WEIGHT AND BALANCE LOADING FORM

BARON _____ DATE _____

SERIAL NO. TE-XXXX REG NO. NXXX

ITEM	WEIGHT	MOM/100
1. BASIC EMPTY CONDITION	3362	2629
2. FRONT SEAT OCCUPANTS	340	289
3. 3rd and 4th SEAT OCCUPANTS	340	412
4. 5th and 6th SEAT OCCUPANTS	300	462
5. NOSE BAGGAGE	166	42
6. REAR BAGGAGE		-
7. AFT BAGGAGE		-
8. CARGO	-	-
9. SUB TOTAL ZERO FUEL CONDITION	4508	3834
10. FUEL - MAIN (74 GAL) FUEL - AUX (62 GAL)	444 372	333 346
11. SUB TOTAL RAMP CONDITION	5324	4513
12. *LESS FUEL FOR START, TAXI, AND TAKE-OFF	-24	-18
13. SUB TOTAL TAKE-OFF CONDITION	5300	4495
14. LESS FUEL - MAIN (20 GAL)	-120	-90
15. SUB TOTAL	5180	4405
14. LESS FUEL - AUX (62 GAL)	-372	-346
17. SUB TOTAL	4808	4059
18. LESS FUEL - MAIN (30 GAL)	-180	-135
19. LANDING CONDITION	4628	3924

*Fuel for start, taxi and take-off is normally 24 lbs at an average mom/100 of 18.

TIME, FUEL, AND DISTANCE TO CLIMB

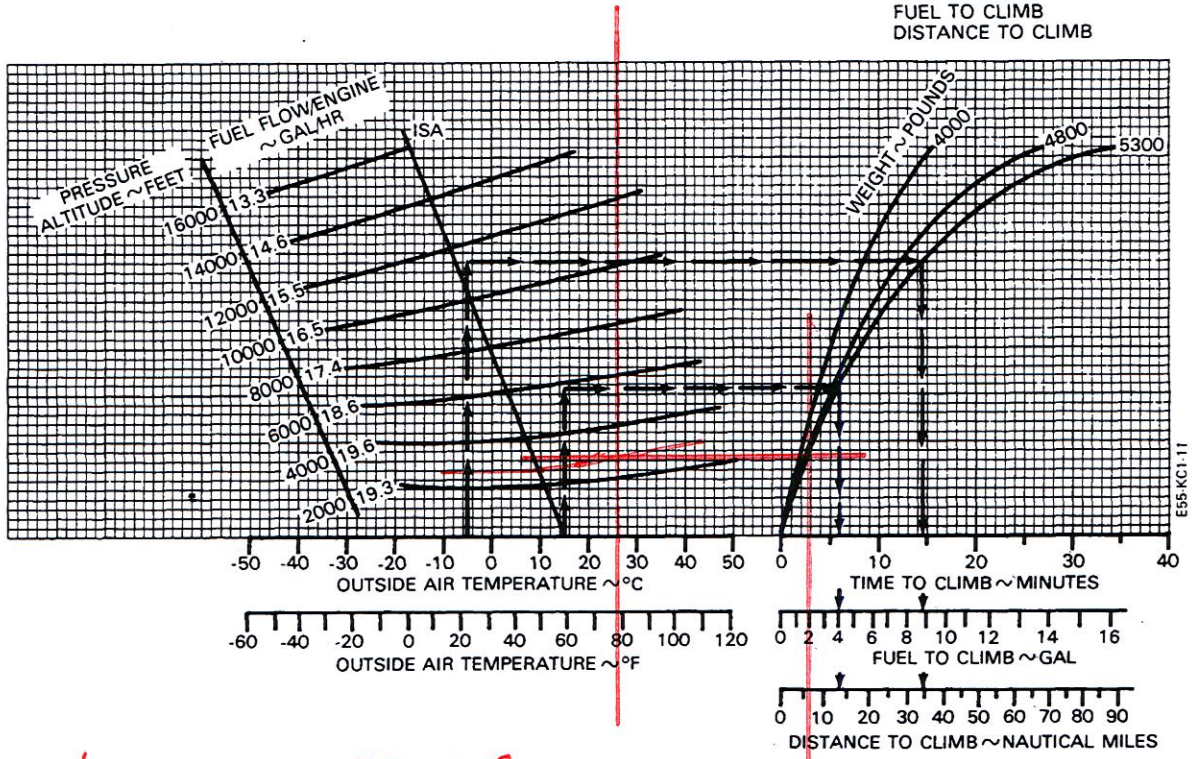
ASSOCIATED CONDITIONS:

POWER	25 IN. HG. OR FULL THROTTLE 2500 RPM
FUEL DENSITY	6.0 LB/GAL
MIXTURE	LEAN TO APPROPRIATE FUEL FLOW
COWL FLAPS	CLOSED

CLIMB SPEED - 130 KTS
(150 MPH)

EXAMPLE:

OAT AT TAKE-OFF	15°C
OAT AT CRUISE	-5°C (23°F)
AIRPORT PRESSURE ALTITUDE	5650 FEET
CRUISE PRESSURE ALTITUDE	11500 FEET
INITIAL CLIMB WEIGHT	5300 LBS
TIME TO CLIMB	(14.5 - 6) = 8.5 MIN
FUEL TO CLIMB	(8.8 - 4) = 4.8 GAL
DISTANCE TO CLIMB	(34 - 13) = 21 NM



Outside air temp: S/L 30°C
2,500 21°C
ave 25°C

Taxi/Takeoff 4gal
Climb to 2,500' – 2gal
Dist to 2,500' - 6nm
Time to climb - 3min

CRUISE POWER SETTINGS
MAXIMUM CRUISE POWER
24.5 IN. HG. @ 2500 RPM (OR FULL THROTTLE) 5000 LBS.

	PRESS ALT.	OAT		ENGINE SPEED	MAN. PRESS	FUEL FLOW/ ENGINE		TAS	
	FEET	°F	°C	RPM	IN HG	PPH	GPH	KTS	MPH
ISA +36°F (+20°C)	SL	100	38	2500	24.5	90	14.8	189	218
	2000	95	35	2500	24.5	91	15.2	195	224
	4000	88	31	2500	24.5	93	15.5	200	230
	6000	81	27	2500	23.4	90	15.0	201	231
	8000	73	23	2500	22.0	84	14.0	199	229
	10000	66	19	2500	20.0	79	13.1	196	226
	12000	59	15	2500	18.3	73	12.2	193	222
	14000	52	11	2500	16.8	69	11.4	189	218
	16000	43	6	2500	16.5	64	10.6	185	213
STANDARD DAY (ISA)	SL	64	18	2500	24.5	93	15.4	188	216
	2000	57	14	2500	24.5	95	15.8	193	222
	4000	52	11	2500	24.5	96	16.1	199	229
	6000	45	7	2500	23.4	93	15.6	200	230
	8000	37	3	2500	22.0	87	14.5	197	227
	10000	30	–1	2500	20.0	82	13.6	195	224
	12000	23	–5	2500	18.3	76	12.7	192	221
	14000	16	–9	2500	16.8	71	11.8	189	218
	16000	7	–14	2500	15.5	68	11.0	185	213
ISA –36°F (–20°C)	SL	28	–2	2500	24.5	96	16.0	186	214
	2000	21	–6	2500	24.5	98	15.9	192	221
	4000	16	–9	2500	24.5	100	16.7	197	227
	6000	9	–13	2500	23.4	97	16.2	198	228
	8000	1	–17	2500	22.0	90	15.0	196	226
	10000	–6	–21	2500	20.0	84	14.0	194	223
	12000	–13	–25	2500	18.3	78	13.1	191	220
	14000	–20	–29	2500	16.8	73	12.2	188	216
	16000	–29	–34	2500	15.5	68	11.3	184	212

ISA +10°C @ 2,500 ft
15½ GPH

NOTES:
1. FULL THROTTLE MANIFOLD PRESSURE SETTINGS ARE APPROXIMATE
2. SHADED AREA REPRESENTS OPERATION WITH FULL THROTTLE

CRUISE POWER SETTINGS
RECOMMENDED CRUISE POWER
24.0 IN. HG. @ 2300 RPM (OR FULL THROTTLE) 5000 LBS.

