



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

Engine & Propeller Directorate

Manufacturing Inspection District Office -44
400 Airport Drive, Bldg. 201, Rm 102
New Cumberland, PA 17070-3419

Tel: (717) 782 - 4425 Fax: (717) 782 - 2231

August 15, 2013

Mr. Donald D. Lichty
Thrane & Thrane, Inc.
509 Viking Drive, Suites K, L and M
Virginia Beach, Virginia 23452

Dear Mr. Lichty:

FEDERAL AVIATION ADMINISTRATION – PARTS MANUFACTURER APPROVAL

In accordance with the provisions of Title 14, Code of Federal Regulations (14 CFR) part 21, Certification Procedures for Products, Articles, and Parts, subpart K, the FAA has found that the design data, based on a license agreement with AeroMech, Inc. as submitted by Thrane and Thane, Inc. (hereinafter referred to as the Manufacturer) on August 13, 2013 meets the airworthiness requirements of the regulations applicable to the products on which the articles are to be installed. Additionally, the FAA has determined that the Manufacturer has established the quality system required by § 21.307 at 509 Viking Drive, Suite K, L and M, Virginia Beach, VA 23452. Accordingly, Parts Manufacturer Approval (PMA) is hereby granted to the Manufacturer to produce modification articles listed in the enclosed Supplement No. 2 Amendment 1 in conformity with the FAA-approved design data. Subsequent changes to the design data must be approved in a manner acceptable to the FAA

The following terms and conditions apply to this approval:

1. The manufacturer's quality system, methods, procedures, and manufacturing facilities, including suppliers, are subject to FAA surveillance and investigations. Accordingly, the Manufacturer must advise its suppliers that their facilities are also subject to FAA surveillance and investigations.
2. The Manufacturer must obtain approval from the New Cumberland Manufacturing Inspection District Office (MIDO), prior to relocating or expanding manufacturing facilities. Additionally, this requirement applies to the Manufacturer's suppliers with major inspection authorization, and those suppliers who furnish articles or related services where a determination of safety and conformance to the approved design cannot or will not be made upon receipt at the approved receiving facility.
3. Upon request, the Manufacturer must make available to the FAA any pertinent information concerning their suppliers who furnish parts/services. This includes:
 - a. A description of the part or service;

- b. Where and by whom the part of service will undergo inspection;
 - c. Any delegation of inspection duties;
 - d. Any delegation of materials review authority;
 - e. The name and title of the 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 its suppliers;
 - i. The purchase/work order number (or equivalent); and
 - 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 article or 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. The Manufacturer must advise the FAA at least ten working days in advance when the use of such foreign suppliers is contemplated. This will allow the FAA time to make this determination.
5. Articles produced under the terms of this approval must be permanently marked with the identification information as required by 14 CFR part 45, Identification and Registration Marking, § 45.15. Use the letters "FAA-PMA," the name, trademark, or symbol of the company, and the part number. If the FAA finds the article is too small or impractical to mark, the manufacturer must attach the information required by § 45.15 to the article or its container.
6. This approval is not transferable and it may be withdrawn for any reason that precludes its issuance or whenever the FAA finds that the quality system is not being maintained. A withdrawal may occur if unsafe or nonconforming articles are accepted under the quality system.

