

QUICK REFERENCE HANDBOOK

QRH



MULTI CREW COOPERATION – MCC

FNPT II MCC – BEECH 200

EMERGENCY PROCEDURES

ABNORMAL PROCEDURES

PERFORMANCE

OPERATIONAL APPENDIX

ON GROUND EMERGENCY

TASK SHARING FOR ABNORMAL/EMERGENCY PROCEDURES

PF:

- Power Lever
- Flight path
- Speed
- Configuration (to be ordered)
- Navigation

PM:

- Monitoring
- Read checklists aloud
- Perform actions on order by PF
- Use/handles guarded switches (with PF confirmation)

No actions below 400 ft AAL, unless a safe flight path is established and can be maintained as well as monitoring can be assured.

This QRH is part of the book "Flight training standards for FTOs" which can be ordered at

www.walserberg.info

This version is tailored for eaa

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ON GROUND EMERGENCY

BACK COVER

E 01 SMOKE

LAND ASAP

E 01.01 ELECTRICAL SMOKE OR FIRE

1. Oxygen masks ON
2. Crew Communication ESTABLISH
3. Mayday call PERFORM
4. Nonessential Electric Equipment OFF

If Fire or Smoke Ceases:

5. Individually restore essential equipment previously turned off
6. Defective equipment ISOLATE
7. Mayday status CANCEL

If Smoke Persists and in VMC:

5. Avionics USE MIN EQPT
6. Cabin Pressure Switch DUMP

If Smoke Persists and in IMC:

5. Diversion to emergency airport (latest now) START

LAND ASAP

E 01.02 ENVIRONMENTAL SYSTEM SMOKE OR FUMES

1. Oxygen masks ON
2. Crew Communication ESTABLISH
3. Left Bleed Air Valve ENVIR OFF

If Smoke decreases:

3. Continue operation with left bleed air off.

If Smoke does not decrease:

4. Left Bleed Air Valve OPEN
5. Right Bleed Air Valve ENVIR OFF
 - a. If Smoke decreases, continue operation with right bleed air off.
 - b. If smoke does not decrease, divert to emergency airport

NOTE

Each bleed air valve must remain closed long enough to allow time for smoke purging to positively identify the smoke source.

E 02 POWER PLANT

LAND ASAP

E 02.01 ENGINE FAILURE/FIRE

PF

PNF/PM

- | | |
|-------------------------------------|-----------------------|
| 1. Ignition 1/2 | OFF |
| 2. Condition Lever No 1 / 2 | FCO Confirm |
| 3. Propeller Lever No. 1 / 2 | FEATHER Confirm |
| 4. Fire Extinguisher No 1 / 2 | AS RQD Confirm |

E 02.02 ENGINE SHUT DOWN IN FLIGHT

- | | |
|------------------------------------|-----------------------|
| 1. Condition lever No 1 / 2 | FCO Confirm |
| 2. Prop lever No 1 / 2 | FEATHER Confirm |
| 3. Generator | Confirm OFF |
| 4. Prop Synchronizer | OFF |
| 5. Fuel tank (affected side) | CLOSE |
| 5. Ignition 1/2 | OFF |
| 6. Fuel pumps L/R | OFF |
| 7. Bleed air (affected side) | OFF |
| 8. Electric load | MONITOR |

Power levers parallel to running if desired due to gear warning noise

Carefully consider fuel management (crossfeed <> fuel leak)

E 02.03 INFLIGHT ENGINE START

- | | |
|---|--------------------|
| 1. Condition lever (Inop engine) | FCO Confirm |
| 2. Power lever (Inop engine) | IDLE Confirm |
| 3. Generator (Inop engine) | Confirm OFF |
| 4. Prop. Sync | OFF |
| 5. Fuel tank (affected side) | OPEN |
| 6. Stdbby fuel pump L/R | ON |
| 7. Airspeed (when starter defect) | MIN 140 IAS |
| 8. Altitude | BLW FL 200 |
| 9. Ignition eng start | ON |
| 10. Prop lever (Inop engine) | FULL FWD |
| 11. Condition lever (Inop engine) | LOW IDLE |

If successful

- | | |
|---|---------------|
| 12. Power (COND/PROP/POWER lever) | RESTORE |
| 13. Ignition eng start | OFF |
| 14. Generator | RST/ON |
| 15. Bleed air (affected side) | ON |
| 16. Electrical Load | MONITOR |

If unsuccessful continue with E 02.02 above

E 03 VOLCANIC ASH - ENCOUNTER

Immediately turn around by 180°

1. ATC NOTIFY
2. Power DECREASE
3. Crew Oxygen masks ON/ 100%
4. Cabin crew INFORM
5. Passenger Oxygen AS REQUIRED
6. Engine Parameters CHECK
7. Airspeed Indication CHECK (reliable? Pitch<> Power)

E 04 AIR

PRESSURIZATION SYSTEM (red arc)

1. Cabin Altitude Controller SELECT HIGHER

If condition persists:

2. Oxygen (crew and passengers) AS REQUIRED
3. Bleed Air Valves ENVIR OFF
4. Cabin Pressure Switch DUMP
5. Descend AS REQUIRED
6. Bleed Air Valves OPEN

E 05 EMERGENCY DESCENT

1. Oxygen mask ON
2. Crew Communication ESTABLISH
3. Power Levers IDLE
4. Propeller Controls FULL FORWARD
5. Navigation ACCORDING SITUATION
6. ATC INFORM/7700

Structural damage suspected

7. FLAPS 1 (200 IAS MAX)
8. Landing Gear EXTEND (181 IAS MAX)

No Structural damage suspected

7. SPEED VMO/MMO

E 06 ALL ENGINE OUT – GLIDE

1. Landing Gear UP
2. Flaps 0
3. Propellers FEATHERED
4. Airspeed 135 KNOTS
5. When fuel remaining TRY ENGINE RESTART (assisted)
6. Gear/Flaps for landing ACCORDING SITUATION

Note: The zero wind glide ration in this configuration is 2.0 nautical miles glide distance for each 1000 feet of altitude (10 kts HW/TW accounts for 10% loss or gain).

E 07 BOMB WARNING

1. Altitude LEVEL OFF
2. Cabin altitude MAINTAIN
3. Threat Level DETERMINE
4. Cabin Crew INFORM
5. ATC/OPS INFORM
6. Passengers INFORM/BRIEF/CALM DOWN
7. Cabin Sweep CONSIDER
 - a. Suspicious article Dislocation consider
 - i. Pressure difference LOW
 - ii. Article dislocation possible CHECK
 - iii. Least bomb risk location Relocate
8. Endurance (low level) DETERMINE
9. Closest suitable airport DETERMINE
10. Speed (avoid sharp manoeuvres) REDUCE TO 121 IAS
11. Descend to CABIN ALT/MORA/MOCA/FL080 INITIATE

Be prepared for everything (decompression/control problems/structural damage, ...)

A 01 ELECTRICAL

A 01.01 GENERATOR INOPERATIVE (DC GEN Annunciator ON)

1. Loadmeter Verify no load
 2. Generator Switch 1/2 OFF/RESET
- If unsuccessful:
3. Generator Switch OFF
 4. Operating Generator MAX LOAD 1.0 to FL 310

A 01.02 GENERATOR OVERHEAT

1. Generator Switch 1/2 OFF
When overheat condition ceased and generator urgently needed:
2. Generator Switch 1/2 ON (as long as it is safe)

A 01.03 EXCESSIVE LOADMETER INDICATION (OVER1.0)

1. Battery Switch OFF

If loadmeter still indicates above 1.0:

2. Nonessential Electrical Equipment OFF

If loadmeter indicates 1.0 or below:

2. Battery Switch ON

A 01.04 CIRCUIT BREAKER TRIPPED

1. Nonessential Circuit DO NOT RESET IN FLIGHT
2. Essential Circuit:
 - a. Circuit Breaker PUSH TO RESET ONCE
 - b. If Circuit Breaker Trips Again DO NOT RESET AGAIN

A. 01.05 BUS FEEDER CIRCUIT BREAKER TRIPPED

(fuel panel bus feeders and right circuit breaker panel bus feeders)

A shortage is indicated, do not reset in flight.

A 02 FLIGHT CTRL

A 02.01 UNSCHEDULED ELECTRIC ELEVATOR TRIM

1. Airplane Attitude **MAINTAIN**
Autopilot will disengage when the disconnect switch is depressed.
2. Control Wheel Disconnect Switch **PRESS ONCE**
3. Retrim Airplane **MANUAL**
4. Pitch trim circuit breaker **PULL**

DO NOT reactivate electric trim system until cause of malfunction has been determined.

A 03 FUEL

A 03.01 FUEL PRESSURE ANNUNCIATOR LIGHT ON

1. Standby pump (effected side) **ON**
If light remains on:
2. Fuel crossfeed (for effected side) **IMPOSSIBLE**
Maintenance action required after landing

A 03.02 CROSSFEEDING (not during approach)

1. Standby pump (feeded side) **ON**
2. Crossfed switch **FEEDING DIRECTION**
3. Feeding side tank **OPEN**
4. Feeded side tank **OFF**

For Approach:

5. Feeded side tank **ON/AS RQD**
6. Crossfed switch **OFF**
7. Standby pump (feeded side) **OFF**

A 03.03 FUEL LEAK PROCEDURE

1. Leakage **DETERMINE**
2. Engine 1/2 **SHUT DOWN**
3. Leaking tank **CLOSE/OFF**
4. Crossfeeding **CONSIDER CAREFULLY**
5. Endurance **DETERMINE**
6. Deviation to alternate **CONSIDER**

A 04 ICE & RAIN

ELECTROTHERMAL PROPELLER DEICE (AUTO SYSTEM)

1. Zero Amps:
 - a. Propeller Deice Switch - CHECK, AUTO
 - b. If OFF, reposition to AUTO after 30 seconds.
 - c. If in AUTO position with zero amps reading, system is inoperative: position the switch to OFF.
 - d. Use manual backup system. (No deice ammeter indication - monitor loadmeter)
2. Zero to 14 amps:
 - a. Continue operation.
 - b. If propeller imbalance occurs, increase rpm briefly to aid in ice removal.
3. Over 18 amps:
 - a. If circuit breaker does not trip, continue operation.
 - b. If propeller imbalance occurs, increase rpm briefly to aid in ice removal.
 - c. If circuit breaker trips, use manual system; monitor loadmeter for excessive current drain.
 - d. If manual mode circuit breaker trips, avoid icing conditions.

