

# FOKKER 100

## CHECKLISTS

### INTRODUCTION

This chapter contains the expanded normal checklists.

The expanded normal checklists contains all main and sub checklist items. The sub items are denoted by a - must be committed to a memory.

Items denoted by an asterisk are dependent on customer specification.

Before the first flight of the day, and after a crew change the flight deck should be scanned using the panel scan flow.

The checklist is used to verify that all steps of the preceding procedure have been accomplished. It is assumed that all systems are operating normally and that automated features are fully utilized.

Exterior and interior lights that have no obvious procedural requirements and personal comfort items are not included in the checklist.

### CHECKLIST USAGE

Reading the checklist is done according to the challenge-and-response method. When the aircraft is parked the Pilot Not flying (PNF) shall read and the Pilot Flying (PF) shall respond to the challenge. When the aircraft is off blocks, the PNF shall read and complete the relevant checklist.

Reading and response shall always be done aloud, regardless of which crew member completes the action. if, under conditions of high workload, response to a checklist item cannot be given

The aircraft preparation consist of the EXTERIOR INSPECTION, the FLIGHT DECK SAFETY INSPECTION and the FLIGHT DECK PREPARATION. These three items should be performed before all originating flights and/or after a crew change. Items which can be checked simultaneously by left and right pilot are denoted "L-R". A broken line in a checklist procedure indicates a sequential condition which should be met before continuing with the procedure.

The BEFORE TAKE-OFF CHECK shall be performed when the aircraft is clear of the ramp.

The AFTER TAKE-OFF CHECK should be delayed until clear of the traffic area. An altitude of 5000 ft AGL is recommended.

The BEFORE LANDING CHECK should be accomplished after selection of landing flap.

### EXTERIOR INSPECTION

The exterior inspection may be omitted if qualified maintenance personnel have carried out this inspection.

Prior to each flight, the flight crew or maintenance shall verify that the aircraft condition is acceptable for flight. Check that all flights controls are unobstructed and that all surfaces are clear of ice, snow, and frost. Check access panels properly secured, all vents and ports unobstructed and aircraft free from damage and fluid leakage. Check wheel chocks in place, gear

<p>immediately, the word "stand-by" shall be used and further reading of the checklist shall be suspended until the proper response is given. When a checklist is completed the pilot reading shall announce: "..... checklist completed".</p>	<p>pins removed and gear doors closed. Check tire condition and gear strut compression. Check shimmy dampers properly serviced.</p>
--	---

FLIGHT DECK SAFETY INSPECTION	
CIRCUIT BREAKERS.....	CHECKED
- Check all C/B's are in or collared in compliance with dispatch requirements	
BATTERIES.....	ON
-Select BATTERIES switch ON.	
-Check BAT voltage 24 V min.	
-Check SAP indicating.	
-Check EFIS EMER COOL FAL light on.	
LANDING GEAR.....	DOWN
-Check landing gear selector down, 3 green lights on.	
-Check alternate landing gear handle down.	
APU.....	ON
-Check DISCH switch guard closed, wired.	
-Check AGENT LO light(s) out.	
-Check LOOP A and B lights out.	
-Pull and rotate APU selector to START and release to ON.	
IRS.....	NAV
-Check AC power available.	
-Set mode selectors at IRS MSU to NAV	
FLAP SELECTOR.....	UP
FUEL LEVERS.....	SHUT
RADAR.....	OFF
EMERGENCY EQUIPMENT.....	CHECKED
-Check: Life vests	
Smoke goggles	
Flashlights	
Fire extinguisher	
Smoke hood	
-Check: Oxygen bottle open and pressure min 1450 psi for 3 crew or 1000 psi for 2 crew.	
AIRCRAFT DOCUMENTS.....	CHECKED
-Check all required documents on board.	
-Verify inoperative items in maintenance status comply with dispatch requirements.	

-Select MFDS DU's ON. Recall and verify MFDS alerts comply with dispatch requirements. Correct or cancel alerts.

## FLIGHT DECK PREPARATION

### SIDE PANELS

L-R OXYGEN MASKS.....CHECKED

-On audio panel select OPEN IC, adjust INT volume and select SPKR ON.

-Push and hold RESET/TEST slide control down and check blinker momentarily yellow and oxygen flow audible via the speakers.

-Squeeze red release levers to inflate harness and check blinker momentarily yellow. Release levers.

-Press to test the EMERGENCY flow selector and check blinker momentarily yellow and oxygen flow audible via the speakers.

-Release RESET/TEST slide control.

-Check N/100 per cent lever at 100 per cent.

### OVERHEAD PANEL

HYDRAULIC.....CHECKED

-Check system quantities minimum 70 per cent.

AVIONICS.....CHECKED

-Check GPWS FLAP OVRD switch guard closed

ELECTRIC.....CHECKED

-If EXT PWR on, select EXT PWR off (AVAIL light on) and have EXT PWR disconnected.

-Set display selectors to GEN and LOAD.

ENGINE FIRE CONTROL.....CHECKED

-Check fire handles in and latched.

