TransNorthern Aviation

King Air 200 Maneuvers

Principal Base of Operations:

TransNorthern Aviation
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REVISIONS

It is the responsibility of the Director of Operations or Chief Pilot to keep the King Air 200 Maneuvers current.

All revisions will be submitted to the FAA for approval prior to being implemented.

Revision control is accomplished in the upper right-hand corner of each page as follows

Page 1 Original 06-25-21

1	Represents Page 1.
Original	Represents Original document (not yet revised)
06-25-21	Represents the date the original document (or revision) became effective.

LOG OF REVISIONS

Rev. No.	Date	Page Numbers	Initials
Original	06-25-21	All	

EFFECTIVE PAGES

This list shows the current revision and effective date of each page.

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James Howery, POI

JAMES M HOWERY

Digitally signed by JAMES M HOWERY
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USE OF THE FLIGHT MANEUVERS

The flight maneuvers contained herein are designed to support the flight training curriculum segment. The procedures established for each maneuver are designed to standardize company flight training.

All crewmembers are expected to demonstrate knowledge and proficiency in each maneuver (both ground and flight) listed in the flight training curriculum segment in accordance with the standards set forth in the applicable airman certification standards guide.

Instructors and check airman will be familiar with the ATP (FAA-S-ACS-11), Commercial Pilot (FAA-S-ACS-7A), or Instrument Rating (FAA-S-ACS-8B) Airman Certification Standards as applicable, °prior to conducting training & testing.

These flight training maneuvers do not replace the aircraft performance and operating limitations published in the King Air 200 AFM. Compliance with the FAA Limitations section is mandatory for all flight operations.

Training Considerations:

- Flight training sessions should be preceded and followed by an instructor briefing and debriefing.
- Flight training maneuvers should be completed above 3,000' AGL.
- Flight training maneuvers should be modified as necessary to comply with ATC instructions.
- For traffic avoidance ADSB and ATC Traffic Advisory services should be used whenever possible.
- Clearing turns should be conducted as necessary prior to initiating the maneuver.
- Instructors should emphasize use of appropriate Checklists and single or multi-crewmember resource management.
- Instructors will provide a view limiting device for applicable maneuvers.
- Instructors should combine maneuvers whenever possible.

King Air 200 Speeds (KIAS at gross weight)

V_{MCG}	84	Ground Minimum Control Speed
V_{MCA}	86	Air Minimum Control Speed
V_R	95	Takeoff Decision Speed/ Rotation Speed Flaps 0% (0°)
V_1	95	Takeoff Decision Speed/Rotation Speed Flaps 40% (14°)
V_2	121	Takeoff Safety Speed
V_Y	125	Two Engine Best Rate of Climb Speed
V_{YSE}	121	Single Engine Best Rate of Climb Speed
Vx	100	Two Engine Best Angle of Climb Speed
V_{XSE}	115	Single Engine Best Angle of Climb Speed
V_{SSE}	104	Intentional One-engine Inoperative Speed
V_{FE}	200	Approach Flaps - 40% (14°)
	146	Full Flaps - 100% (35°)
V_{LO}	181	Landing Gear Operating Speed - Extension
V_{LO}	163	Landing Gear Operating Speed - Retraction
V_{LE}	181	Landing gear extended max speed
V_A	170	Maneuvering Speed
V_{MO}	259	Max operating speed (also max autopilot speed)

Procedure Reference speeds	
135	Maximum Glide Range
170	Turbulent Air Penetration Speed
100	Balked Landing
226	Effective Windshield Deicing Maximum Speed
181	Emergency Descent
140	Icing Conditions Minimum Speed
140	Air Start Minimum Speed
205	Flight with Cabin Entrance Door Removed
25	Maximum demonstrated crosswind

Cruise Climb Speeds	
160	Sea Level to 10,000'
140	10,000 to 20,000'
130	20,000 to 25,000'
120	25,000 to 35,000'

Stall Speeds - Power Idle, 0° Bank Angle	
75	Flaps 100% (35°) V_{SO}
85	Flaps 40% (14°)
99	Flaps 0% (0°) V_{S1}

Takeoff Speed Flaps 0%			
WEIGHT	V_R	V_2	V_{YSE}
1 2,500	95	121	121
12,000	95	119	119
11.500	95	117	118
11,000	95	115	117
10,500	95	113	116
10,000	95	111	114
9,500	95	110	113
9,000	95	108	111

