

Pre-Start N396JGT TURBINE A36

1	Parking Brake - SET
2	Avionics - OFF
3	Circuit Breakeres - IN
4	Gear Handle - DOWN
5	Flaps - UP
6	Cowl Flap - OPEN
7	All Switches - OFF
8	Fuel Selector Valve - ON
9	Engine Anti-Ice System - OFF
10	Condition - CUTOFF/FEATHER
11	Power - GROUND IDLE
12	Battery - ON
13	Annunciators, Warning Lights - CHECK
14	Fuel Quantity Indicators and Totalizer - CHECK and SET
15	Fuel Return Screen Test Button - HOLD A. Fuel Filter Annunciator Light - ON B. Primary Boost Pump - ON, Light - OFF
16	Fuel Pumps - CHECK A. Primary Boost Pump - OFF; Fail light - ON B. Standby Boost Pump - ON; Fail Light - OFF Standby Boost Pump Light - ON C. Standby Boost Pump - OFF
17	Auxiliary Instrument Air - ON CHECK 4.3 - 5.9 hg DO NOT ATTEMPT FLIGHT WITH INOPERATIVE BOOST PUMP OR FAILED FUEL RETURN SCREEN TEST!

Engine Start

1	Avionics Master Switch - OFF
2	Primary Fuel Pump - ON
3	Propeller - CLEAR
4	TOT < 150°C
5	Start/Gen Switch - START
6	N1 15% above 7°C, 13% above -18°C, 12% below -18°C
7	Condition - MAXIMUM POSITION (100% Prop Speed)
8	TOT and N1 MONITOR (810 to 927°C) 10 Sec. max. 1 Sec. max At 927°C
9	Propeller (Np) - CHECK rotating by 25% N1

10	Oil Pressure - POSITIVE Indication by start completion
11	Propeller - UNFEATHERING by start completion
12	Start/Gen Switch - OFF at 58% N1 (25 to 50 seconds)
13	N1 CHECK 59% to 65%
14	APU- OFF/ DISCONNECT if used
15	Power - SET N1 > 64% for generator activation
16	Start/Gen Switch - GENERATOR
17	Standby Alternator Switch - ON
18	Engine Ice Protection - AS REQUIRED
19	Lights - AS REQUIRED
20	Avionics - AS REQUIRED

APU Start

1	Generator, Electrical and Avionics - OFF
2	Standby Alternator - OFF
3	Battery Switch - ON
4	APU - CONNECT
5	APU - SET OUTPUT (28v 300a (max) for start, 120a continuous)
6	APU - ON
7	Engine Start - Back to NORMAL PROCEDURE

Aborted Start

1	Condition Control - CUTOFF/FEATHER
2	Ignition C/B - PULL
3	Start/Gen Switch - START for 10 to 30 seconds
4	TOT - MONITOR

Pre-Takeoff

A

1	Parking Brake - SET
2	Engine Instruments - CHECK
3	Flight Instruments - CHECK and SET
4	Condition - MAXIMUM POSITION (100% Prop Speed) Power - (Np) 1725 RPM A. Propeller Overspeed Governer Test (1) Press and hold each test button alone - OBSERVE No Change (2) Press and hold both test buttons - OBSERVE Np decrease B. Engine Ice Protection Test (1) De-Ice Switch - ON Observe INLET HEAT, IGN. lights, PROP and GEN. amp load increases, TOT rise

	<p>a. Inlet Test - PRESS Observe INLET HEAT light out and GEN. Amp load drop</p> <p>(2) De-Ice Switch - OFF</p> <p>(3) Cowl Flap - AS REQUIRED</p> <p>C. Gyro Pressure - 4.3 to 5.9 in. hg.</p> <p>D. Power - GROUND IDLE</p>
5	<p>Standby Alternator - CHECK</p> <p>A. Generator, Battery and Standby Alternator - VERIFY ON</p> <p>B. Load Meter - VERIFY < 20amps</p> <p>C. Primary Generator Switch - OFF</p> <p>D. STDBY ALT ON Annunciator light - ON</p> <p>E. INCREASE system load to > 20 amps</p> <p>F. STDBY ALT ON Annunciator - CHECK FLASHING</p> <p>G. Generator Out Annunciator - ON</p> <p>H. Start/Gen Switch - GENERATOR</p> <p>I. Loadmeter - CHECK for Primary Generator output</p> <p>J. STDBY ALT ON, LOW BUS VOLT, GEN OUT Annunciators - OFF</p>
6	Trim - SET
7	A. Aileron - NUETRAL
9	B. Elevator - SET 3o Up (6o Up for forward CG)
9	C. Rudder - SET 5o Right
10	Flaps - UP
11	Doors, Windows - SECURED
12	Flight Controls - CHECK
13	Fuel - CHECK (Observe cold weather limits)
14	Cowl Flap - CHECK OPEN
15	Annunciator Panel Warning Lights - OFF (Except INLET HEAT, IGN if ice protection is on)
16	Parking Brake - RELEASED
Takeoff	
1	Flaps - UP
2	Ice Protection - AS REQUIRED
3	Power - 107 psi and 810oC Maximum Limits
4	Rotation - 69 KTS Climb 78 KTS (obstacle clearance)
5	Gear - RETRACT When positive rate established
After Landing	
1	Pitot Heat/Anti-Ice - OFF
2	Flaps - UP

3	Landing/Taxi Lights - AS REQUIRED
4	Trim Tab - 3° Nose Up
5	Cowl Flap - OPEN

Shutdown

1	Brakes - SET
2	Flight Time - RECORD
3	Avionics and Electrical Equipment - OFF
4	Power - GROUND IDLE for 2 minutes
5	Condition - CUTOFF/FEATHER
6	TOT - MONITOR
7	Start/Gen Switch - OFF
8	Standby Alternator Switch - OFF
9	Fuel Pump Switches - OFF
10	Battery Switch - OFF
11	Control Lock - INSTALLED
12	Brakes - RELEASED
13	Chocks/Tiedowns - INSTALLED
14	Pitot Cover, Engine Plugs, Exhaust Covers - INSTALLED
15	Propeller - SECURED

Emergency Procedures

Emergency Airspeeds

1	Emergency Decent - 154 KIAS
2	Maximum Glide Range - 100 KIAS
3	Emergency Landing Approach - 84 KIAS

Maximum Glide Configuration

1	Landing Gear - UP
2	Flaps - UP
3	Cowl Flap - CLOSED
4	Condition Control - CUTOFF/FEATHER
5	Airspeed - 100 KTS

EMERGENCY AIRSPEEDS **MAX GLIDE**

Engine Failure **TURBINE A36**

During Takeoff Ground Roll

1	Power Lever - GROUND IDLE
2	Brakes - APPLY

3	Condition Lever - CUT OFF / FEATHER
4	Fuel Selector - OFF
5	Fuel Pump - OFF
6	Monitor TOT

After Liftoff

1	Airspeed - 84 KIAS
2	Condition Control - CUTOFF / FEATHER
3	Fuel Selector Valve - OFF
4	Power Control - FLIGHT IDLE
5	Fuel Pump - OFF
6	Wing Flaps - AS REQUIRED
7	Battery - OFF

In Flight

1	Airspeed - 100 KIAS
2	Condition Control - CUTOFF/FEATHER
3	Fuel Pump - OFF
4	Monitor - TOT
5	Power Control - FLIGHT IDLE
6	Generator - OFF
7	Electrical Load - REDUCE
8	If air start is warranted, refer to ENGINE RESTART PROCEDURES CHECKLIST
9	If air start is not warranted, refer to EMERGENCY LANDING WITHOUT ENGINE POWER CHECKLIST

Air Restart Procedure

1	Generator - OFF
2	Electrical Load - REDUCE
3	Condition Control - CUTOFF/FEATHER
4	Engine Anti-Ice System - OFF
5	Airspeed: 75 - 140 KIAS below 15,000 Ft. MSL 100 - 140 KIAS 15,000 to 19,000 Ft. MSL
6	Fuel Selector - ON
7	Fuel Pump - ON
8	Power Lever - FLIGHT IDLE
9	START/GEN SWITCH - START

10	TOT 150°C or lower and N1 15% below 15,000 Ft. MSL. N1 maximum obtainable above 15,000 Ft. MSL
11	START/GEN SWITCH - START
12	Condition Control - START
13	TOT and N1 - MONITOR (810° TO 927° 10 seconds maximum)
14	De-energize the starter at 58% N1
15	Condition Control - FLIGHT (Increase Np gradually when propeller unfeathers)

If No Restart

1	Condition Control - CUTOFF/FEATHER
2	Fuel Pump - OFF
3	Fuel Selector - OFF
4	Select most favorable landing site
5	Wing flaps as desired
6	The use of landing gear is dependent on the terrain where the landing must be made
7	See Emergency Landing Without Power

Engine Fire

In Flight

1	Firewall Air Control - PULL TO CLOSE
2	Condition Control - CUTOFF/FEATHER
3	Fuel Pump - OFF
4	Fuel Selector - OFF
5	Battery and Generator - OFF (except IFR)
6	Cabin Heat and Air - OFF (except overhead mixture)
7	Airspeed - 110 KIAS (If fire is not extinguished, increase glide speed to find an airspeed which will provide and incombustible moisture)
8	Forced Landing - Execute (as described in Emergency Landing Without Engine Power)

On the Ground

1	Condition Control - CUTOFF/FEATHER
2	START/GEN SWITCH - START to extinguish the fire.
3	Ign Circuit Breaker - PULLED
4	Fuel Pump - OFF
5	Fuel Selector - OFF
6	Monitor TOT
7	Fire Extinguisher - OBTAIN (have ground attendants obtain if not installed)
8	Engine - SECURE

9	a. Start Switch - OFF
10	b. Battery Switch - OFF
11	Exit aircraft - INSPECT FIRE DAMAGE, associated maintenance actions must be observed.

Electrical Fire In Flight

1	Battery and Generator - OFF
2	Standby Fuel Pump - ON
3	All Other Switches - OFF
4	Vents/Cabin Air/Heat - ACTIVATE
5	Fire Extinguisher - ACTIVATE If fire appears out and electrical power is necessary for continuance of the flight:
6	Battery and Generator - ON
7	Monitor Electrical Load
8	Circuit Breakers - CHECK for faulty circuit, do not reset
9	Radio/Electrical Switches - ON one at a time, with delay after each unit short circuit is localized.

Cabin Fire

1	Battery and Generator - OFF
2	Standby Fuel Pump - ON
3	Vents/Cabin Heat - CLOSED (To avoid drafts)
4	Fire Extinguisher - ACTIVATE (If necessary)

Emergency Descent

1	Power - FLIGHT IDLE
2	Condition - HIGH RPM
3	Landing Gear - DOWN
4	Airspeed - ESTABLISH 154 KTS

Landing Emergencies

Emergency Landing Without engine Power

1	Airspeed - 84 KIAS (flaps up); 79 KIAS (flaps 30°)
2	Condition Control - CUTOFF/FEATHER
3	Fuel Pump - OFF
4	Fuel Selector - OFF
5	Flaps - AS REQUIRED
6	Gear - DOWN or UP (depending on terrain)
7	Battery and Generator Switches - OFF
8	Doors - UNLATCHED Prior to touchdown

9	Touchdown - SLIGHTLY TAIL LOW
10	Brakes - APPLY HEAVILY

Emergency Landing with Power - Gear Up

1	Airspeed - 84 KIAS (flaps up); 79 KIAS (flaps 30°)
2	Power Control - FLIGHT IDLE
3	Condition Lever - CUTOFF/FEATHER
4	Battery Switch - OFF
5	Fuel boost pump - OFF
6	Fuel selector - OFF
7	Doors - UNLATCHED Prior to touchdown
8	Touchdown - WINGS LEVEL During touchdown
9	Get clear of airplane as soon as possible after it stops.

System Emergencies

Low Gyro Pressure Annunciator Illuminated

1	Verify Engine power Settings - NORMAL
2	Standby Instrument Air - ON
3	Standby Instrument Air - VERIFY proper function
4	LAND AS SOON AS POSSIBLE