



***Carenado***

**C185F**

**SKYWAGON**

**OWNER'S MANUAL SUPPLEMENT**

**Floats**

**Amphibian**

**Skis**

**Performance**

# FLOATPLANE

## OPERATING CHECK LIST

### BEFORE ENTERING THE FLOATPLANE.

- (1) Inspect the floats and fairings for dents, cracks, scratches, etc.
- (2) Remove rubber balls (which serve as a stopper on the standpipe in each float compartment) and pump out any accumulation of water. Reinstall rubber balls with enough pressure for a snug fit.

### BEFORE STARTING ENGINE.

- (1) Operate and visually check the water rudders for proper retraction and rudder action.
- (2) Water Rudders -- Down for taxiing.

### TAKE-OFF.

- (1) Water Rudders -- Up.
- (2) Set wing flaps 20° (second notch).
- (3) Hold the control wheel full back and advance the throttle slowly.
- (4) Place the airplane in a planing attitude (on the step) by slowly moving the control wheel forward when the bow wave moves aft of the wing strut position.
- (5) As the airplane accelerates, apply light control wheel back pressure and allow the airplane to fly off smoothly.

#### NOTE

To reduce take-off water run, the technique of raising one float out of the water may be used. This procedure is described on page 1-5 under paragraph "Normal Take-Off."

- (6) Climb out at 75-85 MPH. With obstacles ahead, climb at 65 MPH.

## **CLIMB.**

The maximum rate of climb is obtained with flaps retracted at full throttle and 97 MPH (Edo Model 249A-2870 Floats), 98 MPH (Edo Model 628-2960 Floats). Refer to the Take-Off and Maximum Rate-Of-Climb Data charts, figure 1-6 (Edo Model 249A-2870 Floats), figure 1-7 (Edo Model 628-2960 Floats).

## **BEFORE LANDING.**

- (1) Water Rudders -- Up.
- (2) Maintain 70-80 MPH with wing flaps extended.

## **LANDING.**

- (1) Landing technique is conventional for all wing flap settings.

## **AFTER LANDING.**

- (1) Water Rudders -- Down.



**AIRSPEED CORRECTION TABLE**

FLOATPLANE

**FLAPS 0°**IAS-MPH  
CAS - MPH

60	80	100	120	140	160
66	81	99	117	136	156

**\*FLAPS 20°**IAS-MPH  
CAS - MPH

50	60	70	80	90	100	110
60	65	71	80	90	99	109




**\*FLAPS 40°**IAS-MPH  
CAS - MPH

50	60	70	80	90	100	110
61	66	73	82	91	101	113

**\* MAXIMUM FLAP SPEED 110 MPH, CAS**

# STALLING SPEEDS

POWER OFF ——— MPH - CAS  
 FLOATPLANE WITH EDO MODEL  
 628-2960 FLOATS ———

<i>Gross Weight</i> 3320 LBS	ANGLE OF BANK		
	 0°	 30°	 60°
CONFIGURATION			
FLAPS UP	65	70	93
FLAPS 20°	58	62	91
FLAPS 40°	57	61	80

NOTE: WHEN THE AIRCRAFT IS EQUIPPED WITH EDO MODEL 249A-2870 FLOATS, STALL SPEEDS ARE APPROXIMATELY 1 MPH LESS THAN THE FIGURES SHOWN ABOVE BECAUSE OF REDUCED GROSS WEIGHT.



## FLOATPLANE WITH EDO MODEL 249A-2870 FLOATS

**FLOATPLANE TAKE-OFF DATA**

TAKE-OFF DISTANCE WITH 20° FLAPS FROM SMOOTH WATER

GROSS WEIGHT POUNDS	IAS @ 50 FT	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.
3190	55	0	970	1550	1260	1960	1680	2555	2365	3540
		10	635	1100	840	1405	1135	1855	1625	2600
		20	365	720	495	935	690	1255	1015	1785
2800	51	0	660	1100	825	1345	1060	1680	1415	2185
		10	410	765	530	950	695	1200	945	1575
		20	225	490	300	615	405	790	565	1055
2400	56	0	420	770	525	920	655	1110	845	1380
		10	255	530	325	635	415	775	545	975
		20	130	325	170	395	225	490	305	630

NOTE: INCREASE DISTANCES 10% FOR EACH 25°F ABOVE STANDARD TEMPERATURE FOR PARTICULAR ALTITUDE.

**FLOATPLANE MAXIMUM RATE-OF-CLIMB DATA**

GROSS WEIGHT POUNDS	AT SEA LEVEL & 59°F			AT 5000 FEET & 41°F			AT 10,000 FEET & 23°F			AT 15,000 FEET & 5°F			AT 20,000 FEET & -12°F		
	IAS MPH	RATE OF CLIMB FT/MIN	GAL. OF FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S. L. FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S. L. FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S. L. FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S. L. FUEL USED
3190	97	1040	2.0	93	770	4.0	89	500	6.5	84	290	10.5	--	---	---
2800	94	1290	2.0	90	990	3.6	86	690	5.5	82	400	8.1	77	100	13.4
2400	92	1610	2.0	87	1270	3.2	83	940	4.6	79	610	6.4	74	290	9.1

NOTE: FULL THROTTLE, 2700 RPM, MIXTURE AT RECOMMENDED LEANING SCHEDULE, FLAPS UP. FUEL USED INCLUDES WARM-UP AND TAKE-OFF ALLOWANCE.

