

**AERO**  
SOUTH AFRICA



# Spring Flying: Dust off the Rust!





**Neil Piper**

Head of Content: Messe Frankfurt  
South Africa

**Opening**



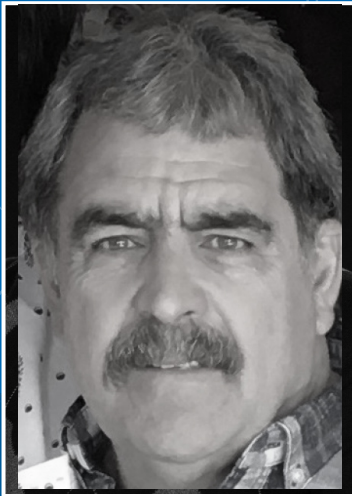
**Annelie Reynolds**

*Show Director: AERO South Africa*

**Welcome**



# PANELISTS



**Cobus Toerien**

ALPA-SA



**Caroline Koll**

Owner at Essential Pilot



**Santjie White**

ICAO SAR EXPERT



# Agenda

- Moderator Opening: Cobus Toerien – ALPA-SA
- Speaker Session: Caroline Koll – The Essential Pilot
- Speaker Session: Cobus Toerien – ALPA-SA
- Speaker Session: Speaker Session: Santjie White - *ICAO SAR EXPERT*
- Q&A
- Closing



# Cobus Toerien

ALPA-SA



# Caroline Koll

OWNER AT ESSENTIAL PILOT



**ESSENTIAL PILOT**

*Keeping flying fun!*



# DUSTING OFF THE RUST

CAROLINE KOLL

A person is shown from the side, wearing a black flight helmet and a headset with a microphone. They are in the cockpit of an aircraft, with their hands on the control yokes. The instrument panel is visible, featuring various gauges, switches, and a small digital display. The background shows a bright sky and a distant horizon.

Be honest—how long has it been since you've done some serious flying?

- A month or two?
- Last summer?
- A year ago?



**What do the  
regulations say?**



61.03.7 (1) The holder of a PPL(A) shall undergo a revalidation check within **12 months** from the date of initial issue and thereafter within a period of **24 months**

91.02.4 (1) A pilot shall not act as PIC of an aircraft, or second-in-command (SIC) of an aircraft required to be crewed by more than one pilot, carrying passengers by day, unless such pilot has personally, **within the 90 days immediately preceding the flight**, carried out either by day or by night at least **three take-offs and three landings** in the **same class** or, if a type rating is required, **type or variant of aeroplane**, and in the case of a helicopter three circuits including three take-offs and three landings in the same type of helicopter as that in which such flight is to be undertaken...

A couple of hours of training every two years may satisfy the regulations, but do you **satisfy your own standards of excellence?**



Rather than accept your deteriorated state, take some steps to **brush up on ALL your piloting skills** when you go back into the air after a layoff.





# **1. Airspeed Control**



- Poor management of the **aircraft's energy** can be deadly.
- Revise the principal **operational airspeeds** for your aircraft.
- Pay attention to **limiting speeds** such as maximum flap and gear extension.



# REMEMBER!

- Pitch changes will result in speed changes.
- Trim is used to maintain a desired speed at a particular power setting.
- When pitch or power changes, re-adjust trim.





