

Touring the Suez and Panama Canals

by Norm Holman
(With help from Norm Hancock)

DC3 Airways has been chartered by a Group of Engineers who are going to build a Canal across an Island in the Pacific and they have asked that you fly them along the Suez and Panama Canals as they wish to study the layout and construction. The first flight will be down the Suez Canal and the party will meet you in Port Said, Egypt.

1. The Suez Canal and the Pyramids.

549-02-01 Suez .fsn flight plan

The Suez Canal was opened in 1869 and has been a benefit to Shipping by cutting several days off the time it takes to go around Africa via Cape Town. (London – Bombay shortened by 5200 nm). Along the Canal, there are a few Lakes, which serve as a point at which Ships in opposing directions can pass one another. Note that there are no locks along the Suez Canal as the Mediterranean and the Red Seas' are at the same level.

These flights are mostly VFR as beacons are scarce and landmarks such as the Pyramids have been used as waypoints. The Port Said and Cairo VOR's have DME's which help with the waypoints. Best departure time is late afternoon.

After reaching the town of Suez and the end of the Canal, where it enters the Red Sea, the Group has requested that you take them to view the Pyramids and permission has been granted by DC3 Airways for your low level flightplan.

You then travel across the Desert towards Hulwan Airport and the Nile River comes into view. Cross the River and descend to 500 ft and view firstly, a Pyramid damaged by the sands of time as it is rounded off on top. To the right of it, is the Great Stepped Pyramid of Saqqara, built in 2650BC, west of Memphis, at that time the Capital of Egypt.

The Pyramids further on at Giza come into view and are, from the small one on the left, Mycerinus, Chephren and Cheops, with the Sphinx just in front of Cheops as you approach. (Cheops Pyramid was built with 2.3 million limestone blocks, each weighing an average of 2.5 tonnes, totaling 6.18 million tonnes). In FS2002, these Pyramids are lit at night and at Sunset; they are a sight to see when viewed from the West.

After passing Cheops on your left, a nice steady 20° bank to the left must be maintained for the photographers' until you have completed a 270° turn. You then pass over the Nile heading east, pass the City of Cairo to your left and land at Cairo International, Runway 5L.

From - To	Flight Description. "Allocated runways and related information may change when flying online or using Real Weather"				Course (Leg)	Distance (Leg)	ETE(leg) HH+MM
	Dep. Rwy-10	Init. Hdg -103deg.	Init. Alt-1,000ft	Apt Elev.-6ft.			
Port Said, Egypt (HEPS) to Cairo, Egypt (HECA)	<u>To Fix 01.</u> Tune Nav1 to PSD VOR, 112.70. After take off maintain runway heading. As soon as you have passed over the town of Port Said and the DME reads 3.5nm, turn right to Hdg 176°. This is the Mediterranean entrance to the Suez Canal.				103deg	04.5nm	00+02
	<u>To Fix 02.</u> Follow the course of the canal until DME reads 28.5nm. Along the way you will over take an oil tanker at 15.5nm DME.				176deg	27.3nm	00+13
	<u>To Fix 05.</u> Turn left to 164deg and continue to follow the course of the canal until it turns right to 186deg (Fix 03) Follow the course of the canal until it again turns right to 206deg (Fix 04). Shortly afterwards you will enter the first lake. When DME reads 42nm turn left to 148deg.				Follow canal's course.	14.4nm	00+07
	<u>To Fix 07.</u> Exit the lake and follow the course of the canal for a short distance until it turns right to 160deg (Fix 06). On this stretch of canal you will pass a large container ship heading north. You will then enter a second, larger lake. Maintain Hdg 165deg across the lake until DME reads 57nm then turn left to 125deg.				Follow canal's course.	15.3nm	00+08
	<u>To Fix 08.</u> Two minutes after you pass Kibrit Airport which is to your right make a right turn to 172deg and exit the lake to again follow the course of the canal.				125deg	12.2nm	00+06
	<u>To Fix 09.</u> Continue to follow general course of the canal until Suez is reached which is the end of the canal. When overhead the town of Suez, turn right to 207deg and enter the Red Sea.				172deg	15.1nm	00+07
	<u>To Fix 10.</u> Maintain heading and you will pass a large tanker. Continue on Hdg 207deg for five minutes and then turn right to 256deg.				207deg	09.3nm	00+05
	<u>To Fix 11.</u> Climb to 2,500ft MSL. Tune Nav1 to FYM VOR, 117.30. Maintain Hdg 255deg and track to station when signal from FYM VOR is received. When DME reads 52nm turn right to 334deg. Commence a 400fpm descent to 700ft MSL. You will now cross the River Nile on your approach to the pyramids.				256deg	63.0nm	00+30
	<u>To Fix 12.</u> You will first approach a pyramid that has been damaged by the sands of time and is rounded off at the top. (Not very obvious inFS2000). Pass to the right of this pyramid and continue on to pass to the right of the Great Stepped Pyramid of Saqqara.				334deg	16.0nm	00+08
	<u>To Fix 15.</u> On station passage continue on Hdg 334° towards the three great Pyramids of Giza. From the small one on the left, they are Mycerinus, Chephren and Cheops with the Sphinx in the foreground. After passing to the right of Cheops, make a wide 270° turn to the left, circumnavigating the Pyramids. Depart the pyramids on a heading of 055deg. Climb to 1,500ft MSL.				334deg	12.4nm	00+06
	<u>To MKT NDB, 317.0.</u> On station passage turn left to runway heading 047deg and intercept the ILS, 110.90.				055deg	9.5nm	00+05
	<u>Land Cairo Rwy 5L.</u> Length – 10,834. Width – 197ft. Surface – Asphalt.				047deg	7.2nm	00+08
Flight No. 549-02-01	Arrival Airport Elev. - 380ft.		Estimated totals for this flight>>>			205nm	01+41

