INFLIGHT
PILOT TRAINING

CESSNA 172N
PROCEDURES MANUAL

Cessna 172N Procedures

Pre-Maneuver Flow

Seat Belts……..Secure
Fuel……On
Mixture……Rich
Landing Light……On
Engine Gauges……Green/Normal

Slow Flight – **Airplane Flying Handbook (AFH) 4-3**

Clearing Turns……Complete
Altitude……Minimum 1500’ AGL

Maneuver
Power……1500 RPM
Carburetor Heat……On
Flaps……Extend in Increments to 30°
Airspeed……Pitch to maintain ***above*** stall horn
Altitude……Increase power as necessary to maintain

Recovery – if stall horn sounds, buffet occurs, or instructor directs.
Power……Full
Carburetor Heat……Off
Flaps……Retract in increments (10° increments as airspeed builds)

Tolerances
Heading……+/- 10°
Altitude……+/- 100 ft.
Airspeed……Above stall horn

Steep Turns – 360° left and right – **AFH 9-2**

Clearing Turns……Complete
Altitude……Minimum 1500’ AGL
Reference Point……Landmark near horizon

Maneuver
Power……≈2300 RPM
Airspeed……90 KTS
During Turn……Slight power increase

Tolerances
Heading……+/- 10°
Altitude……+/- 100 ft.
Airspeed……+/- 10 KTS
Bank Angle……45°

Power-Off Stall (Approach Configuration) – **AFH 4-8**

Clearing Turns……Complete
Altitude……An altitude allowing full recovery by 1500' AGL

Maneuver
Power……1500 – 1600 RPM
Carburetor Heat……On
Flaps……Extend in Increments to 30°
Airspeed……Pitch and Trim for 65 KTS
Altitude……Establish descent, choose an altitude to initiate the stall

Recovery
Pitch……Lower pitch, reducing elevator pressure, then back to climb attitude
Ailerons……Neutral, then level the wings
Rudder……Control yaw
Power……Full
Carburetor Heat……Off
Flaps……1st Notch immediately, 2nd Notch with Positive ROC, 3rd Notch at 60 KTS

Tolerances
Heading……+/- 10°
Bank Angle……20° maximum

Power-On Stall (Takeoff/Climb Configuration) – **AFH 4-9**

Clearing Turns……Complete
Altitude……An altitude allowing full recovery by 1500' AGL

Maneuver
Power……1500 RPM
Altitude……Maintain level
Airspeed……Vr or Vy, as desired
Power……2300 RPM minimum - Full

Recovery
Pitch……Lower pitch, reducing elevator pressure, then back to climb attitude
Ailerons……Neutral, then level the wings
Rudder……Control yaw
Power……Full

Tolerances
Heading……+/- 10°
Bank Angle……20° maximum

Accelerated Stall (Commercial/CFI) – **AFH 4-10**

Clearing Turns……Complete
Altitude……An altitude allowing full recovery by 1500' AGL

Maneuver
Throttle……1500 RPM
Altitude……Maintain level
Bank Angle……45°, increase back pressure to reach stall

Recovery
Pitch……Lower pitch, reducing elevator pressure, then back to climb attitude
Ailerons……Neutral, then level the wings
Rudder……Control yaw
Power……Full

Secondary Stall (CFI) – **AFH 4-10**

Clearing Turns……Complete
Altitude……An altitude allowing full recovery by 1500' AGL

Maneuver
Throttle……1500 RPM
Flaps……Extend in Increments to 30°
Airspeed……Pitch and Trim for 65 KTS
Altitude……Establish descent, choose an altitude to initiate the stall
Stall Indication……Release back pressure, then immediately increase abruptly

Recovery
Pitch……Lower pitch, reducing elevator pressure, then back to climb attitude
Ailerons……Neutral, then level the wings
Rudder……Control yaw
Power……Full
Flaps……1st Notch immediately, 2nd Notch with Positive ROC, 3rd Notch at 60 KTS

Elevator Trim Stall (CFI) – **AFH 4-12**

Clearing Turns……Complete
Altitude……An altitude allowing full recovery by 1500' AGL

Maneuver
Throttle……1500 RPM
Flaps……Extend in Increments to 30°
Airspeed……Pitch and Trim for 65 KTS
Altitude……Establish descent, choose an altitude to initiate the stall
Power……Full, simulate go-around

