

**FLINT AERO, INC.**  
1935 NORTH MARSHALL AVENUE  
EL CAJON, CA 92020


**FAA Approved Pilot's Operating Handbook,  
Airplane Flight Manual Supplement  
and Supplemental Airplane Flight Manual  
Floatplane Supplement**

**185.19**

**CESSNA MODEL A185F floatplane  
Serial No. 18502091 through 18503939 and on.  
Equipped with  
EDO-AIRE MODEL 582-3430 Seaplane Floats IAW STC SA832EA**

**This document must be carried on board and attached to the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual when the Cessna 185 with EdoAire Model 582-3430 Seaplane floats per STC SA832EA is modified by the installation of the Flint Aero Wing Tip Fuel Tanks in accordance with STC SA 8036NM.**

**The information contained herein Supplements or Supersedes the basic Cessna flight manual including the Amphibian Supplement and the EDO-AIRE FLIGHT MANUAL SUPPLEMENT No. E-2 Report ECC-466 only in those areas listed herein. For limitations, procedures, and performance information not contained in this document, consult the basic placards, Cessna Pilot's Operating Handbook, Cessna Airplane Flight Manual including the Amphibian Supplement, and the EDO-AIRE FLIGHT MANUAL SUPPLEMENT No. E-2, Report ECC-466 and FLINT AERO, INC. FAA APPROVED PILOT'S OPERATING HANDBOOK AIRPLANE FLIGHT MANUAL SUPPLEMENT NO. 185.14.**

  
Manager, Flight Test Branch, ANM-160L  
Federal Aviation Administration  
Los Angeles Aircraft Certification Office  
Transport Airplane Directorate  
FAA APPROVED DATE: Dec 3, 1996

STC SA8036NM	<b>FLINT AERO, INC</b> <b>SUPPLEMENT AFM, P.O.H. AND</b> <b>AFM SUPPLEMENT TO CESSNA</b> <b>MODEL A185F</b> <b>FLOATPLANE SUPPLEMENT EDO-AIRE</b> <b>MODEL 582 SEAPLANE FLOATS</b>	Page P-1
Report Number 185.19		Revision
Origination Date		Revision Date
Originated By		Revised By

**REVISIONS AND ADDITIONS**

REV LEV	DATE	PAGES AFFECTED	REMARKS	APPROVED BY
IR	12/03/96	Title	Installation of wing tip fuel tanks	<i>Michael Kohn</i> Manager, Flt. Test Branch FAA Los Angeles ACO ANM160L Date <i>Dec 3, 1996</i>
	12/03/96	P-1		
	12/03/96	P-2		
	12/03/96	1-6		

**EFFECTIVE PAGES**

Page	Rev	Date	Page	Rev	Date	Page	Rev	Date
P-1	IR	12/03/96						
P-2	IR	12/03/96						
1-6	IR	12/03/96						

STC SA8036NM	<p style="text-align: center;"> <b>FLINT AERO, INC</b>  <b>SUPPLEMENT AFM, P.O.H. AND</b>  <b>AFM SUPPLEMENT TO CESSNA</b>  <b>MODEL A185F</b>  <b>FLOATPLANE SUPPLEMENT EDO-AIRE</b>  <b>MODEL 582 SEAPLANE FLOATS</b> </p>	Page P-2
Report Number 185.19		Revision
Origination Date		Revision Date
Originated By		Revised By

**TABLE OF CONTENTS**

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1	General .....	1
2	Limitations .....	3
3	Emergency Procedures .....	4
4	Normal Procedures .....	4
5	Performance .....	4
6	Weight and balance/Equipment List .....	5
7	Airplane and Systems Description .....	6
8	Airplane Handling, Service and Maintenance .....	6

STC SA8036NM	FLINT AERO, INC. SUPPLEMENTAL AFM, P.O.H. AND AFM SUPPLEMENT TO CESSNA MODEL A185F FLOATPLANE SUPPLEMENT EDO-AIRE MODEL 582 SEAPLANE FLOATS	Page 1
Report Number 185.19		Revision
Origination Date		Revision Date
Originated By		Revised By

SECTION I

GENERAL  
INTRODUCTION

This supplement provides information not found in the basic handbook which is required to be furnished to the pilot by FAR 21.5. It includes procedures and data required for the safe and efficient operation of the Cessna Model A185F equipped with EDO-AIRE Model 582-3430 seaplane floats installed per STC SA832EA, when modified by the installation of Flint Aero Wing Tip Fuel Tanks in accordance with STC SA8036NM.

