

DC-3 Airways - Charter Flight: 324-08, The Raid on Entebbe

THE RAID ON ENTEBBE

In 1976, the Israelis conducted what many have called the most successful commando raid in history. They flew from Israel to the interior of Africa (Uganda) and rescued 103 hostages. That operation, originally called Thunderbolt, was later renamed Operation Jonathan in honor of the only man killed during the raid - the leader, Jonathan (Joni) Netanyahu.

That raid is a matter of fact and of history. What follows in this charter, is a purely **fictional** addition to that mission. If anyone is offended by the liberties I have taken, I offer my apologies to them and to the brave commandos who made the Raid on Entebbe such a success.

Abbreviations:

AGL	Above Ground Level	Length	Length of runway
Approx	Approximately	METO	Max (power) Except Take Off
BOD	Beginning Of Descent	MSL	Mean Sea Level
DIR	Direct	NDB	Non Directional Beacon
DR	Dead Reckoning	OB	Out Bound
Elev	Runway Elevation	Rwy	Runway
HDG	Heading	VOR	VHF Omni Range

Background for this Charter:

While conducting charter flights in the western reaches of the Democratic Republic of the Congo (DRC), on June 27, 1976 you heard by short-wave radio of the hi-jacking of an Air France flight with hostages aboard. The following day you are contacted by Israeli agents and recruited to fly a mission for them.

You will be given instructions one day at a time. Be prepared to fly the first leg on June 30, 1976.

NOTAMS (Notices To Airmen)

Certified for FS2000, FS2002 & FS2004

Procedure Turns - If you do not understand how to enter VFR (Visual Flight Rules) traffic patterns or how to complete a 90 / 270 Procedure Turn, do some reading before flying these legs. Check the Technical Editor page on the DC-3 Airways web site for more information.

FSNavigator (FSN) flight plans (.fsn) were saved in Version 3. If you are using FSN, use the map for orientation. But, I challenge you to turn the moving airplane OFF.

DEAD RECKONING – I've computed dead reckoning times for some legs. These can be used if you don't have DME equipment or do not wish to use the DME. Times were computed as follows: IAS (Indicated Airspeed) is 135. Add 5 to 10 knots to determine TAS (True Airspeed), and I assumed minimal or no winds aloft. Therefore, TAS becomes a no-wind GS (Ground Speed) of 140 to 145 knots. If you are flying with a wind, you'll need to take it into account.

PIREP - one leg per PIREP, 324-08-01, 324-08-02, etc.

Flight plans were test flown for timing, fuel consumption and accuracy in FS2000, FS2002 and FS2004 using the Dutch Dakota PH-DDZ, the R4D and N1776 MP for various legs and flight sim versions.

Differences between Flight Sim versions (minimal):

HRYR is Gregoire Kaibanda (Rawanda) in FS2000/FS2002. In FS2004, HRYR is called Kigila Intl. These are the same airport.

Refueling at HRYR (Gregoire Kayibanda, Rwanda / Kigila Intl, Rwanda): FS2000 & FS2004 have no refueling pit, use the menu system to refuel. FS2002 does have a refueling pit

Enjoy the flights

John Achor :-)>

DC3-324 __x_(" ")_x__

From / To	Flight Description	Course	Dist.	ETE HH+MM
Mbandaka (DRC) FZEA to Lisala (DRC) FZGA	Raid on Entebbe - Day 1 Charter Leg: 324-08-01 Initial Cruise Alt - 3000 Set Date/Time to: June 30, 1976 early morning = Dpt Rwy 36, (Elev 1036, Length 7141 x 148, Asphalt) = After takeoff, Rwy HDG to intercept the 009 radial from MBA VOR (115.7) (follow river to Fix01) = Fix01 is MBA VOR 009 / 50 DME ----- = To Fix 02 ----- = To Fix 03 ----- = DIR LIS NDB (324.0) HDG 082, (when in range) ----- = Over Rwy, turn left to 050 ----- = BOD to 2500, fly 2 minutes past Rwy and execute a 90 / 270 turn VFR back to Rwy 23 ----- = Land Rwy 23, (Elev 1515, Length 5348 x 164, Oil treated/Gravel) Taxi to ramp and shut down engines. No need to refuel. <div style="text-align: right;">TOTAL</div>			
		009	50	0+23
		051	65	0+29
		072	50	0+21
		082	93	0+38
		050		
		230		0+10
			258	2+01

On arrival at Lisala, DRC, additional agents greet you. You will remain overnight here and depart early tomorrow morning for Bangoka, DRC.

