

Checklist MS FSX incl. Flight1 ATR72-500

IVAO:

Member-#: _____

Website-PW: _____

Network-PW: _____

Attention:

1. You should have a saved ATR72 flight with parkingbrake set to make sure you have no problems loading the aircraft in dark & cold mode. **Attention:** Only save in 2d panel mode.
2. Flight1 gives the advice to create a new flight within FS every time by loading the standard flight (Cessna 172), then changing the aircraft (to AT72) and airport. *I am not following their advice and have no problems, but you have to do this once to create a flight to load.*
3. You need to work the Columns & specified panels from bottom to top.

Parking Position:

- Dark & Cold (at Configurator) Set
- Load at Configurator Set & **Note** Zero Fuel Weight & Maximum Fuel
- FSX Start & Load saved ATR72 flight
You could also create a new flight as described above.
- Parkingbreak Set
- IVAP-Connection Activate
- Load (at FSX) Check / Reset
- Fuel (at FSX) Set
- Dep-Metar Check & note
- Arr-Metar Check & note
- Flightplan Create (e.g. at Asalink-RouteFinder)
- Door 1 Open (Shift + E)
- Gangway Enable (if available) (Ctrl + J)

- Battery (OHP) On
- Wait for System Self Test to finish FMC 1A/2A light flash
FMC 1A/2A light extinguish
FMC 1B/2B light flash
FMC 1B/2B light extinguish
EMER BUS & ESS BUS arrows illuminated
UNDV (under-voltage) light extinguished

- Cockpit-Lights On (as required)
- External Lights All off
- Power Levers Verify Ground Idle
- Condition Levers Verify FUEL SO (Fuel Shutoff)
- EEC On (Light extinguished) (Elec Eng Control)
- PEC On (Light extinguished) (Prop Elec Control)
- Gust Lock Engaged
--- The Gust Lock is the uppermost black click spot on the engine control panel. ---
- Flaps Lever Set to current flap position
- Land Gear Lever Verify Down
- Wipers Off
--- If no External Power available you have to start ENG2 now, preceded by ENG2 fire test, activating the No2 Fuel Pump, setting the Prop Brake & enabling the Beacon Light. ---

- External Power / Ext Pwr On
- AC Wild External Power On
- Master Caution Light Push / Disable
- Main Elec Panel Verify no amber lights illuminated
Only DC GEN FAULT Light illuminated

- NAV Light On
- Fuel Qty Indicators Check
- Fuel Qty Test Button Press & verify "8888" indicated
--- Next step only after turn-around. ---
- Fuel Used Counters Reset
- ANN LT Test & verify all lights illuminated
- ANN LT BRT / DIM (as required)
- Bleed Air / Packs All On / All white lights extinguished
--- Packs & Eng Bleed yellow Fault Lights should be illuminated. ---
- Avionics Vent Ovbd Valve Auto & Armed, verify no white/amber lights
- ➔ Left Ovhd Panel Column
- Calls Reset
- SELCAL Reset
- ENG 1 Fuel Pump On
--- Verify
RUN Lights illuminated
FEED LO PR Light extinguished
LP VALVE in line
X-FEED VALVE x line ---
- ENG 2 Fuel Pump On
--- Verify
RUN Lights illuminated
FEED LO PR Light extinguished
LP VALVE in line
X-FEED VALVE x line ---

--- Door test will only work with doors open. ---
- Doors SW Test Press & verify Cab OK Light illuminated
- Spoiler Verify lights extinguished
- Landing Gear Verify 3 green
- MFC (FMC) Verify no amber lights
--- Next step is optional. ---
- SELCAL Code Set
- ENG 1 Fire Protection
 - ENG 1 Fire Handle In & latched
 - White Lights All extinguished
 - Squib Test Switch Press & verify Agent Squib lights illuminated
 - Test Switch Fire & hold
 - Verify Eng Fire red light illuminated
CCAS (Centralized Crew Alerting System) activated
Continuous Repetitive Chime Sound
Master Warning flashing red
ENG 1 Fire red light on Crew Alerting Panel
Fuel Shut Off red light illuminated
 - Test Switch Fault & hold
 - Verify Loop A & B Fault lights illuminated
CCAS activated
Single Chime Sound
Master Caution flashing amber
LOOP amber light on

