

LOAD DATA SHEET

AIRWEIGH AVIATION SERVICES

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Aircraft Type: CESSNA 172S

Aircraft Registration: **VH – SPP.**

Sn. 172S8637.

Approved Loading System: Cessna 172S Pilots Operating Handbook

AUTHORISED	DATE	DATE OF EXPIRY	ISSUE
A.K. SEARLE AV 70	17-11-2007.	Indefinite Subj. CAO 100.7	ONE

APPROVAL STAMP

ALAN K. SEARLE
APPROVED

.....*A. Searle*..... DATE 17-11-07

WEIGHT CONTROL AUTHORITY No. AV70

AIRCRAFT WEIGHT AND CENTRE OF GRAVITY DATA

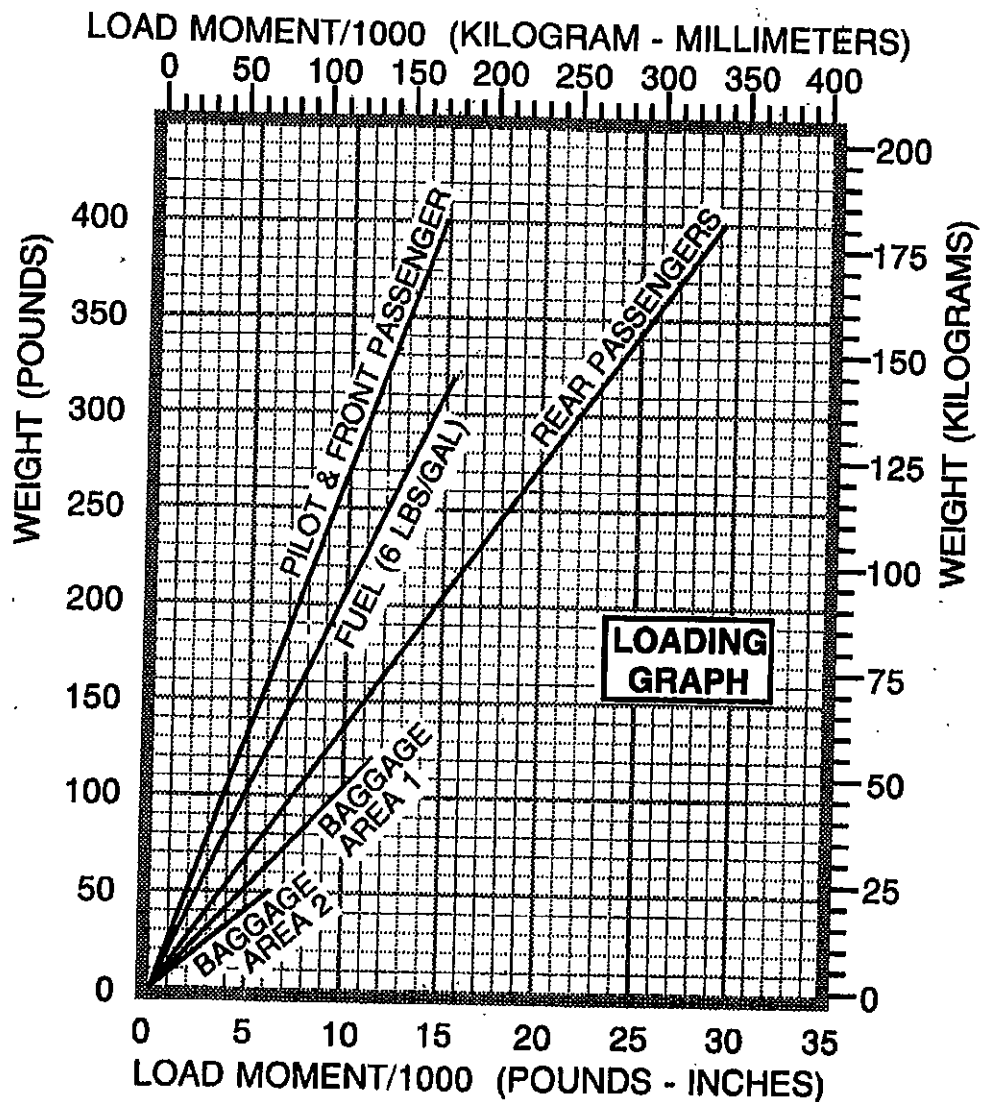
ITEM	WEIGHT kg.	ARM mm.	INDEX UNITS	CONFIGURATION
EMPTY	764.5 kg.	1018.0 mm	778,261 kgmm.	4 Seats.
EMPTY	1685.4 lb.	40.080 inches	67,551 lbin.	4 Seats.