Raid on Entebbe - Day 2

They will not give you any more information. Only that you are to make your flight inconspicuous. Low and slow along the river will do it.

From / To	Flight Description	Course	Dist.	ETE HH+MM
	Charter Leg: 324-08-02 Initial Cruise Alt - 3000			
	Set Date/Time to: July 1, 1976 early morning			
Lisala				
(DRC)	= Dpt Rwy 05, (Elev 1515, Length 5348 x 164, Oil treated)			
	= After takeoff, intercept the 091 radial OB from LIS NDB (324.0) ---	091		
	= DIR BBA NDB (285.0) (over river) -----	091	60	0+29
FZGA	= Follow river: to Monbongo Airport (FZFR, Grass Strip) -----	134	49	0+21
	to Fix 01 -----	133	52	0+22
to	to Fix 02 -----	110	24	0+11
	to Fix 03 -----	150	14	0+06
Bangoka	to BN NDB (270.0) (see below) -----	104	60	0+28
	= Tune KGI VOR (114.5) for DME information. BOD to 2400 at 15			
(DRC)	DME prior to KGI VOR			
	= DIR BN NDB (270.0) when in range (approx 25 nm)			
FZIC	= At BN NDB, turn right to 130 for a 4 nm VFR final			
	= Land Rwy 13, (Elev 1414, Length 11547 x 148, Asphalt) -----	130	4	0+04
	= Taxi to ramp and shut down engines. No need to refuel.			
	TOTAL		261	2+01

Today is just like yesterday. More agents, more instructions, but little about your ultimate mission. From what the agents say, it sounds like they are waiting for the final word to go ahead.

From / To	Flight Description	Course	Dist.	ETE HH+MM
Bangoka (DRC) FZIC to Kalima (DRC) FZOD	Charter Leg: 324-08-03 Initial Cruise Alt - 5000 Set Date/Time to: July 2, 1976 early morning = Dpt Rwy 13, (Elev 1414, Length 11547 x 148, Asphalt) = After takeoff, turn right to intercept the 153 radial OB from KIS NDB (315.0). KIS NDB is short range, lose signal at 40 nm out = DIR Fix01 (Punia Airport – FZOP- Dirt) ----- = HDG 163, DIR KAL NDB (326.0). (Short range, pick up signal at 20 to 25 nm) look for Rwy ----- = Turn left, short of Rwy. Track OB 070 on Rwy centerline, fly 2 minutes past runway BOD to 2800 outbound from Rwy. ----- = Execute a 90/270 turn back to Rwy 25, VFR ----- = Caution: plateau (higher terrain) W, SW of Rwy = Land Rwy 25, (Elev 1807, Length 3904 x 98, Oil treated/Gravel) --- Taxi to ramp and shut down engines. Fuel in the DRC is expensive. Do not refuel. With luck you can make the next leg on your remaining fuel.			
		153	125	0+56
		163	77	0+33
		070		
		250		
		250		0+10
	TOTAL		204	1+39

Three days of flying and you are still in the Democratic Republic of the Congo (DRC). But you find that tomorrow you will land in Rwanda.

Raid on Entebbe - Day 4

You are informed that only two more flights will be required of you. Tomorrow in Rwanda, you will receive your final instructions.

From / To	Flight Description	Course	Dist.	ETE HH+MM
Kalima (DRC) FZOD to Gregoire Kayibanda (Rwanda) HRYR (FS2004 - Kigali Intl)	Charter Leg: 324-08-04 Initial Cruise Alt - 10,000 (incorrect altitude for direction, needed for terrain clearance) Set Date/Time to: July 3, 1976, early morning = Dpt Rwy 07, (Elev 1807, Length 3904 x 98, Oil treated/Gravel) = After takeoff, right turn to 108 degrees, intercept the 088 degree radial OB from KAL NDB (326.0). Signal fades at 25 nm----- = DIR KB NDB (321.0) Signal available at 70 nm ----- = Tune KNM VOR (114.9) for DME & tracking information. Also tune LM NDB (285.0) for Rwy centerline information. ----- = BOD to 6500, 15 DME prior to KNM VOR (Fix 01), & turn left to 036 degrees----- = Intercept final approach (localizer) for VFR to Rwy 10 (Fix 02) ---- = Land Rwy 10, (Elev 4888, Length 11484 x 148, Asphalt) = Refuel your plane. FS2002 - Midfield, south of runway. FS2000 & FS2004 there are no refueling pits. Use menu: Aircraft Fuel and put 100% in all tanks. = Taxi to departure end of Rwy 10. Clear Rwy and set up for departure tomorrow night. TOTAL	 088 088 070 036 100 	 131 63 9 9 	 0+57 0+26 0+04 0+07