### TEST PANEL

-APU FIRE TEST (not required for a/c with double loop system)

-Depress APU FIRE button and check:

Repetitive triple chime, master WARNING and APU FIRE light on, FIRE APU message at MFDS.

-A-SKID TEST

<ul style="list-style-type: none"> <li>-Depress A-SKID button and check A-SKID test light on.</li> <li>-Release button and check light extinguishes.</li> </ul>	
-WARN SYS TEST	
<ul style="list-style-type: none"> <li>-Depress and release WARN SYS button and check: TEST light on, WARN SYS IN TEST memo at MFDS, CMPL light on after approx 20 sec.</li> </ul>	
PRESSURIZATION.....	CHECKED
<ul style="list-style-type: none"> <li>-Check RATE control on mark.</li> <li>-Set manual rate control to DECR.</li> <li>-Check UP/DN toggle in mid position.</li> </ul>	
FUEL.....	CHECKED
<ul style="list-style-type: none"> <li>-Check all fuel pumps OFF.</li> <li>-Check AUTO FEED normal.</li> <li>-Check SYS SHUTOFF indicators in line.</li> <li>-Check X-FEED normal.</li> </ul>	
EMER LIGHT.....	ARMED
AIR CONDITIONING.....	CHECKED
<ul style="list-style-type: none"> <li>-Set temp selectors as required</li> <li>-Set ECON as required</li> <li>-Select cabin recirculation fans OFF if OAT is above +15 deg C / +59 deg F.</li> </ul>	

## MAIN INSTRUMENT PANELS

L-R SOURCE SELECT SWS.....	CHECKED
-Check all source select switches as required.	
L-R CLOCKS.....	CHECKED
-Check time and date, adjust if required.	
STANDBY INSTRUMENTS AND RMI's.....	CHECKED
-Check for correct indication and absence of flags.	
-Erect standby horizon if necessary	
-Set standby altimeter(s) to 1013.2 / 29.92	

## BEFORE STARTING CHECK

Perform this check before each flight.	
SEAT BELT - NO SMKG.....	ON - AUTO
FLIGHT DATA RECORDER.....	ON
-Select FDR/CVR GND CTL p/b on AVIONICS panel ON.	
LANDING ALTITUDE.....	SET
-Set destination field elevation.	
FUEL QUANTITY.....	CHECKED
<ul style="list-style-type: none"> <li>-Check total fuel quantity corresponds with flight plan fuel and cross-check with individual tank quantities.</li> </ul>	

L-R EFIS.....SET

- Select PFD/ND on and adjust brightness.
- Check for correct display and absence of failure flags.
- Cross-check heading info with stby compass.
- Select required ND mode and MAP range
- Select DH and M/DA to zero.
- Select ALTM to QNH.

ALTIMETERS.....SET

-If required, altimeter accuracy can be checked as follows:

Set QNH at ASP and verify QNH at EFIS.

With current altimeter setting at ASP and standby altimeter(s), the altitude indication should show published field elevation within the following tolerances:

#### FIELD ELEV vs ALTITUDE IND TOLERANCES

FIELD ELEV	ALT IND AT	STBY
FT ASL	PILOT's PFD's	ALTIMETER(S)
-1000 / +8000	-45 / +45	-35 / +80

NOTE: Allowances should be made for  
difference in elevation of ramp or point  
where check is made

SHIP'S PAPERS.....ON BOARD

-Check all company documents are available.

FMP.....SET

- Select FD on.
- Check bank control as required.
- Select V1.
- Select V2, departure speed, and initial departure altitude.

L-R FMS.....SET

-Select INIT page A

Write/insert CO RTE/FLT or FROM/TO.

Verify LAT/LONG and ALIGN IRS or INITIALIZE A/C  
POSITION (AHRs).

Write/insert COST INDEX and CRZ FL.

-Select INIT page B.

Write/insert ALTN fuel, BLOCK fuel, TOGW or ZFW and  
CG.

-Select F-PLN page.

Select TO runway/SID.

Verify proper flight plan routing.

Select SEC F-PLN and ACTIVE.

-Select TO/APPR page.

Write/insert V1.

Verify TO speeds, RWY, THR RED and ACCEL ALT.

-PF remains at TO/APPR page.

PNF selects DIR-TO page

MFDS/TRP .....SET

-Adjust brightness.

-Check left MFDS displays primary engine parameters and memos

-Check right MFDS displays secondary engine parameters and door status.

-For FLX thrust: Determine the assumed temperature from the TL table for the particular TO flap/runway combination.

Select FLX and set the assumed temperature.

Verify MFDS displayed FLX EPR value for the assumed temperature corresponds with EPR setting table value.

-For TOGA thrust: Determine take-off EPR from EPR setting table. Select TOGA and verify MFDS displayed take-off EPR value corresponds with EPR setting table value.

NAV/COM .....SET

-Set navigation, communication equipment, radar and transponder as required for departure.

#### NOTE

To prevent high workload in case MAP display is lost the following procedure is recommended before take-off and approach:

-Select ND to ARC or ROSE.

-Preset VOR/DME frequency and radial as required for SID or STAR.

-Select ND to MAP.

If MAP display is lost:

-Select ND ARC or ROSE.