**CRUISE PERFORMANCE**

FLOATPLANE

**NORMAL LEAN MIXTURE**

Standard Conditions — Zero Wind — Gross Weight- 3320 Pounds

**2500 FEET**

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	25	79	151	16.5	3.8	565	4.9	740	3.6	540	4.7	715
	24	75	147	15.6	4.0	585	5.2	765	3.8	555	5.0	735
	23	70	144	14.7	4.2	605	5.5	790	4.0	575	5.3	760
	22	66	140	13.9	4.5	625	5.8	820	4.2	595	5.6	790
2500	25	76	149	16.0	3.9	575	5.1	755	3.7	550	4.9	725
	24	72	146	15.1	4.1	595	5.3	780	3.9	565	5.2	750
	23	68	142	14.3	4.3	615	5.7	805	4.1	585	5.4	775
	22	64	139	13.5	4.6	635	6.0	830	4.4	605	5.8	800
2400	25	71	145	14.9	4.2	600	5.4	785	4.0	570	5.2	755
	24	68	142	14.2	4.4	620	5.7	810	4.2	590	5.5	780
	23	64	138	13.4	4.6	640	6.0	835	4.4	605	5.8	805
	22	60	134	12.7	4.9	655	6.4	855	4.7	625	6.2	825
2300	25	67	141	14.1	4.4	620	5.8	815	4.2	590	5.6	785
	24	63	138	13.3	4.7	640	6.1	835	4.4	610	5.9	805
	23	60	134	12.6	4.9	655	6.4	860	4.7	625	6.2	825
	22	56	129	11.9	5.2	675	6.8	880	5.0	640	6.5	845
2200	25	62	136	13.0	4.8	645	6.2	845	4.5	615	6.0	815
	24	59	132	12.4	5.0	665	6.5	865	4.8	630	6.3	835
	23	55	128	11.7	5.3	675	6.9	885	5.0	645	6.6	850
	22	52	123	11.1	5.6	690	7.3	900	5.3	655	7.0	865
	21	49	118	10.5	5.9	700	7.7	915	5.6	665	7.4	880
	20	45	113	9.9	6.3	710	8.2	930	6.0	675	7.9	895
	19	42	107	9.2	6.7	720	8.8	940	6.4	685	8.5	905
	18	38	100	8.6	7.2	725	9.4	945	6.9	690	9.1	910

NOTE: Range and endurance figures must be reduced to allow for a reduction of approximately five gallons of usable fuel in each tank when inboard fillers are used to fill long range fuel tanks.



# CRUISE PERFORMANCE

FLOATPLANE

## NORMAL LEAN MIXTURE

Standard Conditions \ Zero Wind \ Gross Weight- 3320 Pounds

**5000 FEET**

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	25	81	156	17.0	3.7	570	4.8	745	3.5	540	4.6	715
	24	77	153	16.1	3.8	585	5.0	765	3.7	560	4.8	740
	23	73	149	15.2	4.1	605	5.3	795	3.9	575	5.1	765
	22	69	146	14.4	4.3	625	5.6	820	4.1	595	5.4	790
2500	25	79	154	16.5	3.8	580	4.9	760	3.6	550	4.7	730
	24	75	151	15.6	4.0	600	5.2	780	3.8	570	5.0	750
	23	71	147	14.8	4.2	615	5.5	805	4.0	590	5.3	775
	22	67	144	14.0	4.4	635	5.8	835	4.2	605	5.6	800
2400	25	73	149	15.3	4.0	605	5.3	790	3.9	575	5.1	760
	24	70	146	14.6	4.3	625	5.6	815	4.0	595	5.3	785
	23	66	143	13.8	4.5	640	5.9	835	4.3	610	5.6	805
	22	62	139	13.1	4.7	660	6.2	860	4.5	625	6.0	830
2300	25	69	146	14.4	4.3	625	5.6	820	4.1	595	5.4	790
	24	65	142	13.7	4.5	645	5.9	840	4.3	610	5.7	810
	23	62	139	13.0	4.8	660	6.2	860	4.5	630	6.0	830
	22	58	134	12.3	5.0	675	6.6	885	4.8	645	6.3	850
2200	25	64	140	13.4	4.6	650	6.1	850	4.4	620	5.8	820
	24	60	137	12.7	4.9	665	6.4	870	4.6	635	6.1	840
	23	57	133	12.1	5.1	680	6.7	890	4.9	645	6.4	855
	22	54	128	11.5	5.4	690	7.1	905	5.1	660	6.8	870
	21	51	123	10.9	5.7	705	7.5	920	5.4	670	7.2	885
	20	47	118	10.2	6.1	715	7.9	930	5.8	680	7.6	895
	19	44	112	9.6	6.5	725	8.4	945	6.1	690	8.1	910
	18	40	105	9.0	6.9	725	9.0	950	6.6	690	8.7	915

NOTE: Range and endurance figures must be reduced to allow for a reduction of approximately five gallons of usable fuel in each tank when inboard fillers are used to fill long range fuel tanks.



# CRUISE PERFORMANCE

## FLOATPLANE

### NORMAL LEAN MIXTURE

Standard Conditions — Zero Wind — Gross Weight- 3320 Pounds

### 7500 FEET

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	23	75	155	15.8	3.9	610	5.1	795	3.7	580	4.9	765
	22	71	151	14.9	4.2	630	5.4	820	4.0	600	5.2	790
	21	67	147	14.1	4.4	650	5.8	845	4.2	615	5.5	815
	20	63	142	13.2	4.7	670	6.1	870	4.5	635	5.9	840
2500	23	73	153	15.3	4.1	620	5.3	810	3.9	590	5.1	780
	22	69	149	14.5	4.3	640	5.6	835	4.1	610	5.4	805
	21	65	145	13.7	4.5	655	5.9	860	4.3	625	5.7	825
	20	61	140	12.8	4.8	675	6.3	885	4.6	645	6.1	850
2400	23	68	148	14.3	4.3	645	5.7	840	4.1	615	5.5	810
	22	64	144	13.5	4.6	660	6.0	860	4.4	630	5.8	830
	21	61	140	12.8	4.9	675	6.3	885	4.6	645	6.1	850
	20	57	134	12.1	5.1	690	6.7	905	4.9	660	6.5	870
2300	23	64	144	13.4	4.6	660	6.0	865	4.4	630	5.8	835
	22	60	139	12.7	4.9	680	6.4	885	4.6	645	6.1	855
	21	57	134	12.0	5.2	690	6.7	905	4.9	660	6.5	870
	20	53	129	11.4	5.5	705	7.1	920	5.2	670	6.9	885
2200	23	59	137	12.5	5.0	685	6.5	890	4.7	650	6.3	860
	22	56	133	11.9	5.2	695	6.8	910	5.0	660	6.6	875
	21	53	128	11.2	5.5	705	7.2	925	5.2	675	6.9	890
	20	49	123	10.6	5.8	715	7.6	935	5.6	680	7.3	900
	19	46	117	10.0	6.2	725	8.1	950	5.9	690	7.8	915
	18	42	110	9.3	6.6	730	8.7	955	6.3	695	8.4	920

NOTE: Range and endurance figures must be reduced to allow for a reduction of approximately five gallons of usable fuel in each tank when inboard fillers are used to fill long range fuel tanks.