Information contained in the Model A185F basic FAA approved Cessna Floatplane Supplement for the Model A185F equipped with EDO-AIRE 582-3430 seaplane floats, which is the same as that for the Flint Aero modified floatplane is generally not repeated in this supplement.

Information contained in the Flint Aero Supplemental AFM, POH, and AFM Supplement 185.14 for airplanes modified by the installation of Flint Aero Wing Tip Fuel Tanks in accordance with STC SA8036NM, which is the same as that for the Flint Aero modified floatplane is generally not repeated in this supplement.

Wherever the words "Not Applicable" appear in this Supplement, they are used to indicate that information may not be the same as that shown in the Cessna Supplement and is not required by the airplane certification basis, and therefore should not be used.

FAA APPROVED DATE: DECEMBER 3, 1996

STC SA8036NM	<b>FLINT AERO, INC.</b> <b>SUPPLEMENTAL AFM, P.O.H. AND</b> <b>AFM SUPPLEMENT TO CESSNA</b> <b>MODEL A185F</b> <b>FLOATPLANE SUPPLEMENT EDO-AIRE</b> <b>MODEL 582 SEAPLANE FLOATS</b>	Page 2
Report Number 185.19		Revision
Origination Date		Revision Date
Originated By		Revised By

PERFORMANCE - SPECIFICATIONS

SPEED: NO CHANGE

CRUISE: Range increases in proportion to the amount of additional fuel carried in the wing tip extended tanks. There is no significant change in the specific range.

RATE OF CLIMB AT SEA LEVEL: NO CHANGE

SERVICE CEILING: NOT APPLICABLE

TAKEOFF PERFORMANCE: Increase takeoff water run distances by 12 percent for each 100 pounds gross weight over the weight shown in the Cessna 185 Floatplane Owner's Manual Supplement.

LANDING PERFORMANCE: Increase landing water run distances by 3 percent for each 100 pounds gross weight over the weight shown in the Cessna 185 Floatplane Owner's Manual Supplement.

STALL SPEED (CAS): SEE TABLE 1

MAXIMUM WEIGHT:

TAKEOFF: 3600 LB.

LANDING: 3600 LB.

EMPTY WEIGHT:

See actual weight and balance form for airplane.

MAXIMUM USEFUL LOAD:

See actual weight and balance form for airplane.

BAGGAGE ALLOWANCE:

IN AIRPLANE: NO CHANGE

IN EACH FLOAT BAGGAGE COMPARTMENT: NO CHANGE

(CAUTION: See LIMITATIONS SECTION)

WING LOADING: POUNDS/SQ.FT. (@ 3600 LBS) = 19.35

POWER LOADING: POUNDS/HP (@ 3600 LBS) = 12.0

FUEL CAPACITY: SEE SECTION 2 OF FLINT AERO AFM SUPPLEMENT

OIL CAPACITY: SAME

ENGINE: SAME

PROPELLER: SAME

FAA APPROVED DATE: DECEMBER 3, 1996

STC SA8036NM	FLINT AERO, INC. SUPPLEMENTAL AFM, P.O.H. AND AFM SUPPLEMENT TO CESSNA MODEL A185F FLOATPLANE SUPPLEMENT EDO-AIRE MODEL 582 SEAPLANE FLOATS	Page 3
Report Number 185.19		Revision
Origination Date		Revision Date
Originated By		Revised By

SECTION 2  
LIMITATIONS

1. Airspeed Limitations  
All airspeed limitations remain unchanged.
2. Airspeed Indicator Markings  
Airspeed indicator color code significance remains unchanged. The lower limit of the white arc of the indicator is increased for each model by 3 knots or 3 MPH as appropriate.

Gross Weight

For Cessna A185F airplanes with Edo-Aire 582-3430 Seaplane Floats installed per STC SA832EA, when modified by the installation of Flint Aero wing tip fuel tanks in accordance with STC SA8036NM, the maximum gross takeoff and landing weight is 3600 lbs.

For installation of other modifications by STC, the maximum gross weight is limited to that which is authorized by each particular STC. The pilot is advised to determine this gross weight limit from each appropriate STC.