PARKING BRAKE .....SET

-Check alternate brake pressure indicator.

If press below 1000 psi select HYDRAULIC SYS 1

ELEC PUMP ON until pressure is sufficient.

L-R WINDOWS AND DOORS .....CLOSED

-Check windows closed/markings in line.

-Check absence of doors status at MFDS.

GEAR PINS .....ON BOARD

-----CLEARED FOR START-----

ENG ANTI-ICING .....CHECK OFF

BEACON .....ON

ENGINE PANEL .....SET

-Use CONT 1 for odd numbered flights and CONT 2 for even numbered flights.  
 -For aircraft not equipped with the auto ignition system use NORM.  
 FUEL PUMPS.....ON  
 -Select all fuel pumps (6) on.  
     NOTE: For a/c equipped with CTR TANK p/b's with a blue ON legend, the CTR TANK pumps should only be switched on if the center tank contains fuel.  
 WINDOWS AND PROBE HEAT.....ON  
 -Select WINDOW HEAT on.  
 -Select PITOT and VANE heating on.  
 BLEED PRESS.....CHECK  
 -Check bleed pressure approx 25 psi.  
 THRUST LEVERS.....FWD IDLE  
 -----START ENGINES-----

#### AFTER STARTING CHECK

ANTI-ICING.....SET  
 -Select ENG anti-icing ON after second engine has been started when OAT below +5 deg C and visible moisture is present or runway is wet.  
 ENGINE PANEL.....CHECKED  
 -Select START p/b off.  
 -Set IGNITION to NORM.  
     NOTE: For a/c not equipped with the auto ignition system, select AUTO when the TO runway is wet.  
 ALERT LIGHTS.....OUT  
 -Scan overhead panel and main instrument panel and check all amber and white lights out.  
 FLAPS.....SET FOR TO  
 FUEL LEVERS.....CHECKED OPEN  
 TRIMS.....SET  
 -Set stabilizer to TO CG.  
 -Check RUD and AIL approx zero.  
 DOOR SELECTORS.....AUTOMATIC  
 -Instruct cabin crew to set the door selectors to AUTOMATIC when commencing push-back, pull-out or taxiing.

## BEFORE TAKE-OFF CHECK

FLIGHT INSTRUMENTS.....CHECKED

-Check PFD, ND, RMI and standby instruments for correct indications.

FMP.....SET

-Arm ATS.

-Select NAV/PROF as required

ABS.....RTO

BRAKE TEMPERATURES.....CHECKED

-Check brake temperature within limits.

TO DATA and BRIEFING.....COMPLETED

-Verify TO speeds.

-Perform TO briefing.

FLIGHT CONTROLS.....CHECKED

-Select FLT CTL LOCK OFF and check control lock lever securely latched in the lock off position.

-Check aileron and elevator for full and free movement.

-Hold tiller firmly and check rudder for full and free movement.

RADAR AND TRANSPONDER.....AS REQD

LIFT DUMPERS.....ARMED

-Depress LIFTD arm push button and verify blue ARM light on.

-----CLEARED FOR TAKE-OFF-----

APU.....AS REQD

-If flight time is less than 30 min the APU may be kept running

TO CONFIG.....CHECKED

-Push TO CONFIG button, check absence of take-off configuration warning, and check MFDS memo TO CONF NORM displayed

## AFTER TAKE-OFF CHECK

MFDS.....CHECKED

-Check MFDS memos and switch off unnecessary equipment.

ALTIMETERS.....SET

-Select STD on EFIS panel when passing transition altitude.

## BEFORE APPROACH CHECK



SEAT BELT.....ON  
LANDING ALT.....CHECKED

-Check destination field elevation set.

IGNITION.....AS REQD

-Set IGNITION to NORM.

NOTE: For a/c equipped with the auto ignition system, select  
AUTO when the landing runway is wet.

ABS.....AS REQD

MFDS.....CHECKED

-Check MFDS for status information and recall in case of  
MESSAGE CANCELED displayed at MFDS.

ALTIMETERS.....SET

-Preset altimeter setting on ASP.

-When passing transition level,  
select QNH on EFIS panel.

-Cross-check altitude indications.

Landing DATA/APPROACH BRIEFING.....COMPLETED

-Perform approach briefing and set minimums if required.

-Select ILS frequency/localizer course, VOR frequency/  
radials and ADF's as required.

-Select FMS TO/APPR page and check estimated landing  
weight and Vapp for the intended flap setting. In case of an  
FMS approach insert MDA and confirm the FINAL APPR  
prompt.

## BEFORE LANDING CHECK

LANDING GEAR.....DOWN

-Check 3 green landing gear lights on.

FLAPS.....SET

LIFT DUMPERS.....ARMED

-Depress lift dumpers ARM push button  
and check blue ARM light on.

### NOTE

For adequate cabin cooling in hot climates, start  
APU before landing.

## AFTER PARKING CHECK

PARKING BRAKE.....AS REQD

-Release parking brake when wheel chocks are in place.

DOOR SELECTORS.....MANUAL

-Instruct cabin crew to set the door selectors  
to MANUAL when taxiing into the gate/parking stand.