- ENG 2 Fire Protection (on right Ovhd Panel Column)
 - ENG 2 Fire Handle In & latched
 - White Lights All extinguished
 - Squib Test Switch Press & verify Agent Squib lights illuminated
 - Test Switch Fire
 - Verify Eng Fire red light illuminated
CCAS (Centralized Crew Alerting System) activated
Continuous Repetitive Chime Sound
Master Warning flashing red
ENG 1 Fire red light on Crew Alerting Panel
Fuel Shut Off red light illuminated
 - Test Switch Fault
 - Verify Loop A & B Fault lights illuminated
CCAS activated
Single Chime Sound
Master Caution flashing amber
LOOP amber light on

- ➔ Center-Left Ovhd Panel Column
 - Logo Lights On
 - Cockpit Voice Recorder Test Press & verify pointer moves into black area
- ➔ Center-Right Ovhd Panel Column
 - Emergency-Lights Armed
 - Seat Belts On
 - No Smoking On
 - Anti- / De-Icing All white lights off
 - Probe / Windshield Heating **On** (All white lights off)
 - AC Wild Elec Power All white lights off
 - Hyd Power All white lights off
 - Emer Loc Xmtr Verify Auto & guarded
- ➔ Right Ovhd Panel Column
 - Compt Temp / Air Bleed All white lights off
 - Compt Temp Selectors As required
 - Oxygen Verify high pressure indicated
 - Oxygen Main Supply On / Light extinguished
 - Oxygen Pax Supply On / Light extinguished
 - Compt Smoke Test Press & hold
--- Verify Continuous Repetitive Chime Sound. After 3 seconds continue. ---
 - Avionics Vent Exhaust Mode Reset (by pressing twice)
- ➔ Lower Pedestal (Center Console)
 - Cockpit Door As required / Deny
 - Flight Number Set
 - Aileron / Rudder Trim Center / 0
 - Stby Pitch Trim Off & guarded
 - VHF / COM 1 / 2 On
 - ADF 1 / 2 ADF
 - Transponder Stdbby
 - TCAS Auto
 - TCAS Test Push & verify "TCAS System Test Okay" Sound played
- ➔ Upper Pedestal (Control Stand)
 - Idle Gate Verify light extinguished & orange band visible
 - Emer Audio Cancel Verify switch guarded (red guard)

→ Captains EFIS Control Panel

- Radar Stby
- E-ADI DIM On / Maximum
--- E-ADI DIM is the left click-spot of the ADI DIM / DH TST knob, the right click-spot is for DH (Decision Height). ---
- E-HSI DIM On / Maximum
- DH Set (200ft or as required)
- Bearing Pointer 1 Mode RNV (or as required)
- Bearing Pointer 2 Mode RNV (or as required)
- EHSI Full / Arc Mode ARC (or as desired)
- EHSI Map Mode 1x MAP (or as desired)
- EHSI Mode Set to RNV (or as desired)

→ Center Instrument Panel

- ADC-SW Odd Days: 1
Even Days: 2
- Stdy Instruments Verify no flags
- Stby Horizon Pull to erect (Bug: DON'T DO THAT → RNAV Error)
- Instrument Checks
 - PWR MGT TO
 - ENG 1 & 2 Instruments Check
 - ENG Controls All white lights extinguished
 - Cab Press Lights All extinguished
 - Man Rate Knob Norm
 - Cabin Press Indicator DIFF: 0
RATE: 0
ALT: Pressure Altitude
 - Stick Shaker Fault Light Extinguished
 - Anti Skid Lights All extinguished
 - RMI / EHSI Crosscheck Heading
 - VSI Verify no flags & pointer zero
 - Clock Verify time & adjust if required
 - ASI Verify no flags, airspeed 0 & VMO 250
 - EADI Verify no flags
 - Altimeter Verify no flags
- GPWS / GS Test Button Push
--- Verify "Flight Slow – Pull Up" Sound played. (Button is upper-right of the EADI.) ---

--- Continue here at turn-around. ---

- FMC
 - Ident Page → DATA Btn. → Ident → LSK 6L
 - Verify current AIRAC file loaded
 - Pos Ref → LSK 6R
 - Verify GPS position correct
 - Route → LSK 6R
 - Option 1: Load saved route → User Rtes → LSK 4R
 - Select route → LSK xL (x = line no.)
 - Enter into Rte 1 or 2 → LSK 6x (x = L or R)
 - Option 2: Create new route
 - Enter Dep Airport 4-letter code → LSK 1L
 - Enter Arr Airport 4-letter code → LSK 1R
 - Enter Flight No. → LSK 2R (e.g. DLH84)

