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

Small Airplane Directorate
Manufacturing Inspection
District Office
6020-28th Ave. So, Rm. 103
Minneapolis, MN 55450

August 13, 1997

Mr. John Keller
Otto Controls, Div. of Otto Engineering
2 East Main Street
Carpenterville, IL 60110

Dear Mr. Keller:

Enclosed is your Federal Aviation Administration Parts Manufacturer Approval Letter and Supplement No. 1, both dated August 13, 1997.

Please file this Supplement No. 1 and all subsequent supplements with the attached letter dated August 13, 1997.

Sincerely,

John P. Gurbo

for Chuck Westerberg
Manager, Minneapolis MIDO

Enclosure

U.S. Department of Transportation
Federal Aviation Administration

SMALL AIRPLANE DIRECTORATE
MANUFACTURING INSPECTION DISTRICT OFFICE
6020 28th Ave South, Room 103
Minneapolis, Minnesota 55450

August 13, 1997 Original Issue

Otto Controls
Division of Otto Engineering
2 East Main Street
Carpenterville, Illinois 60110

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

In accordance with the provisions of Federal Aviation Regulation (FAR) 21, Subpart K, the Federal Aviation Administration (FAA) has found that the design data, as submitted by Otto Control, Division of Otto Engineering (hereinafter referred to as the manufacturer) meets the airworthiness requirements of the FARs applicable to the product(s) on which the part(s) are to be installed. Additionally, the FAA has determined that the manufacturer has established the fabrication inspection system required by FAR 21.303(h) at 2 East Main Street, Carpenterville, Illinois. 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 supplements 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 Manufacturing Inspection District Office, 6020-28th Avenue South, Room 103, Minneapolis, MN 55450, 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 evaluations, audits, and/or surveillance of their 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 or services furnished by any suppliers located in a foreign country may not be used in the production of any part 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 is 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 U.S. airworthiness bilateral agreements, and approved for import to the U.S. in accordance with FAR 21.502.

5. Parts produced under the terms of this approval must be marked with the identification information as required by FAR 45.15.

6. This approval is not transferable to another person or location and may be withdrawn for any reason which would preclude its issuance; 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 FAR 21.303(h), and ensure that each part conforms with 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) 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 FAR 21.3.

11. All technical data required by FAR 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 Otto Engineering, Inc. Quality Manual Document #1QA000001, Revision P, dated May 9, 1997, which has been presented as evidence of compliance with FAR 21.303(h). Accordingly, any revisions to these data must be submitted for approval by this office prior to implementation.

14. Design changes to these parts should be submitted to the FAA at regular intervals. If there are minor changes (reference FAR Parts 21.93, 21.95, and 21.97) to the design data, they should be submitted every six months and accompanied by one copy of the top assembly drawings, explanation of the minor changes, and the change in aircraft eligibility, if affected. Major changes should be handled in the same manner but should be submitted and FAA approved before production.

John P. Gruber

for Chuck Westerberg, Manager
Minneapolis MIDO

PMA NO. PQ2624CE

PRODUCTION APPROVAL LISTING-SUPPLEMENT NO. 01

DATE: August 13, 1997

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

OTTO CONTROLS
Division of OTTO Engineering
2 East Main Street
Carpentersville, Illinois, 60110

847-428-7171

Part Name	Part Number	Approved Replacement for	FAA Approval Basis and Approval Design Data	Installation Eligibility: MAKE	Installation Eligibility: MODEL
Switch	P1-30100	Boeing P/N P1-30100	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P1-30100 Rev. D*— Dated 6-24-96	Boeing	757-200
Switch	P4-10056-12	Boeing P/N P4-10056-12	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P4-10056 Rev. E* Dated 6-24-96	Boeing	757-200
Switch	P4-10056-62	Boeing P/N P4-10056-22	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P4-10056 Rev. E * Dated 6-24-96	Boeing	767-200, -300

PMA NO. PQ2624CE

PRODUCTION APPROVAL LISTING-SUPPLEMENT NO. 01

DATE: August 13, 1997

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

OTTO CONTROLS
Division of OTTO Engineering
2 East Main Street
Carpentersville, Illinois, 60110

847-428-7171

Part Name	Part Number	Approved Replacement for	FAA Approval Basis and Approval Design Data	Installation Eligibility: MAKE	Installation Eligibility: MODEL
Switch	P4-10065-22	Boeing P/N P4-10065-22	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P4-10065 Rev. C * Dated 6-24-96	Boeing	757-200 767-200, -300
Switch	P4-10073-9	Boeing P/N P4-10073-9	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P4-10073-9 Rev. C* Dated 6-24-96	Boeing	757-200 767-200, -300
Switch	P4-10082-2	Boeing P/N P4-10082-2	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P4-10082-2 Rev. B* Dated 6-24-96	Boeing	747-400 757-200 767-200, -300

PMA NO. PQ2624CE

PRODUCTION APPROVAL LISTING-SUPPLEMENT NO. 01

DATE: August 13, 1997

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

OTTO CONTROLS
Division of OTTO Engineering
2 East Main Street
Carpentersville, Illinois, 60110