4. Center of Gravity Limits  
-Center of gravity range, inches aft of datum, moment in lb./1000

<u>Forward Limit</u>		<u>Aft Limit</u>		<u>Weight, lb.</u>
<u>Inches</u>	<u>Moment</u>	<u>Inches</u>	<u>Moment</u>	
43.4	156.2	46.5	167.4	3600
34.1	71.6	46.5	97.7	2100
34.1	61.4	46.5	83.7	1800

Straight line fairing between points.

5. Placards  
No change.

FAA APPROVED DATE: DECEMBER 3, 1996

STC SA8036NM	FLINT AERO, INC. SUPPLEMENTAL AFM, P.O.H. AND AFM SUPPLEMENT TO CESSNA MODEL A185F FLOATPLANE SUPPLEMENT EDO-AIRE MODEL 582 SEAPLANE FLOATS	Page 4
Report Number 185.19		Revision
Origination Date		Revision Date
Originated By		Revised By

SECTION 3

EMERGENCY PROCEDURES

No change.

SECTION 4

NORMAL PROCEDURES

No change.

SECTION 5

PERFORMANCE

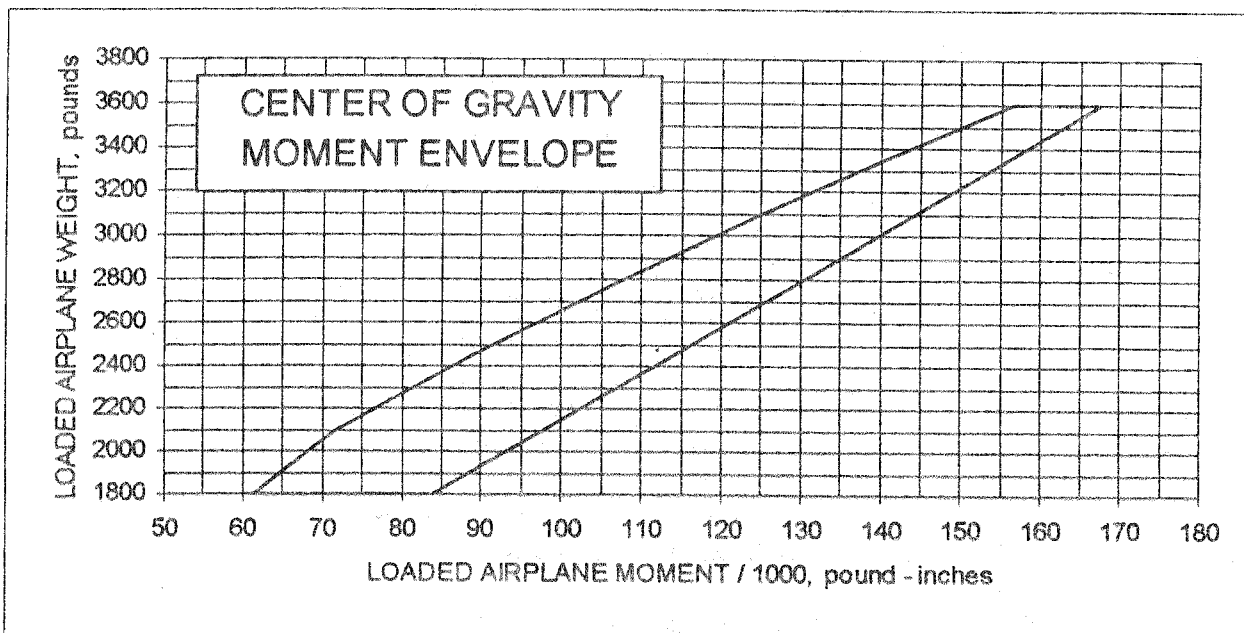
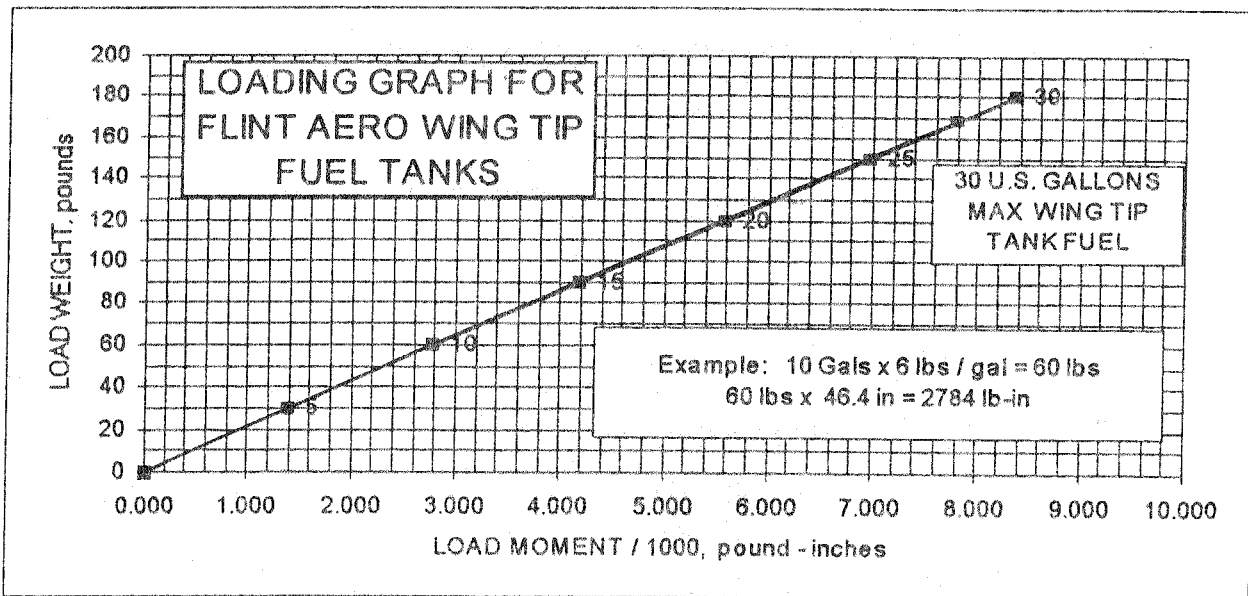
This supplement addresses the operation of an airplane incorporating STC SA8036NM at gross weights greater than previously certificated. The effect of this gross weight increase on airplane performance is effectively offset by the increase in wing area and aspect ratio. For stall speeds at a fixed gross weight, a four knot decrease in the flaps up stall speed, but no change in the flaps 20° and 40° can be expected. Rate of climb will increase at a fixed gross weight. Takeoff and landing distances will increase by 12% and 3% respectively for each 100 lbs. increase in gross weight. For weights equal to or less than the previously certificated gross weight, use the standard performance tables applicable to the basic unmodified airplane. For these weights, performance will be equal to or greater than the tables show.