APU.....AVAILABLE

-Check APU available at AFDS.  
-If APU not used or inoperative have external  
AC power connected before shutting down last engine.

SPEED BRAKE AND LIFT DUMPERS.....IN

-Check speed brake selector forward.  
-If lift dumpers out MEMO present at MFDS.  
-Check reverse handles fully down and depress  
LIFTD arm p/b to retract lift dumpers.

FLAPS.....SET

#### NOTE

If approach or landing is made in icing conditions  
or if runways or taxiways are covered with slush,  
the flaps should not be raised beyond 25 deg until  
it is visually checked that flaps and flap vanes are  
clear of ice.

RADAR.....CHECK OFF

ANTI-ICING.....OFF

-Check engine, wing, and tail anti-icing systems off.  
-Select WINDOW HEAT OFF.  
-Select VANE and PITOT heat OFF.

FUEL LEVERS.....SHUT

FLIGHT CONTROLS.....LOCKED

-Select FLT CTL LOCK ON.  
-Push control column forward until lock engages.

SEAT BELT.....OFF

EXTERIOR LIGHTS.....CHECK

-Select BEACON light off.  
-Set NAV/LOGO and WING INSPEC lights as required.  
-Retract taxi and landing lights.

FUEL PUMPS.....OFF

AIR CONDITIONING.....SET

-Set ECON as required.  
-Select cabin recirculation fans OFF if OAT is above  
+15 deg C / +59 deg F.

EFIS.....OFF

-Select PFD and ND OFF.

MFDS.....CHECKED

-Check MFDS for memos and absence of alert messages  
Select MFDS's OFF.

-----FINAL STOP-----

IRS.....OFF

-Select mode selectors at IRS MSU to OFF.

EMER LIGHT.....OFF

APU.....OFF

**NOTE**  
Wait 10 sec before switching the batteries off to  
allow for APU door closure.

BATTERIES.....OFF

## PERFORMANCE

Following tables present the take-off speeds as a function of aircraft weight.

Engine: R&R TAY 620-15

FLAP 0

AIRCRAFT WEIGHT (kg)	AIRSPEED (kt)		
	V1 = Vr	V2	Vfto
28 000	111	119	148
30 000	116	123	153
32 000	120	128	158
34 000	125	132	163
36 000	130	135	168
38 000	134	139	172
40 000	138	143	177
42 000	142	146	181
44 000	147	150	185
Engine Correction: For every 5 deg C above 30 deg C OAT: V1 and Vr: + 1 kt			

Engine: R&R TAY 620-15

FLAP 8

AIRCRAFT WEIGHT (kg)	AIRSPEED (kt)			
	V1 = Vr	V2	Vfr	Vfto

28 000	107	113	119	148
30 000	112	117	123	153
32 000	116	121	128	158
34 000	120	125	132	163
36 000	123	128	135	168
38 000	127	132	139	172
40 000	131	135	143	177
42 000	135	138	146	181
44 000	139	142	150	185
Engine Correction: For every 5 deg C above 30 deg C OAT: V1 and Vr: + 1 kt				

Engine: R&R TAY 620-15

FLAP 15

AIRCRAFT WEIGHT (kg)	AIRSPEED (kt)			
	V1 = Vr	V2	Vfr	Vfto
28 000	104	110	119	148
30 000	109	114	123	153
32 000	113	118	128	158
34 000	117	121	132	163
36 000	121	125	135	168
38 000	125	128	139	172
40 000	129	131	143	177
42 000	132	134	146	181
44 000	136	138	150	185
Engine Correction: For every 5 deg C above 30 deg C OAT: V1 and Vr: + 1 kt				

## LANDING SPEEDS

Next table present the landing speed, Vref, as a function of aircraft weight and flap setting. The influence of temperature and slope are small and can be ignored. The following tables are valid for the conditions mentioned.

AIRCRAFT WEIGHT (kg)	Vref (kt)		
	FLAP 0	FLAP25	FLAP42
28 000	129	117	109
30 000	134	122	112
32 000	138	126	116
34 000	142	129	120
36 000	146	134	123
38 000	150	136	127
40 000	154	140	130
42 000	158	145	133

44 000	162	147	136
--------	-----	-----	-----

#### LANDING WEIGHT LIMITED BY RUNWAY LENGTH

Following tables presents the runway length as a function of aircraft weight for flap 42 and flap 25

ENGINE R&R TAY 620-15

AIRPORT ALTITUDE 0 ft

FLAP 42

AIRCRAFT WEIGHT (kg)	REQUIRED RUNWAY LENGTH (m)
28 000	1100
30 000	1155
32 000	1200
34 000	1255
36 000	1300
38 000	1360
39 900	1400
Corrections: per kt headwind : - 8 m per kt tailwind : + 27 m per 1000 ft above sea level : + 35 m	
Conditions: Dry runway All braking means serviceable	

ENGINE R&R TAY 620-15

AIRPORT ALTITUDE 0 ft

FLAP 25

AIRCRAFT WEIGHT (kg)	REQUIRED RUNWAY LENGTH (m)
28 000	1190
30 000	1240
32 000	1300
34 000	1355
36 000	1410
38 000	1470
39 900	1520
Corrections: per kt headwind : - 9 m per kt tailwind : + 29 m	

per 1000 ft above sea level	: + 50 m
Conditions: Dry runway All braking means serviceable	

Next table provides the advisory landing distance for landing on very slippery runways as a function of aircraft weight. The advisory landing distance is the unfactored distance from a point 50 feet above the landing surface to the complete stop.  
The influence of temperature and slope are small and can be ignored.  
The following tables are valid for the conditions mentioned.