Takeoff Speed Flaps 40% (14°)			
WEIGHT	V_R	V_2	V_{YSE}
12,500	94	106	121
12,000	94	105	119
11,500	94	104	118
11,000	94	103	117
10,500	94	102	116
10,000	94	101	114
9,500	94	100	113
9,000	94	99	111

BEFORE TAKEOFF

The following procedures are applicable to all takeoff maneuvers:

Checklist	Complete Final Items Checklist
Approach Zone	Verify clear before taxiing into position on runway
Runway	Align with centerline and crosscheck heading

NORMAL TAKEOFF - Flaps °

The purpose of this takeoff is to make a smooth transition from ground roll to flight on a hard surfaced or frozen runway, assuming a headwind or no wind, and no obstacles in the takeoff path.

Checklist	Complete
Flaps	As required - Note: Flaps 0° V_R 95 KIAS
Brakes	As required
Ailerons	Neutral
Elevator	Hold slightly nose high to lighten load on nose landing gear
Power	Advance smoothly to full power - 2,000 ft-lbs torque (Note: Auto ignition lights out, auto feather lights on, two out/two on)
Rudder	Maintain runway alignment
Rotate	V_R/V1- 95 KIAS, 7° pitch attitude (Note: See takeoff speeds chart)
Gear	UP - after positive rate of climb
Flaps	Retract after passing blue line
Airspeed	V_Y - 125 KIAS
Lights	OFF
Yaw Damper	ON
Power	Set climb power - 1,800 RPM / 2,000 ft-lbs torque
Checklist	Complete appropriate checklist
Airspeed	Cruise climb 160 KIAS through 10,000' (Note: Minimum in-flight icing speed is 140 KIAS)

CROSSWIND TAKEOFF

The purpose of this takeoff is to coordinate correct use of flight controls and assure a safe and smooth transition from ground roll to flight in crosswind conditions.

Follow the procedures for a normal takeoff with the following modifications:

Checklist	Complete
Flaps	As required
Brakes	As required
Ailerons	Hold into wind - upwind wheel leaves ground last
Elevator	Neutral - to assist keeping nose wheel on ground and directional control
Power	Advance smoothly to full power - torque 2000 (Note: auto ignition lights out, auto feather lights on, two out/two on)
Rotate	V_R/V_1 - 95 KIAS, add 10 KIAS in gusty wind conditions. (See takeoff speeds charts), maintain runway alignment - when airborne allow airplane to crab into wind to maintain extended runway centerline
Gear	UP - after positive rate of climb
Flaps	Retract after passing blue line
Airspeed	V_Y-125 KIAS
Lights	OFF
Yaw Damper	ON
Power	Set climb power - 1,800 RPM / 2,000 ft-lbs torque
Checklist	Complete appropriate checklist
Airspeed	Cruise climb 160 KIAS through 10,000' (Note: Minimum in-flight icing speed is 140 KIAS)

SHORT FIELD TAKEOFF - Flaps 40% (14°)

The purpose of this takeoff is to get airborne with the shortest take off roll distance due to a limited runway length or obstacles in the immediate takeoff path and once airborne climb at the best angle of climb until obstacles are cleared.

Check list	Complete
Flaps	40% (14°)
Brakes	Limit use on gravel; otherwise apply until takeoff power is reached and then release. See note
Ailerons	Neutral
Elevator	Hold slightly nose high to lighten load on nose landing gear
Power	Advance smoothly to full power - 2000 ft-lbs torque (Note: auto ignition lights out, auto feather lights on, two out/two on)
Rudder	Maintain runway alignment
Rotate	95 KIAS (V_1/ V_R) - Pitch 10° nose up and press pitch sync button (Note: See takeoff speeds charts)
Gear	UP - after positive rate of climb
Flaps	Do not retract until clear of obstacles and passing blue line
Airspeed	100 KIAS (V_X) until obstacles are cleared
Lights	Off
Yaw Damper	ON
Power	Set climb power - 1,800 RPM / 2,000 ft-lbs torque
Checklist	Complete appropriate checklist
Airspeed	Cruise climb 160 KIAS through 10,000' (Note: Minimum in-flight icing speed is 140 KIAS)

Note: If runway is gravel use enough brakes to allow the aircraft to roll slowly until 2000 RPM is reached then fully release brakes and set maximum takeoff power. Experience has shown as long as the aircraft has some movement the propellers generally do not pick-up gravel. When taxiing on gravel runways pilot should be aware of wind direction and velocity at all times.