- Enter T/O Runway → LSK 2L
 - Enter Company Route Name → LSK 3R
- I recommend choosing the rte name like this: xxxxyyyzzzz
with x = Dep Airport, y = Arr Airport, z = Aircraft code (here: AT72). ---
- Next Page → NEXT
 - Enter first waypoint after SID → LSK 2R
 - Continue adding next waypoints → LSK xR (x = line no.)
- After every 5 waypoints you have to change to the next page. ---
- Back to Rte Page 1 → PREV (press till you reach Page 1)
 - Save Rte → LSK 5R
 - Activate → LSK 6R
- Green Exec Light should be illuminated. ---
- Execute → EXEC

- Dep/Arr Page → DEP/ARR
- Dep → LSK 1L
- Select Runway → xR
- Select SID → xL
- (Select Transition → xL)

--- Green Exec Light should be illuminated. ---

- Execute → EXEC

--- You could now select the STAR via the DEP/ARR page, but I postponed this step until reaching the last waypoint before the top of descent. ---

- Legs Page → LEGS
- Clear all discontinuities by replacing the discontinuity with the next waypoint
- Rte Page → RTE
- Perf Init → LSK 6R

--- Following weights will be indicated in 1000kg (1kg ≈ 2,2lbs)

- Auto - ZFW → LSK 3L
- Auto - GW → LSK 1L
- Enter Reserves → LSK 4L (standard: 0.9 ≈ 900kg ≈ 2000lbs)
- Enter Flight Level / Cruize Alt → 1R

--- Green Exec Light should be illuminated. ---

- Execute → EXEC

- | | |
|--------------------------------|---|
| • IVAP-Flightplan | Create, enter route, alternate, POB, FOB, TO time |
| • Mach (or TAS) in Flightplan | Enter |
| • Departure Time | Enter (in UTC/Zulu → CET (MEZ) -2 / (winter -1) |
| • VHF / Com 1 frequency | Set active ATC (or Unicom 122.8) |
| • IFR-Clrc. | Request |
| • Clrc. data | Note & Readback (Squawk, First-Altitude, QNH, SID) |
| • FP correction | Correct (if required) |
| • Squawk | Set |
| • Altimeter | Set to current atmospheric pressure (B) |
| • Auto Press Landing Elevation | QNH in use → Set to airport elevation
OFE in use → Set 0 |
| • ASI Speed Bug | Set V2 (yellow bug) + 5 knots |
| • Door 1 | Close (Shift + e) |
| • Gangway | Disable (Ctrl + j) |

Engine s/u & Pushback:

- | | |
|-------------------------|------------------|
| • Engine s/u & p/b clrc | Request |
| • Doors | Check all closed |
| • Beacon Lights | On |

- Parkingbreak Release
- Pushback Start

- ENG 2 Start ---
- ENG Start Rotary Knob Start A or B
- Start 2 Push & verify on light illuminated
- Between 10 & 19% NH and ITT > 200°C ---
- Condition Lever 2 (CL) FTR
- Verify after 45% NH Start 2 On light extinguished & after 62% NH DC Gen Fault 2 light extinguished. ---
- Condition Lever 2 (CL) Auto
- Verify NP stabilized at 71%. ---

- ENG 1 Start ---
- Start 1 Push & verify on light illuminated
- Between 10 & 19% NH and ITT > 200°C ---
- Condition Lever 1 (CL) FTR
- Verify after 45% NH Start 1 On light extinguished & after 62% NH DC Gen Fault 1 light and BTC flow bar light extinguished. ---
- Condition Lever 1 (CL) Auto
- Verify NP stabilized at 71%. ---
- ENG Start Rotary Knob Off / Start Abort

- DC External Power Off
- Verify DC GEN 1 & 2 Fault light extinguished. ---
- AC Wild External Power Off
- Air Bleed Verify all lights extinguished
- AC Wild Elec Pwr Verify all lights extinguished

- Flaps 15
- Anti Skid Test Press & Release
- Verify no F lights remain illuminated. ---
- Pushback End
- Taxi Lights On
- No Smoking Verify on
- Seat Belts Verify on

Taxi:

- Taxi-Clrc Request
- Taxiways Note
- (Ground guidance Request if needed)
- Taxi To h/p as cleared

