

**SECTION 1
GENERAL**

**PIPER AIRCRAFT CORPORATION
PA-31-350, CHIEFTAIN**

1.7 FUEL

AVGAS ONLY

(a) Fuel Capacity (U.S. gal) (total)	192
(b) Usable Fuel (U.S. gal) (total)	182
(c) Fuel Grade Aviation*	
(1) Minimum Octane	100/130 - Green
(2) Specified Octane	100/130 - Green
	100 - Green
	100 LL - Blue
(3) Alternate Fuels**	115/145 - Purple
	Refer to Lycoming Service
	Instruction 1070, Revision
	J or later.

1.9 OIL

(a) Oil Capacity (U.S. quarts) (each engine)	12
(b) Oil Specification	Refer to latest issue
	of Avco-Lycoming Service Instruction 1014.
(c) Oil Viscosity per Average	
Ambient Temp. for Starting	Refer to
	Section 8, Paragraph 8.23.

1.11 MAXIMUM WEIGHTS

(a) Maximum Ramp Weight (lbs)	7045
(b) Maximum Takeoff Weight (lbs)	7000
(c) Maximum Landing Weight (lbs)	7000
(d) Maximum Weights in Baggage Compartments (lbs)	
(1) Forward (Nose)	200
(2) Aft	200
(3) Nacelle Compartment (each)	150

* Anti-icing additive per MIL-I-27686 is approved for use in the above fuels in the amount by volume of 0.15% maximum. (See Section 8 for blending and handling procedures.)

** Alternate fuels refers to military grade with 4.6 ml of TEL. See Section 8.25 concerning use of alternate fuel grades.

Pressure Altitude Feet	OAT °C	Fuel Flow GPH Total B.P./B.E.	Cruise True Airspeed - Kts.					
			7000 Lbs.		6400 Lbs.		5800 Lbs.	
			Best Power	Best Economy	Best Power	Best Economy	Best Power	Best Economy
C _{°20} + VASI	SL	32.6/26.3	158	155	162	159	165	162
	5000	32.6/26.3	162	159	167	164	172	169
	10000	32.6/26.3	167	163	172	170	177	175
	15000	32.6/26.3	171	167	176	173	182	179
VASI	SL	32.6/26.3	156	153	159	156	162	159
	5000	32.6/26.3	161	158	165	163	169	166
	10000	32.6/26.3	165	162	170	168	175	172
	15000	32.6/26.3	169	166	175	172	181	178
	20000	32.6/26.3	169	165	177	173	184	181
C _{°20} - VASI	SL	32.6/26.3	153	151	156	154	159	157
	5000	32.6/26.3	158	155	162	159	166	163
	10000	32.6/26.3	163	160	168	165	172	169
	15000	32.6/26.3	167	164	173	170	178	175
	20000	32.6/26.3	171	166	176	173	182	179

CRUISE PERFORMANCE - 195 BHP - 2200 RPM (Approx. 55%)
Figure 5-33

SECTION 5
PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-31-350, CHIEFTAIN

Pressure Altitude Feet	OAT °C	Fuel Flow GPH Total B.P./B.E.	Cruise True Airspeed - Kts.					
			7000 Lbs.		6400 Lbs.		5800 Lbs.	
			Best Power	Best Economy	Best Power	Best Economy	Best Power	Best Economy
C °20° + VSI	SL	38.2/30.8	171	169	174	171	176	174
	5000	38.2/30.8	179	177	182	179	185	183
	10000	38.2/30.8	187	184	191	188	195	191
	15000	38.2/30.8	195	191	199	196	204	200
	20000	38.2/30.8	202	198	207	204	213	208
	24000	38.2/30.8	206	202	213	210	219	215
VSI	SL	38.2/30.8	168	166	170	168	172	170
	5000	38.2/30.8	176	173	179	176	181	178
	10000	38.2/30.8	184	181	187	184	190	187
	15000	38.2/30.8	192	188	196	192	200	196
	20000	38.2/30.8	199	195	204	200	209	205
	24000	38.2/30.8	204	201	210	206	215	211
C °20° - VSI	SL	38.2/30.8	163	161	165	163	167	165
	5000	38.2/30.8	172	170	175	173	177	175
	10000	38.2/30.8	180	177	183	180	186	183
	15000	38.2/30.8	187	184	192	189	195	192
	20000	38.2/30.8	195	192	200	197	205	201
	24000	38.2/30.8	201	197	206	203	211	208

CRUISE PERFORMANCE - 230 BHP - 2300 RPM (Approx. 65%)

Figure 5-35

Pressure Altitude Feet	OAT °C	Fuel Flow GPH Total B.P./B.E.	Cruise True Airspeed - Kts.					
			7000 Lbs.		6400 Lbs.		5800 Lbs.	
			Best Power	Best Economy	Best Power	Best Economy	Best Power	Best Economy
C ₀₂ + VSI	SL	43.6/35.3	183	181	185	183	188	186
	5000	43.6/35.3	193	191	195	193	198	196
	10000	43.6/35.3	202	200	205	203	208	206
	15000	43.6/35.3	212	209	215	213	219	217
VSI	SL	43.6/35.3	179	177	181	179	183	181
	5000	43.6/35.3	188	186	191	188	193	191
	10000	43.6/35.3	198	196	201	199	204	202
	15000	43.6/35.3	208	205	211	208	215	212
	20000	43.6/35.3	217	214	221	218	225	223
C ₀₂ - VSI	SL	43.6/35.3	174	172	176	174	178	176
	5000	43.6/35.3	184	182	186	184	189	186
	10000	43.6/35.3	193	191	196	194	199	197
	15000	43.6/35.3	203	201	206	203	210	207
	20000	43.6/35.3	212	210	216	213	220	217

CRUISE PERFORMANCE - 260 BHP - 2400 RPM (Approx. 75%)

Figure 5-37