DATUM : Lower Portion of Front Face of Firewall.

Note : Empty weight includes unusable fuel and full engine oil.
Weight Data is based on running totals in lieu of weighing.

SECTION 6
WEIGHT & BALANCE / EQUIPMENT LIST

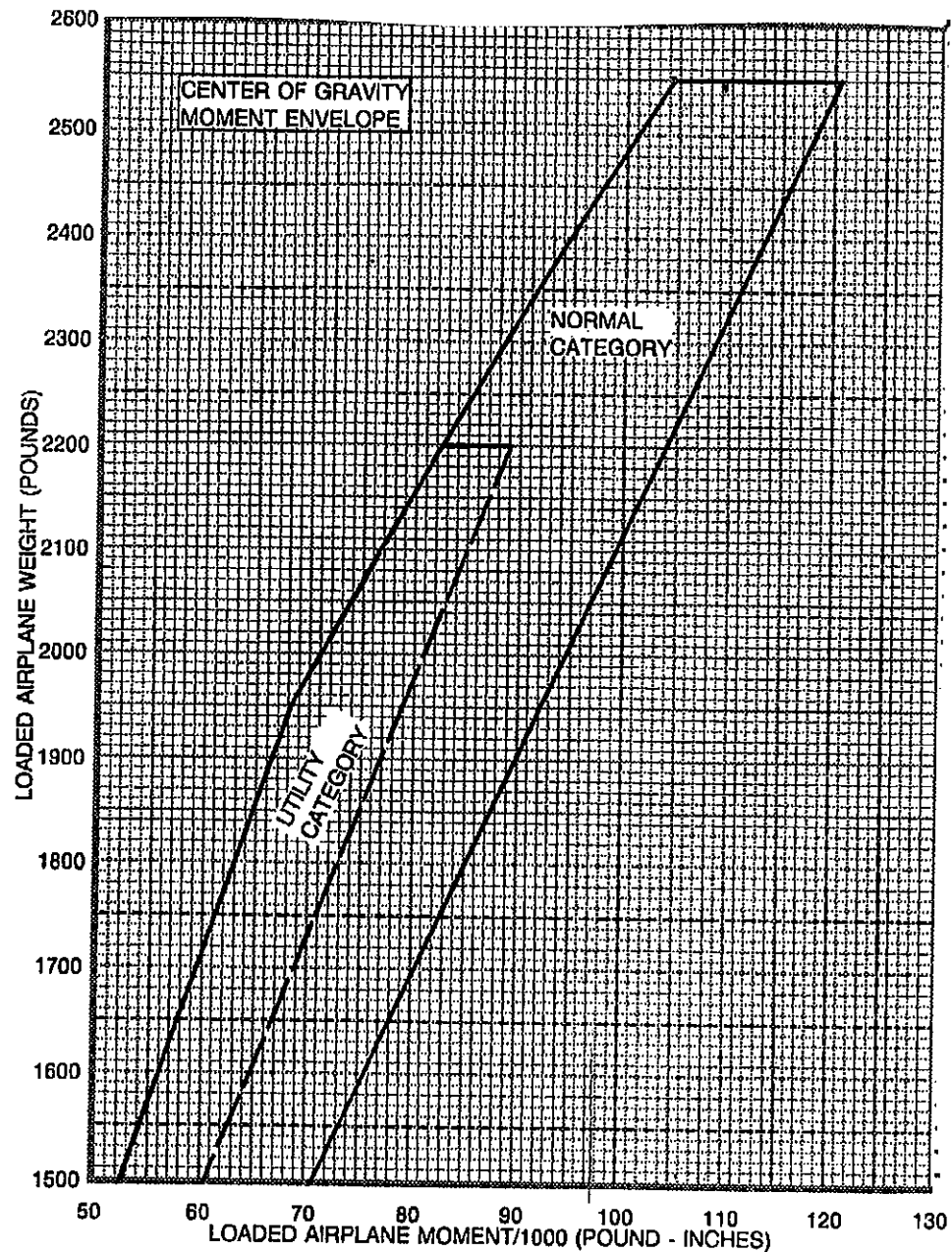
CESSNA
MODEL 172S



NOTE: LINE REPRESENTING ADJUSTABLE SEATS SHOWS THE PILOT OR PASSENGER CENTER OF GRAVITY ON ADJUSTABLE SEATS POSITIONED FOR AN AVERAGE OCCUPANT. REFER TO THE LOADING ARRANGEMENTS DIAGRAM FOR FORWARD AND AFT LIMITS OF OCCUPANT C.G. RANGE.

0585C1006

Figure 6-6. Loading Graph



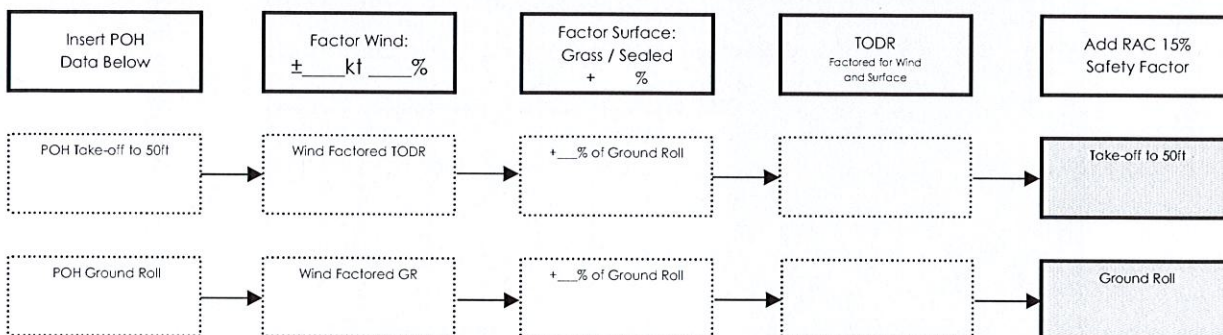
0585C1007

Figure 6-7. Center of Gravity Moment Envelope