## 2. Emergencies

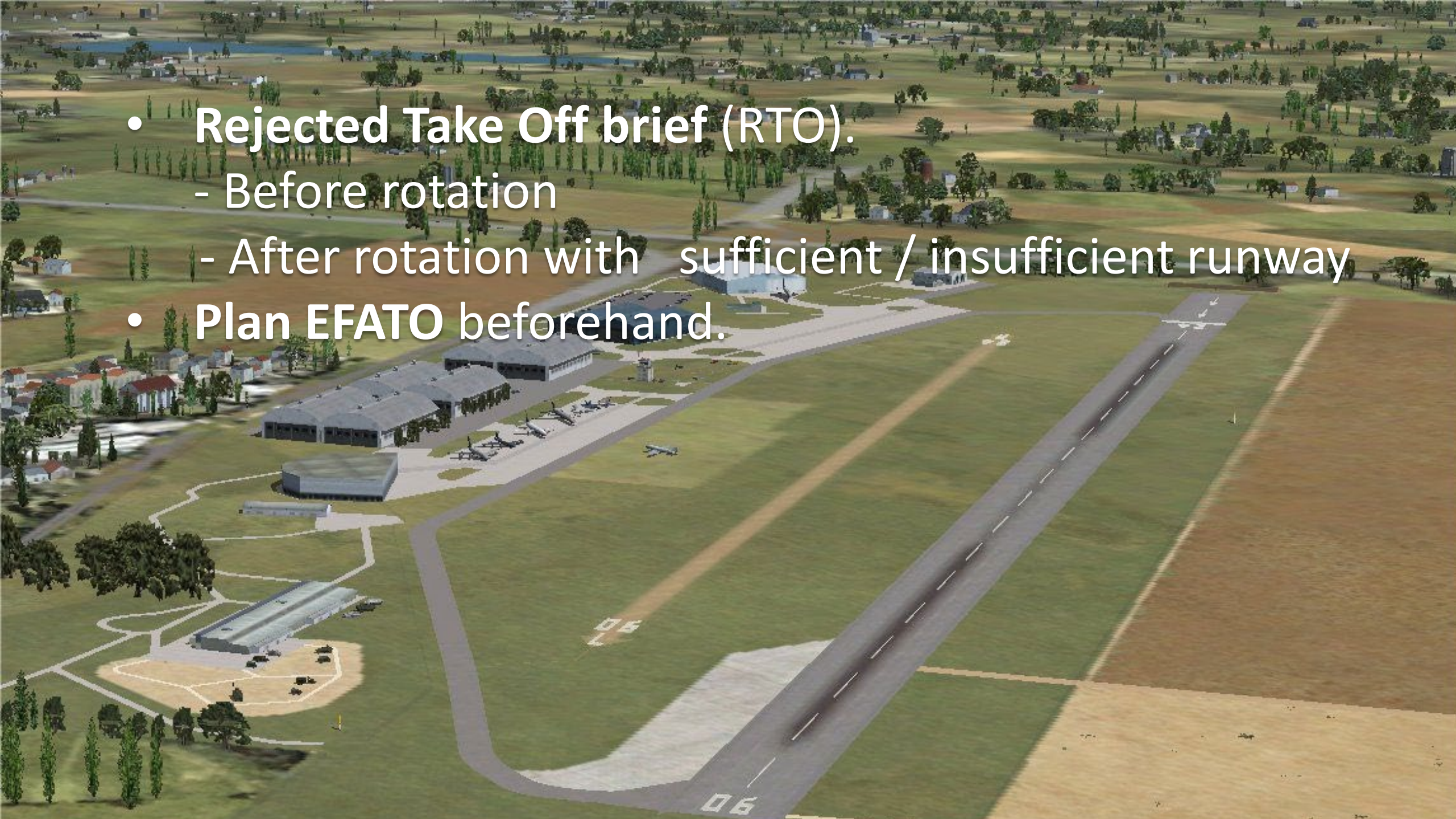


- Revise memory **emergency procedures** for your aircraft.
- **‘Touch’ practice at least one emergency** from the POH before every flight.





- **Rejected Take Off brief (RTO).**
  - Before rotation
  - After rotation with sufficient / insufficient runway
- **Plan EFATO beforehand.**





- Brief passengers / crew on:
  - Looking out
  - Emergencies
  - Go around



**Panicked  
passengers  
can increase  
pilot stress!**



# Manoeuvres to brush up on:

- **Stalls** – In various configurations.
- **Precautionary landings.**
- **Engine fire**, smoke in the cockpit.
- **Lost procedure** and calling for help.
- **Diversions** (without the GPS!).
- **Engine failure** after take-off.
- **Radio failure** procedure.
- **Gliding** from different heights.
- **Crosswind landings** / go-around.



More practice means more conditioning for unusual situations, which means being safer, when, and if, the time comes.

