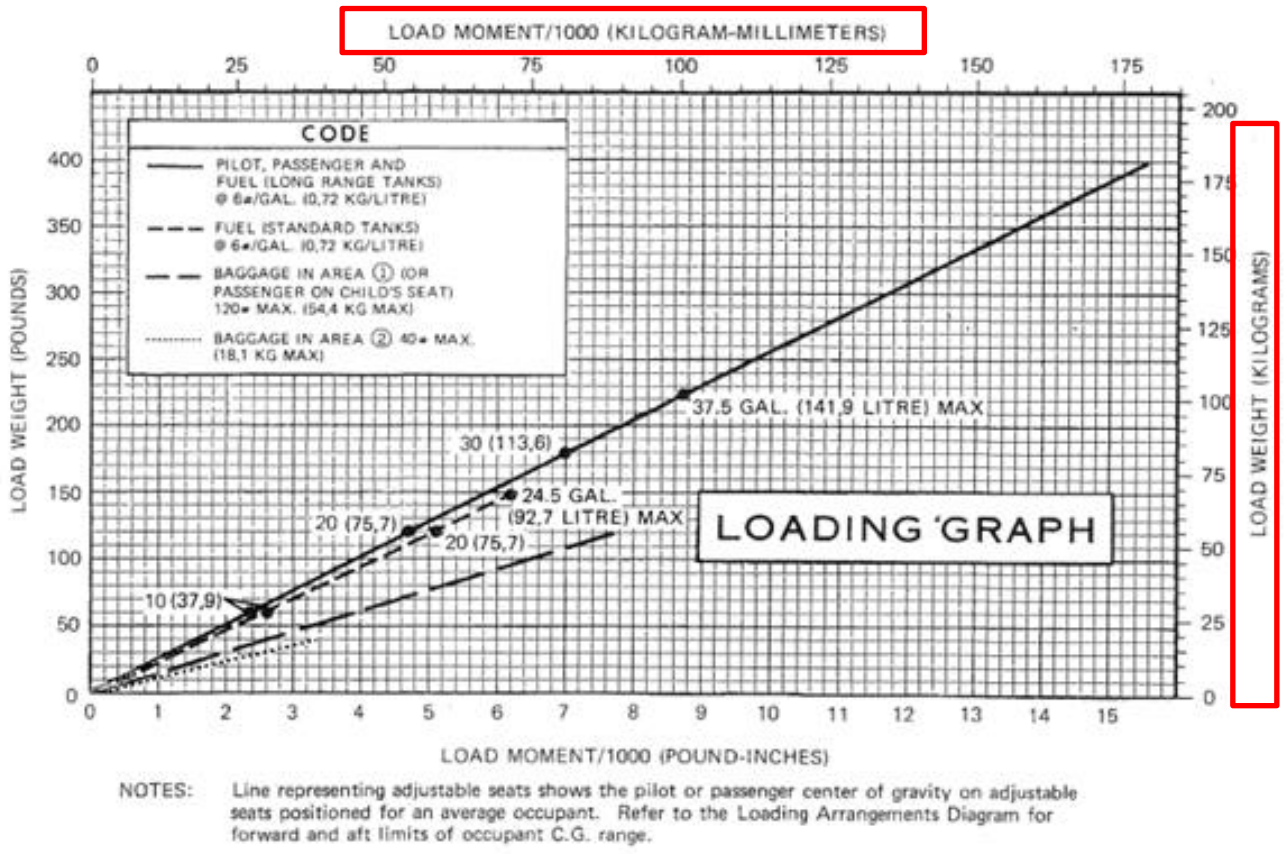


SAMPLE LOADING PROBLEM	SAMPLE AIRPLANE		YOUR AIRPLANE	
	Weight (lbs.)	Moment (lb.-ins. /1000)	Weight Kg	Moment Kg-mm
1. Basic Empty Weight (Use the data pertaining to your airplane as it is presently equipped. Includes unusable fuel and full oil)	1136	34.0	535 Kg	411 Kg-mm
2. Usable Fuel (At 6 Lbs./Gal.) Standard Tanks (24.5 Gal. Maximum)	147	6.2		
Long Range Tanks (37.5 Gal. Maximum)				
Reduced Fuel (As limited by maximum weight)				
3. Pilot and Passenger (Station 33 to 41)	340	13.3		
4. Baggage - Area 1 (Or passenger on child's seat) (Station 50 to 76, 120 Lbs. Max.)	47	3.0		
5. Baggage - Area 2 (Station 76 to 94, 40 Lbs. Max.)				
6. TOTAL WEIGHT AND MOMENT	1670	56.5		
7. Locate this point (1670 at 56.5) on the Center of Gravity Moment Envelope, and since this point falls within the envelope, the loading is acceptable.				



