

# Flying in South Africa

Elephants on the run way and much more



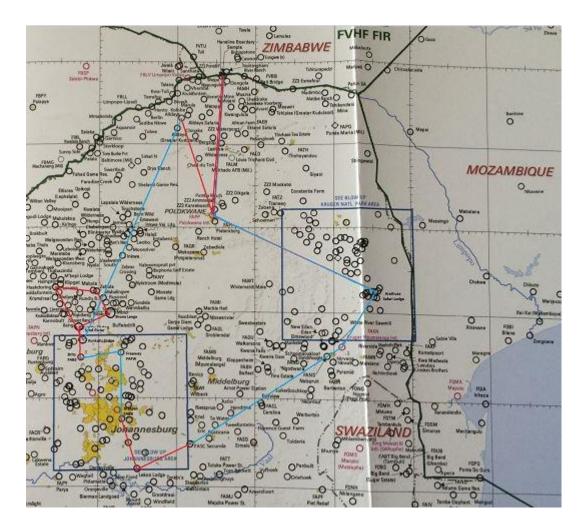
Program & Preparations

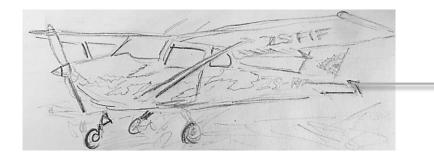
Have a **crazy idea** and follow up on it Comparison of different flight schools **Weather check** – it is not advised to fly in Cape Town area during South African autumn (from April) due to weather

#### Our final program

- 2 days license validation at Jo'burg Brakpan (FABB)
- 2 days Bushpilot training (base camp North of Jo'burg, Kunkuru Bush Lodge)
- 5 days round trip

All detailed planning and bookings were done by Sky Africa based on our comments on wishes





Sky Africa

Founded in 1981 Sky Africa is **located at Brakpan Benoni** Airfield just South-East of Jo'burg.

### They offer

- African Sky Cruises
- Self-Fly Safaris
- Bush Pilot Training
- Hour Building
- Flight Training
- Foreign Licence Validations

and as we found out good humour and individual support of finding the right trip according to our wishes.

Fleet consists of Cessna and Piper aircraft, but with some partnerships, fun flying is also possible.

Check <u>www.skyafrica.com</u> for more info.







License Validation

Sky Africa has an agreement with local authorities which simplify license validation process.

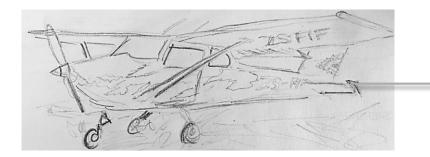
Only **verified documents need to be send in advance** (by courier as post is not reliable in ZA...DHL best value for money)

- Valid license
- Medical
- Radio license \*
- English proficiency \*
- 2 colour passport photos
- Passport
- Logbook summary (total times, total pic times, total dual times)

It is advised to have a minimum of 2 hours flying time on the aircraft type you want to fly in ZA – dual is sufficient

\* No need to provide separately as stated in the Dutch license





## License validation

- Take off and Landings
- Straight and level flight
- Steep turns
- Stall recovery

No nose down, full throttle only

• Precautionary landing

Timing of sufficient field length on 1st downwind

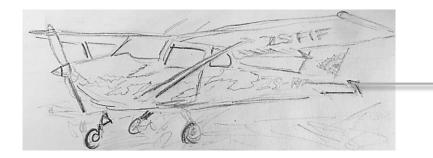
Check flight (1.5-2 hrs)

License Validation flight (1.5-2 hrs)

**Airlaw test** (in writing, multiple choice, use of books and notes allowed)

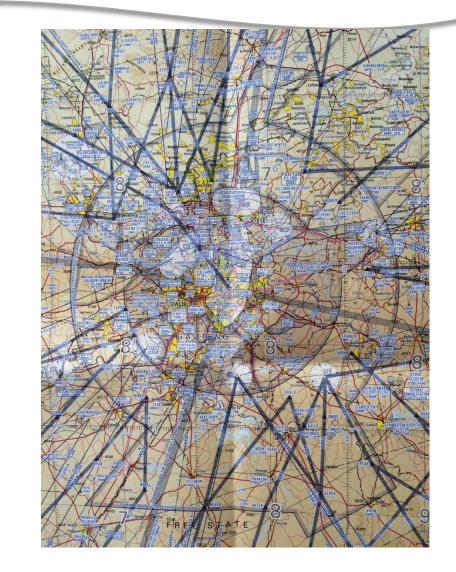
A **detailed briefing is given** before 1<sup>st</sup> take off – however, if skills are not sufficient, Sky Africa might insist on safety pilot during further planned trip!