A 05 GEAR

A 05.01 LANDING GEAR MANUAL EXTENSION

1. Landing Gear Relay Circuit Breaker PULL
2. Landing Gear Switch Handle DOWN
3. Extension Lever Securing clip PULL OPEN
4. Extension Lever PUMP till 3 green
5. Extension Lever SECURE

A 06 APP&LDG

A 06.01 ONE ENGINE INOPERATIVE APPROACH

APPROACH

- | | | |
|----------------------------|--------------|--------|
| 1. ATIS | RECEIVED | PNF |
| 2. Altimeters | SET/COMPARED | PF/PNF |
| 3. Fuel Imbalance | CHECK | PF/PNF |
| 4. Fuel X-feed | CHECK/OFF | PNF |
| 5. Pressurization | CHECK | PNF |
| 6. Prop Sync | OFF | PNF |
| 7. OEI Go Around Procedure | REVIEW | PF |

OUTER MARKER

- | | | |
|------------------|--------------------|--------|
| 8. Time | CHECK | PF/PNF |
| 9. Altimeters | CHECK QNH/ALTITUDE | PF/PNF |
| 10. MAP altitude | SET | PNF |
| 11. FD/AP mode | CHECK | PF/PNF |
| 12. Minimum | ANNOUNCE | PF |

FINAL

- | | | |
|---------------------|----------------------------|-----|
| 13. Gear | DOWN/ 3 GREEN | PNF |
| 13. Landing Light | ON | PNF |
| 14. Flaps | 1 SET | PNF |
| 14. Rudder trim | 0 (final) | PNF |
| 15. Condition Lever | HIGH IDLE | PNF |
| 16. Propeller Lever | FULL FORWARD | PNF |
| 17. Airspeed | V _{REF} +10 KNOTS | PF |

A 06.02 ONE-ENGINE-INOPERATIVE GO-AROUND (by heart!)

- | | | |
|-------------------------|-----------------|--------|
| 1. Power | Max certified | PF/PNF |
| 2. Flaps | 1 STEP UP | PNF |
| 3. Attitude | 5 – 8° ANU | PF |
| 4. Gear (positive rate) | UP | PNF |
| 5. MAP altitude | ARM | PNF |
| 6. Speed | V _{GA} | PF |

SPEEDS

(not to be used in airplane, artificial speeds for MCC only!, V_1 range is runway dependant! Calculate approach speeds according SOP, add min. 5 kts to V_{REF})

Takeoff Speeds Flaps 0			
WEIGHT	V_1	V_R	V_2
12,500	94-97	103	121
12,000	93-96	102	119
11,500	92-95	101	117
11,000	91-94	100	115
10,500	90-93	99	113
10,000	89-92	98	111
9,500	88-91	97	110
9,000	87-90	96	108

Takeoff Speeds Flaps 1			
WEIGHT	V_1	V_R	V_2
12,500	91-94	98	106
12,000	90-93	97	105
11,500	89-92	96	104
11,000	88-91	95	103
10,500	87-90	94	102
10,000	86-89	93	101
9,500	86-88	92	100
9,000	86-87	91	99

Cruise climb speeds:

V_0 to 10.000 ft

$V_{10.000}$ to 20.000 ft

$V_{20.000}$ to 25.000 ft

$V_{25.000}$ to 30.000 ft

150 kts IAS

140 kts IAS

130 kts IAS

120 kts IAS

App & G/A	Flaps 1	Flaps Full	Flaps 1	FLAPS 0
WEIGHT	V_{REF}	V_{REF}	V_{GA}	V_{GA}
12.500	106	103	109	121
12.000	105	102	108	119
11.500	104	101	107	117
11.000	103	99	106	115
10.500	102	98	105	113
10.000	101	96	104	111
9.500	100	95	103	110
9.000	99	93	102	108

V_{LE}

V_{LO} retract

V_{LO} extend

V_{FE} Flaps 1 (40 %)

V_{FE} Flaps Full (100%)

V_{MO} / M_{MO}

V_a

V_{MCA}

181 kts IAS

163 kts IAS

181 kts IAS

200 kts IAS

157 kts IAS

259 kts IAS / .52 Mach

181 kts IAS

86 kts IAS

TOD FLAPS 1

TAKE-OFF DISTANCE — FLAPS 40%

ASSOCIATED CONDITIONS:

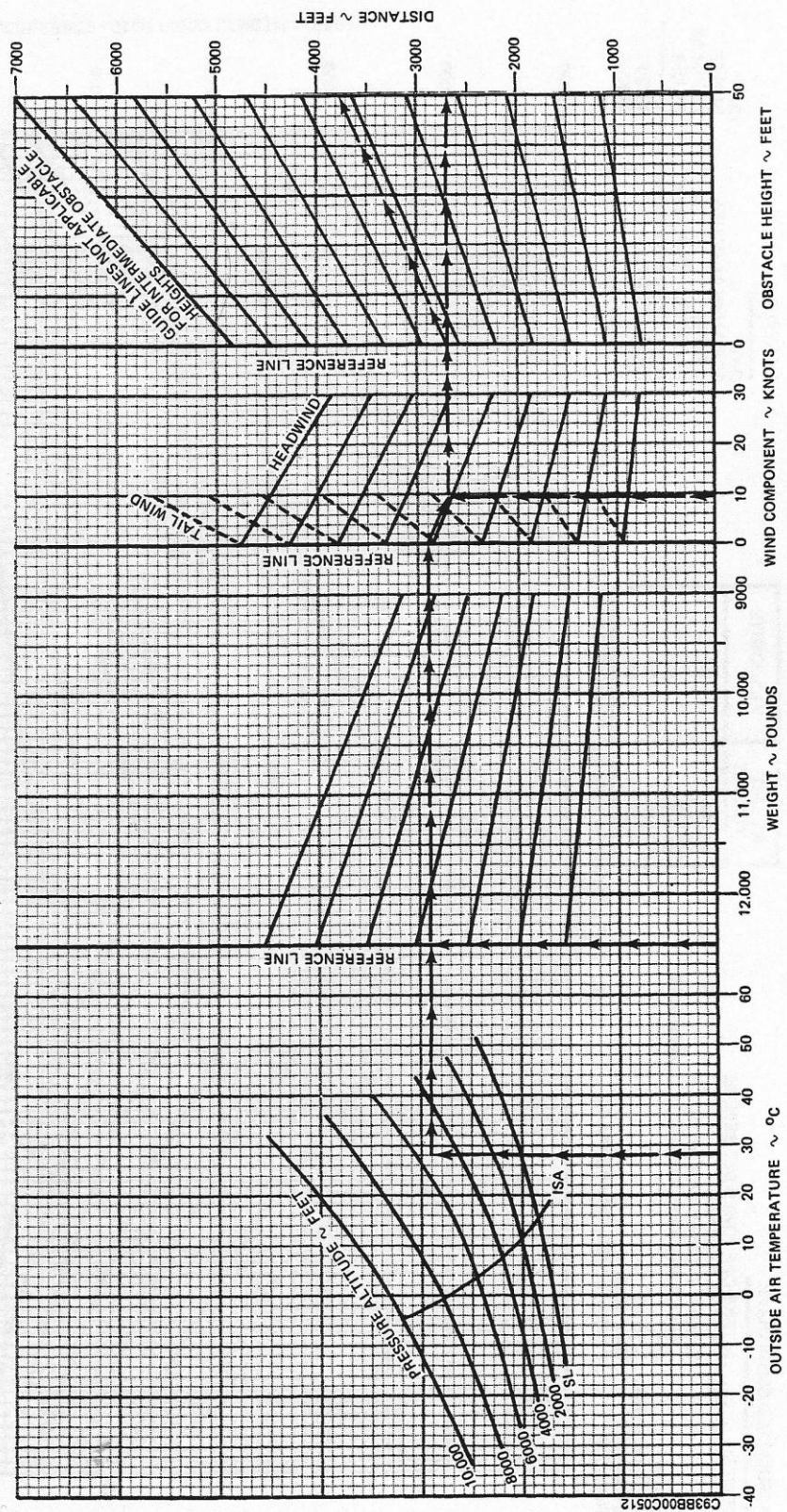
POWER.....TAKE-OFF POWER SET
BEFORE BRAKE RELEASE
FLAPS.....40%
LANDING GEAR..RETRACT AFTER LIFT-OFF
RUNWAY.....PAVED, LEVEL, DRY SURFACE

WEIGHT ~ POUNDS	TAKE-OFF SPEED ~ KNOTS	
	ROTATION	50 FT
12,500	94	106
12,000	94	105
11,000	94	103
10,000	94	101
9,000	94	99

EXAMPLE:

OAT.....28°C
PRESSURE ALTITUDE.....5433 FT
TAKE-OFF WEIGHT.....12,500 LBS
HEADWIND COMPONENT.....9.5 KTS
GROUND ROLL.....2700 FT
TOTAL DISTANCE OVER
50 FT OBSTACLE.....3750 FT
TAKE-OFF SPEED AT ROTATION.....94 KTS
AT 50 FT.....106 KTS

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD 10° C
TO THE ACTUAL OAT BEFORE ENTERING GRAPH.



TOD FLAPS 0

TAKE-OFF DISTANCE — FLAPS 0%

ASSOCIATED CONDITIONS:

POWER.....TAKE-OFF POWER SET
BEFORE BRAKE RELEASE
FLAPS.....0%
LANDING GEAR.....RETRACT AFTER LIFT-OFF
RUNWAY.....PAVED, LEVEL, DRY SURFACE

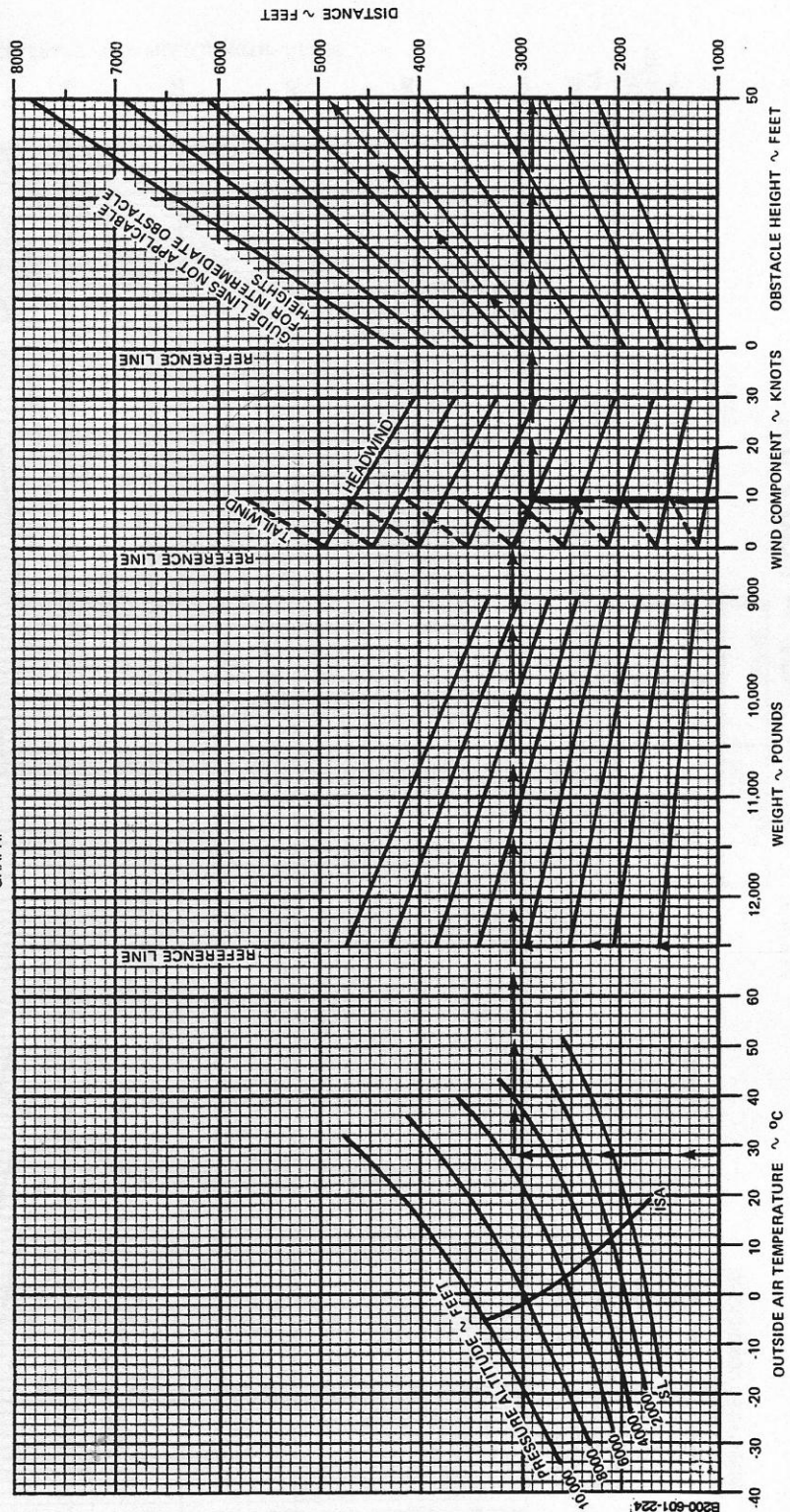
WEIGHT ~ POUNDS	TAKE-OFF SPEED ~ KNOTS	
	ROTATION	50 FT
12,500	95	121
12,000	95	119
11,000	95	115
10,000	95	111
9,000	95	108

