

Cape Town to Cairo Tour

This is not by any means the most direct route between Cape Town and Cairo. I have however tried to route it over some of the most interesting scenery and areas most representative of the diversity of Africa. Total length of tour is 6585.3 nm. There are not an awful lot of nav aids over much of the route, and while I have tried to use as many straight lines as possible, there are several waypoints involved. If you are using FSNV you'll be fine (flightplans are in FSNV 3), otherwise it'll be dead reckoning or the old E6B (or the virtual version) for you! I hope you find the route slightly challenging as well as interesting. To make the most of what scenery there is I suggest you fly between 7 and 12000 ft. There are places where you could fly lower, but that is up to you. If you have learnt just a little more about the 'dark continent' then the effort has been worth it. At the outset I must point out that I have left all distances in nautical miles and altitudes in feet, as I believe the vast majority of slight simmers are flying in knots and feet; conversion to kilometers and meters if so desired is left to the individual.

I also suggest getting hold of the file newriver.zip from Flightsim.com, which widens the rivers in FS2K2 somewhat.

Among a number of books on flying in Africa, one of the best I have read is Beryl Markham's West with the Night. It will provide an atmosphere like few others. This of course is the lady who was the first to fly the Atlantic solo from west to east (from England – Jim Mollison did it from Ireland) in 1936.

1. Cape Town, South Africa to George, South Africa. 262-01-01

From	To	Freq	Hdg	NM
FACT	CB NDB	462.5	008	6.9.....Climb to 8500ft.
CB NDB	ZUI NDB	310.3	314	10.6
ZUI NDB	ZUH NDB	294.2	193	32.8...Descend to7500ft.
ZUH NDB	ZDP NDB	285.5	133	37.1
ZDP NDB	ZUY NDB	298.8	152	66.9
ZUY NDB	OB NDB	427.5	067	19.4
OB NDB	ZL NDB	314.5	098	28.7
ZL NDB	GO NDB	422.5	092	76.4
GO NDB	FAGG Rwy 11	109.5	111	4.3
			Total	259.6

From Cape Town Intl climb to 8500 ft. Table Mountain will be on your left. You'll also see Ysterplaat AFB to your left. At ZUI NDB you'll overfly Robben Island, site of the prison where ex-president Mandela was held, with Cape Town harbour on your left (not shown in default scenery) At ZUH NDB you'll overfly Cape Point (unrealistically flat in default scenery), where the Indian and Atlantic Oceans meet. From there fly east over False Bay, cross the Hottents Holland mountain range and then head SE towards Cape Agulhas (ZUY NDB), the most southerly point of Africa, before heading on to George, where there is an asphalt runway and an ILS.

2. George, South Africa to Kimberley, South Africa. 262-01-02

From	To	Freq	Hdg	NM
FAGG	GG NDB	260.0	111	5.9.....Climb to 9500ft.
GG NDB	VW NDB	325	033	159.9
VW NDB	KMV VOR	115.3	048	175.0
KMV VOR	FAKM Rwy 2		019	1
			Total	341.8

After take off from George climb to 9500 ft. George is an important regional centre based on the timber industry, surrounded by several artists colonies. From George fly north to Kimberley over the Outeniqua mountains and the Great Karoo (semi desert area). The only activity in the Karoo is sheep and ostrich farming on very large farms. There is an abundance of wild life in the Karoo, principally gazelles and antelope, as well as baboons and some leopards, hyena and jackals. Kimberley is the site of the largest man-made hole on earth, diamond workings from the end of the 19th century. There is an asphalt runway and no ILS.

