

CACTUS AVIATION **TOLD** SHEET

CESSNA 172S

Aircraft N#: _____
Student: _____
Departure: _____

Date: _____
CFI: _____
Destination: _____

Airport: _____
Clearance: _____
Tower: _____

ATIS/AWOS: _____
Ground: _____
Approach: _____

ATIS:

Pressure Alt.: _____

Density Alt.: _____

*PA = (29.92-Current Alt.) x 1000 + F.E.

*DA = (Current Temp (C°) - 15) x 120ft. + PA

AIRCRAFT	BASIC EMPTY WT.	C.G.	MOMENT	MAX TO WT.	MAX LDG WT	USEFUL LOAD
N944TH	1707.0	42	71680	2550 LBS	2550 LBS	878
N295PL	1719.0	42.1	72370	2550 LBS	2550 LBS	878
N5296Z	1701.6	41.1	69951	2550 LBS	2550 LBS	878

W & B Data	WEIGHT	ARM	MOMENT
EMPTY WEIGHT			
PILT/FRONT PASSENGERS		37	
AFT PASSENGERS		73	
BAGGAGE AREA 1		95	
BAGGAGE AREA 2		123	
TOTAL ZERO FUEL WEIGHT			
FUEL IN POUNDS		48	
RAMP WEIGHT			
START, TAXI AND RUNUP		-48	
TAKEOFF WEIGHT			
TAKEOFF CG			
EST. FUEL BURN (8GL PH)		-48	
LANDING WEIGHT			
LANDING CG			

Is Takeoff CG within limits: Y or N ?

Is Landing CG within limits: Y or N ?

* Formulas: WT X ARM = MOM WT / MOM = CG

AIRPLANE PERFORMANCE DATA

Takeoff Distance - Short Field (Ground Run) _____
Takeoff Distance - Short Field (50' Obstacle) _____
Landing Distance - Short Field _____
Landing Distance - Short Field (50' Obstacle) _____

Fuel Plan Estimate:

8 gph x ETE = _____ gallons

Reserve (30 min x 8 mph) = 4 gallons

TOTAL REQUIRED FOR THIS FLIGHT: _____ gallons

TOTAL FUEL ONBOARD: _____ gallons

Taxi Clearance:

Departure Clearance:

Vx _____ Vy _____ Va _____ Vg _____

TAKEOFF BRIEFING

Rotation Speed is _____ knots

Computed take-off distance is _____ ft.

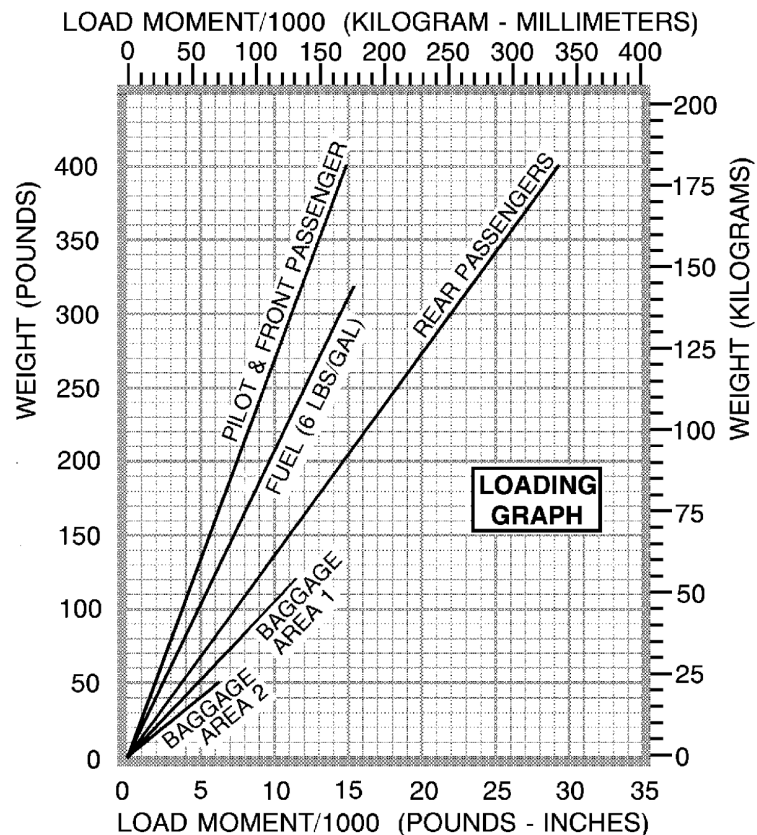
Available runway is _____ ft.

If engine fails before rotation, close the throttle, apply brakes as necessary.

If engine fails after rotation below 500' AGL, establish best glide speed, avoid obstacles, land strait ahead.