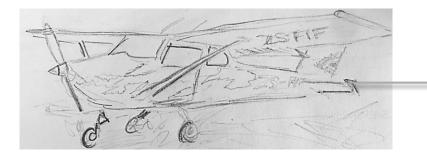




- Radar controlled **Corridor airspace** directly around JIA, Jo'burg TMA above (from 7600')
- Flights below TMA allowed in **special rules area**:
  - Towards the East: 125.4
  - Towards the South: 125.6
  - Towards the West: 125.8
- 7500 ALT cannot be exceeded
- Keep landing lights on
- VFR flights on northbound magnetic track must operate at 7500 ALT, southbound 7000 ALT

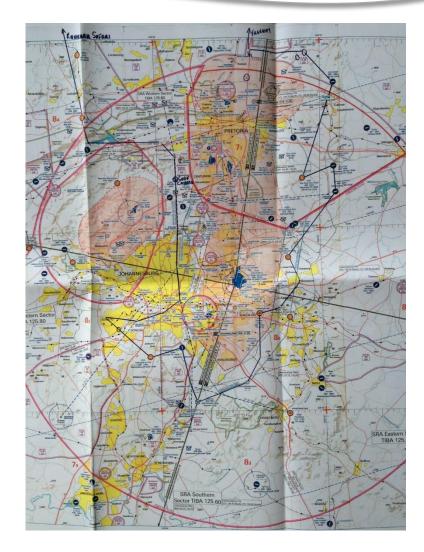
## Jo'burg Airspace

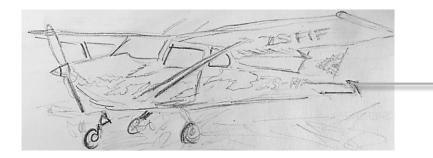




# Air traffic services & Radio

- Self-controlled radio (Frequency 124.8): be active and announce regularly where you have been taking off, heading to, altitude etc. also when preparing for inspection and landing.
- **Challenge:** even tower personnel at bigger fields might not know the bushstrips you are heading to, so be prepared for questions, discussions and to give coordinates from your routes. Consequently you might also not have even a slightest clue of locations from which other aircrafts are reporting!
- Most fields you will be heading to will be unmanned fields simply cut as gravel strips into the bush! This does not only mean "missing radio contact" (announce intentions also via 124.8), but also missing threshold, centre lines and runway edges, but potentially stones, animals, ditches cut into your landing area.
- An **inspection run** before landing (mid level 50 ft from side of RW, low level 20 ft above RW) are essential in any case!





# VFR Rules

- Flight plan only required when flying controlled field to controlled field or crossing borders
- VFR rules and semicircular system as in NL

   however, remember you are flying higher
   altitudes and SCS is really used!
- Remember: you are not flying on MSL. Always check elevation of departing field as well as destination field. Circuit is usually at 700ft....but needs to be calculated due to varying elevations.
- No flying with more than 3/8 clouds or above clouds
- **Special VFR**: ground visibility of min. 1NM, aircraft stays clear of clouds and within sight of ground

#### NOTE: Traffic below 1500° AGL does not need to comply with the semi-circular rule!

### Minimum Heights

No aircraft shall be flown over a populated area at a height less than 1000' above the highest obstacle, within a radius of 2000' of the aircraft.

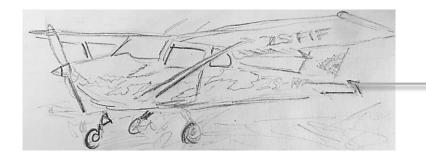
When flown elsewhere the aircraft may not be flown at a height less than 500° above the ground or water, unless the flight can be made without hazard or nuisance to persons or property (including livestock) on the ground or water.

Where any persons, buildings or livestock are in the area (and flying below 500') the aircraft <u>must</u> climb or select an alternate route.