ENGINE R&R TAY 620-15  
AIRPORT ALTITUDE 0 ft  
FLAP 42

AIRCRAFT WEIGHT (kg)	REQUIRED RUNWAY LENGTH (m)
28 000	1400
30 000	1480
32 000	1580
34 000	1680
36 000	1770
38 000	1870
39 900	1960
Corrections:	
per kt headwind	: - 20 m
per kt tailwind	: + 64 m
per 1000 ft above sea level	: + 60 m
Conditions: Vref Poor braking action Normal max reverse thrust selection	

## FLIGHT PLANNING

### CRUISE LEVEL SELECTION

Following table presents the cruise level to destination or alternate as a function of distance. The table is valid for the following speed schedule.

Climb	250 / 280 / M.70
Cruise	280 / M.70
Descent	M.70 / 280 / 250

TRIP DISTANCE (nm)	100	150	200	250	300	350
CRUISE LEVEL	100	200	250	290	330	350

Following table presents the maximum initial cruise level as a function of aircraft weight and temperature. The table is valid for a climb speed schedule of 250 / 280 / M.70. The table can also be used to determine the maximum obtainable flight level for step climb.

#### INITIAL CRUISE LEVEL

engine R&R TAY 620-15

Aircraft Weight (kg)	MAX INITIAL CRUISE LEVEL			
	ISA and below	ISA + 10 deg C	ISA + 15 deg C	ISA + 20 deg C
36.000	350	350	350	350
38.000	350	350	340	330
40.000	350	340	320	310
42.000	340	330	310	290
44.000	330	310	280	260

#### CLIMB

Following table is provided for a climb speed schedule of 250 / 280 / M.70 and for ISA (International Standard Atmosphere ) temperature conditions. Climb distance, time, and fuel are presented from brake release to the top of climb.

#### CLIMB

#### ISA

#### SPEED 250 / 280 / M.70

FL	DISTANCE (nm) TIME ( min ) FUEL (kg)								
	TAKE-OFF WEIGHT (kg)								
	28.000	30.000	32.000	34.000	36.000	38.000	40.000	42.000	44.000
110	13 4 288	14 4 312	15 5 337	16 5 363	17 5 390	19 6 419	20 6 448	21 7 480	23 7 513
130	16 5 328	18 5 355	19 5 384	21 6 414	22 6 445	24 7 478	26 7 512	27 8 548	29 8 586
150	20 5 369	22 6 400	24 6 432	26 7 466	28 7 502	30 8 539	32 8 577	34 9 618	37 10 661

170	24 6 411	27 7 446	29 7 482	31 8 520	34 8 560	36 9 602	39 10 645	42 10 691	45 11 740
190	29 7 454	32 7 494	34 8 534	37 9 577	40 9 621	43 10 668	47 11 717	50 12 769	54 12 824
210	35 8 500	38 8 544	41 9 589	44 10 637	48 11 687	52 11 739	56 12 794	60 13 852	64 14 914
230	40 9 548	44 9 596	48 10 646	52 11 699	56 12 754	61 13 812	65 14 874	70 15 939	76 16 1009
250	47 10 599	52 11 652	56 11 708	61 12 767	66 13 829	72 14 894	77 16 963	84 17 1037	90 18 1117
270	56 11 657	61 12 716	67 13 778	72 14 848	79 15 914	85 17 988	93 18 1068	101 19 1153	110 21 1246
290	63 12 703	69 13 768	76 14 836	83 16 908	90 17 984	98 18 1067	107 20 1156	117 22 1253	127 23 1359
310	71 13 748	78 14 818	85 16 892	93 17 970	102 19 1055	111 20 1146	122 22 1246	134 24 1356	148 26 1479
330	79 14 792	86 16 867	95 17 948	104 19 1034	114 20 1127	126 22 1228	139 25 1341	154 27 1469	172 30 1617
350	87 15 836	96 17 917	105 19 1004	116 20 1097	128 22 1200	142 25 1315	158 27 1445	178 31 1599	204 35 1789

## CRUISE

Cruise and long-range cruise information is given for ISA temperature conditions. Following table is provided for cruise 280 / M.70. Fuel flow per engine (FF/ENG) and TAS are shown as a function of aircraft weight and flight level (FL).