- NAV Receiver 1 On
- NAV Receiver 2 On
- A/P Altitude Set to first altitude
- Altitude Selected will be shown in the A/P window. ---
- A/P HDG Set to runway heading
- Heading will be shown in the lower-left corner of the EHSI. ---
- ASI Speed Bug Verify set to V2 + 5 knots
- EHSI Verify RNV & MAP set

- EHSI Range Set (with arrow buttons)
- A/P CPL Set pilot flying side (left arrow illuminated)
- T/O Config Test Push & verify no alert

h/p:

- Hand-off GND to TWR Change frequency
- l/u & t/o clrc Request (rdy for dep h/p xx)
- Gust Lock Release (Uppermost black click spot)
- Air Bleed Valves Norm Flow
- Wing Lights On
- Strobe Lights On
- Landing-Lights On
- Transponder On
- Postion & hold Taxi & stop on rwy

Ready to Takeoff:

- Parkingbreak Set
- Right click on both levers to auto-set to Power Lever Notch. ---
- Thrust Levers Move forward to manual t/o thrust or right click to set levers to Power Lever Notch.
- Parkingbreak Release
- Yoke (till 70 knots) Press forward
- V1 Abort of start not possible anymore
- VR Lift nose up
- V2 Lift-off

Takeoff:

- Trim settings Adjust (when needed)
- Gear Up (at positive climb rate >500ft)
- at 1000ft AGL---
- Airborne Publish airborne when on Unicom (no ATC)
- Start time [Note \(if needed\)](#)
- A/P YD On
- A/P NAV On
- A/P (Master Switch) On
- Verify YD & AP arrow lights illuminated and green LNAV is shown in the A/P display. ---
- Flaps Raise passing about 150kts
- PWR MGMT CLB
- Power Levers Forward to about 80%
- If the aircraft climbs to fast and is loosing speed set climb speed through A/P. ---
- A/P IAS IAS
- A/P IAS Select Climb speed with A/P wheel
- Warning: If you set the speed to high the aircraft will descend to gain speed! ---
- Continue here. ---
- Hand-off TWR to APP(DEP) Change frequency

Climb:

- Landing Lights Off
- Taxi Lights Off
- Wing Lights Off

--- to final FL / next FL clrc ---

- AP altitude Change
- Hand-off APP to CTR Change frequency
- Altimeter Readjust (above 18000ft)

Cruise:

- PWR MGMT CRZ
- ATC contact Maintain (on UniCom watch TCAS)
- Autopilot Check permanently
- FMC Check PROG & ACT LEGS pages
- FMC Check VNAV Page 2 for T/D

Cruise with Icing Conditions:

- Probes & Windshield HTG Verify on (lights extinguished)
- Mode SEL Auto (light extinguished)
- Prop, Horns & Side Windows Anti-Ice On (On lights illuminated)
- ENG & Airframe De-Icing On (On lights illuminated)
- Minimum Icing Speeds Set bugs as shown in charts

Descent & Approach:

- Descent preparations Begin 30nm before T/D / 80nm before destination
- Airport-/Meta-Information Retrieve
- FMC
 - DEP/ARR Page → DEP/ARR
 - Destination Arrival Page → LSK 2R
 - Select Arrival Runway → LSK xR
 - Select STAR → LSK xL
 - Select Transition → LSK xL
 - Verify green Exec light illuminated. ---
 - Execute → EXEC
 - Legs Page → LEGS
 - Clear all discontinuities by replacing the discontinuity with the next waypoint
 - If you deleted an discontinuity green Exec light should be illuminated. ---
 - Execute → EXEC
 - VNAV Page 1 → Look up Gross Weight
- Look up Vapp in charts according to Gross Weight
- ASI Speed Bug Set to Vapp
- Before reaching Top of Descent (T/D). ---
- Descent-Request Request
- Continue here when reaching T/D. ---
- A/P Altitude Set to next cleared Alt or final approach Alt
- A/P IAS or VS Activate & set
- It is recommend to use VS mode for the first part of the descent (set as recommend on the FMC VNAV page), use IAS mode for final approach (set to Vapp). ---
- Center Panel: ---
- CCAS Depress CPL button & check aircraft status
- Landing Elevation If QNH in use → Destination Airport Altitude
- If QNE in use → 0
- Continue here after descending through 18000. ---
- Altimeter Readjust (under 18000ft)
- Decision Height Set (200ft RA or as required)
- Hand-off CTR to APP Change frequency

- Landing lights On
- Wing Lights On
- Taxi Lights On

Final Approach:

- A/P Altitude Set to Destination Airport Alt. + Decision Height
- --- Passing Deceleration Altitude. ---
- Power Levers Flight Idle
- --- Passing 180kts. ---
- Flaps 15
- --- Passing 170kts. ---
- Gear Down
- PWR MGMT TO
- --- Passing 150kts. ---
- Flaps 30
- --- After stabilized on glide slope & ILS. ---
- ILS captured Announce (on Unicom state final app)
- Hand-off APP to TWR Change frequency
- --- Continue after landing clrc received. ---
- --- At decision altitude. ---
- A/P Disconnect (Press 2x)
- Trim settings Adjust (as required)
- ---Touchdown---
- Throttles Idle
- Thrust reversers Engage (if required)
- Thrust reversers Disengage (at 70kts) / Power levers idle
- Runway Vacate ("rwy vacated")

Taxi:

- Transponder Stdby
- Hand-off TWR to GND Change frequency
- Taxiways Note and follow (with active ATC)
- (Ground-Guidance Request if required)
- Flaps Set 0
- Trims Reset
- Gust Lock Engage
- Landing lights Off
- Wing lights Off
- Strobe lights Off
- NAV Receivers Off
- Landing time Note (if needed)

Parking Position:

- Parkingbreak Set
- Taxi Lights Off
- Ground Power On
- AC Wild Ground Power On
- ENG 1 CL FTR → FUEL SO
- ENG 2 CL FTR → FUEL SO

- Door 1 Open (Shift + e)
- Gangway Enable (Ctrl+ j)
- Master Caution Push / Off
- Seat Belts Off
- No Smoking Off
- Beacon Lights Off
- ATC End service (“on blocks, thx for service”)

--- Ready for turn-around, continue for dark & cold. ---

- ENG 1 & 2 Fuel Pumps Off
- Master Caution Push / Off
- ➔ Captains EFIS Control Panel
- E-HSI DIM Off
- E-ADI DIM Off
- Radar Off
- ➔ Lower Pedestal (Center Console)
- TCAS Stby
- Transponder Off
- ADF 1/2 Off
- VHF / COM 1/2 Off
- Cockpit Door Open
- ➔ Center-Right Ovhd Panel Column
- All Anti-Icing & Heating Off
- Emergency-Lights Disarm
- ➔ Center-Left Ovhd Panel Column
- Logo Lights Off
- NAV Lights Off
- ➔ Right Ovhd Panel Column
- ENG 1/2 Bleed Off
- Packs Off

- AC Wild External Power Off
- External Power Off
- External Lights Verify all off
- Cockpit Lights All off
- Battery Off

Checklist for Flight1 ATR72-500 with Microsoft Flight Simulator.

Created by: Carsten Rau (March 2009 / v7)
 I used to create: Flight1 ATR72 Manual, my other checklists
 Only use with: Microsoft Flight Simulator / IVAO (Intl. Virtual Aviation Organization)
 Visit: <http://www.iva0.aero>
<http://www.carstenrau.de>
<http://www.leveldsim.com> - Level-D 767
<http://www.precisionmanuals.com> - PMDG 747 / MD11
<http://www.wilcopub.com> - Wilco 737 PIC / E-Jet & Airbus Series
<http://www.captainsim.com> - CaptainSim 757 Captain
<http://www.flight1.net> - Flight 1 ATR72-500

