Seminole Check List

Preflight Cabin	
Landing Gear Control	Down
Avionics	Off
Master Switch	On
Landing Gear Lights	3 Green
Fuel Quantity	Checked
Master Switch	Off
Magnetos Switches	OFF
Carb Heat	Off
Mixture Controls	Idle Cut-Off
Cowl Flaps	Open
Circuit Breakers	Checked
Trim Indicators	To Neutral
Static System	Drain
Controls	Free
Flaps -	Check
Emergency Exit	Secure

V Speeds	
Vso	55
Vmc	56
VS	57
Vr	75
Vx	82
Vxse	82
Vsse	82
Vy	88
Vyse	88
Vfe	111
Vlo up	109
Vlo dn	140
Vle	14
Vno	169
Vne	202
Va (3800 #)	135
Va (2700 #)	112
Max Demo XW	17

Preflight Exterior	
Fuel Sump Drain	Check
Wing Aileron & Flap	Check
R-Gear Strut & Tire	Check
Wing Tip	Check
Leading Edge	Check
Fuel & Cap	Check Fuel
Engine	Check Oil
Propeller	Check
Cowl Flaps	Open
N-Gear Strut & Tire	Check
Tow Bar	Removed
Landing Light	Check
Windshield	Check
Leading Edge	Check
Propeller	Check
Cowl Flaps	Open
Fuel Cap	Check Fuel
Engine	Check Oil
Leading Edge	Check
L-Gear Strut & Tire	Check
Wing Tip	Check
Stall Warning Vanes	Check
Pitot/Static Mast	Check
Wing Aileron & Flap	Check
Dorsal Fin Scoop	Clear
Empennage	Check
Stabilator	Check
Antennas	Check
Navigation / Landing Lights	Check
Baggage Door	Secure

Before Starting Engines	
Preflight Inspection	Complete
Seats, Belts & Harness	Checked
Brakes	Set
Fuel Selector Valves	On
Flaps	Up
Cowl Flaps	Open
Carb Heat	Off
Circuit Breakers	Checked
Mixtures	1.5 Knob Fwd Of Lean
Props	Full Forward
Throttles -	Set
Avionics Switch	Off
Alternators	On
Master Switch	On
Lights	As Req
Fuel Pumps	On
Magneto Switches	On

Starting Engines	
Propeller Area	Clear
Left Primer (if Cold)	6 Pumps Of Primer
Left Starter	Engage
Left Throttle	1000 Rpm
Left Oil Pressure	Checked
Left Mixture	Lean
Left Alternator	Checked
Left Vacuum	Checked
Right Primer (if Cold)	6 Pumps Of Primer
Right Starter	Engage
Right Throttle	1000 Rpm
Right Oil Pressure	Checked
Right Mixture	Lean
Right Alternator	Checked
Lt & Rt Fuel Pumps	Off
Lt & Rt Fuel Pressure	Checked
Avionics Master Switch	On
Fresh Air Fan Switch	As Req

After Start/Before Taxi	
Quadrant Friction	Adjusted
Gear Selector	3 Greens No Red
Transponder	Alt/Code
Garmin	Initialized
Compass System	Set
Lt & Rt Crossfeed	Check
ATIS	Received
Taxi Clearance	Received
Lights	As Req

Taxi	
Brakes and Steering	Checked
Flight Instruments	Checked
Flight Control Position	As Req

Runup	
Brakes	Set
Flight Controls	Free & Correct
Fuel Selector Valves	On
Trim	Set
Mixtures	Rich
Props	Full Forward
Throttles	1500 Rpm
Engine Gauges	Check
Props	Feather Check
Throttles	2000 Rpm
Ammeters	Check
Carb Heat	Check
Vacuum	Check
Annunciator	Press-To-Test
Magnetos	Check
Prop Levers	1950 Rpm
Throttles	INCREASE TO CHECK Govs
Throttles	Idle
Props	Full Forward
Mixtures	Lean
Carb Heat	Verify OFF
Primers	In & LOCKED
Cowl Flaps	Open
Flaps	Set
Clock	Set
Flight Instruments	G5 Ai & Hsi/2 Ea. Alt Set
Radios/Nav's	Set

Line-Up (Before Takeoff)	
Door/Window	Closed/Latched
Mixtures	Rich
Transponder	Set
Clock	Reset
Fuel Pumps	On
Lights	As Req

Normal Takeoff	
Flaps	0°
Brakes	Hold
Power	2000 RPM
Engine gauges	Check
Power	Full throttles
Brakes	Release
Airspeed	Call Out Alive
Rotate	Per POH (75 at 3800 gwt)
Climb	82 KIAS to clear 50'
Positive Rate	Establish
Gear	Up
Climb	88 KIAS to 500' AGL
Climb	105 KIAS at 500' AGL
Power	24"MP/2500 RPM 1000'