**CRUISE PERFORMANCE**

FLOATPLANE

**NORMAL LEAN MIXTURE**Standard Conditions  $\searrow$  Zero Wind  $\swarrow$  Gross Weight- 3320 Pounds**10,000 FEET**

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	21	70	153	14.6	4.3	650	5.6	850	4.0	620	5.4	815
	20	65	148	13.7	4.5	670	5.9	875	4.3	635	5.7	840
	19	61	142	12.9	4.8	685	6.3	895	4.6	655	6.1	865
	18	57	136	12.0	5.2	705	6.7	920	4.9	670	6.5	885
2500	21	67	150	14.1	4.4	660	5.7	860	4.2	625	5.5	830
	20	63	145	13.3	4.7	680	6.1	885	4.4	645	5.9	855
	19	59	140	12.5	5.0	695	6.5	905	4.7	660	6.3	875
	18	55	134	11.7	5.3	710	6.9	925	5.1	675	6.7	895
2400	21	63	145	13.2	4.7	680	6.1	885	4.5	645	5.9	855
	20	59	140	12.5	5.0	695	6.5	905	4.7	660	6.2	875
	19	55	134	11.7	5.3	710	6.9	925	5.0	675	6.6	890
	18	51	128	11.0	5.6	720	7.4	940	5.4	685	7.1	905
2300	21	59	139	12.4	5.0	695	6.5	910	4.7	660	6.3	875
	20	55	134	11.8	5.3	710	6.9	925	5.0	675	6.6	890
	19	52	128	11.1	5.6	720	7.3	940	5.3	685	7.1	905
	18	48	122	10.4	6.0	730	7.8	955	5.7	695	7.5	920
2200	21	55	133	11.6	5.3	710	7.0	930	5.1	675	6.7	895
	20	51	128	11.0	5.6	720	7.4	940	5.4	685	7.1	905
	19	48	122	10.4	6.0	730	7.8	955	5.7	695	7.5	920
	18	44	115	9.7	6.4	735	8.3	960	6.1	700	8.0	925
	17	41	108	9.0	6.9	740	9.0	965	6.5	705	8.6	930

NOTE: Range and endurance figures must be reduced to allow for a reduction of approximately five gallons of usable fuel in each tank when inboard fillers are used to fill long range fuel tanks.



## CRUISE PERFORMANCE

FLOATPLANE

## NORMAL LEAN MIXTURE

Standard Conditions — Zero Wind — Gross Weight- 3320 Pounds

15,000 FEET

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	17	57	141	12.1	5.1	720	6.7	945	4.9	685	6.4	910
	16	53	133	11.2	5.5	735	7.2	960	5.3	700	6.9	925
	15	48	124	10.4	6.0	745	7.8	970	5.7	710	7.5	935
	14	43	114	9.5	6.6	750	8.6	980	6.2	715	8.3	940
2500	17	55	138	11.7	5.3	730	6.9	950	5.0	695	6.6	915
	16	51	130	10.9	5.7	740	7.4	965	5.4	705	7.2	930
	15	46	121	10.1	6.2	745	8.1	975	5.9	710	7.8	940
	14	42	111	9.2	6.7	750	8.8	980	6.4	715	8.5	945
2400	17	52	132	11.1	5.6	740	7.3	965	5.3	700	7.0	930
	16	48	124	10.3	6.0	745	7.9	970	5.7	710	7.6	935
	15	43	115	9.5	6.5	750	8.5	980	6.2	715	8.2	940
	14	39	105	8.6	7.2	755	9.4	985	6.8	720	9.0	950
2300	17	48	125	10.4	5.9	745	7.8	970	5.7	705	7.5	935
	16	44	117	9.7	6.4	750	8.4	975	6.1	710	8.1	940
	15	40	108	8.9	6.9	755	9.1	985	6.6	715	8.7	945
	14	36	100	8.2	7.6	760	9.9	990	7.2	720	9.6	955
2200	17	45	118	9.8	6.3	745	8.3	975	6.0	710	8.0	940
	16	41	110	9.1	6.8	750	8.9	980	6.5	715	8.6	945
	15	37	102	8.4	7.4	755	9.7	990	7.0	720	9.3	950
	14	33	94	7.7	8.1	765	10.6	1000	7.7	725	10.2	960

NOTE: Range and endurance figures must be reduced to allow for a reduction of approximately five gallons of usable fuel in each tank when inboard fillers are used to fill long range fuel tanks.

**FLOATPLANE LANDING DISTANCE**

LANDING DISTANCE WITH 40° FLAPS AND POWER OFF

GROSS WEIGHT POUNDS	APPROACH IAS MPH	@ SEA LEVEL & 59° F		@ 2500 FEET & 50° F		@ 5000 FEET & 41° F		@ 7500 FEET & 32° F	
		WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.
3320	73	640	1530	690	1610	740	1690	800	1790

**NOTE:** Reduce landing distances 10% for each 5 knots headwind.



## OPERATING CHECK LIST

### **BEFORE ENTERING THE AMPHIBIAN.**

- (1) Inspect the floats and fairings for dents, cracks, scratches, etc.
- (2) Remove rubber balls (which serve as a stopper on the standpipe in each float compartment) and pump out any accumulation of water. Reinstall rubber balls with enough pressure for a snug fit.
- (3) Check the wheel struts for proper inflation; check the tires for cuts, bruises and proper inflation.

#### **NOTE**

Refer to placards on the nose wheel struts for strut inflation procedures. Proper tire inflation for 6.00 x 6 main wheel tires is 37 psi; tire inflation for the 10 x 3.50 nose wheel tires is 41 psi.

### **BEFORE STARTING ENGINE.**

- (1) Landing Gear Lever -- "DOWN" (amphibian on land) or "UP" (amphibian on water).
- (2) Operate and visually check water rudders for proper retraction and rudder action. (With amphibian on land, pull water rudder retraction handle aft to "RETRACT" position for taxiing.)
- (3) Water Rudders -- Down (for taxiing on water) or up (for taxiing on land).

### **TAKE-OFF.**

#### **TAKE-OFF ON WATER.**

- (1) Landing Gear Lever -- "UP."

- (2) Water Rudders -- Up.
- (3) Set wing flaps 20° (second notch).
- (4) Hold the control wheel full back and advance the throttle slowly.
- (5) Place the airplane in a planing attitude (on the step) by slowly moving the control wheel forward when the bow wave moves aft of the wing strut position.
- (6) As the airplane accelerates, apply light control wheel back pressure and allow the airplane to fly off smoothly.

#### NOTE

To reduce take-off water run, the technique of raising one float out of the water may be used. This procedure is described on page 2-7 under paragraph "Take-Off On Water."

- (7) Climb out at 75-85 MPH. With obstacles ahead, climb at 64 MPH.

#### TAKE-OFF ON LAND.

- (1) Set wing flaps 20° (second notch).
- (2) Power -- Full throttle and 2850 RPM.
- (3) When amphibian feels light (60-70 MPH), apply light back pressure to control wheel and allow airplane to fly off smoothly.
- (4) After take-off, level off slightly and accelerate to an efficient climb speed; then retract the landing gear.
- (5) Climb out at 75-85 MPH. With obstacles ahead, climb at 64 MPH.