7. The New Cumberland MIDO must approve any changes to the address shown in this approval.
8. The Manufacturer must maintain its quality system in continuous compliance with the requirements of § 21.307. The Manufacturer also must ensure that each article conforms to the approved design data and is safe for installation on type-certificated products.
9. A PMA holder has the privileges specified within the PMA letter and supplement. In addition, a PMA holder is eligible for the appointment of qualified individuals in its employ to represent the FAA as Designated Manufacturing Inspection Representatives (DMIRs), in accordance with the provision of part 183. The DMIRs may issue export airworthiness approvals for articles. The PMA holder may also be authorized to apply for and obtain an Organization Designation Authority (ODA). Order 8100.8 and 8100.15 contain procedures for the administration of DMIRs and ODAs, respectively.
10. The Manufacturer must report in a timely manner, to the New Cumberland MIDO, information concerning service difficulties on any article produced under this approval. The Manufacturer also must report any failures, malfunctions, and defects that are required to be reported in accordance with § 21.3.
11. All technical data required by § 21.303(a)(3), for the articles to be produced in accordance with this approval, must be readily available to the FAA at the facility where the articles are being produced.
12. The Manufacturer must notify the New Cumberland MIDO immediately in writing of any changes to the quality system that may affect the inspection, conformity, or airworthiness of the articles approved in this letter.
13. The Manufacturer must produce all articles in accordance with Thrane and Thrane, Inc. Inspection Procedures Manual (IPM), Revision F dated October 26, 2012 that has been presented as evidence of compliance with § 21.307. Accordingly, any revisions to these data must be submitted to the New Cumberland MIDO for approval prior to implementation.

Sincerely,



Stacy L. Ratliff
Manager

Enclosure:
SMR PMA Supplement No. 2 Amendment 1

cc:

AIR-140 Supplement only

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

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

PMA No.: PQ2077NE
 Supplement No.: 2, Amendment 1
 Date: August 15, 2013

Article Name	Part Number	Approved Replacement for Part Number	Approval Basis & Approved Design Data	Make Eligibility	Model Eligibility
Swift Broad Band Unit	405040A	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A <u>Rev:</u> B01 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-001	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-001 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-805	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-805 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy

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Configuration Module	405040A-806	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-806 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-807	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-807 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-808	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-808 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy

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Configuration Module	405040A-815	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-815 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-816	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-816 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-817	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-817 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy

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Article Name	Part Number	Approved Replacement for Part Number	Approval Basis & Approved Design Data	Make Eligibility	Model Eligibility
Configuration Module	405040A-818	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-818 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-825	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-825 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-826	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-826 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy

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Article Name	Part Number	Approved Replacement for Part Number	Approval Basis & Approved Design Data	Make Eligibility	Model Eligibility
Configuration Module	405040A-827	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-827 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-828	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-828 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-835	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-835 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy

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Article Name	Part Number	Approved Replacement for Part Number	Approval Basis & Approved Design Data	Make Eligibility	Model Eligibility
Configuration Module	405040A-836	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-836 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-837	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-837 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Configuration Module	405040A-838	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405040A-838 <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy

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High Power Low noise Device	405016A	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405016A <u>Rev:</u> B00 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Two Wire Handset (black)	405621B-THR	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405621B-THR <u>Rev:</u> E05 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy
Two Wire Cradle (black)	405622B-THR	Modification Part	Licensing agreement between AeroMech Incorporated and Thrane & Thrane, Inc. dated 6-24-2013, STC ST02010SE <u>DWG No:</u> 405622B-THR <u>Rev:</u> C02 or later FAA approved revisions.	Gulfstream Aerospace LP	Gulfstream 200, Galaxy

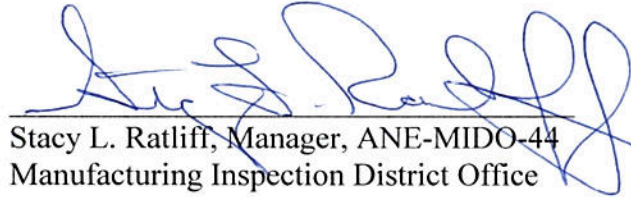
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-----End of Listing-----

NOTE: The procedures that have been accepted by the type certificate or TSO authorization holder and its cognizant FAA Aircraft Certification Office, for minor changes to original articles used on type-certificated products, are also acceptable for incorporating the same minor changes on identical PMA replacement articles. The PMA holder must be able to show traceability relating to the TC, STC, or TSO authorization holder on all minor changes incorporated by this procedure. When these procedures are no longer applicable because of completion of the production contract, or termination of the licensing agreement or business relationship, all subsequent minor design changes to the PMA articles must be submitted in a manner as determined by the ACO. Major design changes (reference 14 CFR §§21. 319 and 21. 619) to drawings and specifications are to be handled in the same manner as that for an original PMA


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