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FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR

AMPHIBIAN OPERATION

IN THE

PA-18/19(A/S), PA-18(A/S/AS) "105/125/135/150"

WITH 150 BHP ENGINE

AND WIPLINE MODEL 2100 AMPHIBIOUS FLOATS

AT 2000 LBS. GROSS WEIGHT

Wipaire Part Number: POHSA00713CH-A-6
Current Document Revision: B

REG. NO. _____

SER. NO. _____

This Supplement must be attached to the FAA Approved Airplane Flight Manual when the airplane is modified by the installation of Wipline Model 2100 floats in accordance with STC SA00713CH. The information contained herein supplements or supersedes the basic FAA Approved Airplane Flight Manual only in those areas listed. For limitations, procedures, and performance information not contained in this Supplement, consult the basic airplane placards, markings, and the AFM as applicable.

FAA APPROVED: _____

3. Michael J. [Signature]
Manager, Southwest Flight Test Section, AIR-713
Federal Aviation Administration
Fort Worth, TX

Original Date: OCT 22, 1998
Current Revision: MAR 23, 2020

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LOG OF REVISIONS

REV. NO.	PAGES	DESCRIPTION	DATE	FAA APPROVED
IR	All	Initial Release	OCT 22 1998	Joseph C. Miess
A	1, 10, 11, 15	Added hydraulic fluid level system information. Updated title page to reflect additional models, updated format.	JUN 18 2019	<i>S.M. Wood</i> <i>for Mgr. AIR-713</i>
B	17, 20	Added CG chart to Section 6. Added Appendix A (Form 8110-3).	MAR 23 2020	FAA approved via form 8110-3. See Appendix A.

NOTE: Revised text is indicated by a vertical black line along outer margin.

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SECTION 1 - GENERAL INFORMATION

INTRODUCTION

This AFM, written especially for operators of the PA-18/19(A/S), PA-18(A/S/AS) "105/125/135/150" with 150 BHP engine, provides information not found in the Owner's Manual. It contains procedures and data required for safe and efficient operation with Wipline Model 2100 amphibious floats (at a gross weight of 2000 pounds).

Information contained in the Owner's Manual for the Super Cub, which is the same as that for the floatplane, is generally not repeated in this supplement.

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SECTION 2 – LIMITATIONS

OPERATING LIMITATIONS

1. Airspeed Limitations (CAS)

SPEED	MPH	KNOTS
Never Exceed Speed (V_{NE})	129	112
Maximum Structural Cruising Speed (V_{NO})	102	89
Maneuvering Speed (V_A)	97	84
Flaps Extended Speed Limit (V_{FE})	80	70
Landing Gear Extended/Operating Speed Limit (V_{LO})	129	112

Airspeed Indicator Markings*

A tape or decal red radial line must be affixed to the glass face of the airspeed indicator at 129 mph.

*See required placards list later in this section for list of airspeed limits applicable to amphibian.

In lieu of the above:

Redline - Never Exceed Speed	129 mph
Yellow Arc - Smooth Air Cautionary Range	102 to 129 mph
Green Arc - Normal Operating Range From Flaps Up Stall Speed to V_{NO}	56 to 102 mph
White Arc - Flap operating Range From Flaps Down Stall Speed to V_{FE}	53 to 80 mph

2. Powerplant Limitations

Engine unchanged from the landplane.

Propeller	Sensenich M74DM
Diameter - Maximum	74 inches
Minimum	72.5 inches
Static RPM at Full Throttle	2350 to 2550 RPM

3. Weight Limitations

Maximum Weight	2000 pounds
Empty Weight and Center of Gravity	See Aircraft Weight and Balance Papers
Useful Load	See Aircraft Weight and Balance Papers
Composition of Useful Load	See Aircraft Weight and Balance Papers
Full Fuel	36 gallons (216 pounds)
Full Oil	8 quarts (15 pounds)
Maximum Baggage	50 pounds

4. Load Distribution Limitations

Center of Gravity Limits (inches aft of wing leading edge)
14.0 to 18.0 inches at 2000 pounds,
10.5 to 18.0 inches at 1300 pounds or less,
Straight line variation between points given above.

5. Maneuvers

This airplane is certificated in the Normal Category. The Normal Category is applicable to aircraft intended for non-aerobatic operations. These include any maneuvers incidental to normal flying, stalls, lazy eights, chandelles, and turns in which the angle of bank is not more than 60°.

Aerobatic maneuvers, including spins, are prohibited.

6. Flight Load Factor

Maximum Positive Load Factor 3.8 g
Maximum Negative Load Factor No inverted maneuvers are permitted

7. Other Limitations

Water rudders must be retracted for all flight operations.

Landing on water is PROHIBITED unless all four-landing gear are fully retracted.