<u>NOTE:</u> The National Parks are an exception to this rule. No aircraft may fly below 2000° AGL within the boundaries of any South African National Park.

#### AEROPLANES

Airspace	e Ceiling Visibility	Visibility	Distance from cloud	
Airspace		horizontally	vertically	
CTR/ATZ/ATA (*)	1500 feet AGL	5 km	2000 feet	500 feet
Other airspaces:				
Ground to 1000' AGL by day		1.5 km	Clear of cloud	
1000' AGL to FL10 Ground to FL100 b		5 km	2000 feet	500 feet
FL100 to FL195 by day or night		8 km	1.5 km	1000 feet



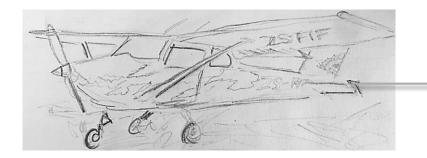
Other differences to NL

#### PERFORMANCE

- Density altitude and performance needs to be calculated: generally "all fields" are "too short"...wind direction is not necessarily the determining factor for landing/take off direction, look at the runway conditions as well (slope, obstacles etc.)
- Lean...lean....and....well: lean
- Climb rate is between 200-300 ft/min. Use any RW length available, select flaps only at ca. 40 kts to cut out drag as much as possible
- Use ground effect staying parallel to RW till reaching climb speed
- Aircraft lighting is not as crucial as you think...usually the sun is brighter than any lights anyway



Use of ground effect is vital on any bush strip to gain speed



# Other differences to NL

#### **OPERATIONS**

- Pads for run up checks are not always "easy to be seen". Remember: any movement damages the proper with stones and gravel. Stay clear...and speed up slowly on the RW for take off.
- Be prepared to get a new feeling for thermals and turbulences
- No carb heat on run up to avoid unfiltered air with dirt from the ground
- Motor cleaning might be necessary when descending
- Expect a bigger circle when turning due to density altitude



Run up pad on Lekoa lodge....you need to be creative to recognize it as such as it seems to be only the RW indication



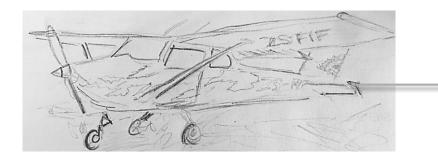
Other differences to NL

#### NAVIGATION

- South Africa currently has a variation around 18 degrees which needs to be considered on navigation planning (we are so spoilt in NL <sup>(C)</sup>)
- Prior permission to land on private strips is required, call min.
   24 hrs in advance.
- Maps printing has been stopped in 2012. Sky Africa provides self-printed maps, partly with own routes marked. Sky demon was a reliable support, however, smaller airfields are unknown and need to be entered by coordinates.
- Airfield directory (provided by Sky Africa) gives details of all fields – but might not be updated on RW surface or frequencies
- Navigation can be challenging as not many landmarks are around
- On private fields usually no landing fees
- Cheap refuelling (ca. 1€/l)



Nearly glass cockpit standard...



Skyafrica Homebase FABB Brakpan

#### **FABB details**

RW 18/36

1440 x 15 m

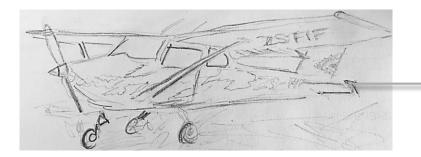
Asphalt

Special entry/exit routes

Fuel available

Take off 36 not advised due to building areas – the owner of Sky Africa lost his life here in February 2016 experiencing engine failure after take off





FAFW Freeways

#### **FAFW details**

RW 02/20

2900 x 45 m

Gravel

R/H Circuit RW 20 L/H Circuit RW 02 Min.Circuit Alt. 1000' AGL

No Fuel, private use only, call in advance

Easy to find as one of the longest and widest in ZA and next to the highway.....not really clever from our point of view as it used to be the big smugglers' airstrip and you might imagine they want to take off in secrecy Graveyard to some old engine parts to plane parts