When taxiing with a tailwind component pilots should use as little power as possible and make every attempt not to stop aircraft prior to beginning the takeoff roll. It may be necessary to complete the runup at a reduced power setting or while taxing

SOFT/ROUGH FIELD TAKEOFF

A field is considered soft if the tires leave a depression in the surface. The purpose of this takeoff is to get airborne at the lowest possible airspeed and accelerate to V_X or V_Y in ground effect. The "rolling" take off technique should be used as much as possible. The aircraft should be configured before starting taxi.

Checklist	Complete
Flaps	40% (14°)
Brakes	Do not use
Ailerons	Neutral
Elevator	Hold slightly nose high to lighten load on nose landing gear.
Power	Advance smoothly to full power
Rudder	Maintain runway alignment
Rotate	At 85 KIAS pitch 5°-7° up (add 10 KIAS for gusty conditions)
Gear	UP - after positive rate of climb
Flaps	Retract after passing blue line
Airspeed	Accelerate through blue line to 125 KIAS while maintaining positive rate of climb.
Power	Set climb power - 1800 RPM / 2000 ft-lbs torque
Checklist	Complete appropriate checklist
Airspeed	Cruise climb at 160 KIAS through 10,000' (Note: Minimum inflight icing speed is 140 KIAS)

REJECTED TAKEOFF

This maneuver provides training in positive aircraft control for stopping the aircraft if a malfunction or sudden runway intrusion occurs during the takeoff roll. The instructor will simulate an "engine failure" by reducing power on one engine during the initial takeoff phase with adequate runway remaining and 50% below V_{MCG} of 84 KIAS.

Power Levers	Idle
Reverse	As required - out of reverse by 60 KIAS unless actual emergency & short runway.
Braking	Maximum braking consistent with safety and runway conditions

If aircraft cannot be stopped on runway and time allows:

Condition Levers	FUEL CUT-OFF
Fuel Firewall Valves	CLOSED
Master Switch	OFF (Gang bar down)
Passengers	Assist with evacuation if necessary

NORMAL LANDING

The purpose of the normal landing is to execute a smooth touchdown and rollout on a hard surfaced runway with ample landing area. The procedure assumes a normal pattern approach with a head wind or no wind.

Airspeed	130 KIAS in pattern
Gear	DOWN abeam runway
Checklist	Complete Landing Checklist
Lights	Landing light ON for visibility
Flaps	40% (14°) initially then 100% (35°) on final
Airspeed	120 KIAS on final then see threshold speed charts
Prop	2,000 RPM, prop sync off, auto feather on
Rudder	Maintain directional control
Aileron	Neutral
Power	Reduce to idle as main wheels are touching down
Touchdown	Slightly nose high keep nose light on rollout
Reverse	Max reverse as main wheels touch down. Come out of reverse when slowing through 60 KIAS.
Flaps	Retract
Elevator	Gently lower nose wheel as airspeed diminishes
Ailerons	As required
Brakes	As required
Checklist	When clear of runway complete After Landing Checklist.

THRESHOLD SPEEDS (FLAPS 100%)			
12,500	103	10,500	98
12,000	102	10,000	96
11,500	101	9,500	95
11,000	99	9,000	93

THRESHOLD SPEEDS	(Flaps 100%)	(Flaps 0%)
12,500	103	132
12,000	102	130
11,000	99	126
10,000	96	122
9,000	93	117

CROSSWIND LANDING

The purpose of the crosswind landing is to land the airplane with a coordinated and straight approach in relation to the runway centerline under crosswind conditions.