CRUISE		ISA						SPEED 280 / M.70		
FL	TAS (kt)	FF / ENG (kg / hr)						engine R&R TAY 620-15		
		ACTUAL AIRCRAFT WEIGHT (kg)								
		28.000	30.000	32.000	34.000	36.000	38.000	40.000	42.000	44.000
110	327	1005	1016	1028	1041	1055	1069	1084	1100	1118
130	337	984	996	1008	1021	1036	1051	1067	1084	1101



150	347	968	981	994	1008	1023	1038	1054	1070	1089
170	358	958	971	984	998	1014	1030	1047	1065	1083
190	369	951	965	980	994	1010	1026	1043	1061	1080
210	380	948	961	976	992	1007	1024	1042	1060	1079
230	392	946	960	975	990	1005	1022	1041	1060	1079
250	404	945	960	975	990	1007	1024	1042	1062	1083
270	417	949	962	976	992	1009	1029	1049	1070	1091
290	414	880	895	912	930	949	970	991	1015	1041
310	410	815	833	851	872	893	915	941	969	999
330	406	760	779	800	821	846	873	903	938	979
350	403	712	732	755	781	810	884	884	927	983

Following table is provided for long-range cruise 280 / M.70. Fuel flow per engine (FF/ENG) and TAS are shown as a function of aircraft weight and flight level (FL).

#### LONG RANGE CRUISE

ISA

FL	TAS / MACH (kt / - - )      engine R&R TAY 620-15 FF / ENG (kg / hr )								
	ACTUAL AIRCRAFT WEIGHT (kg)								
	28.000	30.000	32.000	34.000	36.000	38.000	40.000	42.000	44.000
110	285/.448 835	286/.450 856	293/.461 896	303/.477 948	314/.494 1003	324/.510 1058	331/.521 1100	336/.529 1135	340/.535 1169
130	291/.462 813	299/.474 853	308/.488 899	317/.518 945	327/.518 994	331/.525 1027	334/.530 1056	338/.536 1089	343/.544 1127
150	296/.473 783	306/.489 830	318/.508 882	326/.510 923	330/.527 954	335/.536 990	341/.544 1027	345/.551 1061	347/.555 1090
170	307/.494 772	320/.515 825	327/.526 861	331/.533 893	336/.540 925	340/.547 957	343/.553 988	347/.558 1020	351/.565 1057
190	318/.516 759	324/.527 794	329/.534 824	335/.544 860	340/.552 894	343/.557 924	349/.564 958	354/.575 1002	359/.583 1041
210	324/.530 735	330/.540 769	335/.548 801	339/.554 830	342/.560 859	348/.570 899	356/.582 944	360/.590 981	368/.601 1029
230	328/.541 706	333/.550 738	338/.557 769	343/.566 805	352/.581 850	355/.586 882	363/.599 929	370/.610 972	376/.619 1016
250	333/.555 685	337/.561 713	344/.572 751	350/.583 789	357/.593 829	365/.607 876	372/.618 919	378/.628 961	386/.642 1013
270	334/.561 655	345/.579 701	351/.589 737	359/.603 781	367/.616 825	373/.626 866	382/.641 915	389/.653 961	936/.663 1009
290	345/.583 649	351/.544 685	360/.610 730	367/.621 769	378/.640 822	384/.650 864	391/.661 909	400/.627 965	405/.685 1019
310	352/.601 638	360/.615 679	369/.629 721	379/.647 770	384/.656 810	394/.672 863	400/.683 909	411/.702 972	420/.717 1031
330	360/.620 629	370/.638 675	379/.653 718	387/.667 764	397/.684 817	406/.699 972	415/.714 926	419/.722 975	423/.729 1028

350	372/.646 627	381/.662 672	392/.681 723	398/.691 768	410/.313 829	415/.721 877	420/.730 928	421/.732 974	414/.720 993
-----	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

## DESCENT

Following table presents descent distance, flight time, and fuel used from the top of descent to 2.000 ft including deceleration. The table is valid for an aircraft weight of 38.000 kg. The information is based on the following descent schedule:

-If the top of descent is above FL 300, descent to FL 300 with a constant rate of 1000 ft/min; at FL 300 idle thrust is selected.

-If the top of descent is below FL300, idle thrust is selected.

The speed schedule is M.70/280 down to FL 100.

-At FL 100, decelerate to 250 kt IAS and descend with idle thrust to a pressure altitude of 2000 ft.

-At 2000 ft decelerate to the green dot speed + 20 kt, which is the initial approach speed.

## DESCENT

ISA  
38.000 kg

SPEED M.70 / 280/ 250  
engine R&R TAY 620-15

FL	DISTANCE (nm)					TIME (min)	FUEL (kg)
	HEADWIND		0 KT	TAILWIND			
	60 KT	30 KT		30 KT	60 KT		
140	27	31	35	39	42	7	67
160	32	36	40	44	48	8	74
180	35	40	45	50	55	9	80
200	40	45	50	55	60	10	86
220	43	49	55	61	67	11	92
240	49	55	61	67	73	12	98
260	54	60	66	72	78	12	104
280	57	64	71	78	85	13	109
300	61	68	75	82	89	14	113
320	73	81	89	97	105	16	157
340	84	93	102	110	118	18	197
350	90	99	109	119	128	19	217

## HOLDING

Following table presents EPR/N1, FF/ENG, and IAS at the all-engine minimum drag speed as a function of aircraft weight and altitude.