# FABS Brits

### **FABS details**

RW 02/20

835 x 18 m

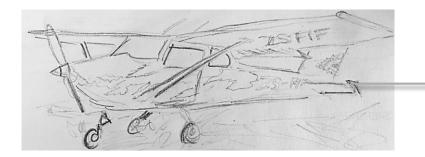
#### Asphalt

L/H Circuit RW 20 R/H Circuit RW 02 Uphill slope 02 Up- and downdraughts RW 02

Fuel available Glider activities

We liked the free soft drink a bag of crisps for the PIC when refueling





Zebula

## Zebula details

RW 08/26

1400 x 13 m

Asphalt

Downhill slope RW 08

No Fuel, not fenced so check for game, call in advance for use





Haakdoring

#### Haakdoring details

RW 01/19

900 m

Gravel

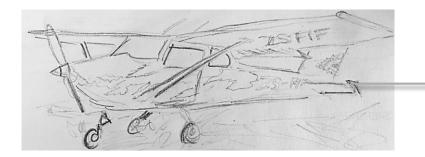
Do not land on the landing strip 1 NM NW (right next to road)

Fuel, flying school, private operator





After you found the field between all crop circles so typical for ZA and dared to land, you are in for a treat! Not only is fuel provided by friendly service, you also meet dusty crop sprayer and his friends in the midst of a stunning scenery!



Liverpool

#### **Liverpool details**

RW 11/29

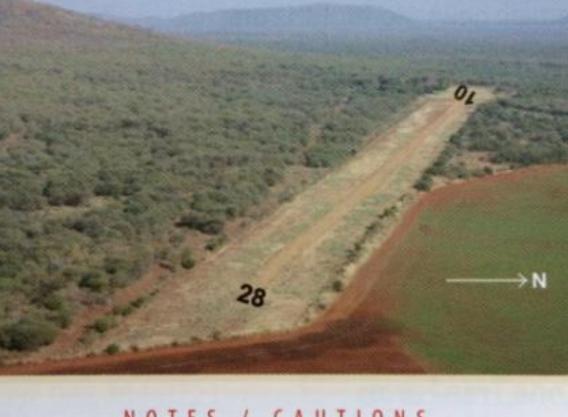
1000 x 40 m

Gravel

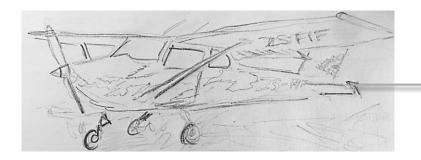
Always land uphill RW 28 R/H Circuits

No Fuel, private use only, call in advance

Scary approach we thought as close to a mountain and with quite some slope....well, we met "better" ones later on our trip



# Game might be on rwy.



Kunkuru Safari Lodge details

RW 05/23

1200 x 15 m

Gravel (compacted)

Power lines on approach RW 23

No Fuel, private use only, call in advance

Kunkuru Lodge



Our base for the bushpilot training

Challenging approach with power lines close to the RW, but they help as location indicator Paul & Sanet are super friendly people with nice surroundings within their farm boundaries Do not miss out when the lions bred there are being fed – it is an experience for itself....even if their roaring during all nights puts you of from being a lion fan somehow



Alldays

#### **FAAL details**

RW 10/28

1450 x 30 m

Asphalt

Game might be on the RW Fuel, private use only, call in advance



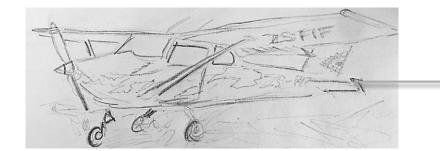
Attention- you have **3 locations within 10 km** radius:

Alldays, Alldays (Greater Kuduland) and Alldays Safari... mix up is easy! **RW headings** are a **nice indication**, but Alldays and Alldays Greater Kuduland are facing the same way...

so check for the surface as well (asphalt verus gravel)



The only thing working when we arrived



Alldays refueling



Never expect fuel simply because it is mentioned in the airfield directory...it might just come again "next Wednesday". When calling in advance – be clear about timing and fuel amount needed.