3. Kimberley, South Africa to Lanseria, South Africa. 262-01-03

From	To	Freq	Hdg	NM
FAKM	fix 01		019	2.0....Climb to 9500ft.
Fix 01	fix 02		091	5.1....Turn right to intercept 083 deg OB
Fix 02	WMV VOR	116.40	083	105.6 bearing from KM NDB, 365.0.
WMV VOR	PSV VOR	115.8	033	83
PSV VOR	LAV VOR	114.5	061	62.4
LAV VOR	FALA Rwy 6L	110.9	060	0.2
			Total	258.3

Kimberley is historically linked with the diamond millionaires and empire builders of the 19th century such as Barnato and Rhodes. It is also famed for the siege of its British garrison by Boer forces during the Anglo Boer War (at which Colonel Baden-Powell, founder of the Boy Scouts won acclaim). Climb to 9500 ft, fly NE to Welkom, a gold mining town in the Free State, and thence to the university town of Potchefstroom, before landing at Lanseria (a secondary but fast growing airport outside Johannesburg. There is an asphalt runway and an ILS. Watch your altitude, Johannesburg is a mile high.

4. Lanseria, South Africa to Francistown, Botswana. 262-01-04

From	To	Freq	Hdg	NM
FALA	WR NDB	230.0	061	24.2...Climb to 9500ft.
WR NDB	NY NDB	465.0	021	58.1
NY NDB	ERV VOR	116.3	355	67.6...Climb to 10500ft
ERV VOR	SP NDB	303.0	006	94.8...Descend to 9500ft.
SP NDB	FT NDB	375.0	353	56.2...Descend to 8500ft.
FT NDB	FBFT Rwy 29		290	0.3

Total 301.0

From Lanseria climb to 9500ft, fly NE over Johannesburg and once having cleared the outskirts of this industrial and financial center of South Africa, fly over typical bushveld terrain NW across the Limpopo river (made famous by Rudyard Kipling in his Just So stories) and on to Francistown in Botswana. Francistown has an asphalt runway and no ILS. Be aware of frequent altitude changes!

5. Francistown, Botswana to Hwange, Zimbabwe. 262-01-05

From	To	Freq	Hdg	NM
FBFT	FF NDB	390	285	1.6.....Climb to 8500ft.
FF NDB	PO NDB	377	358	152.5
PO NDB	VWN VOR	114.5	077	4
VWN VOR	FVWN Rwy 8		077	0.5

Total 158.6

Francistown lies on the Tati River and is a regional and commercial centre. Most of the population of Botswana lives in the eastern highlands, and more than 50% live in rural settlements, engaged in subsistence farming with cattle, sheep and goats and some crops. From Francistown climb to 8500 ft, north to Hwange National Park in Zimbabwe, formerly known as Wankie Game Reserve. There is an asphalt runway and no ILS

6. Hwange, Zimbabwe to Kariba, Zimbabwe. 262-01-06

From	To	Freq	Hdg	NM
FVWN	WN NDB	393	257	3.0.....Climb to 8500ft.
WN NDB	FA NDB	256	305	77.8
FA NDB	LZ NDB	308	016	15.0.....Descend to 7500ft.
LZ NDB	fix 01		107	99.2
Fix 01	ESTAK ISEC		052	48.3
ESTAK ISEC	RETAR ISEC		058	30.2
RETAR ISEC	DW NDB	300	081	21.2
DW NDB	FVKB Rwy 9		091	3.1

Total 297.8

Hwange is one of the major game reserves in Africa, home to lion, leopards, elephant, buffalo, antelope and just about everything else. From Hwange climb to 8500 ft, fly NW to Victoria Falls, thereafter fly hdg 16 deg towards Livingstone in Zambia. The river you'll cross here is the Zambezi (really tough to find in FS2K2 and much easier to see in FS2K). This river forms the border between Zimbabwe to the south and Zambia to the north. Also at this point you should be over-flying the mighty Victoria Falls, 1 mile wide and 420 ft high. But don't look too hard – they aren't there, unless you are using some add-on scenery I haven't yet come across. You can use the border lines on the FS Map to follow the river. Then either follow the river eastwards

(almost impossible in FS2K2 – MS must have based their scenery on the dry season) or follow the flightplan ESE until you reach Lake Kariba, the biggest man-made body of water in Africa, and one of the world’s biggest hydro-electric projects, 175 miles long and covering 2000 sq miles. This appears in square instalments in FS2K but is quite impressive in FS2K2. You’ll land at Kariba at the NE end of the dam. There is an asphalt runway and no ILS.

