

Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA2127WE

*This certificate, issued to* Madras Air Service

*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 3 & 4a of the Civil Air Regulations. (See applicable Data Sheets)*

*Original Product — Type Certificate Number:* Listed on FAA Sealed Master  
*Make:* Eligibility List No. MEL-104  
*Model:*

*Description of Type Design Change:* Installation of Madras Air Service Model 104 wing tips in accordance with Madras Air Service Installation Instructions No. 104. Drawings needed to manufacture parts required for this modification are MAS-104 and MAS-104-1. Madras Air Service FAA Approved Airplane Flight Manual Supplement, as indicated on the Master Eligibility List, is required.

*Limitations and Conditions:* This approval should not be extended to other specific airplanes of these models on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that airplane. A copy of this Certificate, Master Eligibility List, and Madras Air Service Installation Instructions 104 shall be maintained as part of the permanent records for the modified aircraft.

*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:* March 12, 1970

*Date reissued:* November 2, 1978

*Date of issuance:* May 28, 1970

*Date amended:* 2 July 1973, 22 March 1974,  
 31 March 1978, May 16, 1978, Feb. 4, 1982  
*By direction of the Administrator*



*W. Jacobson*  
 (Signature)

Chief, Seattle Area Aircraft  
 Certification Office, ANM-100S  
 (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 APPROVED  
 MASTER ELIGIBILITY LIST NUMBER MEL-104  
 FOR  
 INSTALLATION OF MADRAS AIR SERVICE MODEL 104 WING TIPS  
 MADRAS AIR SERVICE, MADRAS OREGON

STC SA2127WE

Reissue Date: \_\_\_\_\_

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	FAA SEALED DRAWING/ DRAWING LIST		AFM SUPPLEMENT NUMBER/ DATE	MEL AMENDMENT DATE
					NUMBER	REV.		
	Piper	J3C (metal spar only) PA-11	A-691	CAR 4a			03/22/74	03/22/74
	Piper	PA-12	A-780	CAR 3			05/28/70	05/28/70
	Piper	PA-12 Float- plane	A-780	CAR 3			07/02/73	06/28/73
	Piper	PA-14	A-797	CAR 3			05/28/70	05/28/70
	Piper	PA-15	A-800	CAR 3			Not required	02/04/82
	Piper	PA-16	1A1	CAR 3			05/28/70	05/28/70
	Piper	PA-18, PA-18/ 105 PA-18/125 PA-18/135 PA-18A/135 PA-18/150 PA-18A/150 PA-19	1A2	CAR 3			05/28/70	05/28/70
	Piper	PA-20 PA-20/115 PA-20/135	1A4	CAR 3			05/28/70	05/28/70

FAA APPROVED  
 MASTER ELIGIBILITY LIST NUMBER MEL-104  
 FOR  
 INSTALLATION OF MADRAS AIR SERVICE MODEL 104 WING TIPS  
 MADRAS AIR SERVICE, MADRAS OREGON

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STC SA2127WE

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	FAA SEALED DRAWING/DRAWING LIST		AFM SUPPLEMENT NUMBER/DATE	MEL AMENDMENT DATE
					NUMBER	REV.		
8	Piper	PA-22 PA-22/108 PA-22/135 PA-22/150 PA-22/160	1A6	CAR 3			05/28/70	05/28/70
9	Piper	PA-25 PA-25/235 PA-25/260	2A8	CAR 3			05/28/70	05/28/70
10	Piper	PA-25 (Restricted) Category PA-25/235 PA-25/260 (through S/N 25-7405572)- one fuselage tank	2A10	CAR 3			Not Required	05/28/70
11	Piper	PA-25 (Restricted) Category PA-25/235 PA-25/260 (through S/N 25-7405573 & up) 2 wing tanks	2A10	CAR 3			Not Required	3/31/78

MADRAS AIR SERVICE

FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT

TO

Piper Aircraft Models Shown on  
Madras Air Service Master Eligibility List (MEL-104)  
Airplane Flight Manuals

The information in this document is FAA approved material which, together with the appropriate basic CAA/FAA Approved Airplane Flight Manuals, is applicable and must be carried in the basic manuals when the airplane is modified by the installation of Madras Air Service Model 104 wing tips in accordance with Supplemental Type Certificate Number SA2127WE.

The information in this document supersedes the basic manuals only where covered in the items contained in this supplement. For Limitations and Procedures not contained in this supplement, consult the basic manuals.

I. LIMITATIONS

Maneuvers:

- a. No acrobatic maneuvers approved for Normal Category operation.
- b. The maneuvers specified in the basic flight manual, for Utility Category operation, are authorized with exception of spins. Intentional spins are prohibited in both the Normal and Utility Category operation.

II. PROCEDURES

No change.

III. PERFORMANCE

The performance with the fiberglass wing tips installed has been demonstrated to equal or exceed that for the unmodified aircraft.

FAA APPROVED: Rocco Lippis /S/  
Acting Chief, Aircraft Engineering Division  
Western Region,  
Federal Aviation Administration

DATE: 28 May 1970

REVISED: 2 July 1973, 22 March 1974, 31 March 1978  
May 16, 1978

REISSUED November 2, 1978

FAA APPROVED: Charles C. [Signature]  
Chief, Engineering and Manufacturing  
Branch, Flight Standards Division  
Northwest Region