EXAMPLE:

OAT.....28°C
PRESSURE ALTITUDE.....5433 FT
TAKE-OFF WEIGHT.....12,500 LBS
HEADWIND COMPONENT.....9.5 KTS

GROUND ROLL.....2870 FT
TOTAL DISTANCE OVER
50 FT OBSTACLE.....4900 FT
TAKE-OFF SPEED AT ROTATION.....95 KTS
AT 50 FT.....121 KTS

NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD
10° C TO THE ACTUAL OAT BEFORE ENTERING
GRAPH.



NORMAL CRUISE POWER

1700 RPM

ISA +10°C

NOTE: IOAT, TORQUE, AND FUEL FLOW BASED ON 11,000 POUNDS.

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED ~ KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	30	25	2230	475	950	237	242	238	243	239	244
2000	27	21	2230	462	924	235	247	236	248	236	248
4000	23	17	2230	449	898	232	251	233	252	234	253
6000	19	13	2230	436	872	230	256	231	257	232	258
8000	15	9	2230	424	848	227	261	228	262	229	263
10,000	12	5	2230	412	824	225	266	226	267	227	269
12,000	8	1	2230	402	804	223	271	224	273	225	274
14,000	4	-3	2230	394	788	220	277	221	278	222	279
16,000	1	-7	2172	379	758	215	279	216	281	217	282
18,000	-3	-11	2064	358	716	208	279	210	281	211	283
20,000	-7	-15	1975	341	682	202	280	204	282	205	284
22,000	-11	-19	1873	325	650	195	279	197	282	199	284
24,000	-15	-23	1756	304	608	187	277	189	281	191	284
26,000	-19	-27	1630	281	562	178	274	181	278	183	281
28,000	-24	-31	1500	259	518	169	269	172	274	175	278
29,000	-26	-32	1438	248	496	164	264	167	271	270	276
31,000	-30	-36	1319	229	458	153	258	158	266	262	272
33,000	-34	-40	1205	210	420	141	247	148	258	253	267
35,000	-39	-44	1087	192	384	---	---	135	246	242	259

MAXIMUM CRUISE POWER

1700 RPM

ISA + 10°C

NOTE: IOAT, TORQUE, AND FUEL FLOW BASED ON 11,000 POUNDS.

PRESSURE ALTITUDE	IOAT °C	OAT °C	TORQUE PER ENGINE FT-LBS	FUEL FLOW PER ENGINE LBS/HR	TOTAL FUEL FLOW LBS/HR	AIRSPEED ~ KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	30	25	2230	475	950	237	242	238	243	239	244
2000	27	21	2230	462	924	235	247	235	248	236	248
4000	23	17	2230	449	898	232	251	233	252	234	253
6000	19	13	2230	436	872	230	256	231	257	232	258
8000	16	9	2230	424	848	227	261	228	262	229	263
10,000	12	5	2230	412	824	225	266	226	267	227	269
12,000	8	1	2230	402	804	223	271	224	273	225	274
14,000	4	-3	2230	394	788	220	277	221	278	222	279
16,000	1	-7	2230	388	776	217	282	218	283	219	285
18,000	-3	-11	2146	371	742	211	283	213	285	214	287
20,000	-7	-15	2057	354	708	206	284	207	286	208	288
22,000	-11	-19	1950	337	674	198	283	200	286	201	288
24,000	-15	-23	1830	315	630	190	282	192	285	194	288
26,000	-19	-27	1703	292	584	181	279	184	283	186	286
28,000	-23	-31	1572	270	540	172	274	175	279	178	283
29,000	-25	-32	1507	259	518	167	271	171	277	174	281
31,000	-30	-36	1386	239	478	157	264	162	272	165	277
33,000	-34	-40	1271	221	442	146	256	152	265	156	272
35,000	-39	-44	1151	202	404	129	235	140	255	146	265

MAXIMUM RANGE POWER

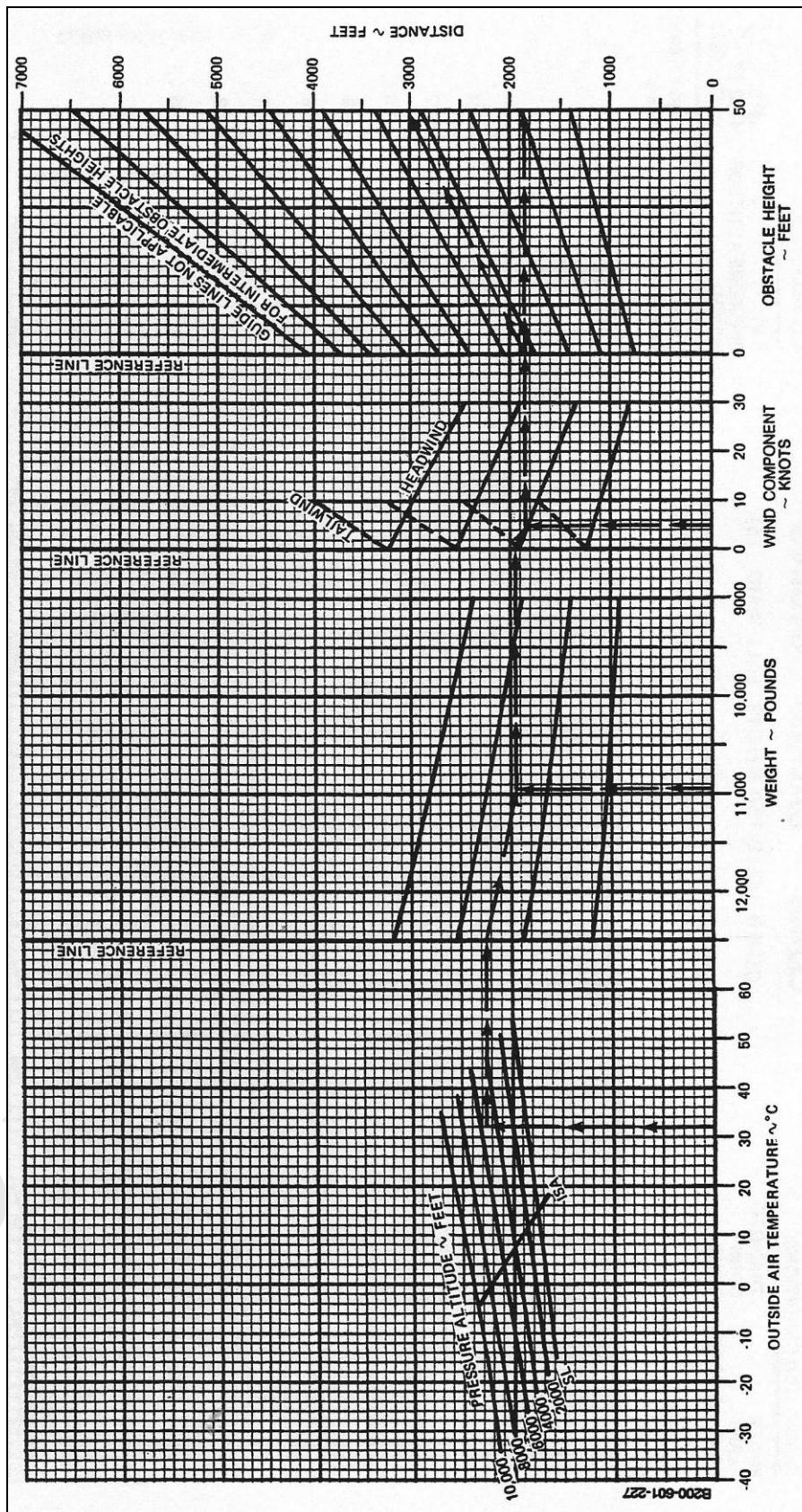
1700 RPM

ISA + 10°C

NOTE: DURING OPERATION WITH ICE VANES EXTENDED, TORQUE WILL DECREASE. IN ORDER TO MAINTAIN MAXIMUM RANGE CONFIGURATION, DO NOT RESET POWER TO ORIGINAL SETTING. FUEL FLOW WILL REMAIN ABOUT THE SAME, BUT TRUE AIRSPEED WILL BE REDUCED APPROXIMATELY 10 KNOTS.