#### CLIMB.

The maximum rate of climb is obtained with flaps retracted at full throttle and 93 MPH. Refer to the Maximum Rate-Of-Climb Data chart, figure 2-7.

#### BEFORE LANDING ON WATER.

- (1) Landing Gear Lever -- "UP."
- (2) Landing Gear Blue Indicator Light -- Check illuminated.
- (3) Water Rudders -- Up.
- (4) Maintain 70-80 MPH with wing flaps extended.



## **BEFORE LANDING ON LAND.**

- (1) Landing Gear Lever -- "DOWN" below 130 MPH.
- (2) Landing Gear Amber Indicator Light -- Check illuminated.
- (3) Water Rudders -- Up.
- (4) Maintain 70-80 MPH with wing flaps extended.

## **LANDING.**

### **NORMAL LANDING ON WATER.**

- (1) Landing technique is conventional for all wing flap settings.

### **NORMAL LANDING ON LAND.**

- (1) Land on main wheels first (nose slightly above level flight attitude).
- (2) Lower the nose wheels gently to the runway after speed is diminished.
- (3) Avoid excessive braking unless obstacle is ahead.

### **CROSSWIND LANDING ON LAND.**

- (1) If field length permits, land with wing flaps retracted.
- (2) Use wing low, crab, or combination method of drift correction.
- (3) Land in nearly level attitude.
- (4) Lower nose wheels to runway immediately after touchdown and hold control wheel forward.
- (5) Maintain a straight path by using a combination of ailerons, upwind rudder (amphibian weathercocks downwind on land) and occasional upwind braking.

## **AFTER LANDING.**

- (1) Water Rudders -- Down (except on land).

**AIRSPEED CORRECTION TABLE**

AMPHIBIAN

**FLAPS 0°**IAS-MPH  
CAS-MPH

60	80	100	120	140	160
66	81	99	117	136	156

**\*FLAPS 20°**IAS-MPH  
CAS-MPH

50	60	70	80	90	100	110
59	65	73	82	91	100	110

**\*FLAPS 40°**IAS-MPH  
CAS-MPH

50	60	70	80	90	100	110
59	66	75	83	92	101	110

**\*MAXIMUM FLAP SPEED 110 MPH, CAS****STALL SPEED, POWER OFF**

AMPHIBIAN

**ANGLE OF BANK***Gross Weight*  
**3100 LBS.****CONFIGURATION**

0°

30°

60°

FLAPS UP

65

70

92

FLAPS 20°

59

63

83

FLAPS 40°

57

61

80

**SPEEDS ARE MPH, CAS**



**AMPHIBIAN TAKE-OFF DATA - WATER**

TAKE-OFF DISTANCE WITH 20° FLAPS FROM SMOOTH WATER

GROSS WEIGHT POUNDS	IAS @ 50 FT	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			WATER RUN	TOTAL TO CLEAR 50 FT OBS	WATER RUN	TOTAL TO CLEAR 50 FT OBS	WATER RUN	TOTAL TO CLEAR 50 FT OBS	WATER RUN	TOTAL TO CLEAR 50 FT OBS
3100	64	0	885	1430	1145	1795	1510	2335	2095	3150
		10	575	1015	755	1285	1015	1675	1430	2305
		20	325	690	445	850	610	1125	885	1575
2800	61	0	650	1100	825	1345	1060	1680	1415	2185
		10	410	765	530	950	695	1200	945	1575
		20	225	490	300	615	405	790	555	1055
2400	56	0	420	770	525	920	655	1110	845	1380
		10	255	530	325	635	415	775	545	975
		20	130	325	170	395	225	490	305	630

NOTE: INCREASE DISTANCES 10% FOR EACH 25°F ABOVE STANDARD TEMPERATURE FOR PARTICULAR ALTITUDE.

**AMPHIBIAN TAKE-OFF DATA - LAND**

TAKE-OFF DISTANCE WITH 20° FLAPS FROM HARD-SURFACED RUNWAY

GROSS WEIGHT POUNDS	IAS @ 50 FT	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
3255	64	0	670	1275	800	1545	960	1925	1165	2540
		10	465	970	565	1150	690	1500	845	2010
		20	295	695	370	870	450	1115	575	1530
2800	59	0	475	915	565	1080	675	1285	815	1595
		10	320	680	385	810	470	980	575	1225
		20	195	470	240	570	300	705	375	895
2400	55	0	335	665	400	790	475	925	570	1105
		10	220	495	265	580	320	665	390	830
		20	125	335	155	395	195	475	245	585

NOTE: INCREASE DISTANCES 10% FOR EACH 25°F ABOVE STANDARD TEMPERATURE FOR PARTICULAR ALTITUDE.

**AMPHIBIAN MAXIMUM RATE-OF-CLIMB DATA**

GROSS WEIGHT POUNDS	AT SEA LEVEL & 59° F			AT 5000 FEET & 41° F			AT 10,000 FEET & 23° F			AT 15,000 FEET & 5° F			AT 20,000 FEET & -12° F		
	IAS MPH	RATE OF CLIMB FT/MIN	GAL. OF FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S.L. FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S.L. FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S.L. FUEL USED	IAS MPH	RATE OF CLIMB FT/MIN	FROM S.L. FUEL USED
3265	93	910	2	90	690	4.1	88	400	7.1	85	110	13.0	---	---	---
2800	90	1270	2	87	950	3.6	85	630	5.6	82	310	8.6	---	---	---
2400	86	1590	2	83	1230	3.2	81	870	4.7	78	520	6.7	75	160	10.5

**NOTE:** FULL THROTTLE, 2000 RPM, MIXTURE AT RECOMMENDED LEANING SCHEDULE, FLAPS UP.  
FUEL USED INCLUDES WARM-UP AND TAKE-OFF ALLOWANCE.