7. Kariba, Zimbabwe to Mfuwe, Zambia. 262-01-07

From	To	Freq	Hdg	NM
FVKB	fix 01		090	1.1.....Climb to 7500ft. Turn left
Fix 01	fix 02		014	1.0 and intercept 047deg OB
Fix 02	MF NDB	401	047	260.5 bearing from KB NDB, 399.0
MF NDB	FLMF Rwy 9		091	1.5
Total				264.1

Kariba is a town on the south bank of the Zambezi river, overlooking the Kariba Gorge and Lake Kariba. It was established in 1957 to accommodate the dam’s construction staff plus settlers. Kariba means “the place where the water is trapped”, and the construction of the dam involved a 5 year project to relocate 50000 Batonka people as well as thousands of animals (Operation Noah). Take off from the airport at Kariba and head NE for Mfuwe. After crossing the Zambezi again (at this point joining the Kariba Dam behind you and the Cahora Bassa dam (which supplies the better part of Southern Africa - mostly South Africa – with power) to the east of your track, you pick up the Lungwa running SW-NE and follow that until the MF NDB bears east, and then make your turn for Mfuwe. If you want to branch off eastwards with the Zambezi and explore the Cahora Bassa, you’ll find the scenery interesting. Hills of different textures, gorges and valleys, as well as the long dam itself, running W-E. Of course, by now you are in Mozambique Should you run out of fuel or suffer engine failure over certain lakes in Africa (Cahora Bassa is one), never fear (in FS2K), the waters will part, and you will land gently on the dry lake bottom, with not a drop of water in sight. Mfuwe has an asphalt runway and no ILS

8. Mfuwe, Zambia to Njombe, Tanzania. 262-01-08

From	To	Freq	Hdg	NM
FLMF	fix 01		088	1.7.....Climb to 9500ft.
Fix 01	fix 02	023	4.2.....	Turn left and intercept
Fix 02	UU NDB	227.0	052	159.0 052deg OB radial from
UU NDB	NJ NDB	261	024	131.3 VMF VOR, 112.90
NJ NDB	HTNJ Rwy 30		355	2.9
Total				299.1

Mfuwe is situated in the Luangwa National Park, a game reserve covering 6000 sq miles, along 120 miles of the Luangwa River. You can take a break, in this slightly cooler area, maybe take a game drive, camp out under the stars and listen to the lions roaring not far away in the night. While much of Zambia lies on a high plateau between 3000-5000ft, the terrain rises in the NE to the 7000 + ft Nyika Plateau From Mfuwe, climb to 9500 ft and fly NE across Zambia towards Lake

Nyasa (the southern end of the Great Rift Valley). In FS2K Lake Nyasa (and apparently most large inland bodies of water in Africa except for Lake Victoria) is a big dust bowl which is filled in instalments as one flies over it, as was the case for Lake Kariba, but in FS2K2 it is fine. You can take a slightly easterly course and angle up along the lake to gain some impression of size (although it is not as big as Lake Tanganyika to the north) - dropping down to around 3000 ft with the escarpment of the rift valley rising above you on each side will also add to the effect. Then on to Njombe in Tanzania. The runway is grass, but long enough. There is no ILS

9. Njombe, Tanzania to Dodoma, Tanzania. 262-01-09

From	To	Freq	Hdg	NM
HTNJ	fix 01		303	2.0.....Climb to 9500ft.
Fix 01	IR NDB	397.0	032	115.3
IR NDB	DO NDB	373	001	90.2
DO NDB	HTDO Rwy 10		226	0.3
			Total	207.8

Njombe is a regional centre in the south of Tanzania. The countryside is more hilly than the flatter northern and central part. It is a farming area, with fields of sisal, wheat and sweet potatoes. Try not to come down between Njombe and Kilimanjaro as tsetse fly infests many parts of the country, and a bite can result in sleeping sickness. The route to Dodoma is pretty straightforward, flying alternately over farmland and wilder areas uninhabited due to the tsetse fly. Dodoma has an asphalt runway and no ILS.