8. Placards

The following placards which supplement or replace landplane placards must be displayed in the amphibian:

Floatplane Operating Limitations

The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Additional operating limitations which must be complied with when operating this airplane in this category are contained in the FAA Approved Airplane Flight Manual Supplement for the amphibian/floatplane.

No acrobatic maneuvers, including spins, are approved.

Flight into known icing conditions is prohibited.

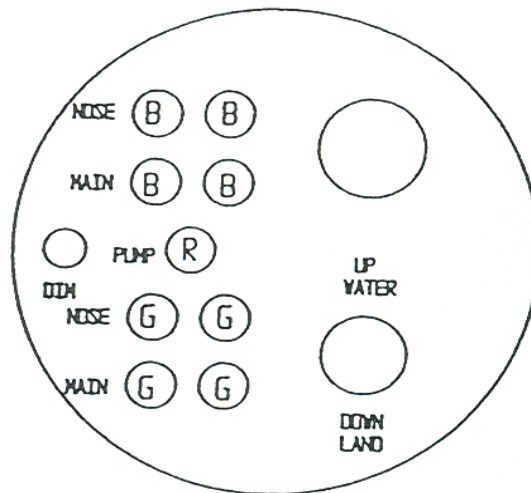
This airplane is certified for the following flight operations as of date of original airworthiness certificate.

DAY --- NIGHT --- VFR --- IFR

DO NOT LAND ON WATER UNLESS
GEAR IS FULLY RETRACTED

EMERGENCY HANDPUMP

PULL GEAR MOTOR CIRCUIT BREAKER
SELECT DESIRED GEAR POSITION
PUMP GEAR TO DESIRED POSITION



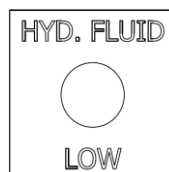
REFER TO WIPLINE AFM SUPPLEMENT FOR
OPERATION WITH WIPLINE FLOATS INSTALLED

FLOATPLANE AIRSPEED LIMITATIONS

Flap Extended Speed Range	Stall	53 mph CAS
	To V_{FE}	80 mph CAS
Normal Operating Speed Range	Stall	56 mph CAS
	To V_{NO}	102 mph CAS
Cautionary Speed Range	V_{NO}	102 mph CAS
	To V_{NE}	129 mph CAS
Never Exceed Speed	V_{NE}	129 mph CAS
Maneuvering Speed	V_A	97 mph CAS

WATER RUDDER UP
FOR ALL FLIGHT OPERATIONS

On the fluid level indicator lamp (if equipped):



SECTION 3 – EMERGENCY AND ABNORMAL PROCEDURES

If landing gear will not extend in the normal fashion, extend (or retract) them in accordance with the placard in the airplane:

Pull Gear Motor Circuit Breaker
Select Desired Gear Position With Manual Valve
Pump Gear To Desired Position

HYDRAULIC FLUID LEVEL INDICATOR (IF EQUIPPED)

HYDRAULIC FLUID LEVEL INDICATOR OPERATION	
OFF	Fluid level sufficient for normal operation
INTERMITTENT	Fluid level is low and must be serviced before next flight
ON	Fluid level is very low and may not be sufficient for normal gear operation. Must be serviced before next flight

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SECTION 4 – OPERATING PROCEDURES

WARNING

There is no substitute for proper and complete preflight planning habits and their continual review in minimizing emergencies. Be thoroughly knowledgeable of hazards and conditions which represent potential dangers, and be aware of the capabilities and limitations of the airplane.

All operating procedures for this airplane are generally conventional.

However, do not land on water unless landing gear are fully retracted.

Takeoffs from larger bodies of water should always be made into the wind. The chop/waves generated in winds of 10 knots and more may inhibit engine operation due to spray and may prevent the airplane from attaining the step under these conditions in crosswinds.

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SECTION 5 – PERFORMANCE

Performance of the PA-18-150 amphibian satisfies the requirements of CAR Part 3.

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SECTION 6 – WEIGHT AND BALANCE

NOTE

When floats are installed, it is possible to exceed the maximum takeoff weight with all seats occupied and minimum fuel.