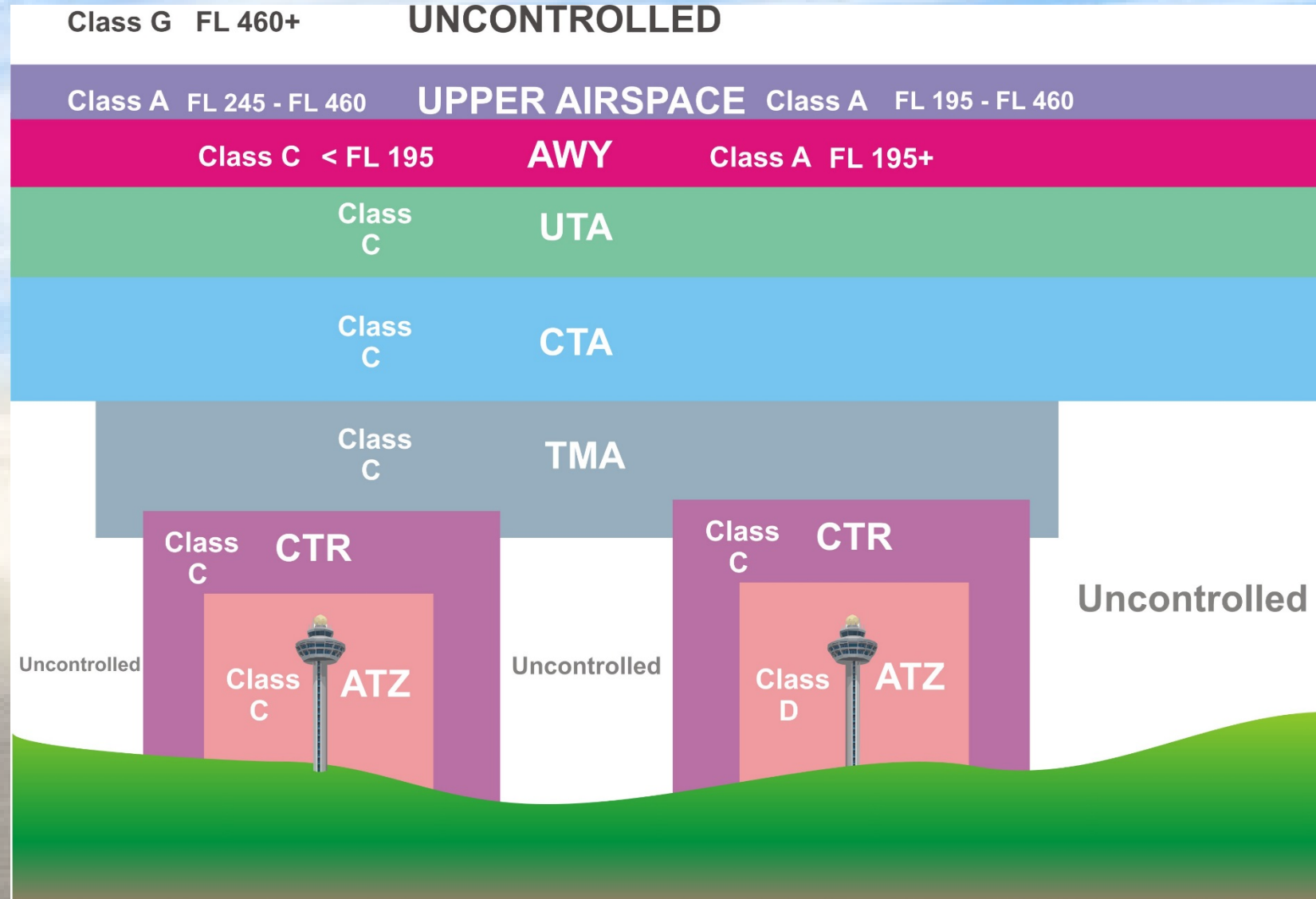
*A superior pilot uses his superior judgement to avoid situations which require the use of his superior skill.*