	PRESS ALT.	OAT		ENGINE SPEED	MAN. PRESS	FUEL FLOW/ ENGINE		TAS	
	FEET	°F	°C	RPM	IN HG	PPH	GPH	KTS	MPH
ISA +36°F (+20°C)	SL	100	38	2300	24.0	78	13.0	179	206
	2000	93	34	2300	24.0	80	13.3	184	212
	4000	86	30	2300	24.0	81	13.6	189	218
	6000	81	27	2300	23.5	82	13.6	193	222
	8000	73	23	2300	21.8	76	12.7	191	220
	10000	64	18	2300	20.1	71	11.9	187	215
	12000	57	14	2300	18.5	67	11.2	185	213
	14000	50	10	2300	17.1	57	9.5	170	196
	16000	43	6	2300	15.6	54	9.1	167	192
STANDARD DAY (ISA)	SL	64	18	2300	24.0	81	13.5	178	205
	2000	57	14	2300	24.0	82	13.7	183	211
	4000	50	10	2300	24.0	84	14.1	188	216
	6000	45	7	2300	23.5	85	14.1	192	221
	8000	36	2	2300	21.8	79	13.2	190	219
	10000	28	–2	2300	20.1	74	12.3	187	215
	12000	21	–6	2300	18.5	69	11.6	184	212
	14000	14	–10	2300	17.1	59	9.9	171	197
	16000	7	–14	2300	15.6	56	9.4	169	195
ISA –36°F (–20°C)	SL	27	–3	2300	24.0	83	13.9	176	203
	2000	21	–6	2300	24.0	85	14.2	181	208
	4000	14	–10	2300	24.0	87	14.5	187	215
	6000	7	–14	2300	23.5	88	14.6	190	219
	8000	0	–18	2300	21.8	82	13.6	188	216
	10000	–8	–22	2300	20.1	76	12.7	185	213
	12000	–15	–26	2300	18.5	72	11.9	183	211
	14000	–22	–30	2300	17.1	62	10.3	171	197
	16000	–29	–34	2300	15.6	59	9.8	169	195

NOTES:
1. FULL THROTTLE MANIFOLD PRESSURE SETTINGS ARE APPROXIMATE
2. SHADED AREA REPRESENTS OPERATION WITH FULL THROTTLE

ISA +10°C

13 1/2 GPH

10 1/2 + 10

22 1/2 gal for takeoff, climb 2,500, T/G 177yr+le, climb 1,500, Total Tx 50min

CRUISE POWER SETTINGS
RECOMMENDED CRUISE POWER
21.0 IN. HG. @ 2300 RPM (OR FULL THROTTLE) 5000 LBS.