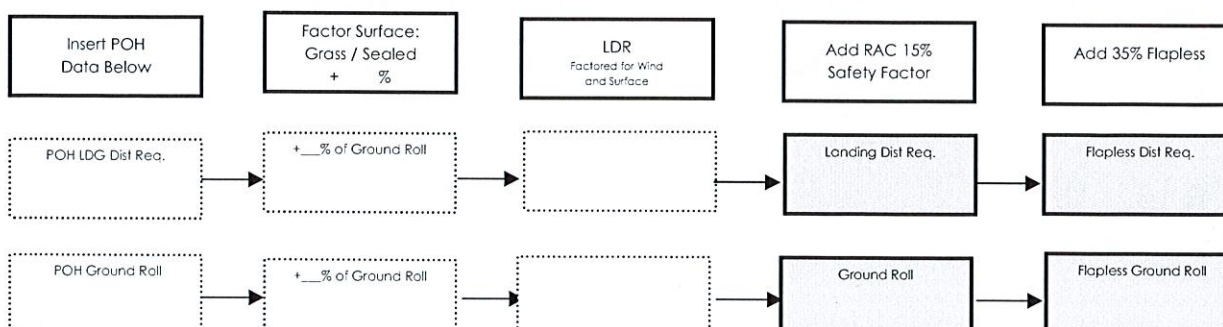
Aircraft Weight & Balance	
Aircraft Type: C172S	Aircraft Rego: VH-RAQ
Pilot:	Date of Flight:

Item	Weight		Arm		Moment / 1000	Aircraft Balanced
	kg	lbs	mm	inches		
Basic Empty Weight	753.8	1661.7	1037	40.8		
Row 1			939.8	37.0		
Row 2			1854.2	73.0		
Baggage A			2413.2	95.0		
Baggage B			3124.2	123.0		
Zero Fuel Weight						✓
Main Fuel Tanks			1219.2	48.0		
Take-off Weight						✓

Take-off Distance Required		Location:
Declared Density Height	DDH:	Temp:
Ambient (preceding 15 min)	PH:	Temp:



Landing Distance Required		Location:
Declared Density Height	DDH:	Temp:
Forecast	PH:	Temp:



