



BY TEXTRON AVIATION

Pilot's Operating Handbook And FAA Approved Airplane Flight Manual **SKYLANE**

CESSNA MODEL 182T
NAV III AVIONICS OPTION - GFC 700 AFCS
Serials 18281869 and 18281876 and On

SUPPLEMENT 19 **HOT WEATHER OPERATIONS**

SERIAL NO. _____
REGISTRATION NO. _____

This supplement must be inserted into Section 9 of the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual for Hot Weather Operations.

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SUPPLEMENT 19

HOT WEATHER OPERATIONS

Use the Log of Effective Pages to determine the current status of this supplement.

Pages affected by the current revision are indicated by an asterisk (*) preceding the page number.

<u>Supplement Status</u>	<u>Date</u>
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LOG OF EFFECTIVE PAGES

Page Number	Page Status	Revision Number
S19-1 thru S19-9/S19-10	Original	0

SERVICE BULLETIN CONFIGURATION LIST

The following is a list of Service Bulletins that are applicable to the operation of the airplane, and have been incorporated into this supplement. This list contains only those Service Bulletins that are currently active.

<u>Number</u>	<u>Title</u>	<u>Airplane Serial</u> <u>Effectivity</u>	<u>Revision</u> <u>Incorporated</u>	<u>Incorporated</u> <u>in Airplane</u>
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HOT WEATHER OPERATIONS

GENERAL

This supplement must be placed in Section 9 of the basic Pilot's Operating Handbook and FAA Approved Airplane Flight Manual for hot weather operations. The information contained herein supplements the information of the basic Pilot's Operating Handbook and FAA Approved Airplane Flight Manual. Limitations, procedures, and performance found in this supplement supersedes those found in the basic Pilot's Operating Handbook and FAA Approved Airplane Flight Manual. For limitations, procedures, and performance information not contained in this supplement, consult the basic Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.

OPERATING LIMITATIONS

There is no change to the airplane operating limitations when used for hot weather operations.

EMERGENCY PROCEDURES

There is no change to the airplane emergency procedures when used for hot weather operations.

NORMAL PROCEDURES

There is no change to the airplane normal procedures when used for hot weather operations.

PERFORMANCE

SHORT FIELD TAKEOFF DISTANCE AT 3100 POUNDS

CONDITIONS:

Flaps 20°

2400 RPM, Full Throttle and mixture set prior to brake release.

Cowl Flaps OPEN

Paved, Level, Dry Runway

Zero Wind

Lift Off: 49 KIAS

Speed at 50 ft: 58 KIAS

Pressure Altitude Feet	10°C		20°C		30°C		40°C		50°C	
	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst
Sea Level	765	1460	825	1570	885	1680	945	1800	1010	1930
1000	835	1600	900	1720	965	1845	1030	1980	1105	2125
2000	915	1760	980	1890	1055	2035	1130	2190	1210	2355
3000	995	1940	1070	2090	1150	2255	1235	2435	1320	2630
4000	1090	2150	1175	2325	1260	2515	1355	2720	1450	2955
5000	1195	2395	1290	2595	1385	2820	1485	3070	1595	3355
6000	1315	2690	1415	2930	1520	3200	1635	3510	1755	3865
7000	1445	3045	1560	3345	1675	3685	---	---	---	---
8000	1595	3500	1720	3880	---	---	---	---	---	---

NOTE

- Short field technique as specified in Section 4.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow schedule in a full throttle, static run-up.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances 10% for each 2 knots.
- Where distance value have been deleted, climb performance after lift-off is less than 150 FPM at takeoff speed.
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

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PERFORMANCE

SHORT FIELD TAKEOFF DISTANCE AT 2700 POUNDS

CONDITIONS:

Flaps 20°

2400 RPM, Full Throttle and mixture set prior to brake release.

Cowl Flaps OPEN

Paved, Level, Dry Runway

Zero Wind

Lift Off: 45 KIAS

Speed at 50 ft: 54 KIAS

Pressure Altitude Feet	10°C		20°C		30°C		40°C		50°C	
	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst
Sea Level	560	1065	600	1135	645	1215	690	1295	735	1380
1000	610	1155	655	1235	700	1320	750	1410	800	1505
2000	665	1260	710	1350	765	1445	820	1545	875	1650
3000	725	1380	775	1480	835	1585	895	1695	955	1815
4000	790	1510	850	1625	910	1740	975	1870	1045	2005
5000	865	1665	930	1790	1000	1920	1070	2065	1145	2225
6000	950	1840	1020	1980	1095	2135	1175	2300	1255	2480
7000	1040	2040	1120	2205	1200	2380	1290	2575	1380	2790
8000	1145	2275	1230	2465	1320	2675	1420	2910	1520	3170

NOTE

- Short field technique as specified in Section 4.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow schedule in a full throttle, static run-up.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

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PERFORMANCE

SHORT FIELD TAKEOFF DISTANCE AT 2300 POUNDS

CONDITIONS:

Flaps 20°

2400 RPM, Full Throttle and mixture set prior to brake release.

Cowl Flaps OPEN

Paved, Level, Dry Runway

Zero Wind

Lift Off: 42 KIAS

Speed at 50 ft: 50 KIAS

Pressure Altitude Feet	10°C		20°C		30°C		40°C		50°C	
	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst
Sea Level	390	750	420	800	450	850	480	905	510	960
1000	425	815	455	870	490	925	520	985	555	1045
2000	460	885	495	940	530	1005	565	1070	605	1135
3000	505	960	540	1025	580	1090	620	1165	660	1240
4000	550	1045	590	1115	630	1190	675	1270	720	1355
5000	600	1140	640	1220	690	1305	735	1390	785	1485
6000	655	1250	700	1335	755	1430	805	1530	860	1635
7000	715	1370	770	1470	825	1570	885	1685	945	1805
8000	785	1510	845	1620	905	1735	970	1865	1035	2000

NOTE

- Short field technique as specified in Section 4.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow schedule in a full throttle, static run-up.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

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PERFORMANCE

SHORT FIELD LANDING DISTANCE AT 2950 POUNDS

CONDITIONS:

Flaps FULL
 Power IDLE
 Maximum Braking

Zero Wind
 Paved, Level, Dry Runway
 Speed at 50 ft: 60 KIAS

Pressure Altitude Feet	10°C		20°C		30°C		40°C		50°C	
	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst	Gnd Roll Feet	Total Feet to Clear 50 Foot Obst
Sea Level	580	1335	600	1365	620	1400	640	1435	660	1465
1000	600	1365	620	1400	645	1440	665	1475	685	1500
2000	625	1405	645	1440	670	1480	690	1515	710	1540
3000	645	1445	670	1485	695	1525	715	1560	740	1585
4000	670	1485	695	1525	720	1565	740	1600	765	1625
5000	695	1525	720	1565	745	1610	770	1650	795	1670
6000	725	1575	750	1615	775	1660	800	1700	825	1715
7000	750	1615	780	1665	805	1710	830	1750	860	1765
8000	780	1655	810	1715	835	1760	865	1805	890	1815

NOTE

- Short field technique as specified in Section 4.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 45% of the "ground roll" figure.
- If landing with flaps up, increase the approach speed by 10 KIAS and allow for 40% longer distances.