#### **FAPP details**

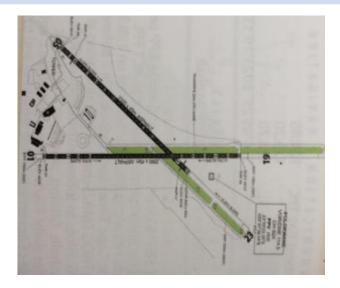
RW 01/19 2560 x 45 m

RM 05/23 2320 x 45 m

Asphalt

Fuel, Flight service

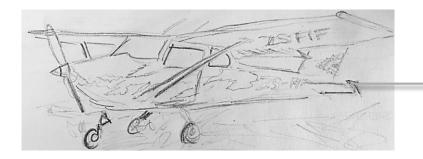
Landing fees



Polokwane



Refueling heaven without any hazzle twice during our trip...just be prepared to give lots of information for the landing fee calculation



Hanaline Boerdery details

RW 07/25

1000 x 15 m

Gravel

RW lighting on request

No Fuel, private use only, call in advance

Lovely lodge about 30 minutes drive from the field with our first (cold) game drive in the morning – maybe not as many animals as in Kruger but absolutely stunning scenery near Zimbabwe border

Be prepared to include a dip into your private terrace pool into your time planning







Arathusa Lodge (Kruger)

#### **FAAR details**

RW 16/34

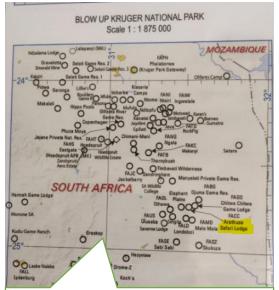
1200 x 11 m

Gravel....or asphalt

Game on RW

No Fuel, private use only, call in advance

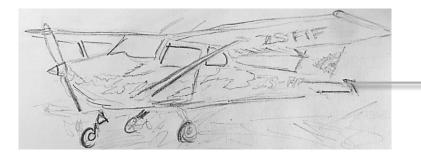




Fields are easy to find within Kruger area as cleaned up strips within the tree bush lands...but there are many of them...often facing the same way....

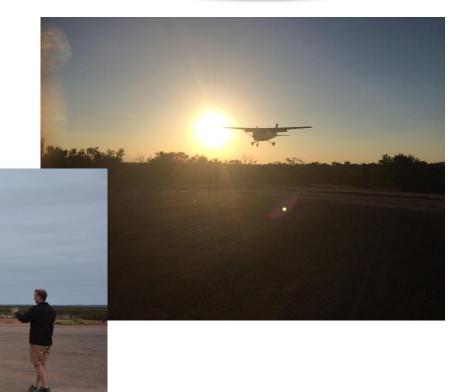


Another surprise: gravel RW was suddenly tarmac....only indication we where right was RW directions (different to all other fields around) and the lodge car we discovered during low level inspection









We used a day there to relax from navigation flying every day and practised inspection runs and T&Gs Watch out: end of daylight comes fast and it is dark within minutes only!



## Kruger International

Refueling, coffee and some decent shopping in the terminal building



Dreams coming true.... marshalled to the parking spot

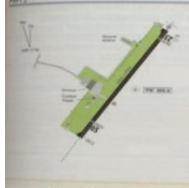


Passenger transfer to terminal African style

tem from Netsprist - A	ON / NAVISATION
inuger TWR owveid info	119.20 119.00 122.65
405.00 N N 109.10 DILS N 112.50 VD	525"23'00" E031"06"32" 525"23'24" E031"06"06" 525"22"51" E031"06"40"

#U#UXY DETAILS 2600m x 45m (8530ft) Asphalt

Moumalanga Inti.



BOTES / CAUTIONS

ans ALT 9000ft. Special flight proc applicable It RMIA, IFR circuit TFC to be to E of rwy at 00ft ALT during day & VMC ops only. All DEP IFC to maintain rwy track to at least 5000ft ALT, before any turns can commence and pendg on prevailg TFC and ATC CLR. IFR TFC vis or VIAC APP onto rwy 05 must pass 8nm Klat 5600ft ALT or aby. Special VFR routings apply during daylight and VMC ops. Proc thin FAKN CTR: All a/c intendg to DEP from nanned AFs inside CTR are to establ 2-way m, with FAKN ATC on 119.20MHz before or ctc ATC on Tel. 013 751 2917 before off, Bird hazard, Wildlife on rwy, Pilots to terc. Caution, Emergency freq. 121.5 is onitored from CTL TWR. Twy G partially obscured from TWP

#### + FAKN 2829ft + 525'23'29.7" + E031"05'57.4"

Mpumalanga Provinc



HAZARDS Primkop Mountain Cell mast: 1.6nm SE, 161th high, t.o.m. 3668ft; The Ranch Cell mast 2.4em NNE, 180th high, t.o.m. 3588h