10. Dodoma, Tanzania to Kilimanjaro, Tanzania. 262-01-10

From	To	Freq	Hdg	NM
HTDO	fix		274	3.9.....Climb to 9500ft.
Fix	fix		016	72.2
Fix	KB NDB	293	027	94.8
KB NDB	KL NDB	283	058	16.6
KL NDB	HTKJ Rwy 9		090	7.9
			Total	192.1

Dodoma is the designated capital of Tanzania, with the transfer of the machinery of government from Dar es Salaam ongoing. It is situated in a sparsely populated agricultural region, at 3720 ft alt. On the side of caution, maintain at least 9500 ft. Most of Tanzania has an elevation of around 4000 ft. The western branch of the Great Rift Valley runs through Lake Tanganyika on the western border with Zaire and the eastern branch runs through the plateau. There is an asphalt runwya and no ILS at Kilimanjaro.

11. Kilimanjaro, Tanzania to Entebbe, Uganda. 262-01-11

From	To	Freq	Hdg	NM
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HTKJ	KO NDB	298	268	5.8....Climb to 9500ft.
KO NDB	HTWK		012	23.0
HTWK	MU NDB	312	002	213.3..Climb to 10500ft.
MU NDB	CD 35		317	116.6
CD 35	HUEN Rwy 35	110.7	353	7.1.
			Total	365.8

After Kilimanjaro you'll be well advised to stay at least 10500 ft. Fly NE towards the mountain, the highest in Africa at 19340 ft (the first waypoint after the KL NDB). You might want to make a circuit or try and reach the summit. The next waypoint (on heading 296) takes you to Ol Doinyo Lengai crater (a lake at 10000 ft, so be careful). If you have time you might want to divert south about 30 miles to the Ngorongoro crater at over 5000 ft. These craters are filled with water (both represented in FS2K and FS2K2), the rim of the latter rising to 7000 ft and the former to nearly 12000 ft, so be careful. The Ngorongoro floor is home to wild life and dense forests. which rise up the rim. Thereafter it's NW for Lake Victoria. Enroute you'll fly over the famed Serengeti National Park, home to lions, leopards, deer, elephant, hippopotami, rhino, crocs, monkeys and tropical birds. So look out for birdstrikes or you could end up as canned meat for big cats.

Between Lake Natron, north of Ol Doinyo Lengai (Mountain of God in Masai - still active although MS has a lake in it) and Lake Manyara (south of Ngorongoro) runs the Olduvai Gorge (part of the eastern arm of the Great Rift Valley). I wasn't able to make it out, but maybe you will. The gorge is where the oldest hominid skull yet found (1.8 million years) was discovered by Richard Leakey in the 1960's. If you should take a loop up to Lake Natron, beware. The combination of scenery, colour and heat haze distorts a pilot's sense of level flight (use ap!) The lake is full of caustic salts, and many birds as well as some aircraft are dissolved therein! After the Serengeti it's out over Lake Victoria, the biggest lake in Africa and the second biggest fresh water lake in the world. You'll be out of sight of land for several minutes., and about midway across you'll be in Uganda. FS2K handles Victoria better than it does the other big African Lakes, but not as well as FS2K2. You'll approach Entebbe over the water. There is an asphalt runway but no ILS from this direction.

