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AIRPLANE FLIGHT MANUAL SUPPLEMENT

TO THE

AIRPLANE FLIGHT MANUAL

FOR

CESSNA 182Q s/n 18266591 through 18267715 except s/n 18267302

STC SA03608AT Maximum Gross Takeoff Weight Increase

Registration No. N132K

Serial No. 18266782

This supplement must be attached to the latest revision FAA Approved Airplane Flight Manual whenever this aircraft is operated at weights above 2950 lbs. in accordance with Trolltune Corporation STC SA03608AT. The information contained in this document supplements or supersedes the basic manual only in those areas listed. For limitations, procedures and performance information not contained in this supplement, consult the basic airplane flight manual.

SECTION 1 — GENERAL

MAXIMUM CERTIFICATED WEIGHTS:

Maximum Ramp Weight: ..... 3110 lbs.
Maximum Gross Takeoff Weight: ..... 3100 lbs.
Maximum Landing Weight: ..... 2950 lbs.

SPECIFIC LOADINGS:

Wing Loading: ..... 17.8 lbs./sq. ft.
Power Loading: ..... 13.5 lbs./hp.

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Manager, Flight Test Branch
Federal Aviation Administration
Atlanta Aircraft Certification Office

Date: 22 August 2008

SECTION 2 – LIMITATIONS

WEIGHT LIMITS:

Maximum Ramp Weight: ..... 3110 lbs.
Maximum Takeoff Weight: ..... 3100 lbs.
Maximum Landing Weight: ..... 2950 lbs.

A normal start, taxi and run-up time of ten minutes will consume approximately 10 lbs. of fuel. Normal landings must not be made at weights in excess of 2950 lbs. For a typical 3100 lbs. takeoff, climb, and cruise profile, this equates to a minimum flight duration of approximately one hour and forty-five minutes.

CENTER OF GRAVITY LIMITS:

Forward: 33.0 inches aft of datum at 2250 lbs. or less, with straight line variation to 40.9 inches aft of datum at 3100 lbs.

Aft: 48.5 inches aft of datum at all weights except 46.0 inches aft of datum at weights above 2950 lbs. to 3100 lbs.

SECTION 3 – EMERGENCY PROCEDURES

AIRSPEEDS FOR EMERGENCY OPERATION:

ENGINE FAILURE AFTER TAKEOFF, 3100 lbs:
Wing Flaps Up: ..... 75 KIAS
Wing Flaps Down: ..... 70 KIAS

MANEUVERING SPEED:
3100 lbs.: ..... 111 KIAS

MAXIMUM GLIDE:
3100 lbs.: ..... 76 KIAS

PRECAUTIONARY LANDING WITH ENGINE POWER:
3100 lbs ..... 70 KIAS

LANDING WITHOUT ENGINE POWER, 3100 LBS:
Wing Flaps Up: ..... 75 KIAS
Wing Flaps Down: ..... 70 KIAS

DITCHING WITHOUT ENGINE POWER, 3100 lbs:
Wing Flaps Up: ..... 75 KIAS
Wing Flaps 10 degrees: ..... 70 KIAS

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SECTION 4 – NORMAL PROCEDURES (continued)

NOISE ABATEMENT:

The certificated noise level for the Model 182Q at 3100 pounds maximum weight is 79.5 dB(A), determined according to Appendix G of 14 CFR Part 36 through Amendment 28. No determination has been made by the Federal Aviation Administration that the noise levels of this airplane are or should be acceptable or unacceptable for operation at, into, or out of, any airport.

SECTION 5 – PERFORMANCE

Refer to the following performance charts for operations at weights above 2950 lbs. to 3100 lbs.:

STALL SPEEDS

CONDITIONS:
Power Off

NOTES:
1. Maximum altitude loss during a stall recovery may be as much as 250 feet.
2. KIAS values are approximate

MOST REARWARD CENTER OF GRAVITY

WEIGHT (LBS)	FLAP DEFLECTION	ANGLE OF BANK							
		0°		30°		45°		60°	
		KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS
3100	UP	44	58	50	63	58	69	73	82
	20°	41	53	46	57	54	63	67	75
	40°	41	52	46	56	53	62	67	74

MOST FORWARD CENTER OF GRAVITY

WEIGHT (LBS)	FLAP DEFLECTION	ANGLE OF BANK							
		0°		30°		45°		60°	
		KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS
3100	UP	49	60	55	65	63	71	78	85
	20°	48	56	53	60	60	66	73	79
	40°	46	55	51	59	58	65	71	77

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SECTION 5 – PERFORMANCE (continued)

TAKEOFF DISTANCE

MAXIMUM WEIGHT 3100 LBS

SHORT FIELD

CONDITIONS:
Flaps 20°
2400 RPM, Full Throttle and Mixture Set Prior to Brake Release
Cowl Flaps Open
Paved, Level, Dry Runway
Zero Wind

NOTES:
1. Short field technique as specified in Section 4 of the basic Airplane Flight Manual.
2. Prior to takeoff from fields above 5000 feet elevation, the mixture should be leaned to give maximum power in a full throttle, static runup.
3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
4. Where distance value has been deleted, climb performance after lift-off is less than 150 fpm at takeoff speed.
5. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

WEIGHT LBS	TAKEOFF SPEED KIAS		PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
	LIFTOFF	AT 50 FT		GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS
3100	50	59	S.L.	720	1365	775	1465	835	1570	895	1680	955	1800
			1000	785	1490	845	1600	910	1720	975	1845	1045	1980
			2000	860	1635	925	1760	995	1890	1065	2035	1140	2185
			3000	940	1800	1010	1940	1085	2090	1165	2255	1250	2430
			4000	1025	1990	1105	2150	1190	2320	1275	2510	1370	2715
			5000	1125	2210	1215	2395	1305	2595	1400	2815	1505	3060
			6000	1235	2470	1330	2685	1435	2925	1540	3190	1655	3490
			7000	1360	2780	1465	3040	1580	3330	1700	3665	---	---
			8000	1500	3170	1615	3485	1740	3855	—	—	—	—

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