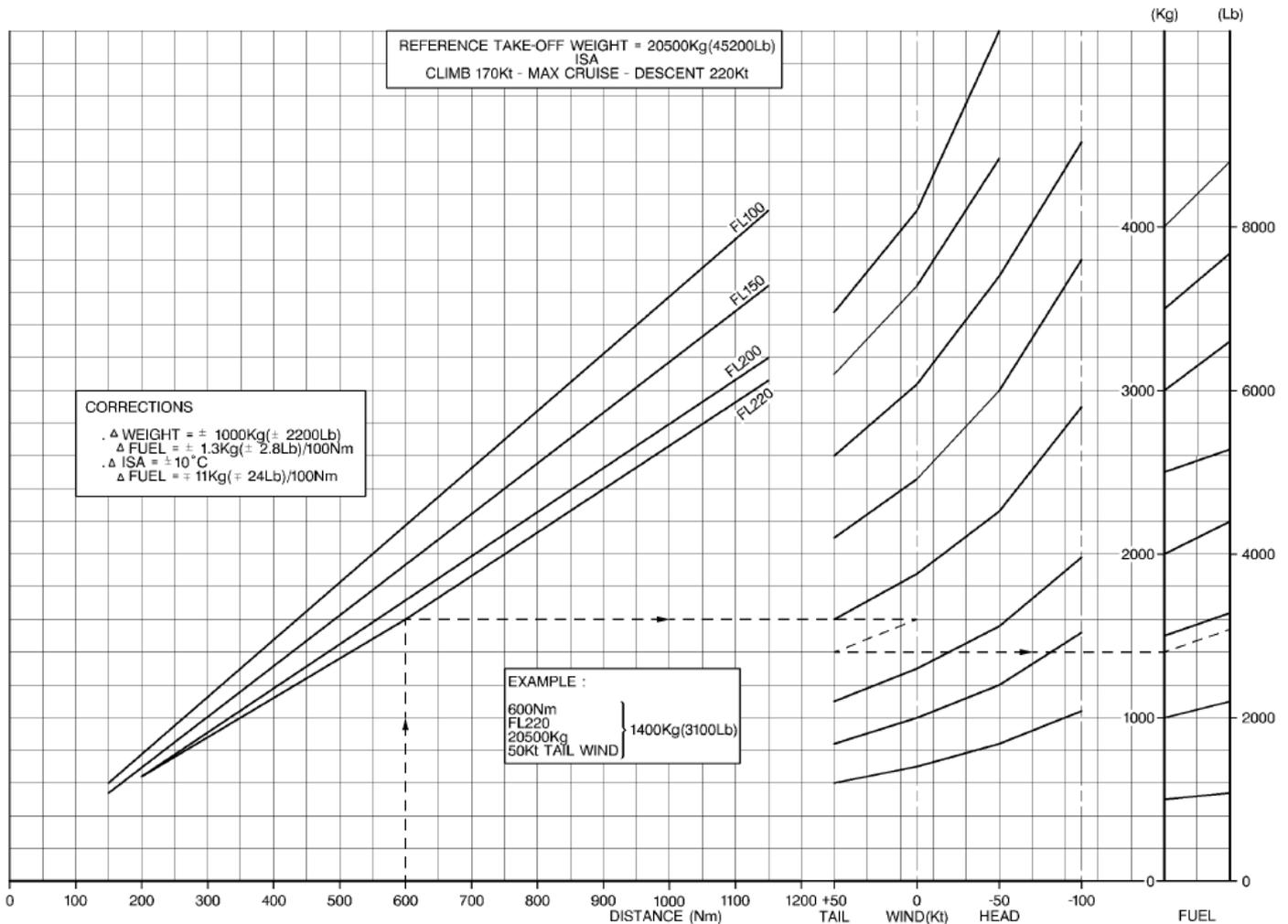
Attachments

for

Checklist MS FSX incl. Flight1 ATR72-500

Fuel Required:

Trip Fuel +Taxi, Take-Off, Climb & Landing Fuel



Fuel planning notes (IFR Flights):