12. Entebbe, Uganda to Kasese, Uganda. 262-01-12

From	To	Freq	Hdg	NM
HUEN	fix 01		172	2.5....Climb to 9500ft. Turn left and intercept
Fix 01	fix 02		036	4.8 063deg radial from NN VOR, 117.50
Fix 02	Jinja Apt			063 48.1
Jinja Apt.	PB NDB.	270.0	254	28.5....Descend to 8500ft.
PB NDB	fix 03		265	153.5
Fix 03	HUKS Rwy 1		357	8.7
			Total	252.0

Entebbe has no industry, and is mainly a residential centre for government employees (the capital of Uganda, Kampala, is a few miles NE) Its main importance is as a transportation crossroad for eastern Africa, with air and steamship connections across Lake Victoria, linking Kenya, Tanzania and other parts of Uganda. The airport is most famous (or infamous) for

the 1973 rescue of 103 hi-jacked Israelis by Israeli commandos flying from Israel in a couple of C-130s. You'll take off over Lake Victoria then swing east over the lake then NE toward Jinja. The river running north from Lake Victoria at Jinja is the White Nile. You might want to follow it up to Lake Kyoga for interest, but our route turns west over Jinja (the Owen Falls dam on the Nile is about here, but not in FS as far as I could find). Jinja is an important industrial centre. From Jinja head west, over Kampala at the Port Bell NDB, then on with Entebbe to your left, until you pick up the Katonga river, until you come to Lake George. Hang a right when the KH NDB bears north and follow it to Kasese. This airport is interesting, running N-S across a valley running E-W. which means you have a choice of hills to hit as you land or take-off. I could have selected the E-W running dirt runway but it's a lot shorter, and it's really not that tough getting into and out of the grass runway. I have selected the lower ridge for the approach. Kasese is the western railhead of the main railway which runs east to Kampala, Jinja and Tororo and ultimately across Kenya to Mombasa on the Indian Ocean. Kasese is near the Ruwenzori copper mines, and I think you'll agree that with the valley, the river and the Ruwenzori mountains to the west, is an attractive setting! There is a grass runway and no ILS.

13. Kasese, Uganda to Kisangani, Democratic Republic of the Congo (Zaire). 262-01-13

From	To	Freq	Hdg	NM
HUKS	fix 01		185	9.0.....Climb to 8500ft
Fix 01	fix 02		240	25.7
Fix 02	fix 03		353	40.4
Fix 03	fix 04		271	297.1...Track to KIS NDB, 315.0.
Fix 04	FZIC Rwy 31		308	0.5
			Total	332.0

The runway at Kasese is grass, but there is 5000 ft of it, and you'll need every bit. I suggest 30 deg flaps and stand on the brakes until you've built up a fair head of steam before setting off to hurdle the high ground at the end of the runway. You'll turn west over Lake George before heading off to Lake Edward (renamed Idi Amin Dada but I think it's back to Edward now). The mountains along the border between Uganda and the DRC are the legendary Ruwenzori range, which include the peaks Stanley, Alexandra and Margherita (this last being the 3rd highest peak in Africa, at 16763 ft). At this point you're flying over the Queen Elizabeth National Park, with the usual complement of lions, leopard, apes, monkeys, antelope, deer, birds and snakes. The Ruwenzori mountains are rumoured to be the ancient "Mountains of the Moon" once believed to be the source of the Nile. Over Lake Edward you'll turn north and head towards Lake Albert (changed to Mobutu Sese Seko, but no doubt since changed back). Between Lakes Edward and Albert you'll come to Margherita Peak, before turning west across Zaire towards Kisangani,. This is the main inland port in the country after Kinshasa. Maintain 8500 ft. Just up the river from Kisangani, you have been routed to turn nw over the river junction, site of Boyoma Falls (ex Stanley Falls – which is also apparently not included in the scenery). This is a series of 7 cataracts spread over 56 miles, and which makes navigation over that section of the river impossible. But as you are in an aircraft, that, like the falls, is academic. Unlike the Zambezi River earlier, the Congo (Zaire) River is easy to follow in both FS2K as well as FS2K2. The airport at Kisangani is Bangoka Intl. While the area of this leg is a little scarce on nav aids, there is an asphalt runway but no ILS from this direction.