WEIGHT →		12,000 POUNDS				11,000 POUNDS				10,000 POUNDS			
PRESSURE/ ALTITUDE	IOAT	OAT	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL	TAS	TORQUE PER ENG	FUEL FLOW PER ENG	FUEL FLOW TOTAL
FEET	°C	°C	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR	KNOTS	FT-LB	LB/HR	LB/HR
SL	29	25	1603	398	796	214	1529	389	778	211	1454	380	760
2000	25	21	1501	371	742	212	1413	360	720	209	1332	350	700
4000	21	17	1387	342	684	209	1306	332	664	206	1252	326	652
6000	17	13	1313	319	638	208	1261	312	624	207	1222	307	614
8000	13	9	1264	299	598	209	1219	293	586	208	1186	289	578
10,000	9	5	1232	281	562	210	1187	275	550	209	1150	271	542
12,000	5	1	1211	267	534	212	1164	261	522	212	1123	255	510
14,000	1	-3	1189	254	508	214	1139	248	506	214	1091	242	484
16,000	-2	-7	1178	244	488	217	1122	237	474	216	1062	229	456
18,000	-6	-11	1159	233	466	219	1105	226	452	218	1027	216	432
20,000	-10	-15	1144	224	448	221	1089	217	434	221	988	204	408
22,000	-14	-19	1120	217	434	222	1075	210	420	223	976	197	394
24,000	-18	-23	1100	208	416	223	1035	199	398	222	969	190	380
26,000	-22	-27	1129	207	414	230	1005	190	380	222	948	182	364
28,000	-26	-31	1150	207	414	235	1027	189	378	228	922	174	348
29,000	-28	-32	1170	209	418	240	1039	189	378	231	921	173	346
31,000	-31	-36	1188	210	420	246	1064	191	382	238	935	172	344
33,000	-35	-40	...	...	...	...	1082	192	384	244	955	172	344
35,000	-39	-44	...	...	...	...	...	...	...	...	968	173	346

LANDING DISTANCE FLAPS FULL – NO REVERSE



LANDING DISTANCE FLAPS – NO REVERSE

LANDING DISTANCE WITHOUT PROPELLER REVERSING FLAPS 0%

ASSOCIATED CONDITIONS

POWER RETARDED TO MAINTAIN
900 FT/MIN ON FINAL
APPROACH
PROPELLER CONTROLS . . . FULL FORWARD
FLAPS UP
RUNWAY PAVED, LEVEL, DRY SURFACE
APPROACH SPEED IAS AS TABULATED
BRAKING MAXIMUM

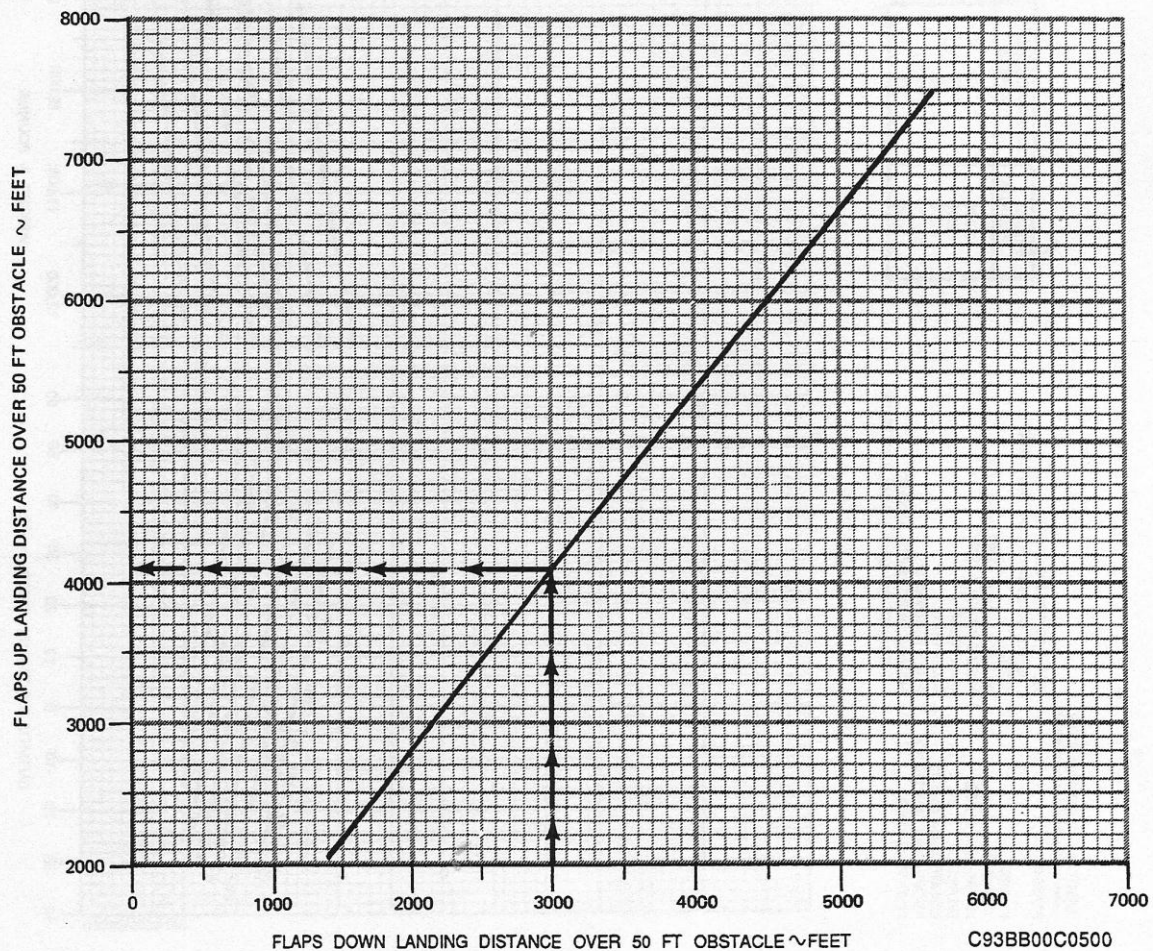
WEIGHT POUNDS	APPROACH SPEED ~ KNOTS
12,500	132
12,000	130
11,000	126
10,000	122
9000	117

EXAMPLE:

FLAPS 100 % LANDING
DISTANCE OVER
50 FT OBSTACLE 3000 FT
LANDING WEIGHT 10,937 LBS

FLAPS UP LANDING
DISTANCE OVER
50 FT OBSTACLE 4100 FT
APPROACH SPEED 126 KNOTS

- NOTES: 1. LANDING WITH FLAPS FULL DOWN (100%) IS NORMAL PROCEDURE. USE THIS GRAPH WHEN IT IS NECESSARY TO LAND WITH FLAPS UP (0%).
2. TO DETERMINE FLAPS-UP LANDING DISTANCE, READ FROM THE LANDING DISTANCE WITHOUT PROPELLER REVERSING – FLAPS 100% GRAPH THE LANDING DISTANCE APPROPRIATE TO OAT, ALTITUDE, WEIGHT, WIND, AND 50-FT OBSTACLE. THEN ENTER THIS GRAPH WITH THE DERIVED VALUE AND READ THE FLAPS-UP LANDING DISTANCE.



APP CLB GRADIENTS

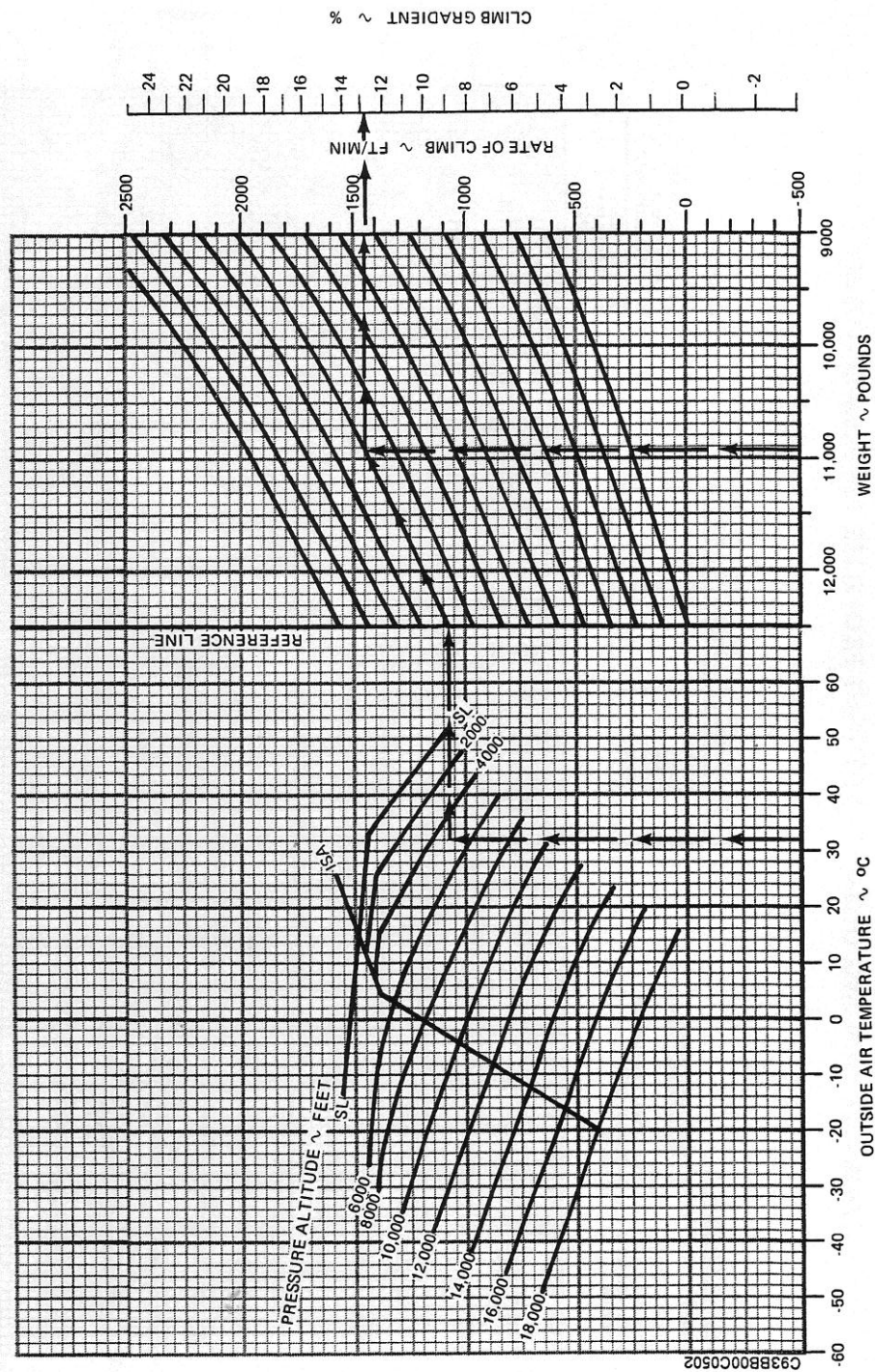
CLIMB — BALKED LANDING

ASSOCIATED CONDITIONS:
POWER TAKE-OFF
FLAPS DOWN
LANDING GEAR . . . DOWN

CLIMB SPEED 100 KNOTS (ALL WEIGHTS)
NOTE: FOR OPERATION WITH ICE VANES EXTENDED, ADD
10° C TO ACTUAL OAT BEFORE ENTERING GRAPH.

EXAMPLE:

OAT 32°C
PRESSURE ALTITUDE . 4732 FT
WEIGHT 10,937 LBS
RATE-OF-CLIMB . . . 1450 FT/MIN
CLIMB GRADIENT . . . 12.8 %



OEI MAX ALT

ASSOCIATED CONDITIONS:

POWER MAXIMUM CONTINUOUS
LANDING GEAR UP
INOPERATIVE PROPELLER FEATHERED
FLAPS 0%

NOTE: SERVICE CEILING IS THE MAXIMUM PRESSURE ALTITUDE AT WHICH THE AIRPLANE IS CAPABLE OF CLIMBING 50 FT/MINUTE WITH ONE PROPELLER FEATHERED.

