



BY TEXTRON AVIATION

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

## CESSNA MODEL T182T

NAV III AVIONICS OPTION - GFC 700 AFCS

Serials T18208665 and T18208669 and On

### SUPPLEMENT 16

### 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 16

### 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

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Page Number	Page Status	Revision Number
S16-1 thru S16-9/S16-10	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>Revision</u>	<u>Incorporated</u>
		<u>Effectivity</u>	<u>Incorporated</u>	<u>in Airplane</u>

## **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, 32 in. hg. and mixture set at 34 GPH prior to brake release.

Cowl Flaps OPEN

Paved, Level, Dry Runway

Zero Wind

Lift Off: 54 KIAS

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
S.L.	750	1340	800	1430	860	1525	915	1620	975	1725
1000	795	1410	850	1505	910	1605	975	1710	1040	1820
2000	845	1485	905	1585	965	1690	1035	1800	1105	1920
3000	895	1565	960	1670	1030	1780	1100	1900	1175	2025
4000	955	1650	1020	1760	1095	1880	1170	2010	1250	2140
5000	1015	1740	1090	1865	1165	1990	1245	2125	1330	2270
6000	1085	1845	1160	1975	1245	2110	1330	2255	1420	2405
7000	1155	1955	1240	2090	1325	2235	1420	2390	1515	2555
8000	1235	2070	1325	2215	1415	2370	1515	2535	1620	2710

### 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 15% of the "ground roll" figure.

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**PERFORMANCE**

**SHORT FIELD TAKEOFF DISTANCE  
 AT 2700 POUNDS**

CONDITIONS:

Flaps 20°

2400 RPM, 32 in. hg. and mixture set at 34 GPH prior to brake release.

Cowl Flaps OPEN

Paved, Level, Dry Runway

Zero Wind

Lift Off: 50 KIAS

Speed at 50 ft: 55 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
S.L.	545	985	585	1050	625	1115	665	1185	710	1255
1000	580	1035	620	1100	665	1170	710	1245	755	1320
2000	615	1090	660	1160	705	1230	755	1310	800	1390
3000	655	1145	700	1220	750	1300	800	1380	855	1465
4000	695	1205	745	1285	800	1370	850	1455	910	1550
5000	740	1275	795	1355	850	1445	910	1540	970	1635
6000	790	1345	845	1435	905	1530	970	1630	1035	1735
7000	845	1420	905	1520	965	1620	1035	1725	1100	1835
8000	900	1505	965	1605	1030	1715	1100	1825	1175	1945

**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 15% of the "ground roll" figure.

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# PERFORMANCE

## SHORT FIELD TAKEOFF DISTANCE AT 2300 POUNDS

CONDITIONS:

Flaps 20°

2400 RPM, 32 in. hg. and mixture set at 34 GPH prior to brake release.

Cowl Flaps OPEN

Paved, Level, Dry Runway

Zero Wind

Lift Off: 45 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
S.L.	380	700	410	745	435	790	465	835	495	885
1000	405	735	435	780	465	830	495	880	525	930
2000	430	775	460	820	490	870	525	925	560	980
3000	455	815	490	865	525	915	560	970	595	1030
4000	485	855	520	910	555	965	595	1025	635	1085
5000	520	900	555	960	595	1020	635	1080	675	1150
6000	550	950	590	1015	630	1075	675	1145	720	1215
7000	590	1005	630	1070	675	1140	720	1210	770	1280
8000	630	1065	675	1130	720	1205	770	1280	820	1355

**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 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
S.L.	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.