14. Kisangani, DRC to Gbadolite, DRC. 262-01-14

From	To	Freq	Hdg	NM
FZIC	BN NDB	270	308	6.....Climb to 6500ft.
BN NDB	BBA NDB	285	303	190.9
BBA NDB	CF25 ISEC		326	153.7...Track to BLT NDB, 310.0.
CF25 ISEC	FZFD Rwy 25	109.9	254	6.8
Total				357.5

Kisangani used to be called Stanleyville, after the famous 19th century explorer, and was the site of his meeting with Livingstone. After take off climb to 6500 ft and head NW along the great Congo river before branching off northwards at Bumba to head towards Gbadolite, still in the DRC, and just south of the Obangui tributary of the Congo. The Congo (Zaire) is the second longest river in Africa at 2900 miles in length. You can in fact fly this whole leg along the Congo river up until Bumba (BBA NDB). Two fifths of the DRC is forested, and using your imagination (and which FS pilot is not well supplied with this essential commodity?) you can see dozens of small villages cut into clearings along the river bank as you cruise along at 4500ft. Gbadolite has an impressive asphalt runway and ILS.

15. Gbadolite, DRC to Sarh, Chad. 262-01-15

From	To	Freq	Hdg	NM
FZFD	BLT VOR	112.1	74	2.2.....Climb to 6500ft.
BLT VOR	BLT NDB	310	61	5.8
BLT NDB	FA NDB	429	333	331.4
FA NDB	FTTA Rwy 4		231	0.6
Total				340.1

Gbadolite is a mining town in the north of the country. From Gbadolite climb to 6500 ft and fly NW to Sarh in Chad, the beginning of the Sahara desert. The FA NDB is on the airfield. Sarh is a dirt runway, but over a mile long, with no ILS.

16. Sarh, Chad to N'Djamena, Chad. 262-01-16

From	To	Freq	Hdg	NM
FTTA	fix 01		037	1.9.....Climb to 6500ft. Turn left and intercept
Fix 01	fix 02		299	5.3 313deg OB bearing from FA NDB, 429.0.
Fix 02	LY NDB	370.0	313	251.5
LY NDB	FTTJ Rwy 5	109.9	047	3.4
Total				272

Sarh is the capital of the Moyen-Chad prefecture in southern Chad, on the Chari River. It's the second largest town in Chad,

and was formerly known as Fort-achambault. From Sarh climb to 6500ft and fly NW to N'Djamena, still in Chad. You can either follow the flightplan or the river Chari (less direct but more fun and will certainly bring you to the ndb). The runway is concrete and with an ILS.

17. N.Djamena, Chad to Dirkou, Niger. 262-01-17

From	To	Freq	Hdg	NM
FTTJ	fix 01		047	2.0.....Climb to 6500ft. Turn left and intercept
Fix 01	fix 02		330	6.7 the 345deg OB bearing from LY NDB, 370.0.
Fix 02	fix 03	113.9	345	420.5... Track to DIR VOR, 113.90. At 5.5 nm DME
Fix 03	DRZD Rwy 42		222	3.0 Turn left to 320 deg. land Rwy 42.
Total			432.2	

N'Djamena is the capital of Chad, formerly known as Fort-lamy and one of Amelia Earhart's stops during her ill-fated round the world attempt in 1937. It lies on the east bank of the Chari River, across the water from Cameroon. Fly NW across Lake Chad and then the Grand Erg de Bilma (desert) and finally to Dirkou in Niger, with only a single navaid. If you keep a sharp look out, you just might spot a Tuareg encampment of dark tents, or even some of the dark blue robed Tuaregs, tending their flocks of sheep or camels. The rwy is on 42 deg 1.5 nm before the vor. There is an asphalt runway and no ILS.