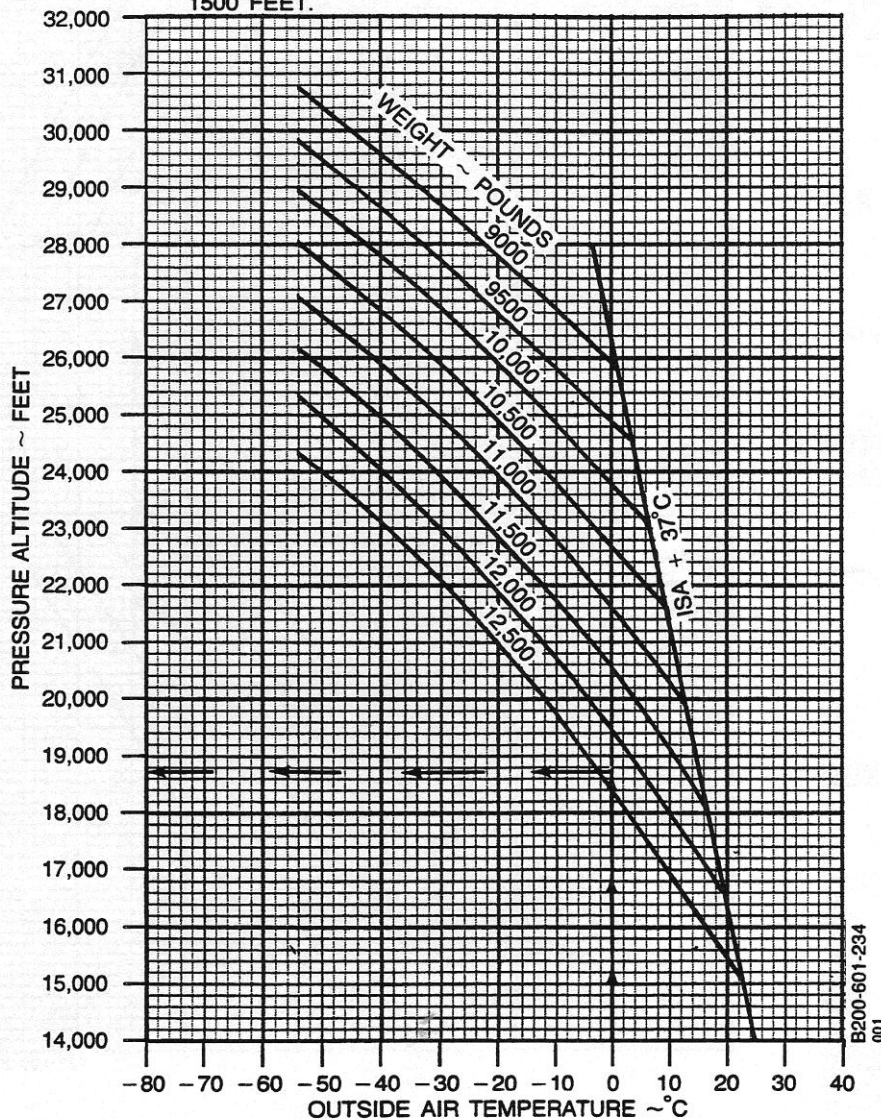
EXAMPLE:

OAT AT MEA 0°C
WEIGHT 12,393 LBS
ROUTE SEGMENT MEA 18,000 FT

SERVICE CEILING 18,730 FT

NOTE: SERVICE CEILING IS ABOVE ENROUTE MEA

NOTE: DURING OPERATION WITH ICE VANE EXTENDED, SERVICE CEILING WILL BE LOWERED APPROXIMATELY 1500 FEET.



OEI MAX CRUISE POWER – 1900 RPM - ISA + 10°

PRESSURE ALTITUDE	IOAT	OAT	TORQUE PER ENGINE	FUEL FLOW PER ENGINE	TOTAL FUEL FLOW	AIRSPEED – KNOTS					
						@ 12,000 LBS		@ 11,000 LBS		@ 10,000 LBS	
FEET	°C	°C	FT-LBS	LBS/HR	LBS/HR	IAS	TAS	IAS	TAS	IAS	TAS
SL	28	25	2230	527	527	185	189	187	191	188	193
2000	25	21	2230	513	513	182	192	184	194	186	196
4000	21	17	2230	499	499	180	195	182	197	184	200
6000	17	13	2230	485	485	177	198	180	201	182	203
8000	13	9	2229	471	471	174	201	177	204	179	206
10,000	9	5	2127	442	442	168	200	171	203	174	206
12,000	5	1	2030	415	415	162	198	165	202	168	206
14,000	1	-3	1958	396	396	155	197	160	202	163	206
16,000	-3	-7	1878	376	376	149	195	154	201	157	206
18,000	-7	-11	1791	356	356	141	190	147	199	152	205
20,000	-11	-15	1712	339	339	132	184	140	196	145	203
22,000	-15	-19	1600	319	319	---	---	130	188	138	199
24,000	---	---	---	---	---	---	---	---	---	---	---

IN CRUISE CK & DIVERSION

ENDURANCE PROFILE – FULL MAIN TANKS

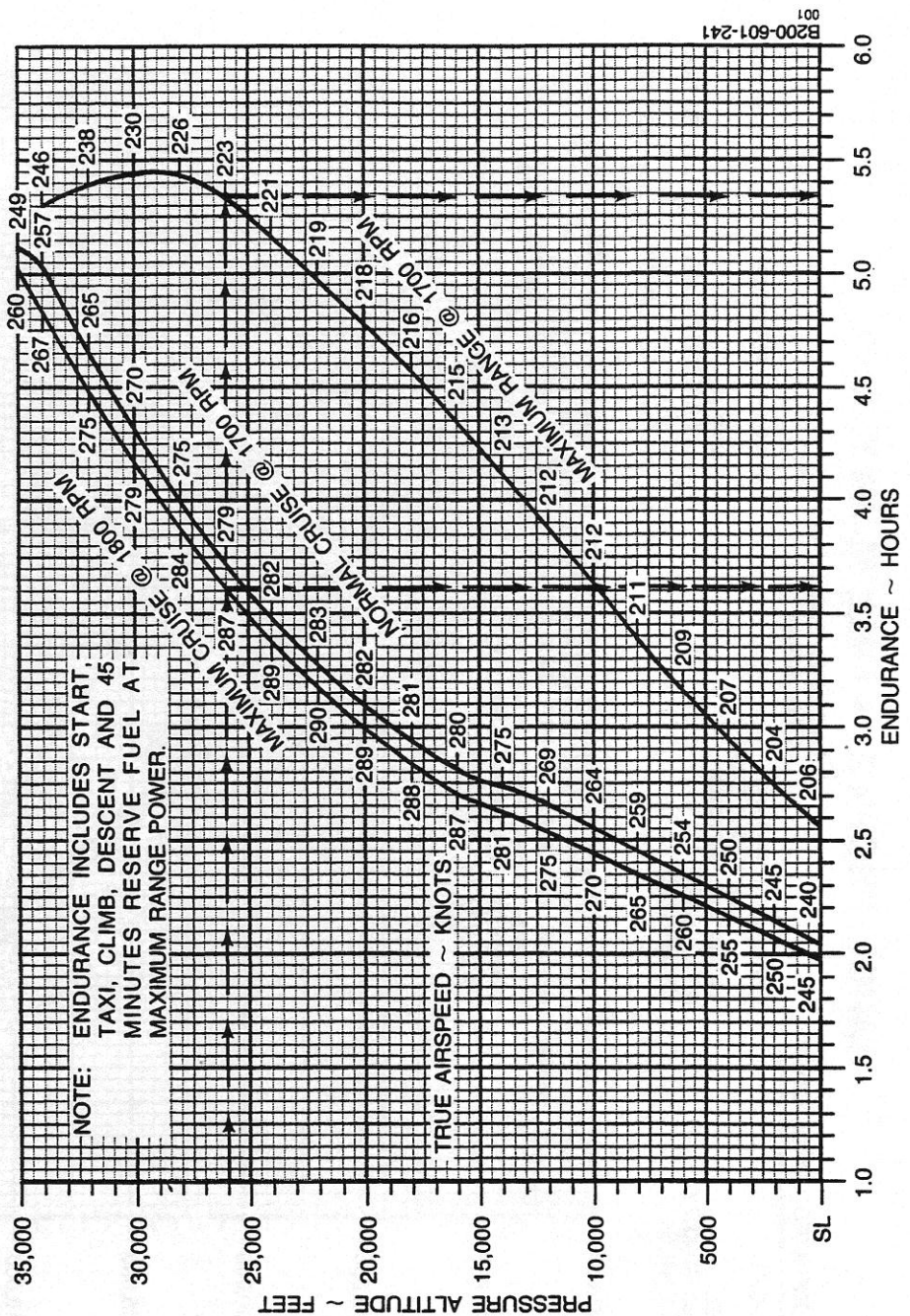
STANDARD DAY

ASSOCIATED CONDITIONS:

WEIGHT 12,590 LBS BEFORE
ENGINE START
FUEL AVIATION KEROSENE
FUEL DENSITY 6.7 LBS/GAL
ICE VANES RETRACTED

EXAMPLE:

PRESSURE ALTITUDE 26,000 FT
ENDURANCE @
MAX CRUISE POWER 3.61 HR
ENDURANCE @
MAX RANGE POWER 5.33 HR



DESCENT

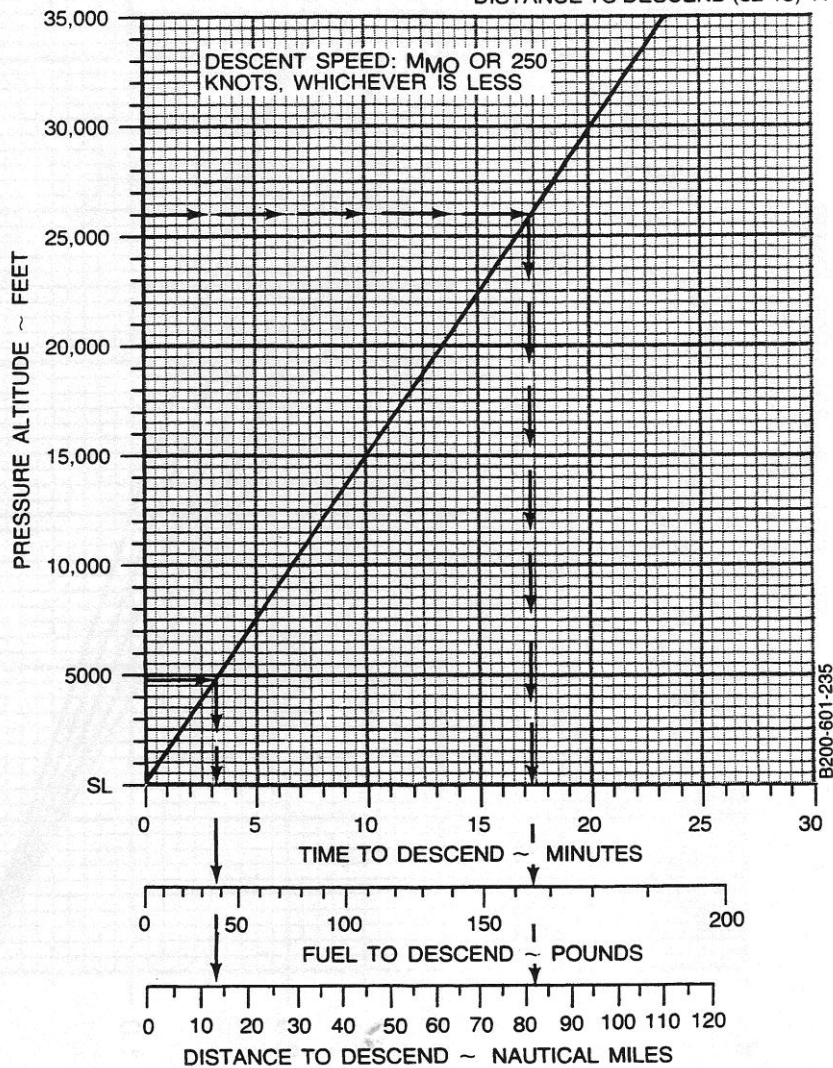
TIME, FUEL AND DISTANCE TO DESCEND

ASSOCIATED CONDITIONS:

POWER AS REQUIRED TO
DESCEND AT
1500 FT/MIN
GEAR UP
FLAPS 0%

EXAMPLE:

INITIAL ALTITUDE 26,000 FT
FINAL ALTITUDE 4732 FT
TIME TO DESCEND (17-3) 14 MIN
FUEL TO DESCEND (164-36) 128 LBS
DISTANCE TO DESCEND (82-13) .. 69 NM



LOW VIS TAKE OFF REQUIREMENTS

- Low visibility procedures have to be in force for RVR below 400m
- Capt performing the take off is compulsory
- RVR/VIS (m) for take off

Facilities	Be 200
RWL + CLL + multiple RVR (1,2)	150
RWL + CLL (2)	200
RWL and/or centerline marking (1,3)	250
Nil (day only)	500
Special approval (4)	125

Initial RVR may be substituted by pilot assessment

1. All RVRs must be within limits, except initial when assessed by pilots
2. LVP have to be in force, otherwise 400 m RVR is required
3. For night operation at least RWY edge lights and RWY end lights required
4. With special approval:
 - Hi intensity CLL spaced 15m or less and Hi intensity RWL spaced 60 m or less
 - Flight crew members have satisfactory completed respective training
 - A 90 m visual segment is available from cockpit at start of take off run
 - Required RVR has to be achieved for all RVR reporting points

CONVERSION OF MET VIS

Only permitted when no RVR is available and never for calculating RVR Cat II/III minima

Lighting facility	<i>day</i>	<i>night</i>
<i>HI App + RWY lights</i>	<i>1.5</i>	<i>2.0</i>
<i>Any other lighting</i>	<i>1.0</i>	<i>1.5</i>
<i>No lighting</i>	<i>1.0</i>	<i>NA</i>

RVSM

NOT APPROVED

RNP

NOT APPROVED

HOLDING SPEEDS (NEW PANS OPS)

Altitudes/Levels	Normal conditions	Turbulence conditions
Up to 14.000 ft	170 kts	170 kts
Above 14.000 ft to 20.000 ft	240 kts	280 kts/0.80 M (the lesser)
Above 20.000 ft to 34.000 ft	265 kts	280 kts/0.80 M (the lesser)
Above 34.000 ft	0.83 M	0.83 M

Timing: Outbound timing should start when abeam fix or established on outbound heading, whichever comes later.

At/below 14.000 ft: 1.0 min

Above 14.000 ft: 1.5 min

Or on reaching DME-limit, when based on DME distances

ALTIMETER CORRECTION IN COLD WEATHER

	Height above the elevation of the altimeter setting source (QNH)																			
ISA deviation	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1800	2000	2500	3000	3500	4000	5000	
-5	10	12	14	16	18	20	22	24	26	28	30	34	36	40	50	60	70	80	100	
-10	20	24	28	32	36	40	44	48	52	56	60	68	72	80	100	120	140	160	200	
-15	30	36	42	48	54	60	66	72	78	84	90	102	108	120	150	180	210	240	300	
-20	40	48	56	64	72	80	88	96	104	112	120	136	144	160	200	240	280	320	400	
-25	50	60	70	80	90	100	110	120	130	140	150	170	180	200	250	300	350	400	500	
-30	60	72	84	96	108	120	132	144	156	168	180	204	216	240	300	360	420	480	600	
-35	70	84	98	112	126	140	154	168	182	196	210	238	252	280	350	420	490	560	700	
-40	80	96	112	128	144	160	176	192	208	224	240	272	288	320	400	480	560	640	800	
-45	90	108	126	144	162	180	198	216	234	252	270	306	324	360	450	540	630	720	900	
-50	100	120	140	160	180	200	220	240	260	280	300	340	360	400	500	600	700	800	1000	

In case you need it one day and don't have a table use the formula: $0.4 \% \times x^{\circ}$

ISA-deviation * y.000 ft

e.g.: ISA -30°C, 3.000 ft abv AD: $30 \times 3.000 \times 0,4\% (\cong 30 \times 3 \times 4)$

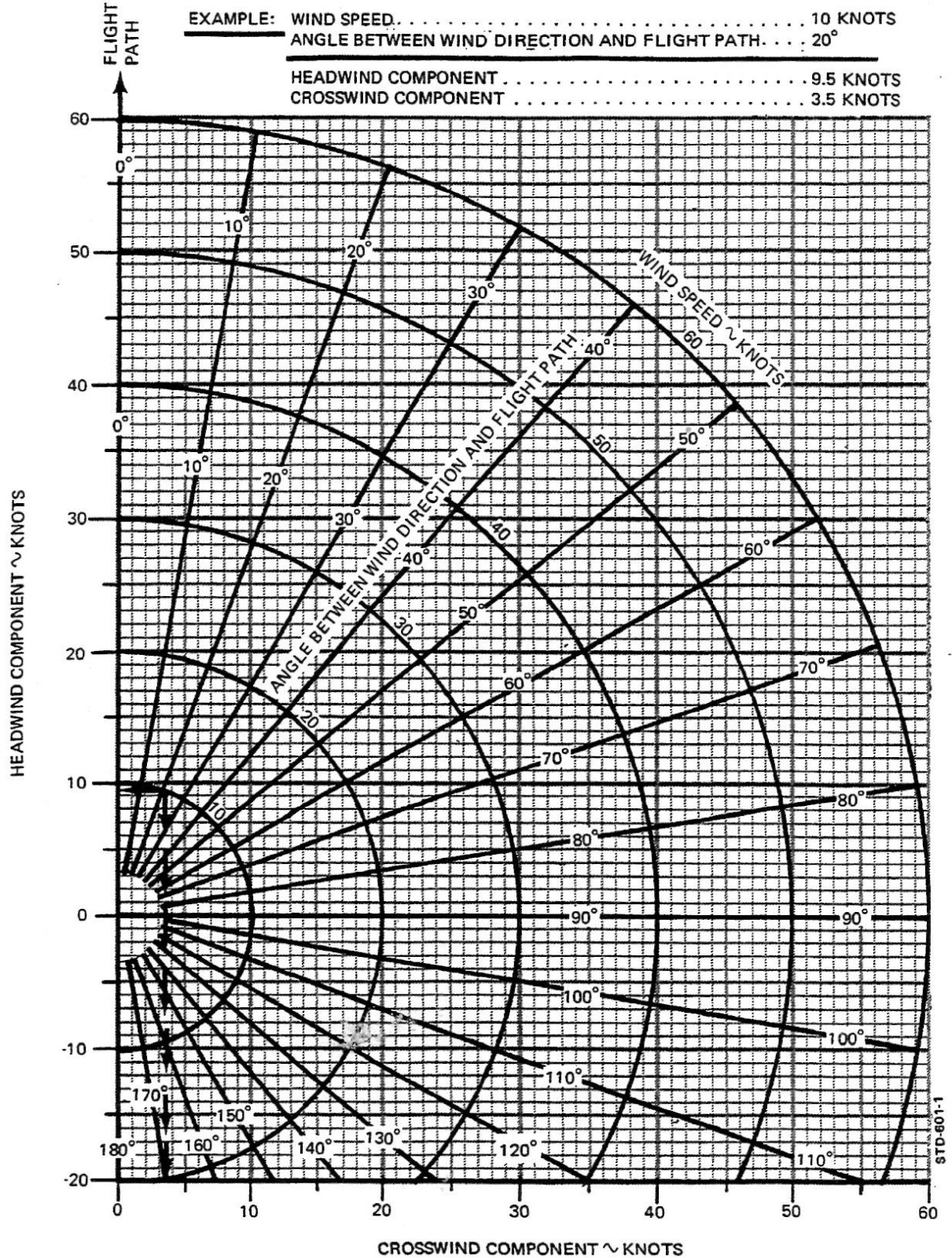
CONTAMINATED RUNWAY		
Maximum depths for slush, standing water and snow covering an appreciable part of the runway are:		
	Takeoff	Landing
Slush or Standing Water	12 mm (0.5 in)	12 mm (0.5 in)
Wet Snow	25 mm (1.0 in)	25 mm (1.0 in)
Dry Snow	100 mm (4.0 in)	100 mm (4.0 in)

RUNWAY CONDITION CODE

(a) Runway Designator (First Two Digits)	
27 = Runway 27 or 27L	88 = All runways
77 = Runway 27R (50 added to the designator for 'right' Runway)	99 = A repetition of the last message received because no new information received.
(b) Runway Deposits (Third Digit)	
0 = Clear and dry	6 = Slush
1 = Damp	7 = Ice
2 = Wet or water patches	8 = Compacted or rolled snow
3 = Rime or frost covered (depth normally less than 1 mm)	9 = Frozen ruts or ridges
4 = Dry Snow	I = Type of deposit not reported (eg due to runway clearance in progress).
5 = Wet Snow	
(c) Extent of Runway Contamination (Fourth Digit)	
1 = 10% or less	9 = 51% to 100%
2 = 11% to 25%	I = Not reported (eg due to runway clearance in progress).
5 = 26% to 50%	
(d) Depth of Deposit (Fifth and Sixth Digits)	
The quoted depth is the mean number of readings or, if operationally significant, the greatest depth measured.	
00 = less than 1 mm	96 = 30 cm
01 = 1 mm etc through to	97 = 35 cm
90 = 90 mm	98 = 40 cm or more
91 = not used	99 = Runway(s) non-operational due to snow, slush, ice, large drifts or runway clearance, but depth not reported.
92 = 10 cm	II = Depth of deposit operationally not significant or not measurable.
93 = 15 cm	
94 = 20 cm	
95 = 25 cm	
(e) Friction Co-efficient or Braking Action (Seventh and Eighth Digits)	
The mean value is transmitted or, if operationally significant, the lowest value. For example:	
28 = Friction co-efficient 0.28	95 = Braking action: Good
35 = Friction co-efficient 0.35	99 = Figures unreliable (eg if equipment has been used which does not measure satisfactorily in slush or loose snow)
or	II = Braking action not reported (eg runway not operational; closed; etc)
91 = Braking action: Poor	
92 = Braking action: Medium/Poor	
93 = Braking action: Medium	
94 = Braking action: Medium/Good	
Note 1: CLRD. If contamination conditions on all runways cease to exist, a group consisting of the figures 88, the abbreviation CLRD, and the Braking Action, is sent.	
Note 2: It should be noted that runways can only be inspected as frequently as conditions permit, so that a re-issue of a previous half hourly report does not necessarily mean that the runway has been inspected again during this period, but might mean that no significant change is apparent.	
Note 3: It is emphasised that this reporting system is completely independent of the normal NOTAM system and these reports are not used by AIS for amending SNOWTAM received from originators.	

