United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA1919WE

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 * *of the* Federal Aviation *Regulations.* *FAR-23 or FAR 21.25 effective February 1, 1965 (see T.C. Data Sheet A9CE).

Original Product — Type Certificate Number: A9CE

Make: Cessna

Model: 188, A188, 188B

Description of Type Design Change:

Installation of Madras Air Service wing tips in accordance with Drawing No. 102, Sheet 1, dated 13 July 1972, and Sheet 2, Revision B, dated 11 July 1972.

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.

~~Limitations and Conditions:~~

Supplemental Type Certificate Addendum No. SA1919WE limits the airspeeds and is a part of this certificate. A copy of this Certificate and STC Addendum No. SA1919WE shall be maintained as part of the permanent records for this 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: 15 April 1969

Date reissued:

Date of issuance: 13 June 1969

Date amended: 16 August 1972, 2 May 1983

By direction of the Administrator

for Charles C. Schroeder
(Signature)

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 (10-68)

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

May 2, 1983 *Number* SA1919WE
SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA1919WE

The conditions and limitations of Type Certificate Data Sheet No. A9CE apply except as follows:

This STC Addendum, which is part of Supplemental Type Certificate No. SA1919WE, prescribes conditions and limitations under which the product for which the STC was issued meets the airworthiness requirements of the Civil Air Regulations. A copy of this STC Addendum is required to be maintained as a part of the modified aircraft's permanent records.

Supplemental Type Certificate Holder: Madras Air Service

I & II: Model 188, A188, & 188B, 1 PCLM, as modified by STC SA1919WE

Airspeed Limits*

Never Exceed	172 MPH (149 Knots)
Maximum structural cruising	137 MPH (119 Knots)
Maneuvering	121 MPH (105 Knots)

Additional Limitations for Restricted Category*

Maximum operating speed in agricultural operations	114 MPH (99 Knots)

NOTE 1. Conformity to Madras Air Service Drawing No. 102, Sheet 1, dated July 13, 1982, and Sheet 2, Revision B, dated July 11, 1972, must be established prior to release of the modified aircraft to Normal Category operations.

NOTE 2. In addition to the changes required above, the aircraft Weight and Balance Report must be revised as follows at the time of modification:

Weight of "Super Tips" 9.5 lbs. total; deduct weight of the tips being removed and add the difference to the aircraft empty weight. The moment change is negligible.

Loading Instructions, when necessary, must be provided for each aircraft modified.

NOTE 3. The placard required by Type Certificate Data Sheet A9CE, Note 2, must be revised as follows:

Note 2(a)(4) Maximum Maneuvering Speed - 121 MPH CAS.

*These Airspeed Limitations may be used in lieu of gross weight reductions imposed by the original STC and Addendum dated June 13, 1969.

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.