Climb/After Takeoff	
Flaps	UP
Landing Gear	UP
Power	25"/2500 RPM
Airspeed (5 Deg Pitch)	105 KIAS
Fresh Air Fan Switch	OFF
Engine Gauges	CHECK
Fuel Pumps	OFF

Cruise	
Power	As Required
Normal	23'/2300 RPM
Training	20"/2300 RPM
Traffic Pattern	18"/2300 RPM
Mixtures	Lean
Cowl Flaps	As Required
Lights	As Required

Descent	
Mixtures	As Req
Throttles	As Req
Cowl Flaps	As Req
CHT/EGT	Monitor
Carb Heat	If Needed

Approach/Before Landing	
Seats/Belts	Checked
Fuel Selector Valves	On
Cowl Flaps	As Req
Mixtures	As Req
Nav/Coms	Set For Approach
Fuel Pumps	On
Landing Gear	Down
Flaps	As Required
Gas Undercarage Mixture Props Switches	

400 Feet	
G-U-M-P-S	RECHECKED

Go Around	
Throttles/Props	Max/Full Fwd
Pitch Attitude	7 1/2 Deg
Flaps	Retract
Airspeed	As Req
Landing Gear	Up
Cowl Flaps	Open

After Landing	
Flaps	Retract
Cowl Flaps	Open
Carb Heat	Off
Mixtures	Lean
Transponder	ALT/1200
Lights	As Req
Fuel Pumps	Off

Shutdown	
Fan	OFF
Avionics Master	OFF
Left Mixture	Cutoff
Left Vacuum	Check
Right Mixture	Cutoff
Left Vacuum	Check
Magnetos	OFF
Lights	OFF
All Switches	OFF
Alternator Switches	OFF
Master Switch	OFF
Flight Hobbs & Tachs	RECORD

Aborted Takeoff	
Normal Takeoff	
Instructor Pulls Mixture	Before 30 KIAS
Reaction	
Pilot	Both Throttles IDLE
Pilot	Maintain Center Line
Instructor	Both Mixtures Rich
Pilot	Maintain Center Line & Slow

Engine Failure After Takeoff	
Short Field Takeoff	
One Engine to IDLE	After 400' AGL
Reaction	
Mixture, Props, & Power	Forward
Bank	Into Good Engine
Rudder	Into Good Engine
Gear	UP
Flaps	UP
Airspeed	Above 82 KIAS
Identify Engine	Dead Foot Dead Engine
Simulate Feather	Dead Engine
Instructor - Set Zero Thrust 11.5 MP / 2000 RPM	
Simulate	Emergency Call
Fly pattern	With Single Engine

Seminole Maneuvers

Seminole Maneuvers are configured to begin as shown below.
Each maneuver may have additional power and prop settings

Training / Maneuvers Configure	
Fuel Pumps	On
Landing Light	On
Mixtures	Rich
Props	Forward
Power	20" MP & 2300 RPM
Clearing Turns	90°Left & Right
Altitudes	
Slow Flight	3,500' AGL or above
Power Off Stalls	5,500' AGL or above
Power On Stalls	5,500' AGL or above
Accelerated Stalls	5,500' AGL or above
VMC Demo	6,600' AGL or above
Drag Demo	7,500' AGL or above
Engine Shut Down	6,500' AGL or above
Emergency Descent	

Short Field Takeoff	
Flaps	0°
Brakes	Hold
Power	2000 RPM
Engine gauges	Check
Power	Full throttles
Brakes	Release
Airspeed	Call Out Alive
Rotate	Per POH (70 at 3800 gwt)
Climb	82 KIAS to clear 50'
Positive Rate	Establish
Gear	Up
Climb	88 KIAS to 500' AGL
Climb	105 KIAS at 500' AGL
Power	24" MP and 2500 RPM

Slow Flight	
Maneuver Configure	
Power	15" MP
Props	2300 RPM
Speed	Under 140 KIAS
Gear	Down
Flaps	Full (40°)
Speed	Reduce to 65 KIAS
Power	18-21" MP
Altitude/Heading	Hold
Recovery	
Power	23" MP
Flaps	Up before 111 KIAS
Gear	Up before 109 KIAS

Power On Stalls	
Maneuver Configure	
Power	12" MP
Props	Full Forward
Speed	75 KIAS
Power	18" MP
Pitch	10-12 Degrees
Decay of Controls	Recover
Recovery	
Pitch	Nose to Horizon
Power	Full Throttle

Power Off Stall	
Maneuver Configure	
Power	15" MP
Speed	Below 140 KIAS
Gear	Down
Flaps	Full (40°)
Power	12" MP
Props	Full Forward
Recovery	
Power	Full Throttle
Flaps	Up before 111 KIAS
Gear	Up before 109 KIAS