The Group now moves on to Panama City, Central America where you will take them on a tour along the Panama Canal.

2. The Panama Canal

549-02-02 Panama Canal .fsn flight plan

This trip starts and ends at Panama City's Tocumen Airport. Once again, the flight is mainly VFR with ships and the locks on the Panama Canal being used as waypoints. Unlike the Suez Canal, the difference in the levels of the Atlantic and Pacific Oceans, plus those of the Inland lakes necessitated the use of locks.

From - To	<u>Flight Description.</u> "Allocated runways and related information may change when flying online or using Real Weather"				Course (Leg)	Distance (Leg)	ETE(leg) HH+MM
	Dep. Rwy-3R	Init. Hdg -300deg.	Init. Alt-2500ft	Apt Elev.-134ft.			
Tocumen, Panama (MPTO) to Tocumen, Panama (MPTO)	To Fix 02. Tune Nav1 to FNC VOR, 109.00. When DME reads 10nm commence a 400fpm descent to 1,000ft MSL.				300deg	26.2nm	00+13
	To FNC VOR, 109.00.				300deg	10.0nm	00+05
	To Fix 03. On station passage turn left to Hdg 254deg. You will see an Oil Tanker heading east out into the Atlantic. When DME reads 3.7nm turn left to 168deg.				254deg	03.7nm	00+02
	To Fix 04. This is the first sea lock.				168deg	02.6nm	00+01
	To Fix 05. On station passage turn right to 180deg. Set Nav1 OBS to 027deg. When needle centers turn left to Hdg 136deg.				180deg	02.9nm	00+01
	To Fix 06. You will pass to your right a large container ship. Tune Nav1 to TUM VOR, 117.10. Set OBS to 101deg. When needle centers turn to that Hdg.				136deg	10.6nm	00+05
	To Fix 07. Track to TUM VOR, When DME reads 18nm turn right to 136deg.....				101deg	06.0nm	00+03
	To Fix 08. Follow the course of the canal and you will pass a large liner heading west. You will then pass a second lock. Over fly this and continue on Hdg until you reach a third lock. Turn right to 156deg and head out into the Pacific.				136deg	09.2nm	00+05
	To Fix 09. Set Nav1 OBS to 037deg. When needle centers turn left to 075deg.				156deg	08.0nm	00+04
	To Fix 10. Tune Nav1 to 110.70 and intercept the ILS.				075deg	03.1nm	00+02
Flight No. 549-02-02	Land Tocumen Rwy 3R. Length – 9,997ft. Width – 148ft. Surface – Concrete.				030deg	10.8nm	00+07
	Arrival Airport Elev. - 135ft.			Estimated totals for this flight>>>		93nm	00+47