## ALL-ENGINE HOLDING

## MINIMUM DRAG SPEED



The required block fuel is calculated as follows:

Taxi fuel: Normally 100 kg. For prolonged taxi times use 15 kg/min.

+

Trip fuel: Obtained from trip time and fuel table

+

Route reserve: According state and/or company rules; usually six per cent of the trip fuel.

+

Alternate fuel: Obtained from trip time and fuel table.

+

Holding fuel: According state and/or company rules; usually 45 min.

NOTES: 1. For approach and landing add 175 kg and six minutes.  
2. For conditions above ISA increase the fuel  
with two per cent per 10 deg C above ISA.

CRUISE ALTITUDE								engine R&R TAY 620-15				
	13.000		15.000		17.000		19.000		21.000		23.000	
GROUND DIST (nm)	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg
100	0:21	829	0:21	823	0:21	821	0:21	823	:	---	:	---
150	0:30	1139	0:30	1120	0:29	1107	0:29	1098	0:29	1094	0:28	1094
200	0:39	1447	0:38	1416	0:38	1392	0:37	1373	0:37	1360	0:36	1345
250	0:48	1755	0:47	1711	0:46	1676	0:45	1648	0:44	1626	0:43	1594
300	0:57	2063	0:56	2006	0:54	1959	0:53	1922	0:52	1892	0:51	1843
350	1:06	2369	1:04	2300	1:03	2242	1:01	2195	1:00	2156	0:59	2121
400	1:15	2675	1:13	2593	1:11	2525	1:10	2468	1:08	2421	1:07	2377
450	1:24	2980	1:21	2886	1:20	2806	1:18	2740	1:16	2684	1:14	2632
500	1:32	3285	1:30	3178	1:28	3087	1:26	3011	1:24	2947	1:22	2887
550	1:41	3589	1:39	3469	1:36	3368	1:34	3282	1:32	3210	1:30	3141
600	1:50	3892	1:47	3760	1:45	3648	1:42	3552	1:40	3471	1:37	3394
650	1:59	4195	1:56	4050	1:53	3927	1:50	3822	1:48	3733	1:45	3647
700	2:08	4497	2:05	4340	2:01	4206	1:58	4092	1:55	3994	1:53	3900
750	2:17	4799	2:13	4629	2:10	4484	2:07	4360	2:03	4254	2:00	4152
800	2:26	5099	2:22	4918	2:18	4761	2:15	4629	2:11	4513	2:08	4404
850	2:35	5400	2:31	5205	2:27	5038	2:23	4896	2:19	4773	2:16	4655
900	2:44	5699	2:39	5493	2:35	5314	2:31	5163	2:31	5163	2:23	4906
950	2:52	5998	2:48	5780	2:43	5590	2:39	5430	2:35	5289	2:31	5156
CLB:TAS (kt)	291		299		308		316		324		332	
DIST (nm)	24		30		36		43		52		61	
CRZ:TAS(kt)	337		347		358		369		380		392	
IAS (kt)	280		280		280		280		280		280	
FF/ENG (kg/h)	1042		1028		1020		1015		1013		1011	
DES:TAS (kt)	286		293		299		305		311		317	
DIST(nm)	29		33		38		43		48		53	

CRUISE ALTITUDE							engine R&R TAY 620-15					
	25.000		27.000		29.000		31.000		33.000		35.000	
GROUND DIST (nm)	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg
100	:	---	:	---	:	---	:	---	:	---	:	---
150	0:28	1094	:	---	:	---	:	---	:	---	:	---
200	0:36	1345	0:35	1343	0:35	1337	:	---	:	---	:	---
250	0:43	1594	0:43	1586	0:43	1567	0:43	1555	0:43	1551	:	---
300	0:51	1843	0:50	1829	0:50	1797	0:50	1773	0:50	1760	0:50	1756
350	0:58	2092	0:57	2071	0:57	2026	0:57	1991	0:58	1968	0:58	1958
400	1:05	2340	1:04	2312	1:04	2254	1:05	2208	1:05	2176	1:05	2159
450	1:13	2588	1:11	2553	1:12	2482	1:12	2425	1:12	2383	1:13	2360
500	1:20	2835	1:19	2793	1:19	2710	1:19	2641	1:20	2590	1:20	2559
550	1:28	3082	1:26	3033	1:26	2936	1:27	2856	1:27	2796	1:28	2758
600	1:35	3328	1:33	3272	1:33	3163	1:34	3071	1:34	3001	1:35	2956
650	1:42	3573	1:40	3511	1:41	3388	1:41	3285	1:42	3206	1:42	3154
700	1:50	3819	1:47	3750	1:48	3614	1:49	3499	1:49	3410	1:50	3351
750	1:57	4063	1:55	3987	1:55	3838	1:56	3712	1:57	3613	1:57	3547
800	2:05	4307	2:02	4225	2:02	4063	2:03	3924	2:04	3816	2:05	3742
850	2:12	4551	2:09	4462	2:10	4286	2:11	4137	2:11	4018	2:12	3937
900	2:20	4794	2:16	4698	2:17	4509	2:18	4348	2:19	4220	2:20	4131
950	2:27	5037	2:23	4934	2:24	4732	2:25	4559	2:26	4421	2:27	4324
CLB:TAS (kt)	341		350		358		363		368		372	
DIST (nm)	62		85		98		111		126		142	
CRZ:TAS(kt)	404		417		414		411		407		403	
IAS (kt)	280		280		269		257		246		235	
FF/ENG (kg/h)	1011		1014		953		897		852		817	
DES:TAS (kt)	323		329		333		341		349		356	
DIST(nm)	58		63		67		76		90		103	

