

| Before Starting               |             |
|-------------------------------|-------------|
| Exterior/Interior Inspection  | COMPLETE    |
| Log Book, Paperwork, Manuals  | ON BOARD    |
| Control Locks                 | REMOVED     |
| Emergency Exits               | SECURE      |
| Battery Master / Gen Switches | OFF         |
| Battery Voltage               | CHECKED     |
| L & R Standby Pumps           | ON          |
| External Power                | OFF         |
| L & R AC Bus                  | OFF         |
| L & R Engine Auto Ignition    | OFF         |
| Engine Anti-Ice               | OFF         |
| Avionics                      | OFF         |
| Gen Ties                      | NORM        |
| Engine and Ignition Start     | OFF         |
| Prop Test                     | OFF         |
| Autofeather                   | OFF         |
| All Ice Protection Switches   | OFF         |
| Landing Gear Control Handle   | DOWN        |
| Power Levers                  | IDLE        |
| Prop Levers                   | HIGH        |
| Condition Levers              | CUTOFF      |
| Flaps                         | UP          |
| L & R Bleed Air Valves        | ENVIRO OFF  |
| Blower                        | OFF         |
| Environmental Mode Control    | OFF         |
| L & R Engine Fire Test B      | TESTED      |
| Master Panel Light Switch     | ON/OFF      |
| Nav and Beacon                | ON          |
| Firewall Fuel Valves          | PULL CLOSED |
| Parking Brake                 | SET         |
| Battery                       | ON          |
| Annunciator Lights            | TEST        |
| Landing Gear Handle Light     | TEST        |
| Firewall Fuel Valves          | OPEN        |
| L & R Standby Pump            | TEST & OFF  |
| Fuel Transfer Valves          | TEST & OFF  |
| Fuel Quantity Main / Aux      | CHECK       |
| Ext Power Voltage & Switch    | CHECK & ON  |

| Before Taxi                |             |
|----------------------------|-------------|
| Cabin & Cargo Doors        | LOCKED      |
| Door Annunciators          | EXTINGSHD   |
| Emergency Exit Briefing    | COMPLETE    |
| Seatbelts & Harnesses      | FASTENED    |
| Fuel Quantity Main / Aux   | CHECK       |
| Avionics Master            | ON          |
| L & R AC Bus               | ON          |
| Trim Tabs                  | SET         |
| Elevator Trim              | SET FOR T/O |
| Yaw Damper                 | OFF         |
| Pressurization             | SET         |
| Bleed Air Valves           | OPEN        |
| Blowers                    | HIGH        |
| Environmental Mode Control | AUTO        |
| DC Volts / Loads           | CHECK       |
| L & R Inverter             | CHECK       |
| Passenger Briefing         | STARTED     |
| Before Takeoff             |             |
| Avionics                   | SET         |
| Flaps                      | UP OR 17    |
| Flight Controls            | CORRECT     |
| Flight Instruments         | CHECK       |
| V Speeds                   | CALCULATE   |
| Takeoff Briefing           | COMPLETE    |
| Passenger Briefing         | COMPLETE    |
| Runway Checks              |             |
| Props                      | FORWARD     |
| Annunciator Lights         | CONSIDERED  |
| Transponder                | ALT         |
| Ice Protection             | ON          |
| Auto Ignition              | ARMED       |
| Engine Anti-Ice            | OFF OR ON   |
| Autofeather                | ARMED       |
| Bleed Air Valves           | ENVIRO OFF  |
| Exterior Lights            | ON          |
| Climb                      |             |
| Landing Gear               | UP          |
| Flaps                      | UP          |
| Climb Power                | SET         |
| Prop Sync                  | ON          |
| Bleed Air Valves           | OPEN        |
| Environmental Mode Control | AUTO        |
| Yaw Damper                 | ON          |
| Engine Instruments         | MONITOR     |
| Pressurization             | CHECKED     |
| -----Thru 10000 MSL -----  |             |
| Exterior Lights            | OFF         |
| ----- Thru FL180 -----     |             |
| Altimeter                  | 29.92       |

| Cruise                       |             |
|------------------------------|-------------|
| Pressurization               | SET         |
| Cruise Power                 | SET         |
| Autofeather                  | OFF         |
| Descent                      |             |
| Pressurization               | SET         |
| Altimeter                    | SET         |
| ----- Thru 10000 MSL -----   |             |
| Windshield Anti-Ice          | ON OR OFF   |
| Exterior Lights              | ON          |
| Autofeather                  | ARMED       |
| Vref                         | ____KTS     |
| Approach Briefing            | COMPLETE    |
| ----- Thru 5000 MSL -----    |             |
| Passenger Briefing           | COMPLETE    |
| Before Landing / Final       |             |
| Landing Gear                 | DN, 3 GREEN |
| Pressurization               | CHECKED     |
| ----- 1000 ft -----          |             |
| Yaw Damper                   | OFF         |
| Prop Levers                  | MAX RPM     |
| Flaps                        | 35          |
| After Landing                |             |
| Props                        | TAXI        |
| Passenger Briefing           | STARTED     |
| Transponder                  | STBY        |
| Exterior Lights              | AS REQ      |
| Elevator Trim                | SET FOR T/O |
| Autofeather                  | OFF         |
| Engine Anti-Ice              | OFF         |
| Auto Ignition                | OFF OR ON   |
| Ice Protection               | OFF         |
| Propeller Sync               | OFF         |
| Shutdown and Securing        |             |
| Parking Brake                | SET         |
| Chocks                       | INSTALL     |
| L & R AC Bus                 | OFF         |
| Engine Anti-Ice              | OFF         |
| Avionics Master              | OFF         |
| Bleed Air Valves             | ENVIRO OFF  |
| Blowers                      | OFF         |
| Power Levers                 | IDLE        |
| Condition Levers             | CUTOFF      |
| Propeller Levers             | FEATHER     |
| Battery / Gen Switches       | OFF         |
| Exterior and Interior Lights | OFF         |
| Parking Brake                | OFF         |
| Control Locks                | INSTALLED   |

| LIMITATIONS          |     |
|----------------------|-----|
| Speeds               | KTS |
| VNE                  | 248 |
| VA                   | 178 |
| VFE17                | 188 |
| VFE35                | 154 |
| VLO                  | 180 |
| VLE                  | 180 |
| VY                   | 138 |
| VYSE                 | 128 |
| VX                   | 122 |
| VXSE                 | 122 |
| VS                   | 101 |
| VSO                  | 84  |
| VG                   | 140 |
| VSSE                 | 105 |
| VENR                 | 123 |
| VMCA Flaps Up        | 92  |
| VMCA Flaps Down      | 92  |
| VB                   | 170 |
| Emergency Descent    | 180 |
| Maximum Range Glide  | 140 |
| Max Wshield Anti-Ice | 223 |
| Minimum Speed Icing  | 160 |

| N1 Gas Generator | RPM    |
|------------------|--------|
| Low Idle         | 65%    |
| High Idle        | 72%    |
| Max Continuous   | 104%   |
| Takeoff          | 104%   |
| AFX Disarm       | < 90%  |
| RPM @ 100%       | 37,468 |
| RPM @ 104%       | 39,000 |

| ITT                   | °C            |
|-----------------------|---------------|
| Starting              | 1000° (5 sec) |
| Idle                  | 750°          |
| Takeoff               | 800o (5 min)  |
| Max Continuous        | 780°          |
| Cruise Climb & Cruise | 780°          |
| Max Reverse           | 780°          |
| Transient             | 870° (20 sec) |

| Torque         | FT-LBS        |
|----------------|---------------|
| Takeoff        | 3950 (5 min)  |
| Max Continuous | 3750          |
| Transient      | 5000 (20 sec) |

| <b>Oil Temperature °C</b> |               |
|---------------------------|---------------|
| Normal Range              | 10° – 105°    |
| Minimum for Starting      | -40°          |
| Max (Time Limited)        | 110° (10 min) |
| Max Continuous            | 105°          |

| <b>Oil Pressure PSI</b> |              |
|-------------------------|--------------|
| Normal                  | 90 - 135 PSI |
| Min                     | 60 PSI       |
| Max                     | 200 PSI      |

| <b>N2 Prop Tach RPM</b> |               |
|-------------------------|---------------|
| Normal                  | 1400 – 1700   |
| Idle                    | 950 Min       |
| Max Takeoff             | 1700          |
| Reverse                 | 1650          |
| Transient               | 1870 (20 sec) |

| <b>Generator Limits % N1</b> |     |
|------------------------------|-----|
| 0 – 75% Load                 | 65% |
| 75% - 100% Load              | 72% |

| <b>Starter Limits</b> |                |
|-----------------------|----------------|
| 20 Seconds On         | 30 Seconds Off |
| 20 Seconds On         | 1 Minute Off   |
| 20 Seconds On         | 5 Minutes Off  |

| <b>Aircraft Weights LBS</b> |        |
|-----------------------------|--------|
| Max Ramp                    | 17,230 |
| Max Takeoff                 | 17,120 |
| Max Landing                 | 16,765 |
| Max Zero Fuel Weight        | 15,165 |

| <b>Battery</b>               |
|------------------------------|
| NiCad 24 Volt 34 Amp Battery |
| 23V Min to Start Engines     |
| 18V to Close Batt Tie        |
| 20V Min for GPU Connection   |

| <b>Fuel Gallons</b>            |         |
|--------------------------------|---------|
| Each Main Tank                 | 240.5   |
| Each Aux Tank                  | 92.2    |
| Total Fuel                     | 665.4   |
| Max Fuel Imbalance             | 200 lbs |
| T/O Prohibited in Yellow Range | 363 lbs |