Here in Rwanda, the final team of agents meets you. They have received permission for the final phase of the mission. If you agree, tomorrow night you will ferry a team of a dozen agents into the airport at Entebbe, Uganda. They are reasonably sure that the runway lights will be on, but you will need to land without landing lights. That will require flying a precise approach to the runway, **it will be difficult to pick out in the dark.**

Depart at 2105 hours Local. Maintain METO power until you reach cruise altitude. It'll be dark out there. Keep to your departure instructions and you shouldn't run into any solid objects.

When you go "feet wet" over Lake Victoria you will descend to about 1000 feet AGL (5000 MSL). Once over water, kill your strobe and navigation lights also. No landing lights for landing.

At 30 DME from the Entebbe VOR (NN), you will enter a holding pattern. Depart the holding fix (NN VOR, 175 / 30 DME) at 2245 hours Local (plus / minus 30 seconds). You must be on the ground at Entebbe before 2300 Local, the scheduled arrival time of the C-130s that carry the main force. You have 15 minutes for a 13-minute flight. If you listen carefully, you may hear a radio call in the blind: "Over Jordan." That's the codeword that the C-130s have arrived over Lake Victoria. Get your bird on the ground quickly, but safely.

After landing, expedite your taxi to the far north end of the runway and clear off runway onto the grass. Get the agent team off your plane and your job is over. One of your agents will lead you to the C-130 that will fly you out of Entebbe. The commandos will take care of your trusty DC-3 and "render it useless." Don't worry, you'll be well paid for your trouble.

Raid on Entebbe - Day 5

From / To	Flight Description	Course	Dist.	ETE HH+MM
(FS2004 – Kigali Intl) Gregoire Kayibanda (Rwanda) HRYR to Entebbe (Uganda) HUEN	Charter Leg: 324-08-05 Initial Cruise Alt - 7000 Set Date/Time to: July 4, 1976, Depart at 2105 Local = Dpt Rwy 10, (Elev 4888, Length 11484 x 148, Asphalt) = After takeoff, maintain METO power and turn left to 025 degrees. Intercept the 031 radial OB from KNM VOR (114.9) = DIR to ZE NDB (264.0) (may not lock on outside 25 nm) ----- = DIR to BK NDB (300.0) ----- At BK NDB: BOD to 5000, turn external lights off. Set Entebbe VOR, NN VOR (117.5) in VOR 1. Set OBS to 355 degrees. Set Entebbe NDB - EN NDB (355.0) for backup information. ----- = Intercept the NN VOR 175 radial (Fix 01, 355 inbound) and maintain until you reach the 30 DME fix. ----- = Hold at NN VOR 175/30 DME (Fix 02, 355 inbound) Right turns, 1 1/2 minute legs (non-standard), 5 min. pattern. Adjust last pattern to make scheduled departure time from holding fix. ----- = At 2245 Local (plus / minus 30 seconds), depart the holding fix. ---- You have must be on the ground prior to 2300 Local or the C-130s will run over you. = Final approach HDG is 352 (ILS/BC, 110.7, Hdg 352) ----- Glide Slope: 5000' at 5.2 DME. 4200' at 3.0 DME = Land Rwy 35, (Elev 3779, Length 12016 x 148, Asphalt). Taxi to north end of Rwy and into the grass. Shut down and deplane. <div style="text-align: right;">TOTAL</div>			
		031	30	0+14
		082	86	0+35
		051	53	0+22
		355	18	0+09
		355/175	0	0+15 to
		355	30	0+20
		352		0+13
			217	1+48 to 1+53