FAA APPROVED
AIRPLANE FLIGHT MANUAL SUPPLEMENT

For
CESSNA 182 Q
Serial No. 18266591 to 18267715

DOCUMENT NO: 182051
Applicable to
N: 96607 Serial No.: 18266782

N132K

The Supplement must be attached to the Pilots Operating Handbook and the FAA Approved Flight Manual when the airplane is modified in accordance with STC **SA00152WI**, which installs an IO-550-D 300 HP Continental Engine and a Hartzell 3 blade propeller. The information contained herein supplements or supersedes the basic Manual only in those areas outlined herein. For limitations, procedures and performance information not contained in this supplement, consult the basic Airplane Flight Manual.

1. GENERAL
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Federal Aviation Administration

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SECTION 1. GENERAL

DESCRIPTIVE DATA

ENGINE

Engine Manufacture: Teledyne Continental
Engine Model No.: IO-550-D
Engine Type: Normally aspirated, direct drive,
aircooled, horizontally opposed, fuel injected six-cylinder engine with 550 cu. in. displacement.
Horsepower rating and engine speed:
Maximum Power: 300 rated at 2700 RPM.
Maximum continuous Power: 300 rated BHP at 2700 RPM.

PROPELLER

Propeller Manufacture: Hartzell Propeller Inc.
Propeller Model No.: PHC-L3YF-1RF/F7691
Number of Blades: 3.
Propeller Diameter: Maximum 78 inches
Minimum 77 inches
Propeller Type: Constant speed and hydraulically actuated with a low pitch setting of 14.5° and a high pitch setting of 26.8°.

Or

Propeller Manufacturer: Hartzell Propeller Inc.
Propeller Model No.: PHC-G3YF-1RF/F8468A()-6R
Number of Blades: 3
Propeller Diameter: Maximum 80 inches
Minimum 78 inches
Propeller Type: Constant speed and hydraulically actuated with a low pitch setting of 13.2° ± 0.1° and a high pitch setting of 31.0° (At 30 Inch Station).

SECTION 2. LIMITATIONS

AIRSPEED LIMITATIONS

Vne Never Exceed Speed	172	KCAS	179	KIAS
Vno Max. Structural Cruising	139	KCAS	143	KIAS
Va Maneuvering Speed:				
2950 Lbs	109	KCAS	112	KIAS
2450 Lbs	99	KCAS	102	KIAS
1950 Lbs	89	KCAS	91	KIAS
Vfe Maximum Flap Extended				
To 10° Flaps	137	KCAS	140	KIAS
10° to 35° Flaps	92	KCAS	95	KIAS

AIR SPEED INDICATOR MARKINGS

White Arc	41 - 95	KIAS
Green Arc	48 - 143	KIAS
Yellow Arc	143 - 179	KIAS
Red Line	179	KIAS

SECTION 4. NORMAL PROCEDURES (Cont.)

DESCENT

(1) Power -- AS DESIRED.
(2) Mixture -- ENRICHEN as required.
(3) Cowl Flaps -- CLOSED.
(4) Wing Flaps -- AS DESIRED (0° - 10° below 140 KIAS, 10° - 35° below 95 KIAS).

BEFORE LANDING

(1) Seats, Belts, Shoulder Harnesses -- ADJUST and LOCK.
(2) Fuel Selector -- BOTH.
(3) Propeller -- HIGH RPM.
(4) Cowl Flaps -- CLOSED.
(5) Airspeed -- 70 - 80 KIAS (flaps UP).
(6) Wing Flaps -- 0° - 35° (below 95 KIAS).
(7) Airspeed -- 60 - 70 KIAS (flaps DOWN).
(8) Elevator and Rudder Trim -- ADJUST.

BALKED LANDING

(1) Power -- FULL THROTTLE and 2700 RPM.
(2) Wing Flaps -- RETRACT TO 20°.
(3) Airspeed -- 70 KIAS.
(4) Wing Flaps -- RETRACT slowly.
(5) Cowl Flaps -- OPEN.

NOTE

Expect pitch control forces up to 75 lbs. until flaps are retracted and airplane is trimmed.

NORMAL LANDING

(1) Touchdown -- MAIN WHEELS FIRST.
(2) Landing Roll -- LOWER NOSE WHEEL GENTLY.
(3) Braking -- MINIMUM REQUIRED.

AFTER LANDING

(1) Wing Flaps -- UP.
(2) Cowl Flaps -- OPEN.

SECTION 5. PERFORMANCE

AIRSPEED CALIBRATION
NORMAL STATIC SOURCE

Flaps UP

KIAS	50	60	70	80	90	100	110	120	130	140	150	160
KCAS	57	63	70	79	88	98	107	117	126	136	145	155

Flaps 20°

KIAS	40	50	60	70	80	90	95
KCAS	50	56	63	71	79	87	92

Flaps 35°

KIAS	40	50	60	70	80	90	95
KCAS	50	57	64	71	79	88	92

STALL SPEEDS

Conditions
Power Off.
Weight 2950 lbs.
Notes:
1. Maximum altitude loss during a stall recovery is approximately 150 ft.
2. KIAS values are approximate.

MOST REARWARD CENTER OF GRAVITY
Angle of Bank

Flap Setting	0°		30°		45°		60°.	
	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS
UP	48	56	55	60	66	67	81	79
20°	43	52	49	56	58	62	74	74
35°	39	50	46	54	55	60	70	71

MOST FORWARD CENTER OF GRAVITY
Angle of Bank

Flap Setting	0°		30°		45°		60°	
	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS
UP	48	56	55	60	66	67	81	79
20	43	52	49	56	58	62	74	74
35	41	51	48	55	56	61	71	72

SECTION 5. PERFORMANCE (Cont.)

Cruise power fuel flows to be used to determine fuel consumption and endurance.

Conditions
Standard day conditions
Recommended lean mixture

Note: Maximum fuel flow for 75% power at each altitude shown. Reduced power will result in reduced fuel flow.

ALTITUDE	RPM	MP	GPH
2000	2500	23	17.0
4000	2500	23	17.0
6000	2500	22	16.5
8000	2500	21	15.8
10000	2500	20	15.2
12000	2500	18	13.7

LANDING DISTANCE

With flap travel limited to 35 deg. maximum, expect 5% increase in landing distances. Increase approach speed by 1 KIAS.