Recovery
Pitch……Lower pitch, reducing elevator pressure, then back to climb attitude
Ailerons……Neutral, then level the wings
Rudder……Control yaw
Power……Full
Flaps……1st Notch immediately, 2nd Notch with Positive ROC, 3rd Notch at 60 KTS

Crossed Control Stall (CFI) – **AFH 4-11**

Clearing Turns……Complete

Altitude……An altitude allowing full recovery by 1500’ AGL

Maneuver
Throttle……..1500 RPM
Descent…….. 65 KTS
Enter Turn……Increase Rudder in Direction of Turn, Increase Opposite Aileron, Maintain Elevator Back Pressure

Recovery
Pitch…….....Lower pitch, reducing elevator pressure, then back to climb attitude
Ailerons……Neutral, then level the wings
Rudder…….Control yaw
Power……..Full

Chandelles – **AFH 9-5**

Clearing Turns……Complete
Altitude…….. An altitude of at least 1500’ AGL
Reference Point……Selected

Maneuver
Power……..2300 RPM
Airspeed……..95 KTS
Chandelle……..Complete

Tolerances
Heading……..+/- 10°
Bank Angle……..30° maximum
Airspeed……Just above stall

Lazy Eights – **AFH 9-6**

Clearing Turns……Complete
Altitude…….. An altitude of at least 1500’ AGL
Reference Point……Selected

Maneuver
Power……..2300 RPM
Airspeed……..95 KTS
Lazy Eight……..Complete

Tolerances
Heading……..+/- 10°
Bank Angle……..30° maximum
Airspeed……..+/- 10 KTS
Altitude……..+/- 100’ from entry altitude

Steep Spirals – **AFH 9-4**

Clearing Turns……Complete
Altitude……An altitude allowing 3 complete turns by 1500’ AGL

Reference Point……Selected

Maneuver
Power……Idle abeam point
Steep Spiral……Complete 3 turns
Airspeed……65 KTS

Tolerances
Heading……+/- 10°
Bank Angle……60° maximum
Airspeed……+/- 10 KTS
Altitude……Complete by 1500’ AGL

Eights on Pylons – **AFH 6-14**

Clearing Turns……Complete
Altitude…… Pivotal altitude calculated/selected
Reference Points. ……Selected
Emergency Field……Selected

Maneuver
Power……2300 RPM
Airspeed……95 KTS
Eights on Pylons……Complete

Tolerances
Heading……45° entry to first pylon
Bank Angle……As necessary
Airspeed……+/- 10 KTS
Altitude……Begin and end at pivotal altitude

Turns Around a Point – **AFH 6-8**

Clearing Turns……Complete
Altitude…… 1000’ AGL
Reference Point……Selected
Emergency Field……Selected

Maneuver
Power……2300 RPM
Airspeed……95 KTS
Turn Around Point……Complete

Heading……+/- 10°
Bank Angle……45° maximum
Airspeed……+/- 10 KTS
Altitude……+/- 100’