**Carenado**  
**C18SF**  
**SKYWAGON**

# CRUISE PERFORMANCE

AMPHIBIAN

## NORMAL LEAN MIXTURE

Standard Conditions  $\searrow$  Zero Wind  $\swarrow$  Gross Weight- 3265 Pounds

2500 FEET

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	25	79	145	16.5	3.8	545	4.9	715	3.6	520	4.7	685
	24	75	142	15.6	4.0	565	5.2	735	3.8	535	5.0	710
	23	70	138	14.7	4.2	580	5.5	760	4.0	555	5.3	730
	22	66	134	13.9	4.5	595	5.8	780	4.2	565	5.6	750
2500	25	76	143	16.0	3.9	555	5.1	725	3.7	530	4.9	700
	24	72	140	15.1	4.1	575	5.3	750	3.9	545	5.2	720
	23	68	136	14.3	4.3	590	5.7	770	4.1	560	5.4	740
	22	64	131	13.5	4.6	605	6.0	790	4.4	575	5.8	760
2400	25	71	139	14.9	4.2	575	5.4	755	4.0	550	5.2	725
	24	68	135	14.2	4.4	590	5.7	770	4.2	560	5.5	745
	23	64	131	13.4	4.6	605	6.0	790	4.4	575	5.8	760
	22	60	127	12.7	4.9	620	6.4	810	4.7	590	6.2	780
2300	25	67	134	14.1	4.4	595	5.8	775	4.2	565	5.6	745
	24	63	130	13.3	4.7	605	6.1	795	4.4	580	5.9	765
	23	60	127	12.6	4.9	620	6.4	815	4.7	590	6.2	785
	22	56	122	11.9	5.2	635	6.8	830	5.0	605	6.5	800
2200	25	62	129	13.0	4.8	615	6.2	800	4.5	585	6.0	770
	24	59	125	12.4	5.0	625	6.5	820	4.8	595	6.3	790
	23	55	121	11.7	5.3	635	6.9	830	5.0	605	6.6	800
	22	52	116	11.1	5.6	645	7.3	845	5.3	615	7.0	815
	21	49	111	10.5	5.9	655	7.7	855	5.6	625	7.4	825
	20	45	105	9.9	6.3	665	8.2	865	6.0	630	7.9	835
	19	42	100	9.2	6.7	670	8.8	875	6.4	635	8.5	845
	18	38	93	8.6	7.2	675	9.4	880	6.9	640	9.1	850

Floats

Amphibian

Skis

Performance

**Carenado**  
**C18SF**  
**SKYWAGON**

Floats

Amphibian

Skis

Performance

# CRUISE PERFORMANCE

AMPHIBIAN

## NORMAL LEAN MIXTURE

Standard Conditions \ Zero Wind \ Gross Weight-3265 Pounds

### 5000 FEET

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	25	81	150	17.0	3.7	550	4.8	715	3.5	520	4.6	690
	24	77	147	16.1	3.8	565	5.0	740	3.7	535	4.8	710
	23	73	143	15.2	4.1	580	5.3	760	3.9	555	5.1	730
	22	69	139	14.4	4.3	595	5.6	780	4.1	570	5.4	750
2500	25	79	148	16.5	3.8	560	4.9	730	3.6	530	4.7	700
	24	75	145	15.6	4.0	575	5.2	750	3.8	545	5.0	725
	23	71	141	14.8	4.2	590	5.5	770	4.0	560	5.3	740
	22	67	136	14.0	4.4	605	5.8	790	4.2	575	5.6	760
2400	25	73	144	15.3	4.0	580	5.3	760	3.9	555	5.1	730
	24	70	140	14.6	4.3	595	5.6	775	4.0	565	5.3	745
	23	66	136	13.8	4.5	605	5.9	795	4.3	580	5.6	765
	22	62	132	13.1	4.7	625	6.2	815	4.5	595	6.0	785
2300	25	69	139	14.4	4.3	595	5.6	780	4.1	565	5.4	750
	24	65	135	13.7	4.5	610	5.9	795	4.3	580	5.7	765
	23	62	131	13.0	4.8	625	6.2	815	4.5	595	6.0	785
	22	58	126	12.3	5.0	635	6.6	830	4.8	605	6.3	800
2200	25	64	133	13.4	4.6	615	6.1	805	4.4	585	5.8	775
	24	60	129	12.7	4.9	630	6.4	825	4.6	600	6.1	790
	23	57	125	12.1	5.1	640	6.7	835	4.9	610	6.4	805
	22	54	121	11.5	5.4	650	7.1	850	5.1	620	6.8	820
	21	51	115	10.9	5.7	660	7.5	860	5.4	625	7.2	830
	20	47	110	10.2	6.1	665	7.9	870	5.8	635	7.6	840
	19	44	104	9.6	6.5	675	8.4	880	6.1	640	8.1	845
	18	40	98	9.0	6.9	680	9.0	885	6.6	645	8.7	855

NOTE: Range and endurance figures must be reduced to allow for a reduction of approximately five gallons of usable fuel in each tank when inboard fillers are used to fill long range fuel tanks.



**Carenado**  
**C18SF**  
**SKYWAGON**

# CRUISE PERFORMANCE

AMPHIBIAN

## NORMAL LEAN MIXTURE

Standard Conditions — Zero Wind — Gross Weight- 3265 Pounds

### 7500 FEET

RPM	MP	% BHP	TAS MPH	GAL/ HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	23	75	148	15.8	3.9	585	5.1	760	3.7	555	4.9	735
	22	71	144	14.9	4.2	600	5.4	780	4.0	570	5.2	755
	21	67	139	14.1	4.4	615	5.8	800	4.2	585	5.5	775
	20	63	135	13.2	4.7	630	6.1	825	4.5	600	5.9	795
2500	23	73	146	15.3	4.1	590	5.3	775	3.9	565	5.1	745
	22	69	142	14.5	4.3	605	5.6	790	4.1	575	5.4	765
	21	65	137	13.7	4.5	625	5.9	815	4.3	590	5.7	785
	20	61	132	12.8	4.8	635	6.3	835	4.6	605	6.1	800
2400	23	68	140	14.3	4.3	610	5.7	795	4.1	580	5.5	770
	22	64	136	13.5	4.6	625	6.0	815	4.4	595	5.8	785
	21	61	132	12.8	4.9	640	6.3	835	4.6	605	6.1	805
	20	57	126	12.1	5.1	650	6.7	850	4.9	620	6.5	820
2300	23	64	136	13.4	4.6	625	6.0	820	4.4	595	5.8	790
	22	60	131	12.7	4.9	640	6.4	835	4.6	610	6.1	805
	21	57	126	12.0	5.2	650	6.7	850	4.9	620	6.5	820
	20	53	121	11.4	5.5	660	7.1	860	5.2	630	6.9	830
2200	23	59	129	12.5	5.0	645	6.5	840	4.7	610	6.3	810
	22	56	125	11.9	5.2	655	6.8	855	5.0	620	6.6	825
	21	53	120	11.2	5.5	660	7.2	865	5.2	630	6.9	830
	20	49	114	10.6	5.8	670	7.6	875	5.6	635	7.3	840
	19	46	109	10.0	6.2	675	8.1	885	5.9	645	7.8	850
	18	42	103	9.3	6.6	680	8.7	890	6.3	650	8.4	860

NOTE: Range and endurance figures must be reduced to allow for a reduction of approximately five gallons of usable fuel in each tank when inboard fillers are used to fill long range fuel tanks.