Airspeed	120 KIAS in pattern
Gear	DOWN abeam runway
Checklist	Complete Landing Checklist
Lights	Landing light ON for visibility
Flaps	As required - Consider reduced flap setting in strong/gusty winds
Airspeed	103 KIAS - gusty conditions add 10 KIAS
Rudder	Crab into wind
Aileron	Into wind and change to slip just prior to touchdown
Power	Use power as required on upwind engine to aid in directional control
Touchdown	Upwind wheel should contact first with no side drift
Reverse	Max reverse as main wheels touch down. Come out of reverse when slowing through 60 KIAS.
Flaps	Retract
Elevator	Lower gently but quickly to maintain ground control.
Ailerons	Increase deflection into wind as speed diminishes.
Brakes	As required
Checklist	When clear of runway complete After Landing Checklist

SHORT FIELD LANDING

The purpose of the short field landing is to land at or near the threshold at a low speed. If the effective runway length is reduced due to obstacles in the approach path then consider the situation to be a short field landing also. There should be little or no floating during round out so airplane can be stopped in shortest distance possible.

Airspeed	120 KIAS in pattern
Gear	DOWN abeam runway
Checklist	Complete Landing Checklist
Lights	Landing light ON for visibility
Flaps	40% (14°) initially then 100% (35°) on final
Airspeed	85 KIAS short final
Prop	Full forward - 2,000 RPM, condition levers full forward
Rudder	Maintain directional control
Aileron	Neutral
Power	Reduce to idle as main wheels are touching down
Touchdown	Slightly nose high keep nose light on rollout
Reverse	Max reverse as main wheels touch down. Come out of reverse when slowing through 60 KIAS.
Flaps	Retract as main wheels contact. This will give maximum braking effectiveness.
Elevator	Gently lower nose wheel as airspeed diminishes
Ailerons	As required
Brakes	Maximum breaking effort
Checklist	When clear of runway complete After Landing Checklist.

SOFT/ROUGH FIELD LANDING

The purpose of this type of landing is to land the airplane softly and maintain a smooth and consistent rollout to avoid damage to the prop and landing gear. Slightly higher power is used throughout the final approach to reduce the rate of descent and allow the airplane to gradually contact the runway surface. A field is considered soft if it is sandy, muddy, slushy or has snow on it.

Airspeed	120 KIAS in pattern
Gear	DOWN abeam runway
Checklist	Complete Landing Checklist
Lights	Landing light ON for visibility
Flaps	40% (14°) initially then 100% (35°) on final
Airspeed	85 KIAS short final
Rudder	Maintain directional control
Aileron	Neutral
Power	As needed to ensure smooth touchdown
Touchdown	Slightly nose high keep nose light on rollout
Flaps	Retract
Elevator	Gently lower nose wheel at minimum airspeed
Ailerons	As required
Brakes	Minimum Required
Checklist	When clear of runway complete After Landing Checklist.

REJECTED (BALKED) LANDING

The purpose of this maneuver is to develop proficiency in executing a go-around procedure just prior to touchdown. The landing gear and flaps will be down and the "Before Landing" Checklist completed. At any time on final approach prior to 50' AGL the instructor will announce: "Go Around".

Power	Set maximum allowable
Pitch	10° UP
Flaps	Approach - 40% (14°)
Gear	UP after positive rate of climb
Airspeed	Accelerate to 125 KIAS (V_Y)
Flaps	UP
Checklist	Complete Climb Checklist
Airspeed	Cruise climb at 140 - 160 KIAS

STEEP TURNS

The purpose of this maneuver is to control the airplane in steep bank angles with a minimum loss or gain of altitude.

Heading	Select cardinal heading
Power	1000 ft-lbs torque & 1800 RPM
Airspeed	170 KIAS
Entry	Smoothly roll into a 45° bank turn
Power	Increase 200 - 300 ft-lbs torque rolling through 30° to maintain airspeed and altitude
Monitor	ADI/VSI/Altimeter
Controls	Lead rollout heading approximately 15°
Power	Reduce 200 - 300 ft-lbs torque when rolling out of maneuver
Pitch	Trim out back pressure and rollout on initial heading while maintaining altitude and airspeed
Controls	Roll into a 360° turn in opposite direction and repeat maneuver

TAKEOFF CONFIGURATION STALL

Power	As required to establish V_Y (125 KIAS) in level flight
Gear	Down (below 181 KIAS)
Flaps	40% (14°)
Power	Maximum power (see note)
Pitch	Establish 20°bank and gradually increase pitch until first stall indication
At Stall Indication:	
Pitch	Reduce to eliminate stall indication & level wings
Power	Set maximum allowable - 2000 ft-lbs torque
Gear	UP - after positive rate of climb
Airspeed	Accelerate to VY (125 KIAS)
Flaps	UP

Note: Due to excessive pitch angles at reduced aircraft weights the instructor may have the pilot use a reduced power setting, but not less than 65% power.

