The 5 T’s
Will be executed and verbalized each time when initiating a turn; intercepting a course, crossing a fix/NAVAID, etc.

Turn (turning to heading ....)
Time (start/stop as needed)
Twist (hdg. bug, CDI, HSI, etc.)
Throttle (adjust for alt./airspeed)
Talk (radio call/report as required)

Final Approach Fix Checklist
Time...................(Start if needed)
Gear...........Down (Seminole Only)
Power.............Reduce for descent
Tower*............Announce Position
Light...........Airport Lights (7 Clicks)
Lights............Aircraft Lights On
Lights.....3 Green (Seminole Only)
Flaps..................10*

Selecting and Tuning a NAVAID
Tune..................Appropriate Frequency
Select..................VLOC*
Twist...............Course on CDI/HSI
Steer...............To intercept course
Identify...........Verify correct identifier

Selecting the GPS for Navigation
Tune............Enter “Direct To”, etc
Select...............GPS*
Twist...............Course on CDI/HSI
Steer...............To intercept course
*Use the “CDI” button on the GPS to select the nav. source. If using an aircraft with a glass display, select the appropriate source on the PFD.

WIRE Checklist
Weather..................Obtain
Instruments........DG/Altimeter Set
Radios......................Set
( Load freq.’s needed for appch.)
Environment.........Approach Brief

JAF Memory Checklist
B – Boost Pumps (fuel)
C – Carb Heat
C – Cowl Flaps (Seminole)
G – Gas (Fuel Selector)
U – Under Carriage
M – Mixture
P – Prop Controls
S - Seatbelts

Standard Call Outs
These standard call outs help build habits that increase situational awareness. The use of these call outs has been shown to reduce the risk of pilots falling behind the airplane in the IFR environment.

Departure
Taking the Runway for Takeoff
Verbally verify the DG, compass, and runway numbers are aligned. (i.e. The pilot looks at the heading indicator, compass, and runway numbers and says “33, 33, 33”, verifying the correct indications.

Airspeed Alive
When the airspeed indicator needle comes off the wall, the pilot will call “Airspeed Alive”.

Rotation
Example: “55 knots, rotate”

Climb/Descent
Approaching Assigned Altitude
“1000 To Go” “500 To Go” “100 To Go”

Approach
“Localizer Alive/Final Approach Course Alive”
“Glideslope Alive”

Approach Mode
Before reaching the final approach fix, the pilot will verify that the GPS has sequenced into approach mode. This will happen when within 2nm of the final approach fix.

Approaching MDA/DA
The pilot will make the 1000’, 500’, and 100’ to go calls when approaching the MDA/DA
“Minimums” – The pilot will announce arrival at the MDA/DA.
“Runway in sight” - The pilot will make this call upon seeing one of the visual references listed in 91.175 in sight.
“Missed Approach” – The pilot will announce when initiating a missed approach.
Piper Seminole Instrument Approach Procedures

**Straight-In Approach to Landing** (All Engines)
Before Reaching IAF..............WIRE Checklist Complete
Final Approach Speed.........................100 KIAS
Before Reaching FAF
.........................Before Landing Check Complete
At FAF.........................Final Approach Fix Checklist
Runway Environment in Sight2,3
.........................Flaps 25°, Pitch 90 KIAS
.........................Flaps 40°, Pitch 80 KIAS

**Circling Approach to Landing** (All Engines)
Procedures are the same as a straight in approach to landing until.............
FAF.......................Leave Flaps 0° Until Downwind
Runway Environment in Sight
Position for circling approach
Enter a normal traffic pattern if practical
*Maintain MDA and intercept PAPI/VASI before beginning final descent.*
After intercepting PAPI/VASI
..............Flaps 25°, Pitch 90 KIAS, begin descent
Final...............................Flaps 40°, Pitch 80 KIAS

**Straight-In Approach to Landing** (Single Engine)
Before IAF.............................WIRE Checklist Complete
Final Approach Speed.............................100 KIAS
(88 KIAS if needed for performance)
Before FAF
.........................Before Landing Check Complete
At FAF.........................Final Approach Fix Checklist
Runway Environment in Sight2,3
.........................Flaps 25°, Pitch 90 KIAS
Committed to Land and Runway Made
Both props fwd. (when using sim. feather)4
Reduce throttle slowly and flare airplane

**Circling Approach to Landing** (Single Engine)
Single engine circling approaches should be avoided if possible. If necessary to perform a circling approach, enter a normal traffic pattern after the runway environment is in sight and perform the normal procedures for a single engine traffic pattern. This includes the procedures for extension of the gear and flaps. For performance purposes, it may be required to delay extension of the gear until beginning descent below MDA. Extra caution must be taken in this case to ensure the gear is down and locked prior to landing.

---

Piper Warrior Instrument Approach Procedures

**Straight-In Approach to Landing**
Before Reaching IAF..............WIRE Checklist Complete
Final Approach Speed.............................90 KIAS
Before Reaching FAF
.........................Before Landing Check Complete
At FAF.........................Final Approach Fix Checklist
Runway Environment in Sight2,3
.........................Flaps 25°, Pitch 80 KIAS
.........................Flaps 40°, Pitch 70 KIAS

**Circling Approach to Landing**
Procedures are the same as a straight in approach to landing until.............
FAF.......................Leave Flaps 0° Until Downwind
Runway Environment in Sight
Position for circling approach
Enter a normal traffic pattern if practical
*Maintain MDA and intercept PAPI/VASI before beginning final descent.*
After intercepting PAPI/VASI
..............Flaps 25°, Pitch 80 KIAS, begin descent
Final...............................Flaps 40°, Pitch 70 KIAS

**FAR 91.175 Descent Below MDA or DA/DH**
Three things required for descent below MDA/DA.
1. *Normal maneuvers to landing* and a normal rate of descent to the intended runway.3
2. *Flight visibility* not less than that listed in the approach procedure.
3. *Runway environment in sight*, including one of the following references:
    ---Runway end identifier lights (REILs)
    ---Visual approach slope indicator
    ---Runway/Runway markings and lights
    ---Threshold/Threshold markings and lights
    ---Touchdown zone/TDZ markings and lights
    ---Approach Lights
    - Allows descent to 100 ft. above TDZE
    -Descent below 100 ft. allowed if red terminating bars or red side row bars are in sight.

---

1See FAF Fix/WIRE Checklist on previous page. For approaches in the Seminole, the landing gear will be extended at the FAF.
2When flying a precision approach, stay on the electronic glide path until it is necessary to descend below.
3When flying a non–precision approach, maintain MDA until intercepting the PAPI/VASI to ensure normal maneuvers to landing.
4This is done in the event that an actual go-around using both engines becomes necessary while performing single engine approaches for training purposes.