing -----

NOTE: The procedures that have been accepted by the Type certificate holder and their cognizant FAA Aircraft Certification Office, for minor changes to the original parts used on the type certified products, are also acceptable for incorporating the same minor changes on identical FAA-PMA replacement parts. The FAA-PMA holder shall be able to show traceability relating to the STC Holder on all minor changes incorporated by this procedure. When these procedures are no longer applicable because of completion of the production contract, or the termination of the licensing agreement or business relationship, all subsequent minor changes to the PMA parts must be submitted in a manner as determined by the ACO. Major design changes (reference 14 CFR part 21, sections 21.93 and 21.97) to drawings and specifications are to be handled in the same manner as that for an original FAA-PMA.

FAA APPROVED: _____


 Stacy L. Ratliff, Manager, ANE-MIDO 44
 Manufacturing Inspection District Office
 New Cumberland, Pennsylvania