LANDING CONFIGURATION STALL

Power	As required to establish V_Y (125 KIAS) in level flight. 1800 RPM / 1000 ft.-lbs. torque
Gear	Down below 181 KIAS
Flaps	Approach then full
Power	Reduce to establish 3° stabilized descent
Pitch	Increase gradually until first indication of stall - stop trimming at 120 KIAS and use elevator from 120 to stall indication - Do not trim all the way to stall
At Stall Indication:	
Pitch	Reduce to eliminate stall indication & level wings
Power	Set maximum allowable 1800 RPM / 2000 ft.-lbs torque
Flaps	Retract to approach 40% (14°)
Gear	UP - after positive rate of climb
Airspeed	Accelerate to VY (125 KIAS)
Flaps	UP

CLEAN CONFIGURATION STALL (Autopilot On)

Power	As required to establish 1.2 V_{S0} in level flight. Stop trimming at 120 KIAS and use elevator from 120 to stall indication. Set 300 ft Lbs torque.
Autopilot	On
Pitch	Let autopilot Increase pitch gradually until first indication of stall
At Stall Indication:	
Autopilot	Disconnect
Pitch	Reduce to eliminate stall indication & level wings
Power	Set cruise power or as instructed and recover to initial altitude

SYSTEMS AND EQUIPMENT MALFUNCTIONS AND FAILURES

At the instructor's option and without advance warning, the instructor will simulate and/or announce various system and equipment malfunctions, failures, and conditions. The student shall explain or demonstrate (as directed by the instructor), the appropriate procedures to address the simulated or announced conditions. These may include, and may not be limited to:

- Partial or complete power loss
- Loss of oil pressure
- Fuel starvation
- Electrical malfunction
- Vacuum/ pressure, and associated flight instruments malfunction
- Pitot / static
- Landing gear or flap malfunction
- Inoperative trim
- Inadvertent door or window opening
- Structural icing
- Smoke/ fire/ engine compartment fire

UNUSUAL ATTITUDES / PARTIAL PANEL

The instructor will simulate partial panel and put the airplane in the following attitudes prior to recovery back to normal cruise flight:

Nose Low - Airspeed Increasing	
Power	Reduce as required
Wings	Roll level
Pitch	Slowly increase to stabilized attitude
Power	Increase as required

Nose High - Airspeed Decreasing	
Power	Increase as required
Pitch	Reduce to stabilized attitude
Wings	Roll level
Power	Decrease as required

EMERGENCY DESCENT

The purpose of this maneuver is to achieve the maximum altitude loss in a minimum amount of time.

Oxygen	Don pilot mask if applicable for altitude or smoke
Communications	Establish
Autopilot	Disconnect
Power Levers	Idle
Prop Levers	Full forward to high RPM
Flaps	Lower to approach 40% (14°) when below 200 KIAS
Gear	Down - do not exceed 181 KIAS (V_{LO})
Pitch	Down - Remain aware of MEA
Pax Oxygen	As required
Transponder	Squawk 7700 & advise ATC, request vectors to nearest airport if necessary
Windshield Heat	As required

After descending to desired altitude:

Gear	Maintain speed under 163 KIAS (V_{LO} retraction) and retract UP
Power	Increase as needed and resume cruise

ENGINE FAILURE AFTER LIFTOFF

This maneuver will be reviewed before departure and will be initiated by instructor saying 'simulated engine failure' and reducing the power of the most critical engine. The failure will be initiated above 500' AGL and a minimum airspeed of 104 KIAS (V_{SSE}). Simulate Zero Thrust with 120 to 165 ft-lbs. torque / 1800RPM.

When the instructor simulates an engine failure the airman will perform the following:

- Fly aircraft - establish 7° nose up pitch attitude and 3° to 5° bank into operative engine
- Confirm maximum power is set
- Bring gear Up after positive rate of climb established
- Confirm flaps UP
- Identify, confirm autofeather of inoperative engine (manual feather if necessary)
- Airspeed - initiate climb at 121 KIAS (V_{YSE}) Note: Aircraft will be at 104 KIAS V_{SSE}
- Airspeed - after obstacles are cleared climb at V_{YSE} 121 KIAS
- Complete Engine Failure During Takeoff Checklist

MANEUVERING WITH ONE ENGINE INOPERATIVE

The instructor will simulate an engine failure during flight and the pilot will demonstrate appropriate emergency procedures. At cruise airspeed the instructor will reduce power to simulate an engine failure. The pilot will maintain the assigned heading and altitude while accomplishing the memory items on the Engine Failure Checklist. After completion of the memory items the pilot will secure or simulate securing the engine (as directed by the instructor) by completing the Checklist. After the engine failure Checklist has been completed the airman will either restart the engine or simulate a restart with the use of the 'Air Start' Checklist.