Accelerated Stall	
Maneuver Configure	
Power	15" MP
Speed	120 KIAS
Gear	UP
Flaps	UP
Turn	45° Bank
Power	Slowly reduce to Idle
Maintain Altitude	Induce stall
Recovery	
Onset of buffeting	Stall condition
Angle-of-attack	Reduced and
Power	Full Throttle
Wings	Level

VMC Demo	
Maneuver Configure	
Power	12" MP
Gear	Up
Flaps	Up
Airspeed	82 KIAS or above
Props	Full Forward
Left Throttle	Slowly to Idle
Right Throttle	Slowly to Full Power
Pitch	Slowly increase
Airspeed	Reduce 1 kt/second
Heading	Maintain directional control
Recovery	Stall Horn or failure to maintain heading
Right Throttle	Idle (reduce)
Angle of Attack	Decrease
As Airspeed increases	
Right Throttle	Advance as needed
Airspeed	82 to 88 KIAS
Throttles	Slowly to 20" MP

Steep Turns	
Maneuver Configure	
Power	20" MP & 2300 RPM
Airspeed	120 KIAS
Bank	50-55°
Turn	360°
Roll Out	
Turn Other Direction	360°
Roll Out	

Drag Demo		
Maneuver Configure		
Altitude		Check
Power		15-16" MP
Props		2300 RPM
Airspeed		88 KIAS Blue Line (Vyse)
Gear		Down
Pitch		88 KIAS Blue Line
VSI	-150 fpm	Note Descent Rate
Flaps		10 Degrees
VSI	-200 fpm	Note Descent Rate
Flaps		25 Degrees
VSI	-300 fpm	Note Descent Rate
Flaps		40 Degrees
VSI	-450 fpm	Note Descent Rate
Left Throttle		Idle (windmilling prop)
VSI	-1,100 fpm	Note Descent Rate
Left Throttle	(zero Thrust)	11.5" MP/2000 RPM
VSI	-650 fpm	Note Descent Rate
Flaps		0 Degrees
Right Engine		Prop & Throttle Full
VSI	+25' fpm	Note Descent/Climb Rate
Recovery		
Power		23" 2300 RPM
Gear		Up before 109 KIAS
Altitude		As Required

2 Engine ILS Approach	
Maneuver Configure	
Power	16"
Props	2300 RPM
Glideslope	Intercept
Gear	Down
Flaps	25° Down
Airspeed	100 KIAS
IF Leveling at at MDA	
Power	22"
Props	2300 RPM
Gear	Down
Flaps	25° Down
Airspeed	100 KIAS

1 Engine ILS Approach	
Maneuver Configure	
Power	22" Or as needed
Props	2300 RPM
Glideslope	Intercept
Gear	Down
Flaps	25° Down
Airspeed	100 KIAS
IF Leveling at at MDA	
Power	Full Power"
Props	2600 RPM
Gear	Down
Flaps	UP
Airspeed	88 KIAS Blue Line
Note: If Unable to Hold Blueline Gear UP Until Landing Assured	

ZERO Thrust	
Power	11.5" MP
Prop	2000 RPM

Engine Shut Down	
Memory Items	
Airspeed	Above 82 KIAS
Mixtures	Full Rich (forward)
Props	Full Forward
Throttles	Full Forward
Flaps	Up
Gear	Up
Identify Engine	Dead foot-Dead Eng
Verify	Throttle Idle
Trouble Shoot	
Fuel Selector	Check On
Primer	In & Locked
Carb Heat	On
Mixtures	Rich
Magnetos	Left or Right only
Electric Fuel Pump	Check On
Shutdown and Secure	
Prop of Inop Eng	Feather > 950 RPM
Mixture of Inop Eng	Full Lean
Trim	As Req
3 to 5 Degree Bank	Toward Good Engine
Ball	1/2 to 3/4 Out
Dead Engine	
Electric Fuel Pump	Off
Magnetos	Off
Cowl Flap	Closed
Alternator	Off
Electrical Load	Reduce as Req
Fuel Selector	Off, X-Feed as Req
Operating Engine	
Electric Fuel Pump	Off
Cowl Flap	Open

Airstart	
Dead Engine	
Fuel Selector	On
Electric Fuel Pump	On
Prop Control	Forward to Cruise
Mixture	1-1.5 " Fwd of Lean
Magneto Switches	On
Begin Shallow Dive	
Throttle	2 Pumps, open 1/2"
Starter	Engage
Throttle	12" MP until CHT in Green
Alternator	On
Fuel Pump	Off
Cowl Flap	As Required

Emergency Descent	
Maneuver Configure	
Power	Idle
Props	Full Forward
Gear	Down
Bank	45° Bank
Pitch	18° Down
Bank	Wings Level at 110 KIAS
Airspeed	120 KIAS (140 KIAS max)
Recovery	
Pitch	Level
Gear	Up before 109 KIAS
Power	As Required