United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number ST00488SE

This certificate, issued to **Quiet Wing Corporation**
1715 114th Ave. SE Suite 230
Bellevue, WA 98006

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 4b of Civil Air Regulations.

Original Product—Type Certificate Number: A3WE
Make: Boeing
Model: 727-100

Description of the Type Design Change: Modification of certain Boeing Model 727-100 series airplanes accomplished in accordance with DuganAir Technologies, Inc., Master Drawing List DT-00001, Revision W, dated November 2, 2001, or later FAA approved revision, concurrent with the incorporation of either Supplemental Type Certificate SA5938NM or ST00384SE. Modified aircraft complies with FAR Part 36, Stage 3 noise limits when operated in accordance with the appropriate FAA approved Airplane Flight Manual Supplement.

Limitations and Conditions: Prior or concurrent modification in accordance with either STC SA5938NM or STC ST00384SE is required. This modification is approved for installation on the aircraft serial numbers listed in the appropriate FAA approved Airplane Flight Manual Supplement. This modification shall not be installed on any aircraft on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and any of these other previously approved modifications, including changes in type design, will introduce no adverse effects upon the airworthiness of that aircraft, nor change the certification status under Part 36. Modified aircraft shall be operated in accordance with the appropriate FAA approved Airplane Flight Manual Supplement. A copy of this certificate must be maintained as part of the permanent records for the modified aircraft.

The STC holder will provide a written permission statement to each person it authorizes to use this certificate to alter the product.

(See Page 3 for additional Limitations and conditions)

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: October 24, 1996
Date of issuance: January 14, 1998
Date reissued: August 5, 2002
Date amended: September 1, 1998; September 9, 1999; August 5, 2002

By direction of the Administrator

(Signature)

Acting Manager, Seattle Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2(10-88)

Supplemental Type Certificate
(Continuation Sheet)

Number ST00488SE

Issued to: Quiet Wing Corporation
Date Amended & Reissued: 8/5/02
Limitations and Conditions: (cont'd)

Applicability of the Change in Status Under FAR Part 36
This Supplemental Type Certificate (STC) approves a design for the modification of eligible Model 727-100 series aircraft by installing an acoustically treated jet exhaust pipe on the center engine and a mixer on the center engine or mixers on all engines in accordance with the master drawing list cited on page 1 of this certificate, and by incorporating either STC SA5938NM or STC ST00384SE. STC SA5938NM permits the incorporation of winglets while STC ST00384SE permits the incorporation of associated changes in flap and aileron positions and rigging (Flap & Aileron Droop). Modified airplanes comply with FAR Part 36 Stage 3 noise limits when operated in accordance with the appropriate FAA approved Airplane Flight Manual Supplement.

Airplane/Engine Combination
727-100 series airplanes equipped with Pratt & Whitney JT8D-7, JT8D-7A, JT8D-7B, JT8D-9 and JT8D-9A engines operated at the thrust level specified by the pertinent FAA approved DuganAir Technologies, Inc., Airplane Flight Manual Supplement.

Inlet Acoustic Treatment
Two types of inlet acoustic treatments were originally installed on the aircraft by the airplane manufacturer: a 13-inch long treatment and a 26-inch long treatment; they have different acoustic properties. The Airplane Flight Manual Supplement must identify the type of acoustic treatment incorporated in the aircraft.

Eligible Serial Numbers
Eligible Boeing Model 727-100 Serial Numbers are listed in the applicable FAA approved DuganAir Technologies, Inc., Airplane Flight Manual Supplement, PK727DA100QW-XXX or DA100QW-XXX and FAA approved Weight & Balance Manual Supplement PK727DA101QW-XXX or DA101QW-XXX. The XXX dash number identifies the appropriate 727 series number, which could have two or three digits. Example: PK727DA100QW-112 is the Airplane Flight Manual Supplement for the 727-112 aircraft series.

Information:
The following documents are essential to the Boeing airplane modified in accordance with this STC and they must be listed in the Master Drawing List DT-00001.

DuganAir Technologies, Inc., Maintenance Program Supplement
DuganAir Technologies, Inc., Supplemental Structural Repair Manual
JR Engineering Noise Certification Compliance Reports applicable to the acoustic configurations defined in the Airplane Flight Manual Supplements
Applicable FAA approved Airplane Flight Manual Supplements
Applicable FAA approved Weight & Balance Supplements

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Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2(10-68)