Note: Airspeed shall never be below 104 KIAS (V_{SSE}). For simulated engine failure Zero Thrust is 120 to 165 ft-lbs torque / 1650 RPM.

ONE ENGINE INOPERATIVE ILS APPROACH & LANDING

Follow speeds and procedures for normal instrument approaches with the following exceptions:

- On straight-in approaches do not lower flaps until landing assured.
- On circling approaches do not lower landing gear or flaps until in position to make normal landing.
- Maintain airspeed above V_{YSE} 125 KIAS until landing assured.

Missed Approach Procedure

- If missed approach becomes necessary initiate as soon as possible.
- Maintain V_{YSE} 125 KIAS throughout missed approach
- Set maximum power
- Raise landing gear and check flaps up
- Establish positive rate of climb at V_{YSE} 125 KIAS
- Execute published MAP

STANDARD INSTRUMENT TAKEOFF

The instructor will simulate instrument conditions at or above 100' AGL with a view limiting device. Follow procedures for normal takeoff with the addition of the following:

- Ensure heading indicator is aligned with runway heading
- During the takeoff roll maintain alignment of the airplane with the runway centerline while smoothly applying power and maintaining positive directional control.
- Monitor flight instruments while maintaining runway heading
- At 95 KIAS rotate 8° to 10° nose up
- Use normal takeoff procedures
- Accelerate and execute published departure procedure

LOWER THAN STANDARD INSTRUMENT TAKEOFF- Ops Spec C057

In addition to completing Standard Instrument Takeoff training, crewmembers being trained to conduct Lower Than Standard Takeoffs in accordance with ops spec C057 must be able to demonstrate satisfactory knowledge and/or proficiency in the following areas.

- Taxiing in a low visibility environment with emphasis on preventing runway incursion
- Required ground based visual aids (such as stop bars, taxi holding position lights)
- Determination of takeoff alternate airports, as applicable.

Follow procedure for Normal Instrument Takeoff with the following addition:

- The crewmember will perform the takeoff while wearing a view limiting device adjusted to allow viewing only the runway immediately in front of the aircraft.
- The instructor will monitor the takeoff and if necessary, take control by calling 'My Aircraft'. The crewmember will respond by saying 'Your Aircraft' and relinquish control to the instructor.

HOLDING PATTERNS

- Slow to the holding airspeed (160 KIAS) within 3 minutes of holding fix
- Crossing the holding fix, start timing, report entering hold
- Adjust inbound leg length to provide 1 minute (1 1/2 minutes above 14,000 MSL)
- Use a standard rate turn at both ends of the holding pattern
- Adjust outbound leg to achieve correct inbound time
- Double the wind correction from the inbound leg

NON-PRECISION APPROACH, LANDING & MISSED APPROACH

PRIOR TO IAF

- Obtain ATIS & set altimeter
- Review approach and missed approach
- Tune & identify NAVAIDS
- Complete Approach Checklist
- Slow to initial approach speed (150 KIAS = 700 ft-lbs torque/ 1800 RPM)

IAF OUTBOUND

- Start timing
- Flaps 40%
- Airspeed 130 KIAS
- Remain within charted distance from FAF

PRIOR TO FAF

- Slow to final approach speed 130 KIAS (typical)

AT FAF

- Gear DOWN & Locked
- Reduce power as necessary to descend 800 to 1000 fpm, approx. 700 ft-lbs torque
- Start time & report FAF inbound (if not in radar contact)
- Airspeed 130 KIAS
- Complete Before Landing Checklist down to approach flaps

AT MDA

- Power levers 700 ft-lbs torque - or as required to maintain 130 KIAS

MISSED APPROACH POINT & RUNWAY IN SIGHT

- Flaps 100% - confirm Landing Checklist complete
- Airspeed slowing to V_{REF}
- Execute normal landing followed by after landing procedures