	PRESS ALT.	OAT		ENGINE SPEED	MAN. PRESS	FUEL FLOW/ ENGINE		TAS	
	FEET	°F	°C	RPM	IN HG	PPH	GPH	KTS	MPH
ISA +36°F (+20°C)	SL	99	37	2300	21.0	66	10.9	164	189
	2000	93	34	2300	21.0	67	11.2	169	195
	4000	86	30	2300	21.0	70	11.6	175	201
	6000	79	26	2300	21.0	72	11.9	181	208
	8000	72	22	2300	21.0	73	12.2	187	215
	10000	64	16	2300	20.2	71	11.9	187	215
	12000	57	14	2300	18.6	67	11.2	185	213
	14000	50	10	2300	17.0	57	9.5	170	196
	16000	43	6	2300	15.7	54	9.1	167	192
STANDARD DAY (ISA)	SL	63	17	2300	21.0	68	11.3	164	189
	2000	57	14	2300	21.0	70	11.6	169	195
	4000	50	10	2300	21.0	72	12.0	175	201
	6000	43	6	2300	21.0	74	12.3	180	207
	8000	36	2	2300	21.0	76	12.7	186	214
	10000	28	–2	2300	20.2	74	12.3	187	215
	12000	21	–6	2300	18.6	69	11.3	184	212
	14000	14	–10	2300	17.0	59	9.9	171	197
	16000	7	–14	2300	15.7	56	9.4	169	195
ISA –36°F (–20°C)	SL	27	–3	2300	21.0	70	11.6	163	188
	2000	21	–6	2300	21.0	72	12.0	168	193
	4000	14	–10	2300	21.0	74	12.4	173	199
	6000	7	–14	2300	21.0	76	12.7	179	206
	8000	0	–18	2300	21.0	78	13.1	185	213
	10000	–3	–22	2300	20.2	76	12.7	185	213
	12000	–15	–26	2300	18.6	72	12.0	183	211
	14000	–22	–30	2300	17.0	62	10.3	171	197
	16000	–29	–34	2300	15.7	59	9.8	169	195

NOTES:
1. FULL THROTTLE MANIFOLD PRESSURE SETTINGS ARE APPROXIMATE
2. SHADED AREA REPRESENTS OPERATION FULL THROTTLE

CRUISE POWER SETTINGS
ECONOMY CRUISE POWER
20.5 IN. HG. @ 2100 RPM (OR FULL THROTTLE) 5000 LBS.

	PRESS ALT.	OAT		ENGINE SPEED	MAN. PRESS	FUEL FLOW/ ENGINE		TAS	
	FEET	°F	°C	RPM	IN HG	PPH	GPH	KTS	MPH
ISA +36°F (+20°C)	SL	99	37	2100	20.5	56	9.2	151	174
	2000	91	33	2100	20.5	57	9.5	156	180
	4000	84	29	2100	20.5	59	9.8	161	185
	6000	79	26	2100	20.5	62	10.3	167	192
	8000	72	22	2100	20.5	62	10.4	171	197
	10000	64	18	2100	20.2	62	10.4	174	200
	12000	57	14	2100	18.6	59	9.3	170	196
	14000	50	10	2100	17.0	54	9.0	165	190
	16000	43	6	2100	15.7	50	8.4	157	181
STANDARD DAY (ISA)	SL	63	17	2100	20.5	58	9.6	151	174
	2000	55	13	2100	20.5	59	9.9	156	180
	4000	48	9	2100	20.5	61	10.2	161	185
	6000	43	6	2100	20.5	64	10.6	167	192
	8000	36	2	2100	20.5	64	10.7	171	197
	10000	28	–2	2100	20.2	64	10.7	174	200
	12000	21	–6	2100	18.6	61	10.1	171	197
	14000	14	–10	2100	17.0	56	9.4	167	192
	16000	7	–14	2100	15.7	52	8.7	160	184
ISA –36°F (–20°C)	SL	27	–3	2100	20.5	60	10.0	151	174
	2000	19	–7	2100	20.5	62	10.3	156	180
	4000	12	–11	2100	20.5	63	10.6	160	184
	6000	7	–14	2100	20.5	66	10.9	166	191
	8000	0	–18	2100	20.5	66	11.1	170	196
	10000	–8	–22	2100	20.2	66	11.1	174	200
	12000	–15	–26	2100	18.6	63	10.5	171	197
	14000	–22	–30	2100	17.0	58	9.7	167	192
	16000	–29	–34	2100	15.7	54	9.0	162	186

ISA @ 10°C

9 7/8 GPH

NOTES:
1. FULL THROTTLE MANIFOLD PRESSURE SETTINGS ARE APPROXIMATE
2. SHADED AREA REPRESENTS OPERATION WITH FULL THROTTLE