

# CACTUS AVIATION TOLD SHEET

## CESSNA 172R

Aircraft N#: \_\_\_\_\_  
 Student: \_\_\_\_\_  
 Departure: \_\_\_\_\_

Date: \_\_\_\_\_  
 CFI: \_\_\_\_\_  
 Destination: \_\_\_\_\_

Airport: \_\_\_\_\_  
 Clearance: \_\_\_\_\_  
 Tower: \_\_\_\_\_

ATIS/AWOS: \_\_\_\_\_  
 Ground: \_\_\_\_\_  
 Approach: \_\_\_\_\_

ATIS: \_\_\_\_\_  
 \_\_\_\_\_

Pressure Alt.: \_\_\_\_\_  
 PA = (29.92 - Current Alt.) x 1000 + F.E.

Density Alt.: \_\_\_\_\_  
 DA = (Current Temp (C°) - 15) x 120ft. + PA

**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

AIRCRAFT	BASIC EMPTY WT.	C.G.	MOMENT	MAX TO WT.	MAX LDG WT	USEFUL LOAD
N2448B	1660.6	39.1	64931	2450 LBS	2450 LBS	878
N2432K	1657.3	39.3	65099	2450 LBS	2450 LBS	878

**Taxi Clearance:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Departure Clearance:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Vx \_\_\_\_\_ Vy \_\_\_\_\_ Va \_\_\_\_\_ Vg \_\_\_\_\_

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 ?

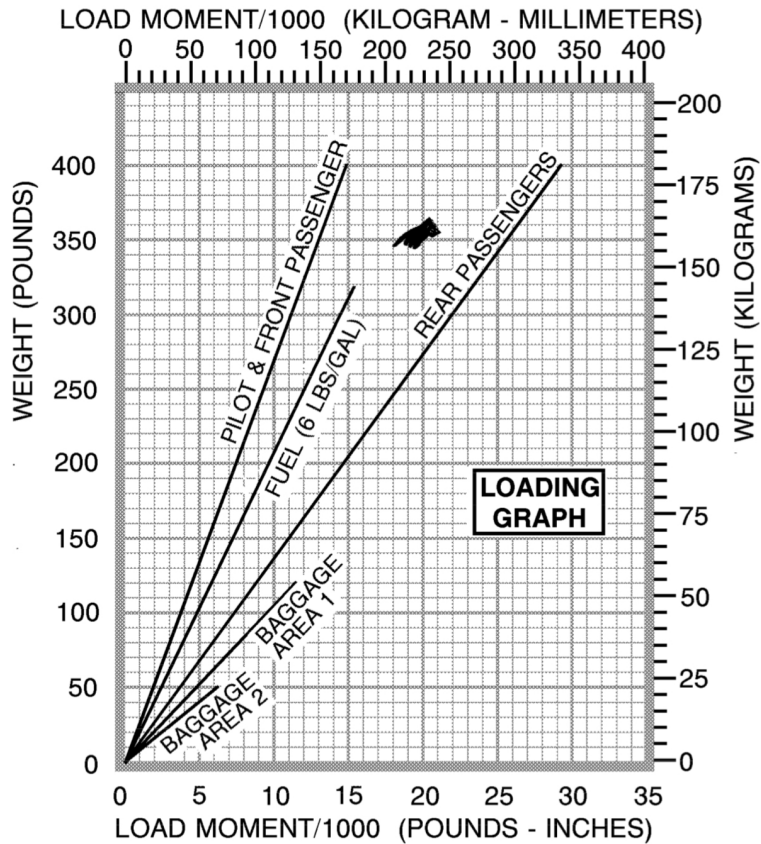
\*Formulas: WT X ARM = MOM WT / MOM = CG