#### FACILITEES

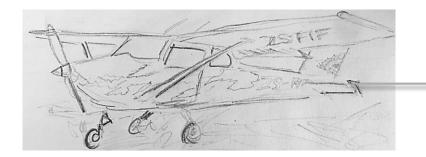
FlightServices: ATC Tel: 013 753 7519/20 / 751 2917; Fax; 013 751 2910; MET 082 233 8401/2, Fax: 013 751 3804 or ctc FAOR Tel: 082 233 9600/8800 C&I: Mon-Sun 0700-1900 Customs: Peggy Segokodi Tel: 013 750 2234 a/h 082 448 0395; Immigration: a/h Esther Dennis 082 808 2777; Border Police: Pierre Pieterse 013 752 1375. a/h 082 853 1101. Reg. for a/h service to be submitted 48hrs in advance. Facilities: Fire & Emergency: Mon-Sun 0500-1700 LT Tel: 013 753 7523, Security Tel: 013 753 7573. Restaurant, Coffee Shop, Car Hire Fuel: Avgas/JetA1/Oils - Shell - Tel: 013 753 7610 Ernest Barker Cell: 082 898 2363 Hrs. Mon-Fri LT 0700-1900 a/h call out Cell: 083 277 9565 AMO: See website www.kmiairport.co.za CarHire: Avis Tel: 013 750 1015 Hertz 013 750 9150

#### LODGING & LEISURE

Likweti Lodge and Sanctuary Tel: 082 939 0629 http://likweti.co.za/; Destiny Lodge Tel: 013 751 6600 http://destinylodge.co.za/ -Gateway to Kruger National Park and Mpumalanga

#### OFEBATOR

Private AF. Primkop Airport Management Tel: 013 753 7502 Fax: 013 753 7555; APM Marius Nel Cell: 083 626 4902 email: mariusakmiairport.co.za; www.kmiairport.co.za

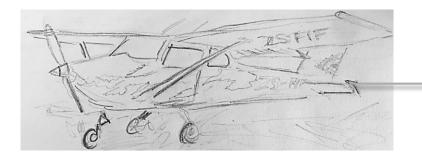




FASC details
RW 11/29
1100 x 18 m
Asphalt
R/H Circuit RW 29
Avgas



Not the nicest area as surrounded by lots of factories – so at least relatively easy to find Apparently busy during the weekends with gliders and motor flyers coming in from Jo'burg Restaurant now opened regularly with clean facilities



### Lekoa Lodge details

RW 10/28

1200 x 21 m

Gravel

Uphill RW 10

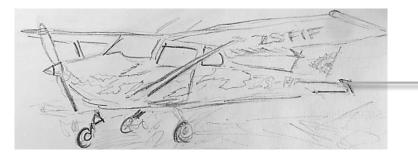
Fenced in, but cattle might still move onto RW, overfly necessary, private field





Learn how to deal with optical illusions and slope fears

Not only is this field not at all recognizable from the air amidst general crop fields (search for RW numbering helps), it has also the steepest slope ever directly after touch down point – so concentrate on "threshold" and take it all from there



Learning points

- Combining long flying hours with ground activities can result in stress – set your priorities clearly during planning
- Always **plan for extra time** and the unexpected
- **Pack lightly** ... you need as little extra weight as possible and at the end of each day you are dusty and oil smeared so not catwalk material anyway
- Plans replace coincidence with errors— stay spontaneous and face the unexpected
- Consider **alternative routes** for sudden weather changes or simply the end of personal energy level
- Always call and check for fuel availability in advance
- Stay curious and meet others along the way: not only pilots, but also talks to other tourists can be a great experience
- Stay calm and enjoy



Don't be shy to ask for support: We carried our safety pilot on our hands and are grateful for all handy hints ad top tips given during the time together ... apart from all the personal stories shared during the trip opening our eyes for South African life



Yes...there was really an elephant on the runway!!!



## What's next

### Sky Africa Bushpilot Trailer

https://www.youtube.com/watch?v=MD35ila\_-SU

approx. 20h flight time - 1 on 1 instruction - 45 airstrips over 60 takeoff & landings - all in 8 days

Intense - Rewarding - Fun!