The Flint Tip Fuel Tanks may be used in conjunction with other approved modifications provided it is determined that no interference exists. In this instance, the performance procedure in the paragraph above applies and in addition performance decrements must be applied as previously defined for any other installations.

STC SA8036NM	<b>FLINT AERO, INC.</b> <b>SUPPLEMENTAL AFM, P.O.H. AND</b> <b>AFM SUPPLEMENT TO CESSNA</b> <b>MODEL A185F</b> <b>FLOATPLANE SUPPLEMENT EDO-AIRE</b> <b>MODEL 582 SEAPLANE FLOATS</b>	Page 5
Report Number 185.19		Revision
Origination Date		Revision Date
Originated By		Revised By

SECTION 6

WEIGHT AND BALANCE/EQUIPMENT LIST



FAA APPROVED DATE: DECEMBER 3, 1996

STC SA8036NM	<b>FLINT AERO, INC.</b> <b>SUPPLEMENTAL AFM, P.O.H. AND</b> <b>AFM SUPPLEMENT TO CESSNA</b> <b>MODEL A185F</b> <b>FLOATPLANE SUPPLEMENT EDO-AIRE</b> <b>MODEL 582 SEAPLANE FLOATS</b>	Page 6
Report Number 185.19		Revision
Origination Date		Revision Date
Originated By		Revised By

Table 1

STALL SPEED, CAS		Angle of Bank							
		0 Deg		30 Deg		45 Deg		60 Deg	
		Condition	MPH	KCAS	MPH	KCAS	MPH	KCAS	MPH
<u>Model</u> A185F Floatplane  3600 lbs Gross Weight	Flaps Up	62	54	67	58	74	64	88	76
	Flaps 20 Deg	61	53	66	57	73	63	87	75
	Flaps 40 Deg	61	53	65	57	72	63	86	75

stcdata6.xls

SECTION 7

AIRPLANE & SYSTEMS DESCRIPTIONS

No change.

SECTION 8

AIRPLANE HANDLING, SERVICE AND MAINTENANCE  
WITH WING TIP FUEL (TRANSFER)

No change.

FAA APPROVED DATE: DECEMBER 3, 1996