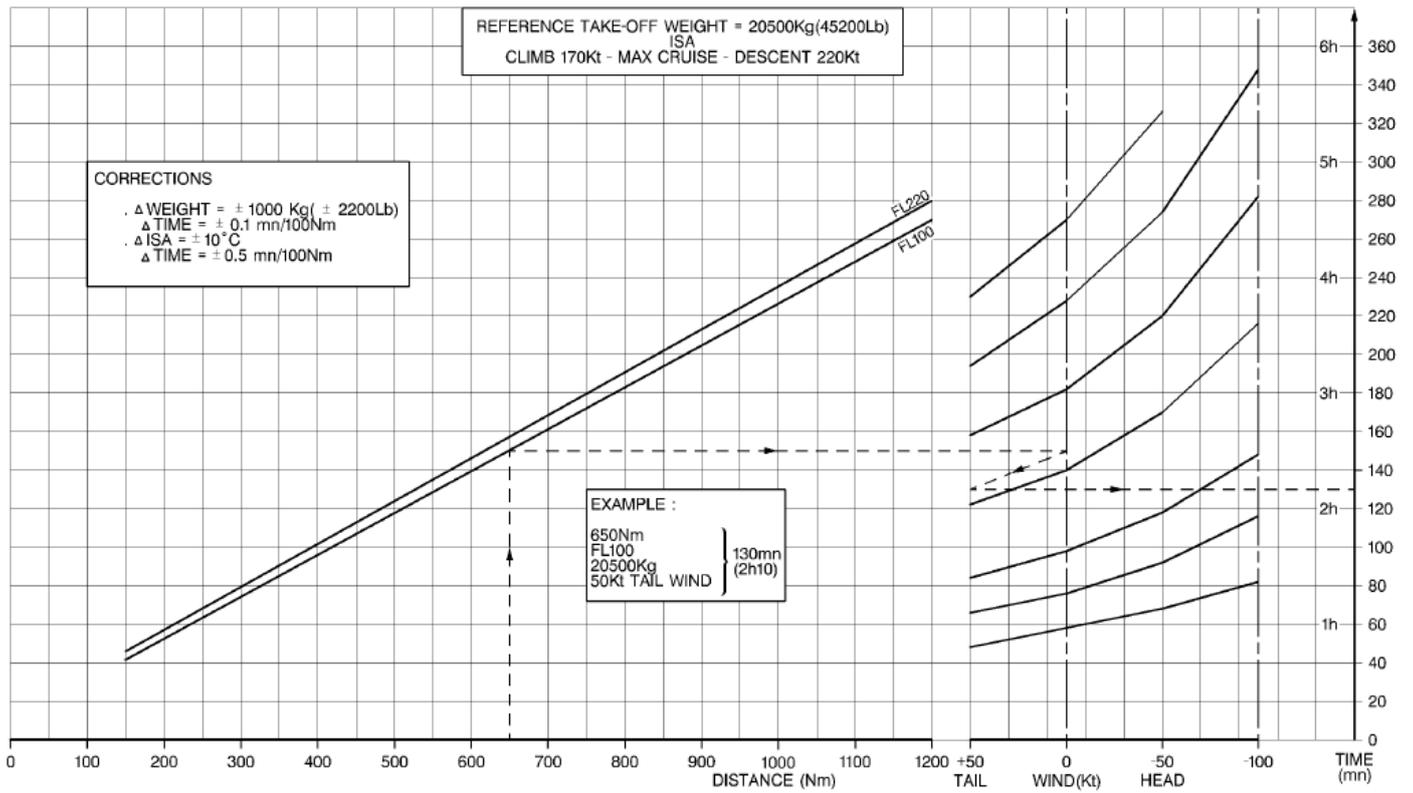
	Basic Operating Weight (OEW)	29.762 LBS	
+	Payload (passengers & cargo)	XX.XXX LBS	
=	Zero Fuel Weigh (ZFW)	XX.XXX LBS	(max 45.194 LBS)
+	Minimum Landing Fuel (FAA 45min reserve)	01.000 LBS	
+	Alternate Fuel (200nm distance)	01.000 LBS	
+	Contingency Fuel (included in chart above)	00.000 LBS	
=	Planned Landing Weight (PLW)	XX.XXX LBS	(max 48.502 LBS)
+	Flight Plan Fuel (fuel for route)	XX.XXX LBS	
=	Planned Takeoff Weight (PTOW)	XX.XXX LBS	(max 48.502 LBS)

→ Flight Plan Fuel + 2.000 LBS = Total Fuel (2.000 LBS ≈ 900 KG)

→ Total fuel = Enough fuel for route, 45min contingency (holding & taxi), problematic winds, alternate fuel for 200nm and a minimum landing fuel (45min). Modify alternate value as needed.

→ Load wing tanks first, with same amount of fuel; wing tanks full → center tank.

Distance & Time:



Vapp (Approach Speed):

FINAL APPROACH SPEED:

$$V_{APP} = V_{mHB} + \text{WIND FACTOR}$$

Wind factor :
 The highest of
 - 1/3 of the reported head wind velocity
 -0f-
 - the gust in full
 with a maximum wind factor of 15 kt.
 Wind factor is added to give extra margin against turbulence, risk of windshear etc...

FLAPS 30°

Weight (1000 kg)	VmHB IAS limited by VMCL	
	Normal conditions	Icing conditions
13	95	95
14	95	95
15	95	97
16	95	100
17	96	104
18	99	107
19	102	110
20	105	114
21	108	117
22	111	120
22.5	113	122

Weight (1000 lb)	VmHB IAS limited by VMCL	
	Normal conditions	Icing conditions
29	95	95
31	95	95
33	95	97
35	95	100
37	95	104
39	98	106
41	101	109
43	103	112
45	106	115
47	109	118
49	112	121
49.5	113	122