S-Turns Across a Road – **AFH 6-10**

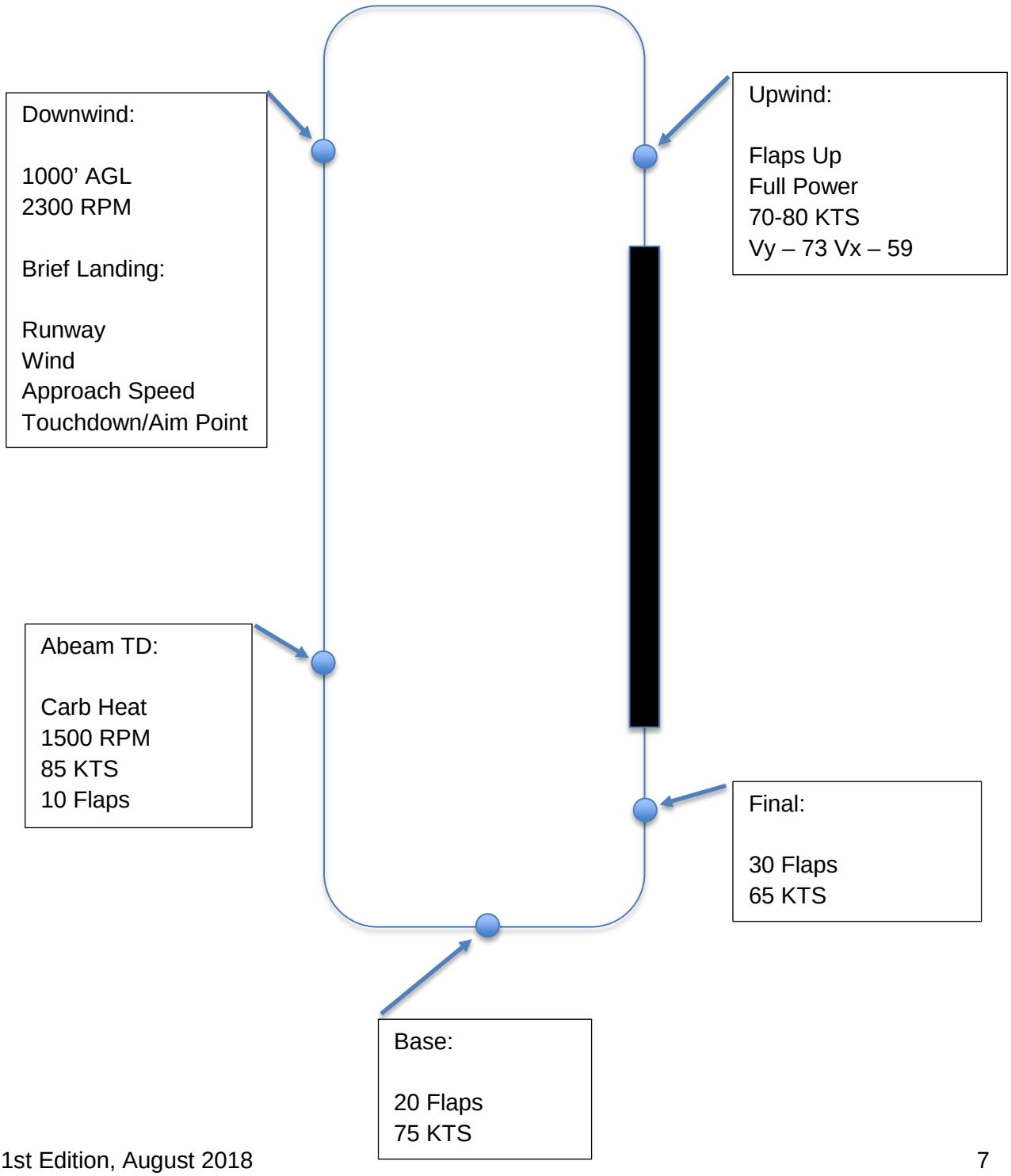
Clearing Turns……Complete
Altitude…… 1000’ AGL