**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) \_\_\_\_\_

**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 straight 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



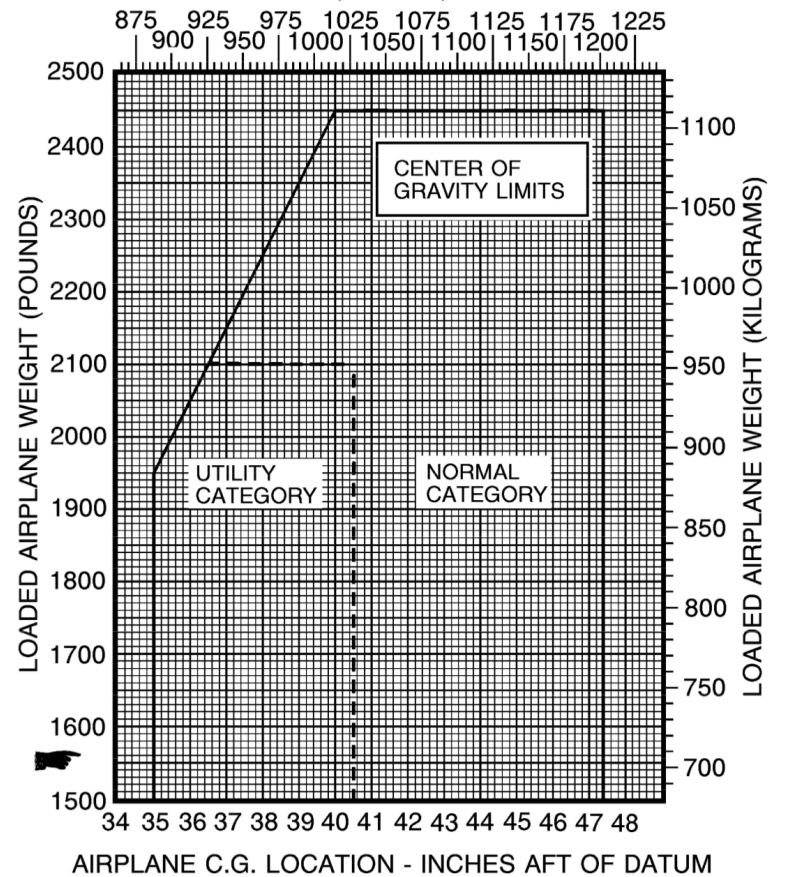
**SHORT FIELD LANDING DISTANCE AT 2450 POUNDS**

CONDITIONS:

Flaps 30°  
 Power Off  
 Maximum Braking  
 Paved, level, dry runway  
 Zero Wind  
 Speed at 50 Ft: 62 KIAS

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 7 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.	525	1250	540	1280	560	1310	580	1340	600	1370
1000	545	1280	560	1310	580	1345	600	1375	620	1405
2000	565	1310	585	1345	605	1375	625	1410	645	1440
3000	585	1345	605	1380	625	1415	650	1445	670	1480
4000	605	1380	630	1415	650	1450	670	1485	695	1520
5000	630	1415	650	1455	675	1490	700	1525	720	1560
6000	655	1455	675	1490	700	1530	725	1565	750	1605
7000	680	1495	705	1535	730	1570	755	1610	775	1650
8000	705	1535	730	1575	755	1615	780	1655	810	1695



**SHORT FIELD TAKEOFF DISTANCE AT 2450 POUNDS**

CONDITIONS:

Flaps 10°  
 Full Throttle Prior to Brake Release  
 Paved, level, dry runway  
 Zero Wind  
 Lift Off: 51 KIAS  
 Speed at 50 Ft: 57 KIAS

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.
5. Where distance value has been deleted, climb performance is minimal.

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.	845	1510	910	1625	980	1745	1055	1875	1135	2015
1000	925	1660	1000	1790	1075	1925	1160	2070	1245	2220
2000	1015	1830	1095	1970	1185	2125	1275	2290	1365	2455
3000	1115	2020	1205	2185	1305	2360	1400	2540	1505	2730
4000	1230	2245	1330	2430	1435	2630	1545	2830	1655	3045
5000	1355	2500	1470	2715	1585	2945	1705	3175	1830	3430
6000	1500	2805	1625	3060	1750	3315	1880	3590	2020	3895
7000	1660	3170	1795	3470	1935	3770	2085	4105	2240	4485
8000	1840	3620	1995	3975	2150	4345	2315	4775	---	---

NOTES: