

# ATR 72-500

## Atlantic Sun Airways CAT A Pilot Procedures



**This is the third of a series of Atlantic Sun Airways CAT A pilot procedures and checklists for our fleet. Use them with good judgment.**

### General Characteristics

#### Dimensions:

Span 88 ft 9 in  
Length 89 ft 2 in  
Height 25 ft 1 in

#### Engines:

P&WC PW 127F turboprops x 2 driving six blade Hamilton Sundstrand propellers

#### Weight and Capacities

Operating Empty Weight: 28,550 lb  
Max TOW: 48,501 lb  
Optional: 49,604 lb

Passengers: 74 Max Seating - 4 abreast  
Crew: 2

#### Performance

Max Cruising Speed at 15,000 FT: 284 KTS  
Economical Cruising Speed: 248 KTS  
Range with Reserves at Max Operational Weight: 645 nm  
Range with 66 Passengers: 1,200 nm



## THE CHECKLISTS

### PRESTART CHECKLIST

Parking Brake  
 Battery Switch  
 Generator Switches  
 Power Management Switch  
 Automatic Torque Switches  
 Throttle  
 Landing Gear Lever  
 Propeller  
 Fuel Condition Lever  
 Idle Gate Lever  
 Flaps  
 Battery Switch  
 Panel Lights  
 Fuel Quantity  
 Flight Controls  
 Avionics Master Switch  
 Fasten Seat Belts  
 No Smoking  
 Check Weather  
 De-ice  
*Request Clearance*  
 Transponder  
 Beacon

SET  
 OFF  
 OFF  
 CHECK SET TO (take off)  
**CHECK OFF !!!**  
 IDLE  
 CHECK DOWN  
 HIGH RPM  
 FUEL CUTOFF  
 GROUND IDLE  
 UP  
 ON  
 ON if required  
 CHECK  
 CHECK  
 ON  
 ON  
 ON  
 (ATIS, Flight Service)  
 TEST/CHECK  
  
 STANDBY  
 ON

### **STARTUP CHECKLIST**

Engine and Propeller Area  
Thrust Levers  
Fuel Valves  
Fuel Condition Lever  
Idle Gate Lever  
Prop Brake  
Engine Start Selection Switch  
Engine Start Selection Switch  
Start Button Engine 2

Generator 2  
Start Button engine 1

Generator 1  
Loadmeter+Voltmeter  
Engine Start Selection Switch

CLEAR  
IDLE  
OPEN  
AUTO  
FLIGHT IDLE  
OFF  
CRANK few seconds  
START A + B  
START (hold until engine starts)  
ON  
START (hold until engine starts)  
ON  
CHECK for CHARGE  
OFF

### **BEFORE TAXI CHECKLIST**

Nav Lights  
Taxi Lights / Logo Lights / Wing Lights  
Heading Indicator/ Altimeter  
Instruments  
Radios and Avionics  
Autopilot  
F/D

*Request Taxi Clearance*

ON  
ON  
SET  
NORMAL OPERATION  
ON, CHECKED, and SET  
SET and OFF  
ON

### **TAXI CHECKLIST**

Parking Brake  
Brakes  
Directional Gyro  
Turn Coordinator  
Artificial Horizon  
Taxi to assigned runway

RELEASE  
CHECK during taxi  
PROPER IND. during turns  
PROPER IND. during turns  
ERECT during turns  
SPEED Max. 20 knots

### **BEFORE TAKEOFF CHECKLIST**

Parking Brake	SET
Fuel Quantity	CHECK
Throttle	IDLE
Elevator Trim	SET for takeoff
Flaps	15 deg
Flight Controls	FREE AND CORRECT
Engine / Flight Instruments	CHECK
Radios and Avionics	SET
Landing Lights	ON
Taxi Lights	OFF
Strobe Light	ON
Pitot Heat	ON
Anti-ice	AS REQUIRED
Power Management Switch	SET TO (takeoff)
Annunciator Lights	CHECK
Transponder	ON
<i>Request Takeoff Clearance</i>	

### **TAKEOFF CHECKLIST**

Automatic Torque Switches	BOTH ON
Brakes	RELEASE
V1= Vr=	110 KIAS
Pitch	10 degrees
V2=	115 KIAS
At Positive Climb Rate	Touch Brakes
Landing Gear	RETRACT
Power Management Switch	SET CLB (climb)
At 130 KIAS	RETRACT FLAPS
Annunciator Lights/Eng. Instruments	CHECK

### **CLIMB-out CHECKLIST**

Power Management Switch	CHECK CLB
Autopilot	CHECK and SET
Yaw Damper	ON
Landing Lights	OFF
Airspeed	190 KIAS / 1800 fpm 89%
	180 KIAS / 1500 fpm 77%
	MONITOR
	AS REQUIRED
Engine Instruments	
ATC	
At Transition Altitude (FL180) set Altimeter to 29.92 (1013mb)	

### **CRUISE CHECKLIST (above FL 180)**

Accelerate to cruise speed	
Power Management Switch	SET CRZ (cruise)
at 6,000 ft	245 KIAS     78%
at 9,000 ft	240 KIAS     76%
at 12,000 ft	235 KIAS     73%
at 18,000 ft	220 KIAS     68%
at 24,000 ft	205 KIAS     63%
Service	
Ceiling 25,000 ft	
Engine+Instruments	CHECK
Fuel Quantity	CHECK
Radios	TUNED and SET
Autopilot	CHECK and SET

### **DESCENT CHECKLIST**

ATIS /Airport Information	CHECK
Altimeter	CHECK
Radios	SET
Automatic Torque Switches	OFF !!!
Descent Speed	200 – 240 KIAS
Descent Rate	-1500 fpm
Flaps / Landing Gear	CHECK UP
At Transition Altitude (FL180) reset Altimeter to local	
Check Weather	(ATIS, Flight Service)

### **APPROACH CHECKLIST**

On Localizer Level Flight:	
Fasten Seat Belts	ON
No Smoking	ON
Avionics + Radios	SET
Speed: Establish	145 KIAS
Flaps	15 deg
Landing Lights	ON
Speed: Establish	130 KIAS
Landing Gear	DOWN

### *Final glide Slope Descent:*

Speed: Establish	120 KIAS
Descent Rate	-600 fpm
Elevator Trim	AS DESIRED
Parking Brake	VERIFY OFF
Anti-Ice	AS REQUIRED
Yaw Damper	OFF

### **LANDING CHECKLIST**

Landing Gear	CHECK DOWN, 3 GREEN
Autopilot	OFF
Landing Speed	115 KIAS
Touchdown	MAIN WHEELS FIRST
Landing Roll	LOWER NOSE WHEEL
After Touchdown	Apply Reverse Thrust, at 60 kts: Cancel Reverse Thrust

### **TAXI TO RAMP CHECKLIST**

Strobe Light	OFF
Flaps	UP
Spoilers	RETRACTED
Taxi Lights /Runway Turnoff Lights	ON
Landing Lights	OFF
Anti-ice	OFF
Speed	Max. 20 knots
Transponder	1200/OFF
Elevator Trim	TAKEOFF SETTING
Avionics/Radios	AS REQUIRED

### **SHUTDOWN CHECKLIST**

Parking Brake	SET
Throttles	IDLE
Passenger Signs	OFF
Air-conditioning Fan	OFF
Pitot Heat	OFF
De-ice	OFF
Taxi Lights / Runway turnoff Lights	OFF
Nav Lights	OFF
F/D	OFF
Fuel Cond. Lever	FUEL CUTOFF
Idle Gate Lever	GROUND IDLE
Fuel Valves	CLOSE
Power Management Switch	SET TO (takeoff)
Generators	OFF
Prop Brake	ON
Panel Light	OFF
Beacon	OFF
Passenger Door	OPEN
BATT Master Switch	OFF

### **SECURING AIRCRAFT**

Parking Brake	VERIFY SET
Throttles	VERIFY IDLE
All Switches	VERIFY OFF
Passenger Door	CLOSED

Good Luck and enjoy using these procedures, I have flight tested and verified them on FS9. Of course if you have a real ATR 72-500 use the Operating Procedures in your AFM!

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