X WIND GRAPH

WIND COMPONENTS

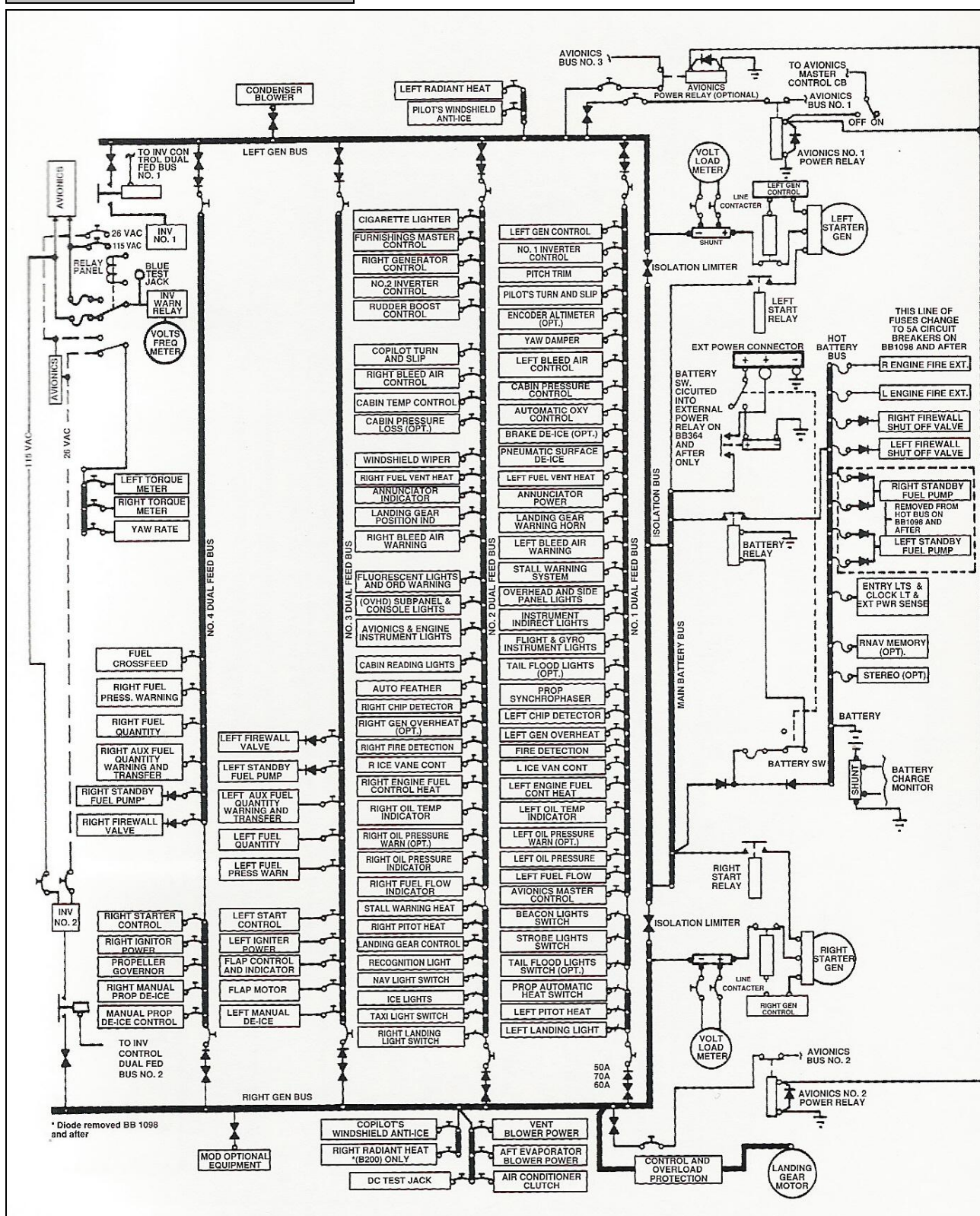


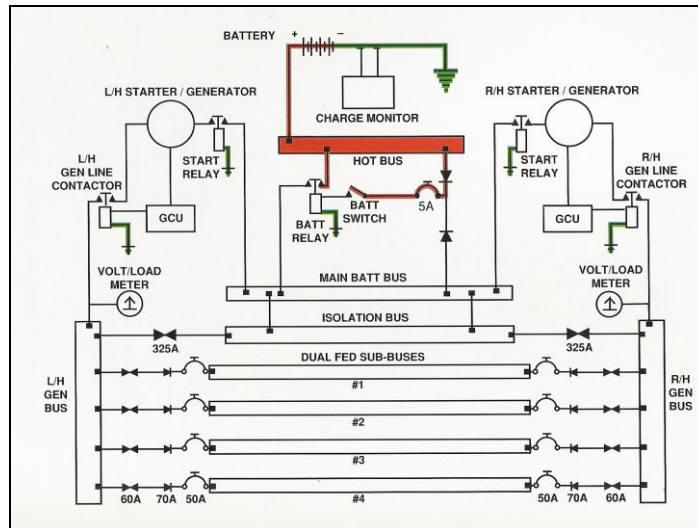
CONVERSIONS

To convert	Into	Multiply by
DISTANCES		
Metres	Feet	3.28
	Yards	1.09
Feet	Metres	0.305
	Yards	0.333
Yards	Feet	3.00
	Metres	0.9144
Inches	Millimetres	25.4
Millimetres	Inches	0.03937
Kilometres	Statute Miles	0.621
	Nautical Miles	0.54
Statute Miles	Kilometres	1.609
	Nautical Miles	0.869
Nautical Miles	Statute Miles	1.151
	Kilometres	1.852
LIQUID		
Litres	Imp. Gallons	0.22
	US Gallons	0.264
US Gallons	Litres	3.785
	Imp. Gallons	0.833

To convert	Into	Multiply by	
WEIGHTS			
Kilograms	Pounds	2,2046	
Pounds	Kilograms	0.4536	
FUEL			
Specific weight		0.71	0.80
Litres	Kilos	0.7100	0.8000
Kilos	Litres	1.4085	1.2500
	US Gallons	0.3717	0.3299
	Imp. Gallons	0.3095	0.2747
Imp. Gallons	Kilos	3.23	3.64
	Pounds	7.122	8.025
Pounds	Imp. Gallons	0.1404	0.1246
	US Gallons	0.1686	0.1496
US Gallons	Kilos	2.69	3.03
	Pounds	5.93	6.68
PRESSURE			
Inches HG	LB/SQ. Inch	0.49	
LB/SQ. Inch	Inches HG	2.036	
HPA/BAR	(PSI)	0.0145	
(PSI)	HPA BAR	68.95	
TEMPERATURE			
Celsius	Fahrenheit	Multiply by 2minus 10% and add 32	
Fahrenheit	Celsius	subtract 32 + divide by 2 plus 10%	

ELECTRICAL SYSTEM

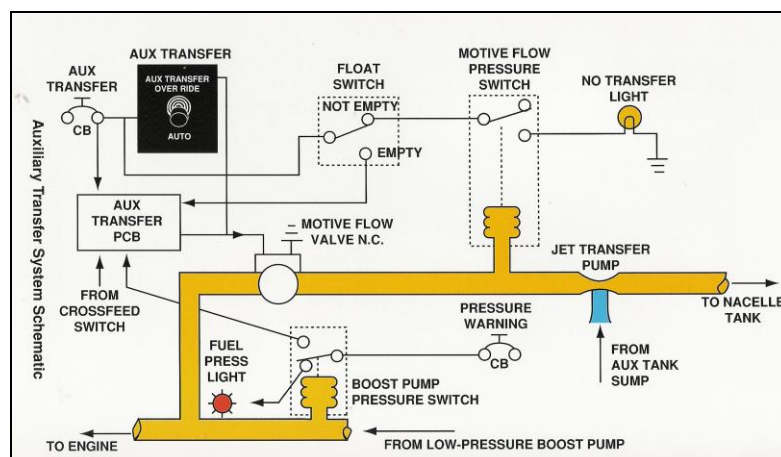
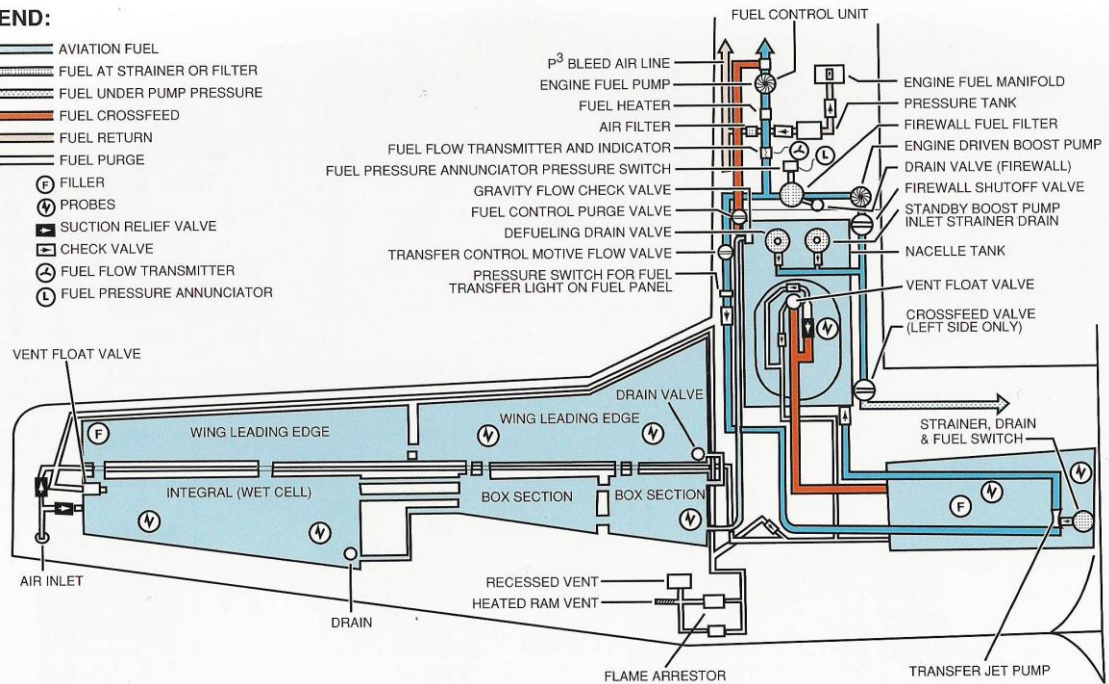


