

BEFORE START CHECKLIST – ensures all aircraft systems functioning properly and all switches are properly set prior to engine start

CHALLENGE	ACTION	RESPONSE
1. SEATBELTS	PF ensures all personnel have seatbelts (snug on hips/belt operates freely). - OBS may remain unbelted until cabin door closed	“FASTENED” (PF, OBS, PM)
2. PARKING BRAKE	LS ensures brake handle pulled out fully and brakes pumped firm.	“SET” (PF)
3. CIRCUIT BREAKERS	- LS checks pedestal and fuel CBs; RS checks right subpanel and engine instrument CBs	“I’LL CHECK MINE, YOU CHECK YOURS” “SET” (PF, PM)
4. ELECTRICAL PANEL	PF ensures starter, auto-ignition, avionics master, inverters, AUX BAT and gang bar switches OFF	“SET” (PF)
5. EMERGENCY STATIC AIR	PM ensures emergency static air is NORMAL	“NORMAL” (PM)
6. AUDIO CONTROL PANEL	~ Receive VHF & V/UHF Radio – ON ~ VOX, RX, ICS VOL – “9-1-1” ~ Trans selector – V/UHF (PF) ~ ISO/EMR/NORMAL – NORMAL VHF (PM) ~ Noise Cancellation Switch – ON ~ SPKR – OFF ~ MIC – BOOM ~ Transponder – STBY ~ 121.5 EMER – PUSH ~ ADC, AHRS, RMT TUNE, RTU/CDU TUNE, DG SWITCHES – NORMAL	“SET” (PF, OBS, PM)
7. GEAR	PF ensures gear handle down and J-hook engaged. Don’t touch handle	“DOWN” (PF)
8. FLAPS	PF and PM ensure handle corresponds visually with flap position	“CORRESPOND” (PF, PM)
9. CONDITION LEVERS	PF ensures condition lever(s) at FUEL CUTOFF; set friction	“FUEL CUTOFF” (PF)
10. PROPS	PF moves props from FEATHER to FULL FORWARD; set friction	“FULL FORWARD” (PF)
11. POWER LEVERS	PF ensures levers are against idle stop; set friction	“IDLE” (PF)
12. LIGHTS	Beacons on anytime engines are turning. Nav lights 30/30 or IFR	“BEACONS ON”
13. ANTI-ICE/DEICE	PF ensures all anti-ice/deice switches OFF and ice vanes in	“OFF” (PF)
14. FUEL PANEL	~ Fuel panel CBs in ~ Boost Pumps – On. Check battery ~ Firewall shutoff valve switches OPEN ammeter for discharge ~ Crossfeed Valve – OPEN; Light on ~ BAT – ON check LH and RH ~ Crossfeed Valve – CLOSED; light out FUEL PRES light out	“CHECKED SET” (PF)
15. FUEL QUANTITY	PF checks total fuel in LH and RH systems; max split = 100 lbs PF checks LH and RH nacelles for quantity and out of yellow range. Max split = 50 lbs.	### within 100 lbs; ### within 50 lbs; CHECKED” (PF)
16. ANNUNCIATOR PANEL	~ PM holds Press-to-Test button. PF ensures all annunciators + “Terrain”, “Pull Up”, “Terrain N/A”, “EMER 121.5” on and Fault Warning flashes; ~ PF resets Fault Warning and ensures it goes out. ~ PF checks full dimmer range and sets brightness (inc. “Terrain N/A”) ~ PM releases Press-to-Test button.	“CHECKED” (PF)
17. FIRE DETECTORS	~ PF rotates switch CLOCKWISE and ensures Fault Warning, LH FIRE annunciator and LF FIRE EXT PUSH TO EXT illuminate (“THREE”). ~ PM ensures RH FIRE annunciator and RH FIRE PUSH TO EXT illuminate (“TWO”). ~ OBS can close door at this point on hot day.	“I’LL CALL 3, YOU CALL 2” (PF) “CHECKED” (PF, PM)
18. OVERHEAD LIGHTS	~ Master Cockpit Lights switch on & Overhead Map Light full bright. ~ Check operation of OAT gauge light & Master Cockpit Lights off ~ PFDs-full bright, then as required; all other lights OFF	“SET” (PF, PM)
19. OXYGEN	Pulls Oxygen knob and ensure "green" in hose, Mask 100%, Test inflate	“OPEN” (PF)
20. CABIN DOOR	Cabin door locked and CABIN DOOR OPEN annunciator light out.	“LOCKED” (PF, OBS)
21. CABIN SIGN	Not required if OBS properly briefed and no other occupants in cabin	“OFF” (PF)

Base 140.325 Tower 134.85 Maint 138.775 CRP-115.5 CR350 ESIS 144 TAC 87X

Dep N=105*/2,500' S=125-135*/500 - 2,500@Bridge TRUAX-114.0 BA500/RA520 150KIAS
Arrival N=200*/1000' S=230*/1000'

PF: "This will be a Battery start of the right engine. Check the right side clear." (PM) "Clear right" PF: "Left side is clear"; (show two fingers to lineman to indicate starting right (#2) engine). "Lineman's got the right engine, starting right engine"

CHECKLIST ITEM	ACTION AND CALLS
1. Starter	~ PF engages right starter with right hand and hacks clock with left. ~ Calls "IGNITION" when RH IGN IND annunciator is on; calls "ROTATION" when N1 starts to increase
2. N1	Stable above 12%
3. Battery	PF ensures battery voltage 18V or greater prior to moving Condition Lever to LOW IDLE. If not, Abort
4. Condition Lever	~ PF moves Condition Lever to LOW IDLE once N1 greater than 12%, mentally starts back-up count ~ PM starts timing when Condition Lever at LOW IDLE; informs PF if no light off within 10 seconds
5. Fuel Flow	Normal fuel flow should be around 100 Lbs/Hr. If no fuel flow indicated after moving Condition Lever, wait 10 seconds for light off, then terminate start if no light off.
6. ITT and N1	~ PF announces "LIGHTOFF" when ITT begins to increase ~ PF hovers hand over Condition Lever; ready to move it to FUEL CUTOFF if ITT likely to exceed 925°C. Start ITT must not exceed 1090°C for more than 2 seconds ~ If no light off in 10 seconds, move Condition Lever to FUEL CUTOFF and secure starter.
7. Starter	~ PF Turns Started - OFF when N1 at 50%; stops his clock, verifies starter time did not exceed 40 seconds.
8. Engine Instruments	~ Check for normal start indications at LOW IDLE. Normal start only requires oil pressure above 40 psi and N1 and ITT stabilized. ~ Oil Pressure can exceed 100 psi for start and warm-up ~ PF signals "thumbs up" to lineman, indicating normal start
9. Power Levers	PF advances to 70% N1
10. Right Generator	PF resets GEN, then turns on; notes RH GEN OUT extinguished and load indication (0.5-1.0) Batter Ammeter will read approx. 60 amps and 28 Vdc
Control Check and Flap Check (while battery is charging)	~ PF places yoke left wing down, right wing down, full aft and full forward; reports control surface positions. PM responds with position reports. PF: "LEFTAILERON UP" PM: "DOWN" PF: "LEFTAILERON DOWN" PM: "UP" PF: "ELEVATOR UP" PM: "UP" PF: "ELEVATOR DOWN" PM: "DOWN" ~ PF holds up rudder signal to lineman, and then checks full left, neutral and full right.
	~ PF: "FLAPS SELECTED DOWN. INDICATE DOWN. CHECKED DOWN" PM: DOWN ~ PF: "FLAPS SELECTED APPR. INDICATE APPR. CHECKED APPR." PM: APPROACH ~ PF: "FLAPS SELECTED UP. INDICATE UP. CHECKED UP" PM: UP
11. Right Generator	~ PF turns Right Generator OFF
LEFT ENGINE START	
PF: "This will be a Generator-assisted start of the left engine. Check the right side clear." PM: "You're clear on the right." PF: "Left side is clear"; (show one finger to lineman to indicate starting left (#1) engine). "Lineman's got the left engine, starting left engine".	
1. Starter	~ PF engages left starter with right hand and hacks clock with left. ~ PF calls "IGNITION" when LH IGN IND is on; calls "ROTATION" when N1 increases
2. N1	Above 12% (doesn't need to be "stable")
3. Right Generator	PF turns on RH GEN and notes RH GEN OUT annunciator extinguished
4. Right Engine ITT	If right ITT likely to exceed 790°C, abort the start. Reattempt start with right engine at 85% N1.
5. Condition Lever	PF moves Condition Lever to LOW IDLE after N1 stabilizes above 12% and right GEN has been turned on. PM commences timing for 10 seconds.
6. Fuel Flow	Normal Indication of 100 Lbs/Hr. If no fuel flow indicated after moving Condition Lever, wait 10 seconds for light off, then terminate start if no light off.
7. ITT and N1	~ PF announces "LIGHTOFF" when ITT begins to increase ~ PF hovers hand over Condition Lever; ready to move it to FUEL CUTOFF if ITT likely to exceed 925°C. Start ITT must not exceed 1090°C for more than 2 seconds If no light off in 10 seconds, move Condition Lever to FUEL CUTOFF and secure starter.
8. Starter	~ PF Turns Started - OFF when N1 at 50%; stops his clock, verifies starter time did not exceed 40 seconds.
9. Engine Instruments	~ Check for normal indications at LOW IDLE. Normal start only requires oil pressure above 40 psi and N1 and ITT stabilized (Oil Pressure can exceed 100 psi for start and warm-up). PF signals "thumbs up" to lineman
10. Right Generator	~ PF Turns off Right Generator
11. Fuel Quantity	If either indicator reads 0, corresponding current limiter may have failed
12. Generators	~ RH & LH generator Reset then on; notes RH & LH GEN OUT extinguishes and parallel load w/in .1
13. Power Levers	~ Both IDLE
14. Fuel Control Heat	~ PF turns on Fuel Control Heat individually and notes small increase in load.

ATIS Info _____ Time _____ Z Wind _____ Vis _____

Sky _____ Temp _____ DP _____ Altimeter _____ Rwy _____

• Navy Corpus Clearance, __; _____ on request, ready to copy." Max fuel to Ldg _____ #

Clearance (CRAFT):Clr Limit:

Route: Alt: Dep: Squawk:

• Navy Corpus Ground, __, Taxi from (C/H) to the Runup, Info _____

• NC Tower, __ number 1, holding short _____ VFR. TIME:

Enroute (ABCD)

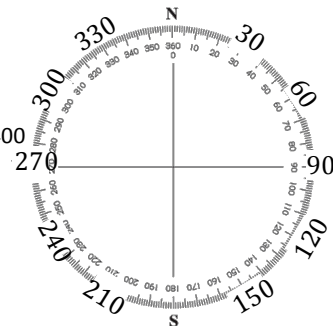
Atis: Info: Wind: Vis/Ceil: Alt: Rwy:

Atis: Info: Wind: Vis/Ceil: Alt: Rwy:

ATIS / MINS, NOTAM, RUNWAY (4K/4490 X 75/100), BUILD (Source + Freq, Course, Mins, ESIS) BRIEF, APPR CHECKLIST, BACKUPS.

Local-NGP, CRP, NGW Juliett-ALI, NOG
Cheetah-HRL, BRO, PIL Fox-VCT, PKV, PSX
Speed-torque 130-500 150-675 170-950

SLAY Prop 1900 Stall Speeds ____ / ____ / ____ Clearing Turn, 400



EMERG: Declare w/reason, position, altitude, intention, # Souls onboard,

Fuel Remaining $\frac{450}{250}$ $\frac{900}{500}$ $\frac{1350}{750}$ $\frac{1800}{1000}$ $\frac{2250}{1250}$ $\frac{2700}{1500}$

16. PFDs/FGP	<ul style="list-style-type: none"> ~ PFD in 360° format with R1 softkey ~ Primary NAV Source VOR 1 W/ Needle 1 as VOR 1 (CRP 115.5) ~ Preset NAV Source FMS w/ Needle 2 as FMS ~ PF and PM set CDI as appropriate using CRS1/2 knob on FGP (set runway heading for emergency return or 130°/100° for appropriate seagull departure. ~ Select 150 with speed knob on FGP ~ Set desired altitude using ALT knob on FGP. Use 2,500 for VFR departure. ~ PF bugs initial heading or takeoff winds ~ PF sets a course for emergency return in ESIS. MENU=>SET CRS=>spin knob to adjust course, then press knob again. Make sure NAV ON. ~ PF: "I HAVE VOR 1 AS PRIMARY AND FMS IN THE PRESET. MY NUMBER ONE NEEDLE IS SELECTED VOR 1 NUMBER TWO NEEDLE SELECTED FMS. TRAFFIC SELECTED, RADAR DESELECTED, AND IM UP 360 FORMAT. MY COURSE IS SET 130, HEADING BUG SET 105, SPEED IS SET 150, ALTITUDE IS 2500 FOR COURSE RULES DEPARTURE, AND ESIS IS SET 129 FOR EMERGENCY RETURN." ~ PM: "MY PRIMARY IS VOR 1, FMS PRESET, NUMBER ONE NEEDLE IS SELECTED VOR 1, NUMBER TWO IS SELECTED FMS, TRAFFIC OVERLAY, 360 FORMAT AND COURSE SET 130." 	"SET" (PF, PM)
17. PRESSURIZATION	<ul style="list-style-type: none"> ~ PF sets rate control knob at midpoint of travel (1 o'clock) ~ Cabin controller to field elevation plus correction factor ~ Select PRESS on dump switch 	"SET" (PF)
18. BLEED AIR	~ PF directs PM to select desired position	"CLOSED" (PF)
19. CREW	~ PF: "BACK ME UP ON THE POWER QUADRANT AND MONITOR THE ENGINE AND FLIGHT INSTRUMENTS. CALL OUT ANY MALFUNCTIONS. ALL MALFUNCTIONS WILL BE HANDLED IN ACCORDANCE WITH NATOPS. CALL ROTATE AT 91 KNOTS AND NOTE THE TIME OF TAKEOFF. THIS WILL BE A COURSE RULES DEPARTER TO BLOCK 2 SOUTH. FOR AN EMERGENCY AFTER TAKEOFF REQUIRING AN IMMEDIATE RETURN TO THE AIRPORT, WE WILL MAINTAIN VFR AND REQUEST A DOWNWIND FOR RUNWAY 13R. ARE THERE ANY QUESTIONS"	"BRIEFED, HOLD THE CHECKLIST" (PF)
PM: "NAVY CORPUS GROUND, STINGRAY 12, FURTHER TAXI." ... "CLEAR FOR TAKEOFF, RUNWAY 13L, STINGRAY 12" turn on Anti-ice, lights and push condition levers to full idle then as you're taxing onto the runway "Continue the checklist"		
20. ANTI-ICE/ DEICE	PF turns on equipment as necessary. Normally only L/R pitot heat.	"SET" (PF)
21. LIGHTS	PF turns on LEFT and RIGHT LANDING, TAXI, NAV (night or low visibility), ICE (night only), BEACON (already on), and STROBE (once on active runway)	"SET" (PF)
22. TRANSPONDER	PM turns XPDR below RTU from STBY to ON	"SET" (PM)
23. CONDITION LEVERS	PF places both condition levers in HIGH IDLE and verifies 70-73% N1	"HIGH IDLE" (PF)
24. AUTOIGNITION		"ARMED" (PM)

TAKEOFF PROCEDURE

At the hold short, flip the fuel panel switch into 'Nacelle' and say "Call me out of the yellow." PM will say "Out of the yellow" and PF will switch the fuel panel back into 'Total'. Once clear for takeoff, say "Clear left, right and above", taxi onto the runway, and call for the last 5 of the checklist. Once PF is on the runway set the anti-ice/deice, lights, and move the condition levers to high idle. PM will finish the checklist. Line up on centerline, set power at idle (>70%), and look out at the wing/nacelle, check the engine and flight instruments, and then say "Checked left". PM will say "Checked Right" and you will begin the takeoff roll by dropping the brakes and setting power. PM will call "Rotate" at 91kts. Smoothly lift the plane up 7-10° and call "Two positive rates, gear up". Props come back to 1900RPM once the gear is up. Follow course rules from there.

AFTER START CHECKLIST – Check/set systems prior to taxi.		
CHALLENGE	ACTION	RESPONSE
1. A/C CONTROLS	PM sets environmental controls as required	"SET" (PM)
2. DC GENERATOR Voltages	PF presses both PRESS FOR VOLTS buttons on DC BUS meters and checks voltages between 27.45 and 29.05 Vdc (28.25+/- .8)	"CHECKED" (PF)
3. INVERTERS	Does not apply	N/A
5. AUX BATTERY & AVIONICS MASTER	<ul style="list-style-type: none"> ~ PF turns on AUX BATT Switch to ON/ARMED and verifies light illuminates and RTU powers up ~ PF turns on Avionics Master Switch, confirms AUX BATT light extinguishes and wait for AHRSl to align before proceeding (30-35 sec) ~ Once Avionics Master and AUX BATT are on, PF/PM/OBS done headsets and perform ICS checks. 	"CHECKED ON" (PF)
<p>PF directs PM to "HOLD THE CHECKLIST. KEEP ME CLEAR ON THE RIGHT DURING ALL TAXI AND GROUND OPS AND LET BASE KNOW WE ARE OUT OF THE CHOCKS." Should be monitoring Ground (3) on V/UHF and Base on RTU</p> <p>PF gives brake check signal to lineman, "CLEAR LEFT"; PM: "CLEAR RIGHT". Taxi slowly forward as directed for brake check. After Aircraft stopped five feet short of the taxiway, set parking brake and direct PM to "CONTINUE THE CHECKLIST".</p>		
6. ESIS SWITCH	After AHRSl aligned, PF turns ESIS on. ESIS takes 2-3 minutes to align so permissible to continue checks during this time.	"ON" (PF)
7. TRANSFER PUMPS	<ul style="list-style-type: none"> ~ TRANSFER TEST switch in L position ~ LH TRANSFER PUMP - AUTO ; LH NO FUEL TRANSFER flicker and reset FAULT WARNING if illuminated. ~ PF repeats for right transfer pump. ~ Verify both pumps in AUTO 	"CHECKED, AUTO" (PF)
8. CROSSFEED PUMPS	<ul style="list-style-type: none"> ~ Crossfeed Valve - AUTO ~ Left boost pump - OFF; LH FUEL PRESS Flickers, CROSSFEED VALVE light on, Reset FAULT WARNING ~ Left Boot Pump - ON lights off ~ Crossfeed valve - CLOSED then AUTO ~ Repeat test for right boost pump ~ Verify Crossfeed Valve in AUTO 	"CHECKED, AUTO" (PF)
9. GENERATOR LOADS	PF checks L and R GEN within 0.1. If either load above 0.5, reduce electrical load (turn off A/C or heater) or increase N1. Match both Condition Levers at same N1 setting if position above LOW IDLE required. (NATOPS pg. 4-6)	"CHECKED" (PF)
10. MFD (Tell PM to get ATIS, then monitor Ground on UHF, Base VHF)	<ul style="list-style-type: none"> ~ MFD Switch on ~ Verify self-test passed, Press LSK to allow Database check ~ Select TRFC on MFD; select TST on display ~ Observe test pattern and verbal 'ok' ~ Set view NORMAL and set desired range and rotate control knob to ON ~ Verify TERR N/A light out ~ Select TERR on MFD ~ Select TST on display ~ Observe pattern and verbal 'ok' ~ Set range as desired and select NORMAL ~ Set MAP and overlay/range. Typical = 10-20NM. 	"CHECKED, SET" (PF)
<p>~ PF gets ATIS info from PM, contacts CC Clearance if required then contacts ground. "NAVY CORPUS GROUND, STING RAY 412, TAXI FROM ___ WITH INFORMATION ___"</p> <p>~ Depart line area and enter taxiway once cleared. Note proper turn needle and ball deflection; ensure PF/PM heading indicators and ESIS heading indicator properly tracking and aligned. PF: "NEEDLE LEFT, 1-2-3 RIGHT" (Needle deflection, Ball =1, ESIS Ball = 2, PF ball=3)</p> <p>~ On taxiway, bring both power levers into full reverse and note symmetric acceleration on both N1 gauges. Then return power to idle.</p> <p>~ PM takes controls to performs his brake check.</p> <p>~ PF directs PM to "CONTINUE THE CHECKLIST".</p>		
11. TURN INDICATOR/ COMPASSES	~ Only one direction for turn needle/ball/slip checks required	"CHECKED" (PF)
12. BRAKES		"CHECKED" (PF)

ENGINE RUN-UP CHECKLIST – checks operations of essential systems, which cannot be checked prior to start or at idle.		
CHALLENGE	ACTION	RESPONSE
1. PARKING BRAKE	PF sets the parking brake and begins runup brief.	"SET" (PF)
PF directs PM to "MONITOR FOR MOVEMENT DURING ENGINE RUNUP."		
2. ENGINE INSTRUMENTS	~ PF ensures both power levers at IDLE and condition levers at LOW IDLE; ~ ITT = 685°C max ~ PROP RPM = 900-1100 RPM ~ Torque = 100-200 ft-lbs ~ Oil temp = 10-99°C ~ Oil PX = 40-100 psi ~ Fuel Flow = Approx. 100 lbs/hr	"CHECKED" (PF)
3. SUCTION AND PNEUMATIX PX	~ PF ensures power levers at least 70% N1 ~ PF ensures suction 4.3 to 5.9 in-hg and pneumatic pressure 12-20 psi	"CHECKED" (PF)
4. OVERSPEED GOVERNOR	~ Props are Full Forward, NP less than 1900 ~ Power Levers = slowly retard prop RPM to 1900 RPM ~ PROP GOV TEST switch – TEST ~ PROP GOV TEST switch - Release ~ Power Levers = advance until prop RPM stops increasing (1900-2100). ITT and torque should continue to increase while prop RPM remains stabilized. (should never exceed 2200)	"CHECKED" (PF)
5. PRIMARY GOVERNOR	~ Prop Levers—move both aft to detent, NP stabilized between 1600-1800 RPM ~ Prop Levers – Slowly full forward, NP returns to approx. 1900 RPM	"CHECKED" (PF)
6. AUTOFEATHER/AUTOIGNITION	~ Power Levers – 500 ft-lb torque ~ ENG AUTO IGN SWITCHES (2) – ON; lights on ~ AUTOFEATHER switch – HOLD TO TEST; lights on (4 green total) ~ Left Power Lever – slow continuous retard, using peripheral vision, call out torque when "light swap" (RH AUTOFEATHER ARMED light out, LH AUTO IGNITION ARMED light out and LH IGN IND light on) and "flashing" (LH AUTOFEATHER ARMED light flashing). Look for NP to dip below 800 then advance power lever to match right. Observe 4 total green lights. ~ Right Power Lever – slow continuous retard, using peripheral vision, call out torque when "light swap" and "flashing". Look for NP to dip below 800 and bring both power levels to idle looking for auto feather sequence to stop and both NP to return to 900-1100 RPM. ~ AUTOFEATHER TEST switch – Release ~ ENG AUTO IGN switches – OFF; ensure all lights out	"CHECKED OFF" (PF)
7. MANUAL FEATHER	~ Prop Levers – FEATHER (FULL AFT) NP decreases below 800 ~ Prop levers – FULL FORWARD - NP returns to 900-1100 (if prop RPM doesn't return to 900-1100, do a low pitch torque check [10.6 in NATOPs])	"CHECKED" (PF)

TAKEOFF CHECKLIST – check the remaining systems and configure the aircraft for takeoff.		
CHALLENGE	ACTION	RESPONSE
1. AUTOPILOT/YAW DAMP	~ PF engages AP and presses AP/YD disconnect button. Make sure disengages with horn and PDF light, and controls operate freely ~ PF turns on AP and tells PM to press AP/YD disconnect button. Make sure disengages with horn and PDF light; controls operate freely ~ PF reengages AP and disconnects it with AP bar; ensure free controls ~ Verify AP disengaged and AP bar is in down position. PF and PM press respective FD to remove FD pink bars from PFD.	"CHECKED, DISENGAGED" (PF, PM)
2. ELECTRIC TRIM	~ PF moves half of split switch, make sure trim wheel doesn't move. ~ PF moves both halves and note smooth movement of trim wheel (both directions). While trim wheel moving, press AP/YD button to disengage trim. Note trim wheel stops and red "TRIM" on PFD. Release button and note reengagement. ~ PM repeats steps	"CHECKED" (PF, PM)
3. TRIM TABS	Aileron 0, Rudder 0, Elevator 2 up	"SET" (PF, PM)
4. CONTROLS	Already checked from AP checks; second check unnecessary	"CHECKED" (PF)
5. FLAPS	Visually confirm flap handle, flap position indicator and flaps UP	"CHECKED, UP" (PF, PM)
6. PROPS		"FULL FORWARD" (PF)
7. PROP SYNC		"OFF" (PF)
8. AUTOFEATHER		"ARMED" (PF)

9. ANTI-ICE/ DEICE	1. Propeller De-icer – ON; commence timing; make sure PROP AMPS = 14-18 during each phase. Secure system after amperage checked in fourth phase (2 minutes min) 2. Place following systems ON and verify gen load: LH&RH PITOT HEAT, STALL HEAT, LH&RH ENG LIP BOOT (no change in load), LH&RH FUEL VENT, WSHLD ANTI-ICE - BOTH then PILOT 3. Upon completion of checks, place all switches OFF 4. N1 – 70% (both engines) 5. DE-ICE CYCLE – SINGLE (release) LS "INFLATE" (L wing), RS "INFLATE" (R wing) PF "PRESSURE" (Pneumatic Pressure gauge recovers) LS "INFLATE" (R horz stab) RS "INFLATE" (L Stab) LS "Deflate" (R Stab) RS "DEFLATE" (L Stab) PF "SUCTION" (within limits) LS "DEFLATE" (L wing) RS "DEFLATE" (R wing). Select MANUAL (hold). Repeat all inflate calls. Release switch and give all deflate calls. 6. Propeller Deice – OFF 7. N1 – IDLE (both engines)	"CHECKED" (PF, PM) or "PITOTS CHECKED" (PF, PM)
10. STALL WARNING	PF moves stall warning test switch to TEST and verifies light illuminates and warning horn sounds	"CHECKED" (PF)
11. RADAR	~ PFDs in 120° format (R1 soft key) ~ RLSK on PFD shows RDR in blue/on ~ Select RADAR on DCP, confirm in STBY ~ STAB = ON ~ GAIN = NORM ~ Sector Scan - OFF ~ Target - OFF ~ TST on display (w/ menu-adv knob) ~ Observe two sweeps of test pattern on both PFDs ~ PF selects STBY	"CHECKED, STANDBY" (PF, PM)
12. FLIGHT INSTRUMENTS	~ No comparator/warning flags on either PFD ~ V-speeds set as follows: Vt = 102, V2 = 102, Vr = 91, V1 = 91, Vref = 110; Select Vt, Vr and Vref for display ~ Check ESIS indications (heading, attitude, VSI, slip/skid) match PFD indications and set backlighting PF: "MY HEADING 130, ESIS 130; NO COMPARATORS OR WARNING FLAGS; VT, VR, VREF SELECTED" PM: "MY HEADING 130, NO COMPARATORS OR FLAGS"	"CHECKED, SET" (PF, PM)
13. ALTIMETERS	1. BA = check current altimeter setting selected with no comparators/flags. Ensure BA within +/-75' of airport elevation and compare LS, RS and ESIS readings. - Set RA minimums to 500' for day VFR training sortie or BA/RA mins for IFR. - Normal operations: PF should display BA mins and PM display RA mins for backup 2. RA = press test button and verify proper indications. Both altimeters should show a rise of 50' and green RAD ALT display should show 50+/-5' PF: "PFD SET 30.12 READING 30 FEET, ESIS SET TO 30.12 READING 30 FEET BARO SET 520. IM UP BARO AND RADALT CHECKS." PM: "SET 30.12 READING 30 FEET, RADALT SELECTED"	"CHECKED, SET" (PF, PM)
PF directs PM to "HOLD THE CHECKLIST" and contacts/copies clearance delivery as required PF: "SIR YOU HAVE THE CONTROLS, I WILL BE HEADS DOWN"		
14. FMS	~ Status = verify FMS database current and ensure UTC time/date correct ~ POS INIT = MANDATORY; use GPS ~ Flt PLN = Enter departure and destination airports and route (push EXEC after each page) ~ DEP/ARR = Enter departure as required ~ LEGS = Verify WPs and fix discontinuities ~ Check RAIM = IDX button, then GPS CTL; ensure GPS sensor enabled and deselect all satellites listed in NOTAMS; ensure arrival airport is accurate and enter ETA for RAIM availability	"CHECKED, SET" (PF)
15. RADIOS/NAVAIDS	~ V/UHF = set display intensity (ENT then 8 or 9); squelch ON, TR+G ON ~ VHF = set display intensity; depress EMER 121.5 check freq. change and illuminated button, reset button. Set appropriate frequency in preset and active ~ NAV 1 and 2 = set freq in preset and active with RTU. Hit L2 softkey twice, verify RMT TUNE on. Press L3 soft key and select manual or preset. Tune and ID all NAVAIDS. Repeat for NAV 2 (CRP 115.5 active, TRUAX 114.0 stby) ~ ADF = Set appropriate freq. Verify MODE is ADF and BFO OFF. ~ TRANSPONDER = Set appropriate ATC code. Verify ALT is ON. ~ TACAN = Verify ON, A/G switch is A/G, Tune appropriate freq using TACAN control head. No test required. Identify morse code ID. (87X - . - . - .)	"CHECKED, SET" (PF, PM)