Reference Point……Selected
Emergency Field……Selected

Maneuver
Power……2300 RPM
S-Turn……Complete
Airspeed……95 KTS

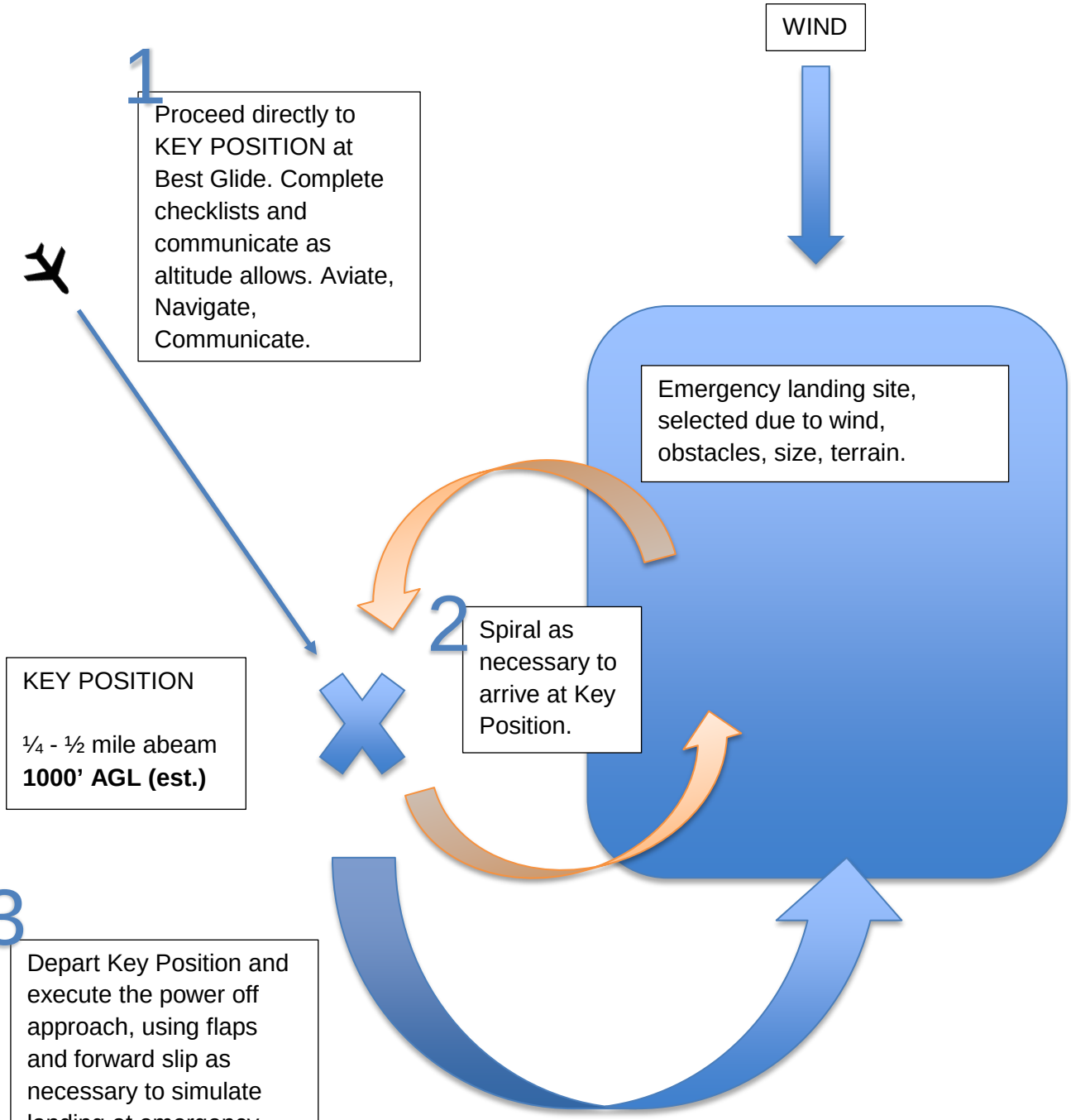
Heading……+/- 10°
Bank Angle……45° maximum
Airspeed……+/- 10 KTS
Altitude……+/- 100’

Traffic Pattern – **AFH CH. 7**



Engine Failure Procedure – **AFH 8-25, 26**

The engine failure procedure is intended to provide the student with a basic procedure in order to correctly set up the aircraft for a power off approach to the emergency landing site. Not included in this procedure are the necessary procedures and checklists to troubleshoot the engine and secure the engine. These will be found in the aircraft POH as well as the Inflight iPad checklists.



Instrument Approach Procedure

Prior to the Approach:

Approach……..Briefed
Checklists…… Completed as necessary

On Initial Approach Segment or Downwind/Base Vector

Throttle……..2300 RPM
Airspeed……..Cruise

Approaching Major Descent Point (1/2 Scale on GS or 2 NM to FAF)

Airspeed……..90 KTS

Intercepting Major Descent Point (GS/FAF)

Throttle……..1700 RPM
Carb Heat……On
Flaps……10°
Pitch……2.5° Down
Airspeed…… ……..80 - 85 KTS

Briefing the Approach

WEATHER – ATIS/Automated Weather
INSTRUMENTS – Set as necessary.
RADIOS – Set as necessary
ENVIRONMENT – Brief the approach

Brief the approach from Top to Bottom

Header - Verify Name, Type, and Runway of the approach. Discuss the notes and frequencies and note any changes as necessary. Verify airport lighting. Tune and ID frequencies. Verify airport elevation and TDZE.

Planview – Brief current location relative to the airport, IAF, approach segments to the airport, and any procedure turns. Minimum Safe Altitude for the area. Brief runway position relative to Final Approach Course. Is circling required?

Profile – Brief fixes, altitudes, and minimums.

Missed Approach – Brief the FULL missed approach. The first 2 steps should be memorized.