CRUISE ALTITUDE							engine R&R TAY 620-15					
	13.000		15.000		17.000		19.000		21.000		23.000	
GROUND DIST (nm)	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg	TIME hr:min	FUEL kg
1000	3:02	6646	2:57	6416	2:52	6226	2:48	6056	2:44	5910	2:39	5772
1100	3:20	7266	3:14	7012	3:09	6801	3:04	6612	2:59	6450	2:55	6295
1200	3:38	7884	3:32	7605	3:26	7373	3:20	7165	3:15	6987	3:10	6816
1300	3:55	8499	3:49	8195	3:43	7943	3:37	7716	3:31	7522	3:25	7334
1400	4:13	9111	4:06	8784	3:59	8510	3:53	8265	3:47	8054	3:41	7850
1500	4:31	9721	4:23	9369	4:16	9075	4:09	8810	4:02	8584	3:56	8364
1600	:	----	4:41	9952	4:33	9637	4:25	9354	4:18	9112	4:11	8876
1700	:	----	:	----	:	----	4:42	9895	4:34	9637	4:27	9385
1800	:	----	:	----	:	----	:	----	:	----	4:42	9892
1900	:	----	:	----	:	----	:	----	:	----	:	----
2000	:	----	:	----	:	----	:	----	:	----	:	----

CLB:TAS (kt)	291	300	308	316	325	333
DIST (nm)	30	37	45	55	65	77
CRZ:TAS(kt)	337	347	358	369	380	392
IAS (kt)	280	280	280	280	280	280
FF/ENG (kg/h)	1068	1055	1049	1044	1043	1042
DES:TAS (kt)	286	293	299	306	311	317
DIST(nm)	29	34	39	43	49	54

CRUISE ALTITUDE							engine R&R TAY 620-15	
	25.000	27.000	29.000	31.000	33.000	35.000		
GROUND DIST (nm)	TIME FUEL hr:min kg	TIME FUEL hr:min kg	TIME FUEL hr:min kg	TIME FUEL hr:min kg	TIME FUEL hr:min kg	TIME FUEL hr:min kg	TIME FUEL hr:min kg	TIME FUEL hr:min kg
1000	2:35 5649	2:32 5557	2:32 5376	2:33 5239	2:34 5158	2:35 5143		
1100	2:50 6157	2:46 6053	2:47 5848	2:48 5692	2:49 5596	2:50 5574		
1200	3:05 6663	3:00 6547	3:01 6318	3:03 6141	3:04 6031	3:05 5999		
1300	3:20 7167	3:15 7038	3:16 6785	3:17 6587	3:19 6462	3:20 6420		
1400	3:35 7668	3:29 7527	3:30 7249	3:32 7031	3:33 6890	3:35 6837		
1500	3:50 8167	3:44 8014	3:45 7711	3:47 7472	3:48 7315	3:50 7250		
1600	4:04 8664	3:58 8499	3:59 8171	4:01 7910	4:03 7736	4:05 7661		
1700	4:19 9159	4:12 8981	4:14 8629	4:16 8346	4:18 8155	4:20 8069		
1800	4:34 9651	4:27 9461	4:28 9084	4:30 8780	4:32 8571	4:34 8473		
1900	: ----	4:41 9939	4:43 9537	4:45 9211	4:47 8984	4:49 8873		
2000	: ----	: ----	4:57 9987	4:60 9639	5:02 9393	5:04 9271		
CLB:TAS (kt)	342	352	360	367	372	377		
DIST (nm)	92	112	130	151	177	211		
CRZ:TAS(kt)	404	417	414	411	407	403		
IAS (kt)	280	280	269	257	246	235		
FF/ENG (kg/h)	1043	1049	991	943	907	887		
DES:TAS (kt)	323	329	333	340	349	356		
DIST(nm)	59	64	68	77	77	105		

#### MAXIMUM OPERATING WEIGHTS:

The maximum operating weights are:

Maximum Take-off Weight (MTOW)	44.450 kg (98.000 lb).
Maximum Landing Weight (MLW)	39.915 kg (88.000 lb)
Maximum Zero Fuel Weight (MZFW)	36.740 kg (81.000 lb)
Maximum Taxi Weight (MTW)	44.680 kg (99.500 lb)

#### FUEL

##### Tank Arrangements and Identifications

The fuel is stored in wing tanks which contain an integral collector tank, and a center tank.

## Loading

USABLE FUEL TANK QUANTITIES			
	Wing tanks	Center tank	Total
Liters	9.680	3.140	12.820
US gallons	2.557	830	3.387
IMP gallons	2.130	691	2.821
Kilograms	7.744	2.512	10.256
Pounds	17.073	5.538	22.611

-----end of F100-1.doc-----