**Carenado**  
**C18SF**  
**SKYWAGON**

# CRUISE PERFORMANCE

AMPHIBIAN

## NORMAL LEAN MIXTURE

Standard Conditions — Zero Wind — Gross Weight-3265 Pounds

### 10,000 FEET

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	21	70	145	14.6	4.3	615	5.6	805	4.0	585	5.4	775
	20	65	140	13.7	4.5	630	5.9	825	4.3	600	5.7	795
	19	61	134	12.9	4.8	645	6.3	845	4.6	615	6.1	815
	18	57	128	12.0	5.2	660	6.7	865	4.9	630	6.5	830
2500	21	67	142	14.1	4.4	625	5.7	815	4.2	595	5.5	785
	20	63	137	13.3	4.7	640	6.1	835	4.4	610	5.9	805
	19	59	131	12.5	5.0	655	6.5	855	4.7	620	6.3	820
	18	55	125	11.7	5.3	665	6.9	870	5.1	630	6.7	835
2400	21	63	137	13.2	4.7	640	6.1	835	4.5	610	5.9	805
	20	59	131	12.5	5.0	655	6.5	855	4.7	620	6.2	820
	19	55	126	11.7	5.3	665	6.9	865	5.0	630	6.6	835
	18	51	119	11.0	5.6	670	7.4	875	5.4	640	7.1	845
2300	21	59	131	12.4	5.0	655	6.5	855	4.7	620	6.3	820
	20	55	126	11.8	5.3	665	6.9	865	5.0	630	6.6	835
	19	52	120	11.1	5.6	670	7.3	875	5.3	640	7.1	845
	18	48	114	10.4	6.0	680	7.8	890	5.7	645	7.5	855
2200	21	55	125	11.6	5.3	665	7.0	870	5.1	635	6.7	835
	20	51	119	11.0	5.6	670	7.4	875	5.4	640	7.1	845
	19	48	113	10.4	6.0	680	7.8	890	5.7	645	7.5	855
	18	44	107	9.7	6.4	685	8.3	895	6.1	655	8.0	865
	17	41	101	9.0	6.9	690	9.0	900	6.5	655	8.6	870

Floats

Amphibian

Skis

Performance



**Carenado**  
**C18SF**  
**SKYWAGON**

# CRUISE PERFORMANCE

**AMPHIBIAN**

## NORMAL LEAN MIXTURE

Standard Conditions — Zero Wind — Gross Weight- 3265 Pounds  
**15,000 FEET**

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	17	57	132	12.1	5.1	675	6.7	880	4.9	640	6.4	850
	16	53	124	11.2	5.5	685	7.2	895	5.3	650	6.9	860
	15	48	116	10.4	6.0	695	7.8	905	5.7	660	7.5	875
	14	43	107	9.5	6.6	700	8.6	915	6.2	665	8.3	880
2500	17	55	129	11.7	5.3	680	6.9	885	5.0	645	6.6	855
	16	51	121	10.9	5.7	690	7.4	900	5.4	655	7.2	865
	15	46	113	10.1	6.2	695	8.1	910	5.9	665	7.8	875
	14	42	104	9.2	6.7	700	8.8	920	6.4	670	8.5	885
2400	17	52	123	11.1	5.6	685	7.3	895	5.3	655	7.0	865
	16	48	115	10.3	6.0	695	7.9	910	5.7	660	7.6	875
	15	43	107	9.5	6.5	700	8.5	915	6.2	665	8.2	880
	14	39	99	8.6	7.2	705	9.4	925	6.8	675	9.0	890
2300	17	48	117	10.4	5.9	695	7.8	905	5.7	660	7.5	870
	16	44	109	9.7	6.4	700	8.4	915	6.1	665	8.1	880
	15	40	102	8.9	6.9	705	9.1	920	6.6	670	8.7	885
	14	36	94	8.2	7.6	710	9.9	930	7.2	675	9.6	895
2200	17	45	110	9.8	6.3	700	8.3	910	6.0	665	8.0	880
	16	41	103	9.1	6.8	705	8.9	920	6.5	670	8.6	885
	15	37	96	8.4	7.4	710	9.7	925	7.0	675	9.3	895
	14	33	89	7.7	8.1	720	10.6	940	7.7	685	10.2	905

Floats

Amphibian

Skis

Performance

**AMPHIBIAN LANDING DISTANCE - WATER**

LANDING DISTANCE WITH 40° FLAPS AND POWER OFF.

GROSS WEIGHT POUNDS	APPROACH IAS MPH	@ SEA LEVEL & 59° F		@ 2500 FEET & 50° F		@ 5000 FEET & 41° F		@ 7500 FEET & 32° F	
		WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.	WATER RUN	TOTAL TO CLEAR 50 FT. OBS.
3100	72	600	1480	640	1550	690	1630	750	1720

**NOTE:** Reduce landing distances 10% for each 4 knots headwind.**AMPHIBIAN LANDING DISTANCE - LAND**

LANDING DISTANCE WITH 40° FLAPS AND POWER OFF ON HARD SURFACED RUNWAY

GROSS WEIGHT POUNDS	APPROACH IAS MPH	@ SEA LEVEL & 59° F		@ 2500 FEET & 50° F		@ 5000 FEET & 41° F		@ 7500 FEET & 32° F	
		GROUND ROLL	TOTAL TO CLEAR 50 FT. OBS.	GROUND ROLL	TOTAL TO CLEAR 50 FT. OBS.	GROUND ROLL	TOTAL TO CLEAR 50 FT. OBS.	GROUND ROLL	TOTAL TO CLEAR 50 FT. OBS.
3100	69	780	1240	830	1320	880	1390	930	1480

**NOTE:** Reduce landing distances 10% for each 4 knots headwind.



# SKIPLANE

## OPERATING CHECK LIST

### BEFORE ENTERING THE SKIPLANE.

- (1) Check that the skis are not frozen to the snow or icy surface.
- (2) Check hydraulic components for leakage, and skis and attachments for condition (retractable wheel skis only).
- (3) Check the Weight and Balance Data, and load the airplane to maintain the center of gravity within designated limits.

#### NOTE

The installation of skis causes a significant forward shift in center of gravity location, and ballast is required under certain loading conditions. Refer to Weight and Balance, page 3-4, for additional information.

### BEFORE TAKE-OFF.

- (1) A full throttle RPM check is recommended only when the condition of the engine is in doubt. Due to the absence of brakes on the skiplane, this check is normally done during the initial portion of the take-off.
- (2) Check that the gear is pumped to the maximum position (retractable wheel skis only).

### LANDING.

- (1) Visually check position of main wheel ski. If a wheels landing is intended, the skis should be retracted; when a landing on skis is intended, the skis should be extended beneath the landing gear wheels.
- (2) Check that the gear is pumped to the maximum position (retractable wheel skis only).
- (3) The landing technique is conventional for all wing flap settings.