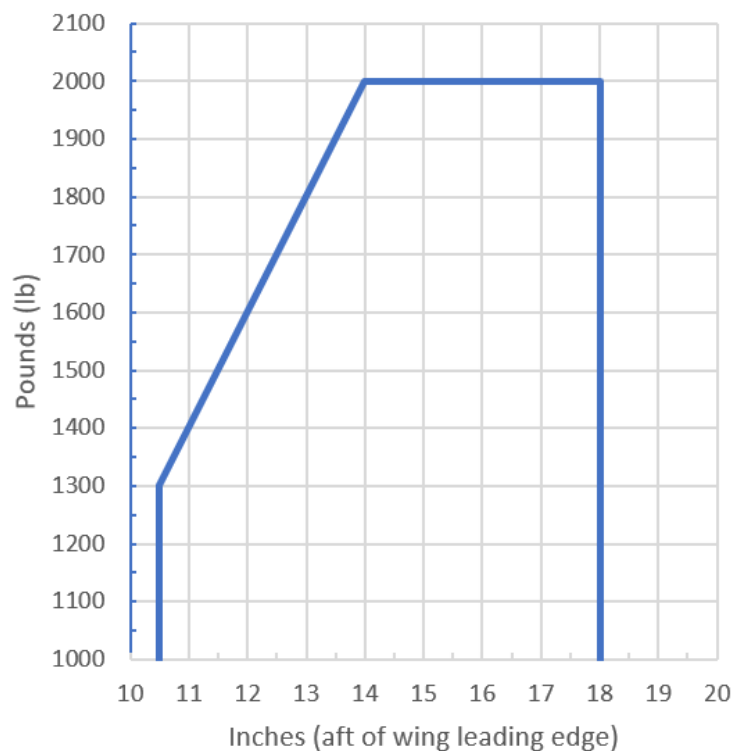
WARNING!!

It is the responsibility of the pilot to ensure that the amphibian is loaded properly. Operation outside of prescribed weight and balance limitations could result in an accident and serious or fatal injury.

FLOAT BAGGAGE COMPARTMENTS

Baggage may be carried in the float baggage compartments in accordance with the following limitations:

COMPARTMENT	MAX WT	ARM	MOM
LEFT	50 Lbs.	55	2750
RIGHT	50 Lbs.	55	2750



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SECTION 7 – AIRPLANE AND SYSTEMS DESCRIPTIONS

HYDRAULIC FLUID LEVEL INDICATOR (IF EQUIPPED)

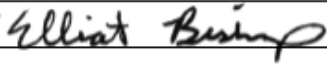
NOTE: The hydraulic fluid level indication light is a non-required auxiliary aid to pilots for monitoring hydraulic fluid levels in between required 25-hour fluid level inspections.

The landing gear pump reservoir may be equipped with an optical fluid sensor which activates an amber light on the face of the instrument panel to alert the pilot of a possible low fluid situation in the hydraulic gear actuating system. The amber light is normally off when the sensor is submerged in hydraulic oil but will activate when the fluid sensor is exposed to air.

Steep turns, sudden accelerations or decelerations may cause the light to activate intermittently if the level of fluid is close to the level of the optical sensor. If this occurs, the fluid level should be visually checked as soon as practicable and fluid added if necessary.

HYDRAULIC FLUID LEVEL INDICATOR OPERATION	
OFF	Fluid level sufficient for normal operation
INTERMITTENT	Fluid level is low and must be serviced before next flight
ON	Fluid level is very low and may not be sufficient for normal gear operation. Must be serviced before next flight

APPENDIX A
FAA FORM 8110-3

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		1. DATE March 23, 2020	
STATEMENT OF COMPLIANCE WITH AIRWORTHINESS STANDARDS			
AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION			
2. MAKE Piper Aircraft, Inc.	3. MODEL NO. All listed on TCDS 1A2	4. TYPE (Aircraft, Engine, Propeller, etc.) Airplane	5. NAME OF APPLICANT Wipaire, Inc.
LIST OF DATA			
6. IDENTIFICATION	7. TITLE		
POHSA00713CH-A-6 Rev: B Dated 3/23/2020	FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT FOR AMPHIBIAN OPERATION IN THE PA-18/19(A/S), PA-18(A/S/AS) "105/125/135/150" WITH 150 BHP ENGINE AND WIPLINE MODEL 2100 AMPHIBIOUS FLOATS AT 2000 LBS. GROSS WEIGHT		
-----	-----END-----		
8. PURPOSE OF DATA Added weight and balance chart to Section 6, add Appendix A for form 8110-3. Supplement is for STC SA00713CH.			
9. APPLICABLE REQUIREMENTS (List specific sections) Certification basis per TCDS 1A2. CAR 3 as amended through November 1, 1949: 3.777, 3.778, 3.779, 3.780			
10. CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with conditions and limitations of appointment under 14 CFR Part 183, the data listed above and on attached sheets numbered <u>N/A attached</u> have been examined in accordance with established procedures and found to comply with applicable requirements of the Airworthiness Standards listed. I (We) Therefore ☐ Recommend approval of these data ☒ Approve these data			
11. SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S) Elliot T. Bishop 		12. DESIGNATION NUMBER(S) DERT-834188-CE	13. CLASSIFICATION(S) FLIGHT ANALYST CONSULTANT

FAA Form 8110-3 (03/10) SUPERSEDES PREVIOUS EDITION