# FW-JWA658-11

# FAA Approved Airplane Flight Manual Supplement

for

# Aerocet Model 2200 Seaplane Float Installation on Cessna Model 172 to 172P and F172D to F172P with Tricycle Gear

Registration No.\_\_\_\_\_

Serial No.\_\_\_\_\_

This supplement must be attached to the FAA approved Airplane Flight Manual and is applicable when the airplane is modified by the installation of the Aerocet Model 2200 seaplane floats in accordance with Supplemental Type Certificate (STC) No. <u>SA02400AK</u>.

The information contained in this document supersedes the basic Airplane Flight Manual only where covered in the items listed herein. For limitations, procedures, and performance information not contained in this supplement, consult the basic Airplane Flight Manual.



FAA Approved: \_\_\_\_

For: Manager, Northwest Flight Test Section, AIR-715 Federal Aviation Administration Seattle, WA

Date: 5/5/2021

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Airplane Flight Manual Supplement for Aerocet Model 2200 PAG Seaplane Float Installation on Cessna Model 172 2					
LOG OF REVISIONS PAGE					
REV.	PAGES AFFECTED	DESCRIPTION	FAA APP (DA)	'AA APPROVED DATE)	
IR	ALL	Initial Release	1/	31/2019	
А	ALL	Correct flap limits add F172 models, add performance section	ded 4	/15/20	
В	ALL	Not Released (rev combined with F172 approvals)		N/A	
С	ALL	Increase gross weight option, add canoe	e& 5	/5/2021	
		Kayaks, added climb performance	5,	5/2021	
		Kayaks, added climb performance		5/2021	
		Kayaks, added climb performance		5/2021	
		Kayaks, added climb performance		5/2021	

Revisions are done to this document in its entirety. Changes are shown by a bar in the margin like this paragraph.



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SECTION 1. GENERAL				
This Airplane Flight Manual Supplement is applicable to those Cessna 172 airplanes equipped with Aerocet Model 2200 Seaplane Floats.				
<b>SECTION 2. NORMAL PROCEDURES:</b> (NOTE: these items supplement the basic flight manual and seaplane supplement normal procedures- be sure to follow those procedures except as noted below)				
BEFORE ENTERING FLOATPLANE				

- 1. Inspect the floats and attachment for dents, cracks, or punctures. Inspect hardware, water rudder and rigging for security.
- 2. Remove rubber plugs (which serve as stoppers on the standpipe in each float compartment) and pump out any accumulation of water. Reinstall rubber stoppers with enough pressure for a snug fit. (If there is an excess of water, investigate the leakage)
- 3. Inspect locker door latches DETENTS ENGAGED, LATCHES TURNED CLOCKWISE TO STOPS.
- 4. If a canoe or kayaks are installed, verify that all 4 ropes are tied with appropriate knots per the ICA (bowline, two half hitches, and cleat knot,) and that each rope is snug. Verify the forward end of the canoe is 25" max ahead of the firewall. Verify the stern of the canoe or kayak is mounted forward.

## CAUTION:

An un-latched locker bay door will cause a howl and may bang against the float struts during flight. Aircraft should be returned to field in normal fashion to avoid potential damage, and to assess any possible problems. However, as with any situation, "FLY THE AIRCRAFT!" rather than make a rash decision. It is likely that little or no damage will occur to locker door.

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### SECTION 3. EMERGENCY PROCEDURES:

Emergency procedures in the FAA approved airplane placards, Pilots Operating Handbook and/or Floatplane Supplement generally apply except for the specific items listed herein.

EMERGENCY LANDINGS ON WATER should be done with water rudders up, aircraft slightly tail low on touchdown, and control wheel held full aft as the floatplane decelerates on the water.

EMERGENCY LANDINGS ON LAND should be done with water rudders up, aircraft in a level attitude on touchdown, and the control wheel full aft after contact.

If damage occurs to the floats causing compartments to flood, aggressively shift the weight (people & baggage) in the opposite direction of damage in order to balance the aircraft over the buoyant compartments.

### SECTION 4. LIMITATIONS

#### **Maximum Weights:**

Models 172A, 172B:	2220 lbs.
Model 172C:	2250 lbs.
Models 172D to 172N and F172D to F172N:	2300 lbs.
Model 172P and F172P:	2400 lbs.
Models 172A-P with up-gross STC:	2487 lbs.

**EMPTY WEIGHT:** see actual WT. & balance form for aircraft.

### **BAGGAGE:**

IN EACH FLOAT Maximum 100 LBS. per float

CAUTION: Assure CG range is proper when loading

The float compartment is at the following location:

The centerline of the compartment is 31.2" aft of the aircraft datum (firewall): 100 lb = 3120 in lb. (Aircraft level)

**CANOES OR KAYAKS:** to be weighed and the CG measured. Limitation of 15' 8" rigid canoe or single 17' 6"kayak on left side max weight 85 lb. Stern of canoe or kayak(s) to be forward; max of 25" forward of firewall. Two rigid 17' 6" kayaks, one on each side, 85 lb max each.

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AIRSPEED LIMITS: No Change.							
AIR SPEED INDICATO No Change.	R MARKINGS:						
WATER RUDDER:							
Water rudder must be up e	except for water taxi.						
FLAP LIMITS:							
Models 172A to 172N:	Take-off: 10 degrees						
Models 172P:	Landing:30 to 40 degTake-off:10 degreesLanding:30 degrees	grees					
PLACARDS:							
P/N 35-70006 Placard n	ear retract handle:						
	WATER RUDDER						
	EXCEPT						
WATER TAXIING"							
P/N 22-17401 Placard on each float locker							
MAXIMUM BAGGAGE: 100 LBS ARM: 31.2 in. AFT OF DATUM							
Placard near retract device or on lower instrument panel:							
P/N 22-17402, (Retract handle) "RETRACT HANDLE: AFT IS RETRACTED"							
P/N 22-17403, (Retract Pull Ring) "RETRACT RING: UP IS RETRACTED"							

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### **SECTION 5 - PERFORMANCE:**

Takeoff Distance: performance is as good as or better than the Cessna POH supplement for floatplanes.

Takeoff at sea-level, 2487 lbs, 145 HP distance to clear 50 ft. 3,434 ft. Takeoff at sea-level, 2487 lbs, 160 HP distance to clear 50 ft. 2,928 ft. Takeoff at sea-level, 2487 lbs, 180 HP distance to clear 50 ft. 2,252 ft.

Climb Performance at 77 MPH IAS						
- Weight (lbs)	145	145 Hp 160Hp		180 HP		
	Sea Level	5000 ft	Sea Level	5000 ft	Sea Level	5000 ft
2300	560	340	710	420	1010	630
2400	510	280	650	360	930	570
2487	460	240	600	320	870	520

Note: fixed pitch propellers generally do not obtain rated horsepower in climb.

Climb rate with a canoe or kayak installed is approximately 20% less.

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