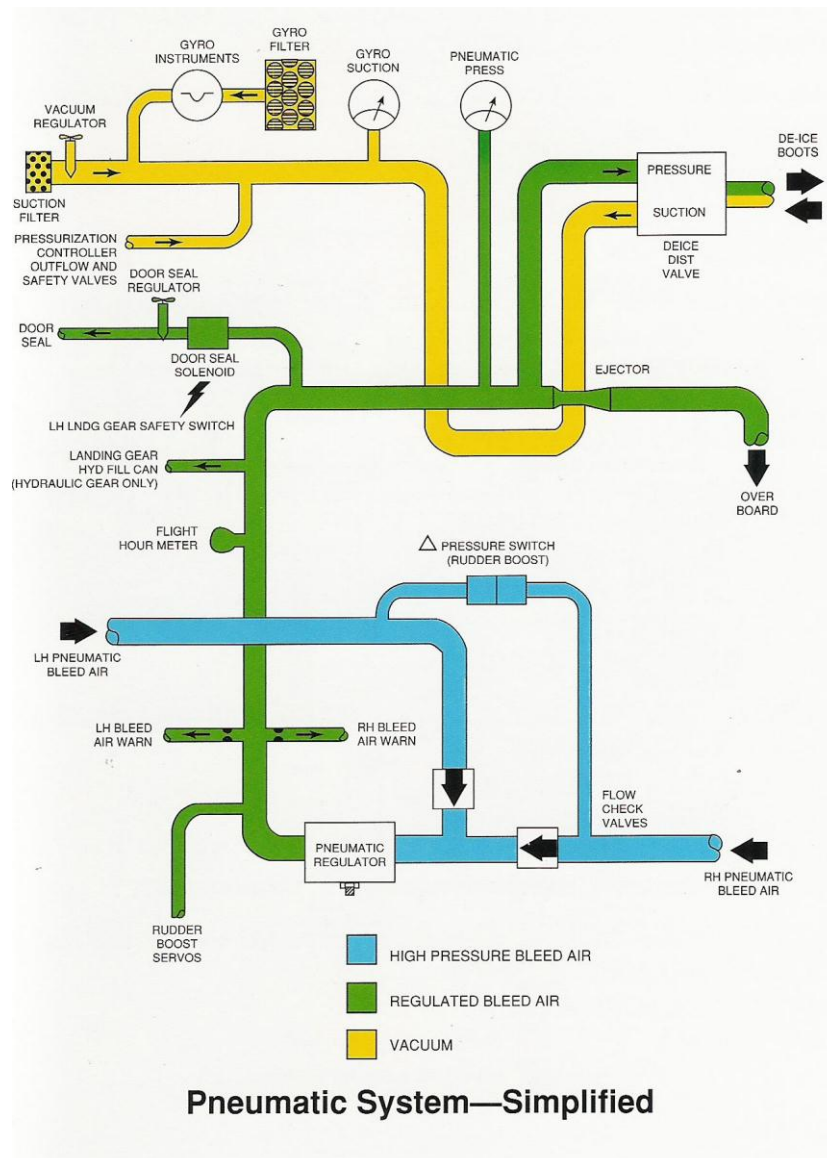


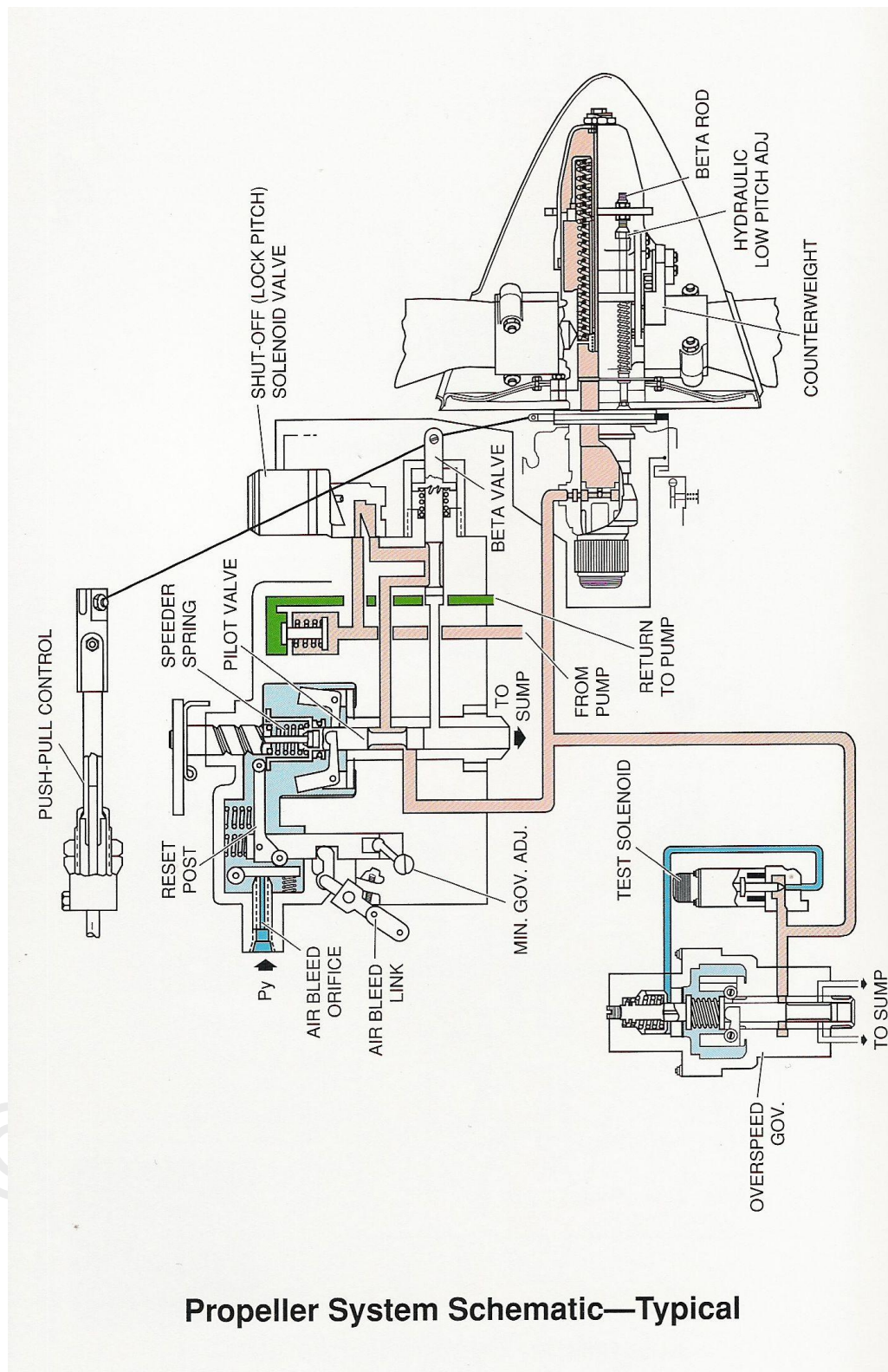
FUEL SYSTEM

LEGEND:

- AVIATION FUEL
- FUEL AT STRAINER OR FILTER
- FUEL UNDER PUMP PRESSURE
- FUEL CROSSFEED
- FUEL RETURN
- FUEL PURGE
- FILLER
- PROBES
- SUCTION RELIEF VALVE
- CHECK VALVE
- FUEL FLOW TRANSMITTER
- FUEL PRESSURE ANNUNCIATOR





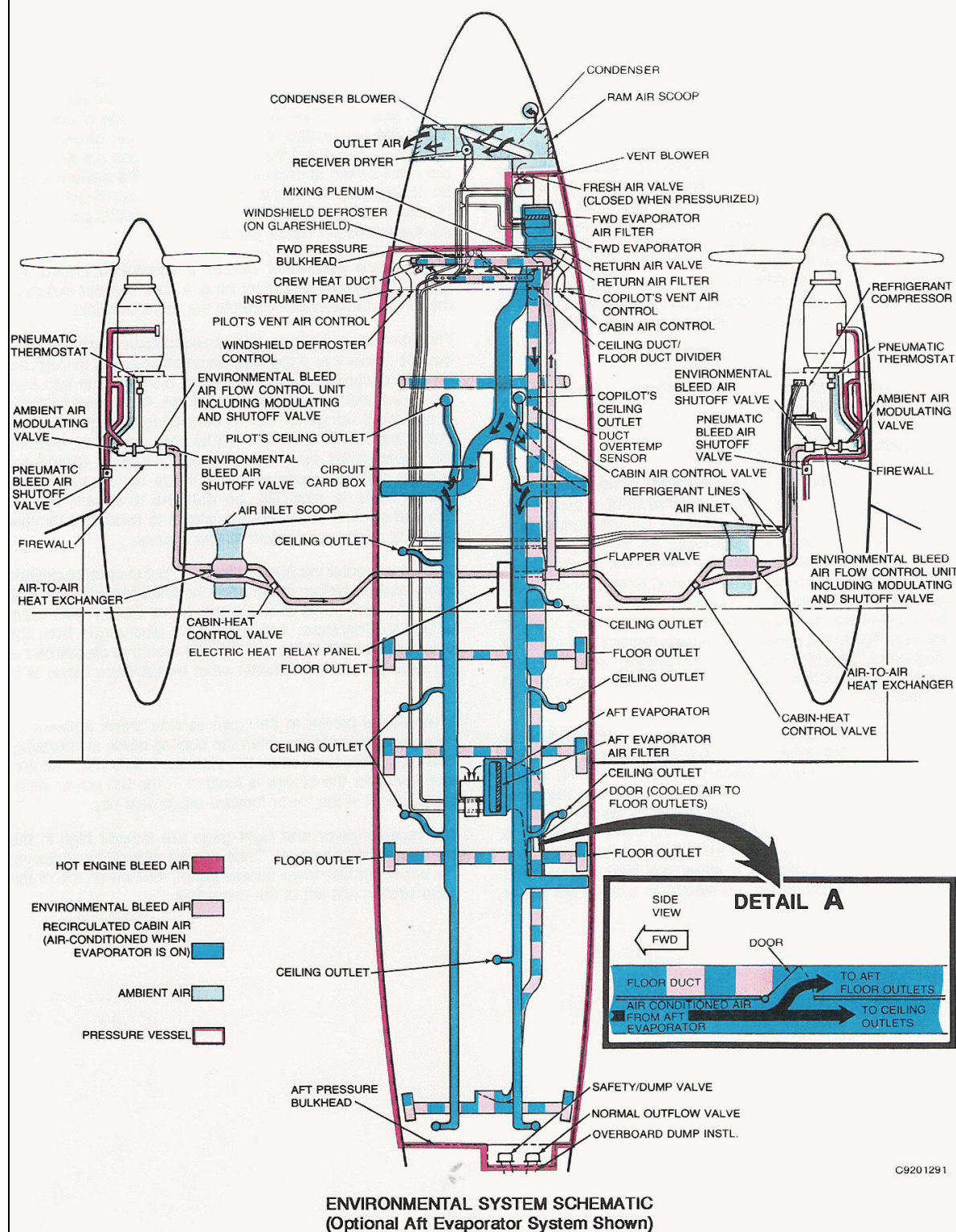


Propeller System Schematic—Typical

ENVIRONMENTAL SYSTEM

**Section VII
Systems Description**

**Beechcraft
Super King Air B200**



C9201291

ON GND EMERGENCY

1. Parking brake

ON

2. Power levers

IDLE

Reconsider situation

3. ATC

INFORM

4. Propeller levers

FEATHER

5. Condition levers

FUEL CUT OFF

6. Cabin

DUMP

7. Fire extinguishers

AS REQUIRED

8. Evacuation

ORDER

9. Master switch

OFF