SECTION 6 WEIGHT AND BALANCE/EQUIPMENT LIST

CESSNA
MODEL 172S NAV III

CENTER-OF-GRAVITY LIMITS

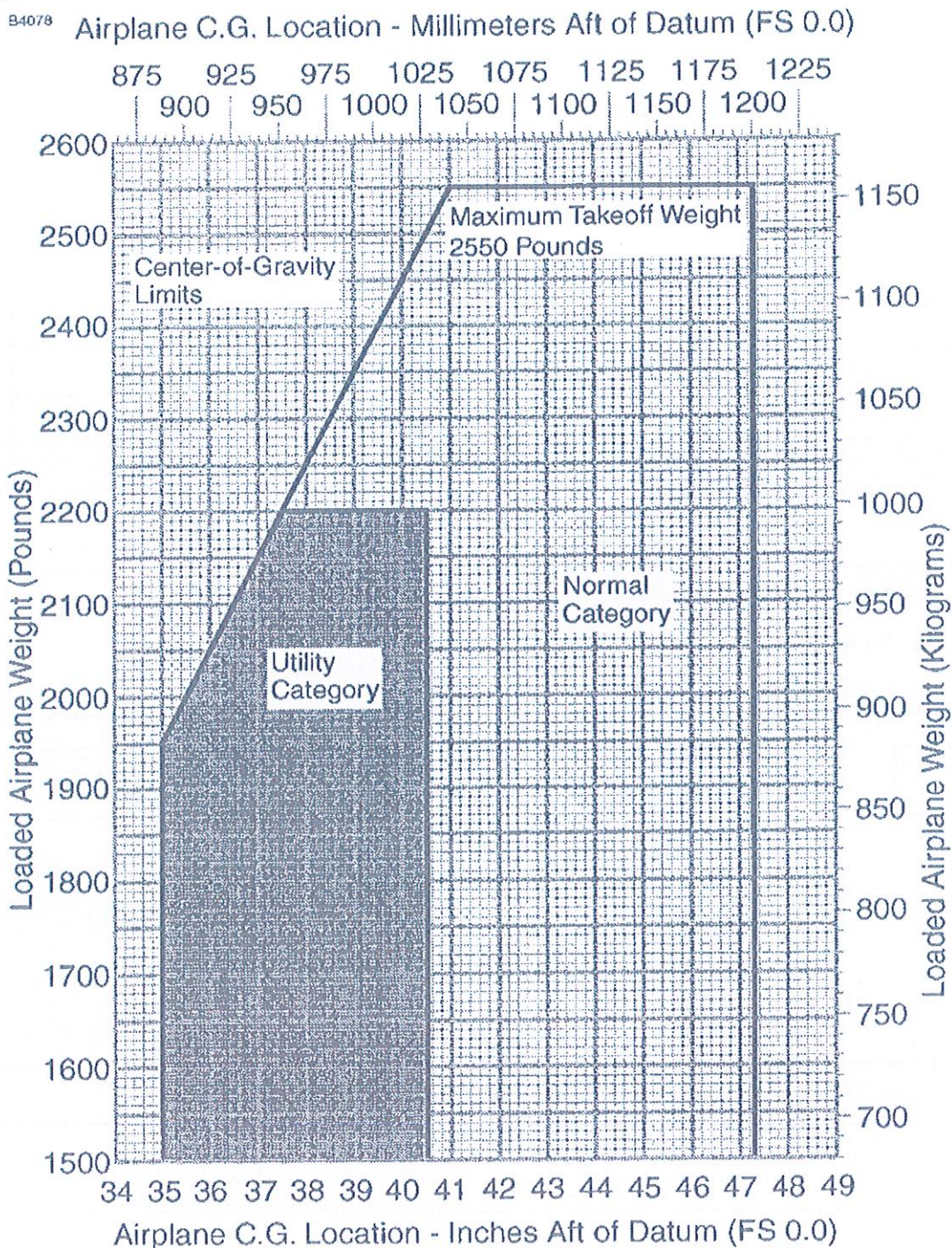


Figure 6-8

6-16 U.S.

172SPHAUS-01

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

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

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.

Figure 5-5. Short Field Takeoff Distance (Sheet 1 of 3)

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

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

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.

Figure 5-11. Short Field Landing Distance