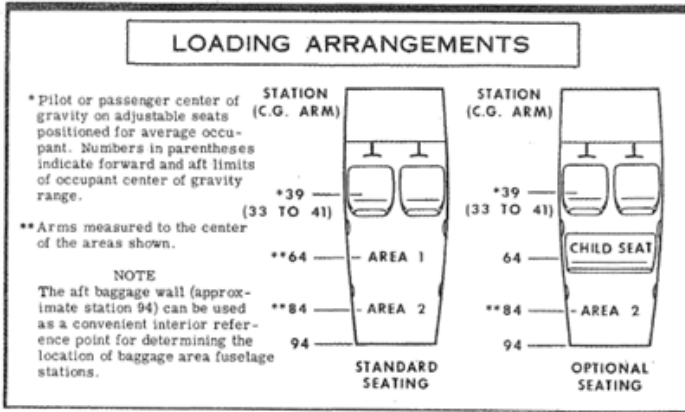
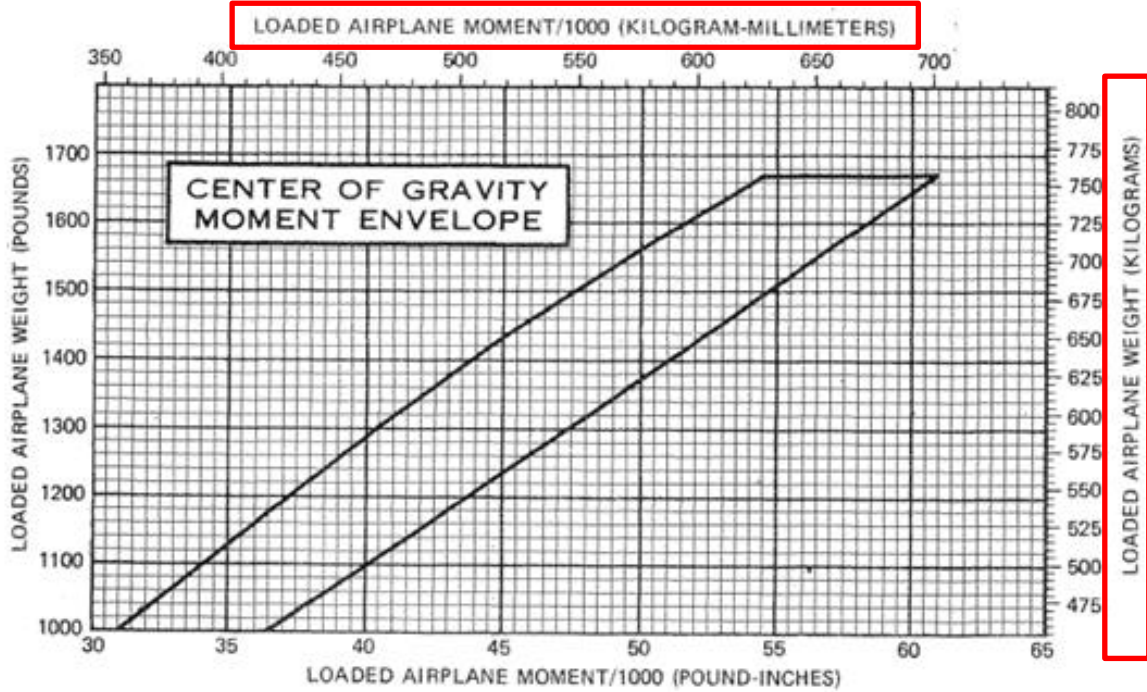
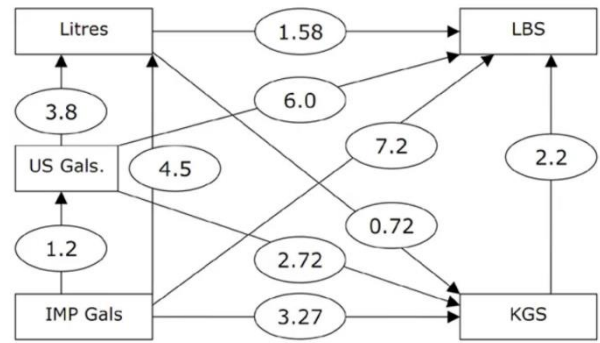


Figure 6-3. Loading Arrangements

Avgas Fuel Conversion Chart



TAKEOFF DISTANCE SHORT FIELD

LANDING DISTANCE SHORT FIELD

CONDITIONS:
Flaps 10°
Full Throttle Prior to Brake Release
Paved, Level, Dry Runway
Zero Wind

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

CONDITIONS:
Flaps 30°
Power Off
Maximum Braking
Paved, Level, Dry Runway
Zero Wind

- NOTES:**
- Short field technique as specified in Section 4.
 - Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distance by 10% for each 2 knots.
 - For operation on a dry, grass runway, increase distances by 45% of the "ground roll" figure.

WEIGHT LBS	TAKEOFF SPEED KIAS	PRESS ALT FT	0°C		10°C		20°C		30°C		40°C		
			GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	
1670	50	54	S.L.	640	1190	695	1290	755	1390	810	1495	875	1605
			1000	705	1310	765	1420	825	1530	890	1645	960	1770
			2000	775	1445	840	1565	910	1690	980	1820	1055	1960
			3000	855	1600	925	1730	1000	1870	1080	2020	1165	2185
			4000	940	1775	1020	1920	1100	2080	1190	2250	1285	2440
			5000	1040	1970	1125	2140	1215	2320	1315	2525	1420	2750
			6000	1145	2200	1245	2395	1345	2610	1455	2855	1570	3125
			7000	1270	2470	1375	2705	1490	2960	1615	3255	1745	3590
			8000	1405	2800	1525	3080	1655	3395	1795	3765	1940	4195

Figure 5-4. Takeoff Distance

WEIGHT LBS	SPEED AT 50 FT KIAS	PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
			GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	GROUND ROLL	TOTAL TO CLEAR 50 FT OBS	GROUND ROLL	TOTAL TO CLEAR 50 FT OBS
1670	54	S.L.	450	1160	465	1185	485	1215	500	1240	515	1265
		1000	465	1185	485	1215	500	1240	520	1270	535	1295
		2000	485	1215	500	1240	520	1270	535	1300	555	1330
		3000	500	1240	520	1275	540	1305	560	1335	575	1360
		4000	520	1275	540	1305	560	1335	580	1370	600	1400
		5000	540	1305	560	1335	580	1370	600	1400	620	1435
		6000	560	1340	580	1370	605	1410	625	1440	645	1475
		7000	585	1375	605	1410	625	1440	650	1480	670	1515
		8000	605	1410	630	1450	650	1480	675	1520	695	1555

Figure 5-4. Landing Distance