18. Dirkou, Niger to Sabhah, Libya. 262-01-18

From	To	Freq	Hdg	NM
DRZD	DIR VOR	113.9	42	1.4.....Climb to 5500ft.
DIR VOR	fix 01		010	460.4
Fix 01	ff31		023	26.4At 30 nm DME turn right to 023deg.
ff31	HLLS Rwy 31	110.3	313	6.1 and Intercept ILS.
Total			494.3	

Dirkou is a regional center in the eastern part of the country. More than half of Chad is desert, with the rest semi-arid grassland. In the NE is a massif (mountain system) called the Air, which rises to 6300ft. There are uranium workings in these mountains, while most of the rest of the population busies itself with subsistence crops. From Dirkou climb to 5500 ft and fly north to Sabhah in Libya. The runway is asphalt and there is ILS but only BC.

19. Sabhah, Libya to Tabesty V-9, Libya. 262-01-19

From	To	Freq	Hdg	NM
HLLS	SBH NDB	263.0	313	5.8.....Climb to 5500ft.
SBH NDB	PRB NDB	245.0	069	210.8
PR NDB	XS NDB	365.0	069	49.7
XS NDB	HLTS Rwy 1		068	17.3 ...Track to VO NDB, 295.0.

Total 283.6

Sabhah is the principal town in the Fezzan province of Libya. From Sabhah climb to 5500 ft and fly east across Tripolitania, to Beda-M3. Temperatures in the interior range between 100-120F, so try to force land between sundown and sunup. There are a few scattered oases (some way to the north of your route is the Al Jufrah oasis, but you could get lost trying to find it) and very few towns, with the area mostly inhabited by nomadic peoples. To the west of Sabhah is the Idehan Ubari, the Dune Sea. Looks pretty impressive in both FS2K and FS2K2. The runway at Tabesty is asphalt and there is no ILS.

20. Tabesty V-9, Libya to Sarir-C4, Libya. 262-01-20

From	To	Freq	Hdg	NM
HLTS	fix 01		191	1.0.....Climb to 5500ft.
Fix 01	HLSA Rwy 16		106	178.3....Track to GS NDB, 305.0.
Total				179.3

Tabesty is, like Sarir, one of the many airfields constructed to service oil drilling operations. The route takes you through Cyrenaica, the region around Cyrene (settled by the Greeks in the 7th century) and the Libyan desert, with the Jalu Oasis well to the north of your route. So unless you feel like Antoine de Saint-Exupery, try and stay out of the sand. And if you bear in mind that only around 2% of Libya is suitable for cultivation, and that there are no permanent lakes and rivers, you'll realise that the odds on your driving the DC3 out of an off-runway landing are minimal. The runway at Sarir is asphalt and there is no ILS.

21. Sarir-C4 to Cairo, Egypt. 262-01-21

From	To	Freq	Hdg	NM
HLSA	fix 01		163	1.2.....Climb to 5500ft.
Fix 01	fix 02		056	5.3.....Turn left and intercept 072 deg OB
Fix 02	FYM VOR.	117.3	072	423.4 bearing from GS NDB, 305.0.
FYM VOR	MKT NDB	317.0	047	60.0
MKT NDB	HECA rwy 5L	110.9	047	7.2
Total				497.1

From Sarir climb to 5500 ft and fly eastward across the Libyan desert and the area known as the Sand Sea towards Egypt. You'll enter Egypt somewhere to the south of the Siwa Oasis (one of the few areas away from the Nile which has any population to speak of), skirt the the Qattara Depression (133 ft below sea level) somewhat to the north of your flightpath, continue across the Great Sand Sea – the Western Desert which is part of the Libyan Desert. If you were to fly low over the desert you might see, gazelles, antelope, ibex, hyenas, jackals and rabbits (if you fly really low!) Just before the Nile you'll come to the Fayyum Depression, near the FYM VOR, then fly low over the pyramids of Giza, before crossing the Nile and

setting down at HECA. Cairo is the capital of Egypt and the largest city on the African continent, and which grew out of the ancient city of Babylon. The runway at Cairo is asphalt and there is an ILS.

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