If engine fails between 500' and 1000' AGL, establish best glide speed, you may turn up to 45° right or left of flight path to land on most suitable field, avoid obstacles

***DO NOT** attempt to turn back to the field without at least 1500 ft. AGL



SHORT FIELD LANDING DISTANCE AT 2550 POUNDS

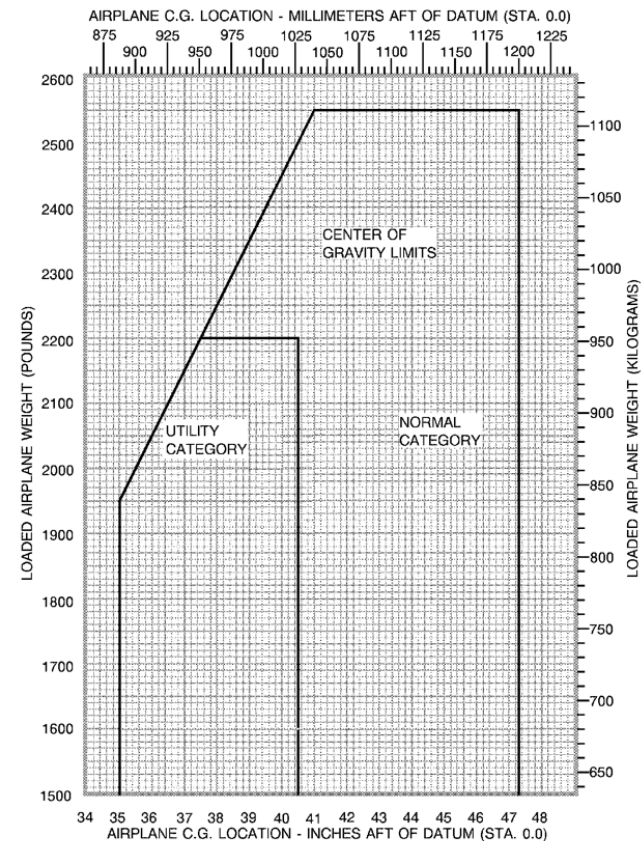
CONDITIONS:

Flaps 30°
Power Off
Maximum Braking
Paved, level, dry runway
Zero Wind
Speed at 50 Ft: 61 KIAS

NOTES:

1. Short field technique as specified in Section 4.
2. Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
3. For operation on dry, grass runway, increase distances by 45% of the "ground roll" figure.
4. If landing with flaps up, increase the approach speed by 9 KIAS and allow for 35% longer distances.

Press Alt In Feet	0°C		10°C		20°C		30°C		40°C	
	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst
S. L.	545	1290	565	1320	585	1350	605	1380	625	1415
1000	565	1320	585	1350	605	1385	625	1420	650	1450
2000	585	1355	610	1385	630	1420	650	1455	670	1490
3000	610	1385	630	1425	655	1460	675	1495	695	1530
4000	630	1425	655	1460	675	1495	700	1535	725	1570
5000	655	1460	680	1500	705	1535	725	1575	750	1615
6000	680	1500	705	1540	730	1580	755	1620	780	1660
7000	705	1545	730	1585	760	1625	785	1665	810	1705
8000	735	1585	760	1630	790	1670	815	1715	840	1755



SHORT FIELD TAKEOFF DISTANCE AT 2550 POUNDS

CONDITIONS:

Flaps 10°
Full Throttle Prior to Brake Release
Paved, level, dry runway
Zero Wind
Lift Off: 51 KIAS
Speed at 50 Ft: 56 KIAS

NOTES:

1. Short field technique as specified in Section 4.
2. Prior to takeoff from fields above 3000 feet elevation, the mixture should be leaned to give maximum RPM in a full throttle, static runup.
3. Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
4. For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

Press Alt In Feet	0°C		10°C		20°C		30°C		40°C	
	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst	Grnd Roll Ft	Total Ft To Clear 50 Ft Obst
S. L.	860	1465	925	1575	995	1690	1070	1810	1150	1945
1000	940	1600	1010	1720	1090	1850	1170	1990	1260	2135
2000	1025	1755	1110	1890	1195	2035	1285	2190	1380	2355
3000	1125	1925	1215	2080	1310	2240	1410	2420	1515	2605
4000	1235	2120	1335	2295	1440	2480	1550	2685	1660	2880
5000	1355	2345	1465	2545	1585	2755	1705	2975	1825	3205
6000	1495	2605	1615	2830	1745	3075	1875	3320	2010	3585
7000	1645	2910	1785	3170	1920	3440	2065	3730	2215	4045
8000	1820	3265	1970	3575	2120	3880	2280	4225	2450	4615