847-428-7171

Part Name	Part Number	Approved Replacement for	FAA Approval Basis and Approval Design Data	Installation Eligibility: MAKE	Installation Eligibility: MODEL
Switch	P4-10100-2	Boeing P/N P4-10100-2	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P4-10100 Rev. E* Dated 6-24-96	Boeing	747-400
Switch	P7-600018	Boeing P/N P7-600018	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P7-600018 Rev. C* Dated 6-24-96	Boeing	757-200 767-200, -300
Switch	P8-3000007	Boeing P/N P8-3000007	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P8-3000007 Rev. E* Dated 6-24-96	Boeing	747-400

PMA NO. PQ2624CE

PRODUCTION APPROVAL LISTING-SUPPLEMENT NO. 01

DATE: August 13, 1997

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

OTTO CONTROLS
Division of OTTO Engineering
2 East Main Street
Carpentersville, Illinois, 60110

847-428-7171

Part Name	Part Number	Approved Replacement for	FAA Approval Basis and Approval Design Data	Installation Eligibility: MAKE	Installation Eligibility: MODEL
Switch	P8-3000009	Boeing P/N P8-3000009	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P8-3000009 Rev. D* Dated 6-24-96	Boeing	747-400
Switch	P8-4000003	Boeing P/N P8-4000003	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. P8-4000003 Rev. E* Dated 6-24-96	Boeing	737-300, -400 747-100, -200, -300, -400 757-200 767-200, -300 777-200
Switch	T1-0050-1	Boeing P/N T1-0050-1	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. T1-0050-1 Rev. D* Dated 6-24-96	Boeing	767-200, -300

PMA NO. PQ2624CE

PRODUCTION APPROVAL LISTING-SUPPLEMENT NO. 01

DATE: August 13, 1997

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

OTTO CONTROLS
Division of OTTO Engineering
2 East Main Street
Carpentersville, Illinois, 60110

847-428-7171

Part Name	Part Number	Approved Replacement for	FAA Approval Basis and Approval Design Data	Installation Eligibility: MAKE	Installation Eligibility: MODEL
Switch	T1-0051-1	Boeing P/N T1-0051-1	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. T1-0051-1 Rev. B* Dated 6-25-96	Boeing	757-200
Switch	T1-0073	Boeing P/N T1-0073	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Boeing CAG File No. 6-5973-96-BGP-1111 dated 3-5-96 Design Drawing No. T1-0073 Rev. J* Dated 6-25-96	Boeing	757-200 767-200, -300
Switch	P6-10062	Saab P/N 9303718-001	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Saab Aircraft AB File 73EPS0654 Dated 4-10-97 Saab Design dwg 9303718; OTTO P6-10062 Rev. D* Dated 6-24-96	Saab	Saab 340 Saab 2000

PMA NO. PQ2624CE

PRODUCTION APPROVAL LISTING-SUPPLEMENT NO. 01

DATE: August 13, 1997

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

OTTO CONTROLS
Division of OTTO Engineering
2 East Main Street
Carpentersville, Illinois, 60110

847-428-7171

Part Name	Part Number	Approved Replacement for	FAA Approval Basis and Approval Design Data	Installation Eligibility: MAKE	Installation Eligibility: MODEL
Switch	P6-20082	Saab P/N 9303718-002	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Saab Aircraft AB File 73EPS0654 Dated 4-10-97 Saab Design dwg 9303718; OTTO P6-20082 Rev. D* Dated 6-24-96	Saab	Saab 340 Saab 2000
Switch	P6-20083	Saab P/N 9303718-003	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Saab Aircraft AB File 73EPS0654 Dated 4-10-97 Saab Design dwg 9303718; OTTO P6-20083 Rev. D* Dated 6-24-96	Saab	Saab 340 Saab 2000
Switch	P4-10121-2	Fokker P/N P4-10121-2	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Fokker Aircraft B.V. File INQA/HL/95-4064 Dated 7-8-95 Design Drawing P4-10121 Rev. D* Dated 6-24-96	Fokker	F27MK050 F28MK0100

PMA NO. PQ2624CE

PRODUCTION APPROVAL LISTING-SUPPLEMENT NO. 01

DATE: August 13, 1997

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

OTTO CONTROLS
Division of OTTO Engineering
2 East Main Street
Carpentersville, Illinois, 60110

847-428-7171

Part Name	Part Number	Approved Replacement for	FAA Approval Basis and Approval Design Data	Installation Eligibility: MAKE	Installation Eligibility: MODEL
Switch	P4-10157-2	Fokker P/N P4-10157-2	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Fokker Aircraft B.V. File INQA/HL/95-4064 Dated 7-8-95 Design Drawing P4-10157 Rev. A* Dated 6-24-96	Fokker	F28MK0100
Switch	C300510	Fokker P/N C300510	Identically Per 14 CFR 21.303, Licensing Agreement Between OTTO Controls, Division of OTTO Engineering Inc. and Fokker Aircraft B.V. File INQA/HL/95-4064 Dated 7-8-95 Design Drawing C300510 Rev. A* Dated 6-25-96	Fokker	F28MK0100

END OF LISTING

Note: * Denotes "Or later FAA Approved Revision"

FAA APPROVED: John P. Gerber

for Chuck Westerberg, Manager
MINNEAPOLIS Manufacturing Inspection District Office