**Carenado**  
**C185F**  
**SKYWAGON**

# CRUISE PERFORMANCE

SKIPLANE

## NORMAL LEAN MIXTURE

Standard Conditions  $\searrow$  Zero Wind  $\searrow$  Gross Weight- 3350 Pounds

2500 FEET

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	25	79	147	16.5	3.8	555	4.9	725	3.8	525	4.7	695
	24	75	144	15.6	4.0	575	5.2	750	3.8	545	5.0	720
	23	70	141	14.7	4.2	595	5.5	775	4.0	565	5.3	745
	22	66	138	13.9	4.5	615	5.8	805	4.2	585	5.6	775
2500	25	76	145	16.0	3.9	565	5.1	735	3.7	535	4.9	710
	24	72	143	15.1	4.1	585	5.3	760	3.9	555	5.2	735
	23	68	140	14.3	4.3	605	5.7	790	4.1	575	5.4	760
	22	64	137	13.5	4.6	625	6.0	820	4.4	595	5.8	790
2400	25	71	142	14.9	4.2	590	5.4	770	4.0	560	5.2	740
	24	68	139	14.2	4.4	610	5.7	795	4.2	580	5.5	765
	23	64	136	13.4	4.6	630	6.0	825	4.4	600	5.8	795
	22	60	133	12.7	4.9	650	6.4	850	4.7	620	6.2	820
2300	25	67	139	14.1	4.4	610	5.8	800	4.2	580	5.6	770
	24	63	136	13.3	4.7	635	6.1	825	4.4	600	5.9	795
	23	60	133	12.6	4.9	655	6.4	855	4.7	620	6.2	820
	22	56	129	11.9	5.2	670	6.8	875	5.0	640	6.5	845
2200	25	62	135	13.0	4.8	645	6.2	840	4.5	610	6.0	810
	24	59	132	12.4	5.0	660	6.5	860	4.8	630	6.3	830
	23	55	128	11.7	5.3	675	6.9	885	5.0	645	6.6	850
	22	52	123	11.1	5.6	690	7.3	900	5.3	655	7.0	865
	21	49	118	10.5	5.9	700	7.7	915	5.6	665	7.4	880
	20	45	111	9.9	6.3	700	8.2	915	6.0	665	7.9	880
	19	42	103	9.2	6.7	695	8.8	905	6.4	660	8.5	870
	18	38	93	8.6	7.2	670	9.4	880	6.9	640	9.1	845

Floats

Amphibian

Skis

Performance



# CRUISE PERFORMANCE

SKIPLANE

## NORMAL LEAN MIXTURE

Standard Conditions — Zero Wind — Gross Weight- 3350 Pounds  
**5000 FEET**

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	25	81	152	17.0	3.7	555	4.8	725	3.5	530	4.6	700
	24	77	149	16.1	3.8	575	5.0	750	3.7	545	4.8	725
	23	73	146	15.2	4.1	595	5.3	780	3.9	565	5.1	750
	22	69	143	14.4	4.3	615	5.6	805	4.1	585	5.4	775
2500	25	79	150	16.5	3.8	565	4.9	750	3.6	540	4.7	715
	24	75	148	15.6	4.0	585	5.2	765	3.8	555	5.0	735
	23	71	145	14.8	4.2	605	5.5	790	4.0	575	5.3	765
	22	67	142	14.0	4.4	630	5.8	820	4.2	600	5.6	790
2400	25	73	147	15.3	4.0	595	5.3	775	3.9	565	5.1	745
	24	70	144	14.6	4.3	610	5.6	800	4.0	585	5.3	770
	23	66	141	13.8	4.5	635	5.9	825	4.3	605	5.6	795
	22	62	138	13.1	4.7	655	6.2	855	4.5	625	6.0	825
2300	25	69	144	14.4	4.3	615	5.6	805	4.1	585	5.4	775
	24	65	141	13.7	4.5	635	5.9	830	4.3	605	5.7	800
	23	62	138	13.0	4.8	655	6.2	855	4.5	625	6.0	825
	22	58	134	12.3	5.0	675	6.6	880	4.8	640	6.3	850
2200	25	64	140	13.4	4.6	645	6.1	845	4.4	615	5.8	815
	24	60	136	12.7	4.9	665	6.4	865	4.6	630	6.1	835
	23	57	133	12.1	5.1	680	6.7	885	4.9	645	6.4	855
	22	54	128	11.5	5.4	690	7.1	905	5.1	660	6.8	870
	21	51	123	10.9	5.7	700	7.5	915	5.4	670	7.2	885
	20	47	116	10.2	6.1	705	7.9	920	5.8	670	7.6	885
	19	44	108	9.6	6.5	700	8.4	910	6.1	665	8.1	880
	18	40	98	9.0	6.9	680	9.0	890	6.6	650	8.7	855

**CRUISE PERFORMANCE**

SKIPLANE

**NORMAL LEAN MIXTURE**Standard Conditions  $\searrow$  Zero Wind  $\swarrow$  Gross Weight- 3350 Pounds**7500 FEET**

RPM	MP	% BHP	TAS MPH	GAL/HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	23	75	152	15.8	3.9	595	5.1	780	3.7	570	4.9	750
	22	71	149	14.9	4.2	620	5.4	810	4.0	590	5.2	780
	21	67	146	14.1	4.4	645	5.8	840	4.2	610	5.5	810
	20	63	142	13.2	4.7	665	6.1	870	4.5	635	5.9	835
2500	23	73	150	15.3	4.1	610	5.3	795	3.9	580	5.1	765
	22	69	147	14.5	4.3	630	5.6	825	4.1	600	5.4	795
	21	65	144	13.7	4.5	655	5.9	855	4.3	620	5.7	820
	20	61	139	12.8	4.8	675	6.3	880	4.6	640	6.1	850
2400	23	68	147	14.3	4.3	635	5.7	830	4.1	605	5.5	800
	22	64	143	13.5	4.6	655	6.0	860	4.4	625	5.8	825
	21	61	139	12.8	4.9	675	6.3	880	4.6	645	6.1	850
	20	57	134	12.1	5.1	690	6.7	905	4.9	660	6.5	870
2300	23	64	143	13.4	4.6	660	6.0	860	4.4	625	5.8	830
	22	60	139	12.7	4.9	675	6.4	885	4.6	645	6.1	850
	21	57	134	12.0	5.2	690	6.7	905	4.9	660	6.5	870
	20	53	129	11.4	5.5	705	7.1	920	5.2	670	6.9	885
2200	23	59	137	12.5	5.0	685	6.5	890	4.7	650	6.3	860
	22	56	133	11.9	5.2	695	6.8	910	5.0	660	6.6	875
	21	53	128	11.2	5.5	705	7.2	920	5.2	670	6.9	885
	20	49	121	10.6	5.8	710	7.6	925	5.6	675	7.3	890
	19	46	113	10.0	6.2	705	8.1	920	5.9	670	7.8	885
	18	42	104	9.3	6.6	690	8.7	900	6.3	655	8.4	865

