ANGEL AVIATION®
PA-34-200T NORMAL PROCEDURES

BEFORE START	
Preflight Inspection	COMPLETE
Passenger Briefing	COMPLETE
Fuel Selectors	ON
Cowl Flaps	OPEN
Alternate Air	OFF
Circuit Breakers	IN
Avionics Master Switch	OFF

STARTING ENGINES	
Mixtures	FULL RICH
Propellers	FULL FORWARD
Throttles	FULL OPEN
Master Switch	ON
Alternators	ON
Beacon Light (Fin)	ON
Magnetos	ON
Prime	5-10 SECONDS
Throttles	1/8" OPEN
Start switches (one at a time)	ENGAGE
Throttles	800-1000 RPM

AFTER START	
Mixtures	LEAN
Gyro / Oil Pressure	GREEN ARC
NAV / TAXI Lights	AS REQUIRED

BEFORE TAKEOFF	
Doors & Windows	CLOSED & LOCKED
Flight Controls	FREE & CORRECT
Flight / Engine Instruments	SET & CHECK
Annunciator Lights	CHECK
Mixtures	RICH
Throttle(s)	1900 RPM
Propellers	CYCLE
Magnetos	CYCLE
Gyro Pressure	4.5 – 5.2 in Hg.
Throttle(s)	800-1000 RPM
Fuel Selectors	ON
Rudder / Stabilator Trim	SET FOR TAKEOFF
Flaps	SET FOR TAKEOFF
Avionics	SET
Takeoff / Emergency Briefing	COMPLETE

BEFORE LANDING	
Seats & Seat Belts	SECURE
Fuel Selectors	ON
Cowl Flaps	AS REQUIRED
Landing Gear	DOWN (3 GREEN)

AFTER LANDING	
Flaps	UP
Cowl Flaps	OPEN
Mixtures	LEAN

SHUTDOWN	
Heater (if on)	FAN FOR 2 MINUTES
Avionics Master Switch	OFF
Mixtures	IDLE CUT-OFF
Master Switch	OFF
Alternators	OFF
Lights	OFF
Magnetos	OFF

V-SPEEDS	
V_R	71 KIAS
V_X	76 KIAS
V_Y	89 KIAS
V_A @ 4570Lbs	136 KIAS
V_S	63 KIAS
V_{SO}	61 KIAS
V_{FE10} (Flaps 10)	138 KIAS
V_{FE25} (Flaps 25)	121 KIAS
V_{FE40} (Flaps 40)	107 KIAS
V_{LO}	107 KIAS
V_{LE}	129 KIAS
V_{NO}	163 KIAS
V_{NE}	195 KIAS
V_{XSE}	78 KIAS
V_{YSE}	89 KIAS
V_{MC}	66 KIAS
Max Demonstrated X-wind	17 KNOTS

MAGNETO DROP LIMITATIONS	
100 RPM	NORMAL DROP
150 RPM	MAX DROP
50 RPM	DIFFERENTIAL

Before using this checklist, the pilot shall become familiar with the POH/AFM (Pilot Operating Handbook/Aircraft Flight Manual) and thoroughly understand the required procedures for aircraft operation.

PA-34-200T EMERGENCY PROCEDURES

ENGINE FAILURE ON TAKEOFF

Airspeed	**89 KIAS**
Gear	**UP**
Flaps	**UP**
Inop Engine	**IDENTIFY**
Inop Engine	**VERIFY**
Inop engine	**FEATHER**

ENGINE FAILURE IN FLIGHT

Airspeed	**89 KIAS**
Mixtures	**FULL RICH**
Propellers	**FULL FORWARD**
Throttles (40" Hg.)	**FORWARD**
Gear	**UP**
Flaps	**UP**
Inop Engine	**IDENTIFY**
Inop Engine	**VERIFY**
Inop Engine	**FIX or FEATHER**

FIX INOP ENGINE

Fuel Selector	**CROSSFEED**
Alternate Air	**ON**
Fuel Pump	**HIGH (Power not restored, OFF)**

FEATHER INOP ENGINE

Propeller Inop Engine	**FEATHER**
Mixture Inop Engine	**IDLE CUT-OFF**
Fuel Selector Inop Engine	**OFF**
Cowl Flap Inop Engine	**CLOSED**
Cowl Flap Operating Engine	**OPEN**
Alternate Air	**OFF**
Magnetos Inop Engine	**OFF**
Alternator Inop Engine	**OFF**
Electrical Load	**REDUCE**
Engine Instruments	**MONITER**

UNFEATHERING PROCEDURE

Fuel Selector	**ON**
Mixture Inop Engine	**FULL RICH**
Propeller Inop Engine	**FULL FORWARD**
Throttle Inop Engine	**FULL OPEN**
Magnetos	**ON**
Prime	**10 SECONDS**
Throttle	**1/8" OPEN**
Start Switch	**ENGAGE**

WHEN ENGINE STARTS

Throttle	**15-20" Until Temps in Green Arc**
Alternator	**ON**

IF ENGINE FAILS TO START

Starting Procedure	**REPEAT**

ENGINE FIRE IN FLIGHT

Fuel Selector Valve	**OFF**
Throttle	**CLOSE**
Propeller	**FEATHER**
Mixture	**IDLE CUT-OFF**

EMERGENCY DESCENT

Throttles	**CLOSED**
Propellers	**FORWARD**
Mixtures	**EN-RICH**
Gear	**EXTEND**
Airspeed	**129 KIAS**

MANUAL GEAR EXTENSION

Airspeed	**85 KIAS**
Landing Gear Handle	**DOWN**
Emergency Extension Valve	**PULL OUT**
Gear	**3 GREEN**

ELECTRICAL FAILURE ("ALT" LIGHT)

Ammeters	**OBSERVE LOAD**

BOTH AMMETERS READ ZERO

(Reduce electrical load to minimum)

Alternator Switches	**BOTH OFF**
Alternator Switch	**ON (One at a time)**

(Observe which ammeter shows an electrical load and do not exceed 60 amperes on operating alternator)

ONE AMMETER READS ZERO

Alternator Switch	**OFF then ON**

IF OUTPUT NOT RESTORED

Circuit Breaker (5 AMP)	**RESET ONCE**

(Located in top right corner of circuit breaker panel)

Electrical Load	**REDUCE**

(Continue flight and take corrective action before further flight)

SINGLE ENGINE FUEL MANAGEMENT

USING FUEL FROM TANK ON SAME SIDE AS OPERATING ENGINE

Fuel Selector (Operating Engine)	**ON**
Fuel Selector (Inoperative Engine)	**OFF**

USING FUEL FROM TANK ON OPPOSITE SIDE AS OPERATING ENGINE

Fuel Selector (Operating Engine)	**X-FEED**
Fuel Selector (Inoperative Engine)	**OFF**

LANDING

Fuel Selector (Operating Engine)	**ON**
Fuel Selector (Inoperative Engine)	**OFF**