MISSED APPROACH POINT & RUNWAY NOT IN SIGHT

- If FD engaged press GA Button
- Set maximum power
- Pitch to 7° nose up
- After positive rate of climb Gear UP & Yaw Damper On
- Above 107 KIAS flaps UP
- Climb at 125 KIAS (V_Y)
- Above 1000' AGL set climb power
- Turn landing & taxi lights off & complete Climb Checklist
- Cruise climb at 160 KIAS
- Follow missed approach procedure and advise ATC

ILS APPROACH. LANDING & MISSED APPROACH

PRIOR TO IAF or BEING VECTORED

- Obtain the ATIS, review approach and missed approach
- Tune & identify NAVAIDS
- Complete Approach Checklist
- Slow to initial approach speed (150 KIAS = 700 ft-lbs torque/ 1800 RPM)

IAF OUTBOUND / VECTORS

- Start timing - if applicable
- Airspeed 150 KIAS
- Remain within charted distance

PRIOR TO GLIDE SLOPE INTERCEPT

- Slow to final approach speed 120 KIAS (typical)
- Preselect initial missed approach altitude

1 DOT BELOW GLIDESLOPE INTERCEPT

- Gear DOWN & Locked
- Complete Landing Checklist to Approach flaps
- Check FAF crossing altitude
- Airspeed V_{REF}

DH & RUNWAY IN SIGHT

- Flaps 100% - confirm Landing Checklist complete
- Airspeed V_{REF} + wind additive
- Execute normal landing followed by After Landing Checklist

MISSED APPROACH AND GO-AROUND

- Follow same missed approach procedure as non-precision approach

GPS APPROACH, LANDING & MISSED APPROACH

General precautions when executing a GPS approach include:

Be thoroughly familiar with the GPS unit being used.

Be certain of the waypoint you are navigating to. Some GPS approach waypoints are Initial Approach Fixes and the same waypoint may also be a Missed Approach Waypoint.

Be familiar with the required GPS activation procedure for a missed approach when passing the Missed Approach Waypoint (MAWP).

Fly the full approach from the Initial Approach Fix (IAF) unless specifically cleared and terrain clearance is assured. Joining an approach at an intermediate fix does not assure terrain clearance or proper GPS waypoint sequencing.

Back up the GPS approach with alternative navigation equipment during the approach.

Plan power settings and descent rates to arrive over Final Approach Waypoint (FAWP) at V_{LO} - 181 KIAS .

Use same procedure as non- precision or precision approach with the following differences:

INITIAL APPROACH FIX

- Select and load GPS Approach
- Verify GPS waypoints on flight plan page match the approach plate waypoints
- Within 30 NM of airport or transitioning to first waypoint of arrival procedure ensure GPS has switched to 'Terminal' mode.
- Ensure CDI is in GPS mode
- Tune and Identify NAVAIDS as backup

PRIOR TO FINAL APPROACH FIX

- Within 2 NM of FAF verify GPS has switched to approach mode (LPV, VNAV, LNAV+V, or LNAV)

MISSED APPROACH WAYPOINT & RUNWAY NOT IN SIGHT

- Deselect "Suspend" mode to enable missed approach waypoint sequencing
- Ensure CDI is in GPS mode
- Follow same missed approach procedure as Precision or Non-Precision Approach

CIRCLING APPROACH, LANDING & MISSED APPROACH

Use same procedures as non-precision or precision approach with the following exceptions:

MINIMUM DESCENT ALTITUDE

- Airspeed 130 KIAS (Power - 1000 ft-lbs torque / 2000 RPM
- Maneuver within criteria area (Category C airspeed 121-140 KTS)
- Maneuver the shortest path to the downwind or base leg considering weather conditions. There is no restriction from passing over the airport or other runways
- Maintain visual contact with runway environment
- Do not exceed 30° bank while maneuvering
- Maintain MDA until in position to make a normal landing
- Remain vigilant of VFR aircraft operating in the airport traffic area and follow airport traffic patterns whenever possible

Note: If single-engine circling is required leave gear and flaps up until landing assured.

CIRCLING MISSED APPROACH

- Initiate missed approach whenever visual contact with the runway environment is lost.
- Make initial climbing turn toward the landing runway to join the published missed approach procedure and notify ATC