Floats

Amphibian

Skis

Performance



**CRUISE PERFORMANCE**

SKIPLANE

**NORMAL LEAN MIXTURE**

Standard Conditions  $\searrow$  Zero Wind  $\swarrow$  Gross Weight- 3350 Pounds  
**10,000 FEET**

RPM	MP	% BHP	TAS MPH	GAL/ HOUR	"ON-OFF" FUEL SYS.				"SELECTOR VALVE" FUEL SYS.			
					62 GALLONS (NO RESERVE)		81 GALLONS (NO RESERVE)		59 GALLONS (NO RESERVE)		78 GALLONS (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2550	21	70	152	14.6	4.3	645	5.6	840	4.0	615	5.4	810
	20	65	147	13.7	4.5	665	5.9	870	4.3	635	5.7	835
	19	61	142	12.9	4.8	685	6.3	895	4.6	655	6.1	865
	18	57	136	12.0	5.2	700	6.7	915	4.9	670	6.5	885
2500	21	67	149	14.1	4.4	655	5.7	855	4.2	625	5.5	825
	20	63	145	13.3	4.7	675	6.1	885	4.4	645	5.9	850
	19	59	140	12.5	5.0	695	6.5	905	4.7	660	6.3	875
	18	55	133	11.7	5.3	710	6.9	925	5.1	675	6.7	890
2400	21	63	145	13.2	4.7	680	6.1	885	4.5	645	5.9	850
	20	59	140	12.5	5.0	695	6.5	905	4.7	660	6.2	870
	19	55	134	11.7	5.3	705	6.9	925	5.0	670	6.6	890
	18	51	126	11.0	5.6	710	7.4	930	5.4	675	7.1	895
2300	21	59	139	12.4	5.0	695	6.5	905	4.7	660	6.3	875
	20	55	134	11.8	5.3	705	6.9	925	5.0	670	6.6	890
	19	52	127	11.1	5.6	710	7.3	930	5.3	675	7.1	895
	18	48	118	10.4	6.0	705	7.8	925	5.7	675	7.5	890
2200	21	55	133	11.6	5.3	710	7.0	925	5.1	675	6.7	890
	20	51	126	11.0	5.6	710	7.4	930	5.4	675	7.1	895
	19	48	118	10.4	6.0	705	7.8	925	5.7	675	7.5	890
	18	44	109	9.7	6.4	695	8.3	910	6.1	660	8.0	875
	17	41	97	9.0	6.9	665	9.0	870	6.5	635	8.6	840

**Carenado**  
**C18SF**  
**SKYWAGON**

	FLOATPLANE (Edo Model 249A-2870 Floats)	AMPHIBIAN (Edo Model 597-2790 Floats)	SKIPLANE (FluidDyne Model C-3200 and CT-3600 Skis)
GROSS WEIGHT . . . . .	3100 lbs	3265 lbs*	3350 lbs
SPEED, BEST POWER MIXTURE			
Top Speed at Sea Level . . . . .	163 mph	156 mph	157 mph
Cruise, 75% Power at 7500 ft . . . . .	156 mph	149 mph	150 mph
RANGE, NORMAL LEAN MIXTURE:			
Cruise, 75% Power at 7500 ft . . . . .	605 mi	575 mi	580 mi
62 Gallons, No Reserve	3.9 hrs	3.9 hrs	3.9 hrs
	155 mph	148 mph	149 mph
Cruise, 75% Power at 7500 ft . . . . .	790 mi	755 mi	760 mi
81 Gallons, No Reserve	5.1 hrs	5.1 hrs	5.1 hrs
	155 mph	148 mph	149 mph
Optimum Range at 10,000 ft . . . . .	755 mi	695 mi	705 mi
62 Gallons, No Reserve	6.9 hrs	6.9 hrs	5.6 hrs
	110 mph	101 mph	126 mph
Optimum Range at 10,000 ft . . . . .	990 mi	910 mi	930 mi
81 Gallons, No Reserve	9.0 hrs	9.0 hrs	7.4 hrs
	110 mph	101 mph	126 mph
RATE OF CLIMB AT SEA LEVEL . . . . .	1040 fpm	970 fpm	.....
SERVICE CEILING . . . . .	17,350 ft	15,300 ft	.....
TAKE-OFF:		On Land	On Water
Ground Run or Water Run . . . . .	970 ft	670 ft	885 ft*
Total Distance Over 50-ft Obstacle . . . . .	1550 ft	1275 ft	1430 ft*
LANDING:			
Ground Roll or Water Run . . . . .	640 ft	780 ft*	600 ft*
Total Distance Over 50-ft Obstacle . . . . .	1530 ft	1240 ft*	1480 ft*
EMPTY WEIGHT (Approximate) . . . . .	1865 lbs	2135 lbs	1725 lbs
BAGGAGE (Cabin Area) . . . . .	350 lbs	350 lbs	350 lbs
AFT BAGGAGE . . . . .	50 lbs	50 lbs	50 lbs
WING LOADING: Pounds/Sq Foot . . . . .	18.3	18.8	19.3
POWER LOADING: Pounds/HP . . . . .	10.6	10.9	11.2
FUEL CAPACITY: Total			
Standard Tanks . . . . .	65 gal.	65 gal.	65 gal.
Optional Long Range Tanks . . . . .	84 gal.	84 gal.	84 gal.
OIL CAPACITY: Total . . . . .	12 qts.	12 qts.	12 qts.
PROPELLER: Constant Speed (Dia) . . . . .	86 in.	86 in.	86 in.
ENGINE:			
Continental Fuel Injection Engine . . . . .	IO-520-D	IO-520-D	IO-520-D
300 rated BHP @ 2850 RPM (5-Minute Take-Off Rating)			
285 rated BHP @ 2700 RPM (Maximum Continuous Rating)			
WING SPAN . . . . .	36 ft., 2 in.	36 ft., 2 in.	36 ft., 2 in.
LENGTH . . . . .	27 ft.	27 ft., 6 in.	25 ft., 9 in.
HEIGHT . . . . .	12 ft., 2 in.	12 ft., 8 in.	7 ft., 9 in.

Floats

Amphibian

Skis

Performance