# 3. Airports



# Airspace





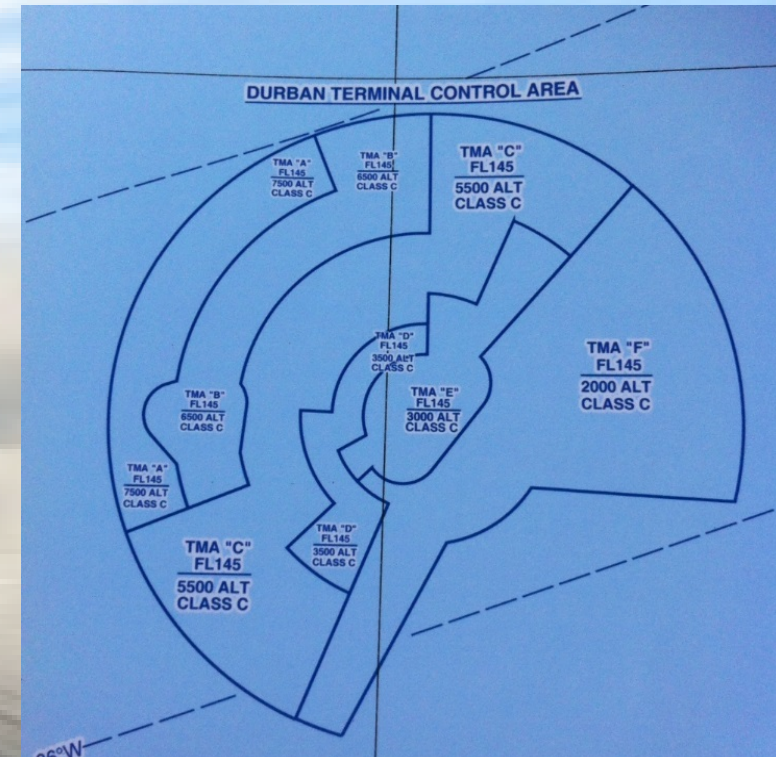
# Airspace

Class	Airspace Type	Flight Rules	Service Provided	
A	Controlled	IFR	All Aircraft	ATC
				Separation
C	Controlled	IFR + VFR	All Aircraft	ATC
				Separation
				Separation
				Separation
				Traffic Info
D*	Controlled	IFR + VFR	All Aircraft	ATC
				Separation
				Traffic Info
				Traffic Info
F	Uncontrolled	IFR + VFR	IFR	Advisory
			All Aircraft	Traffic Info
G	Uncontrolled	IFR + VFR	All Aircraft	Traffic Info

All aircraft, regardless of which service will be provided, **MUST request permission** to enter controlled airspace at least **10 minutes prior** to entering.

**Entry** may not take place until **clearance** has been received from the controller.

## Study the airspace you are entering:



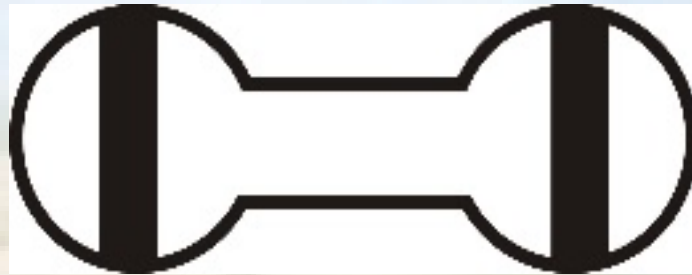


# Airport Markings & Signals

What do these markings and signals mean?



A



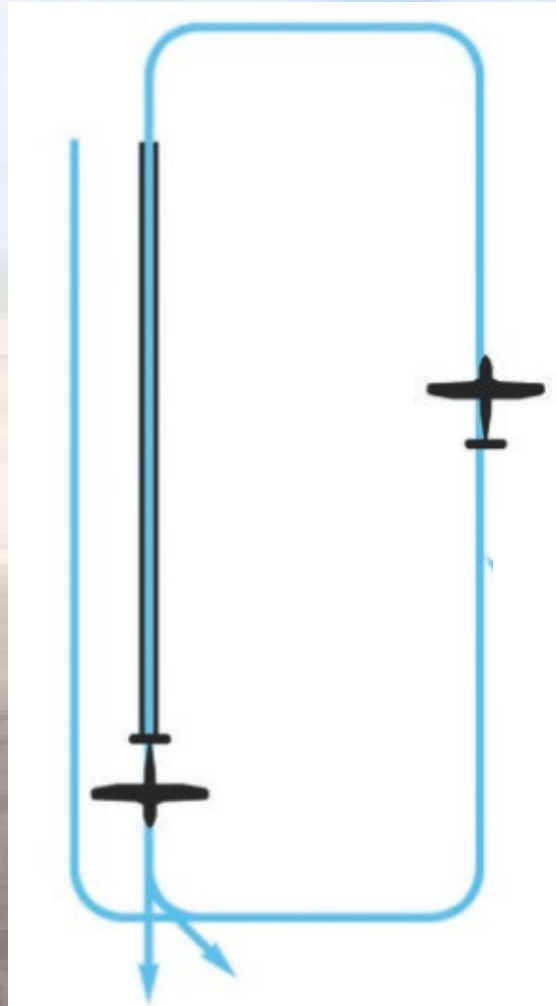
B



C

# Traffic Pattern

Study the traffic pattern for your departure, destination and alternates:



# Radio Procedures

When in doubt, remember the 4 W's:

- **Who** am I speaking to?
- **Who** am I?
- **Where** am I?
- **What** do I want to do?

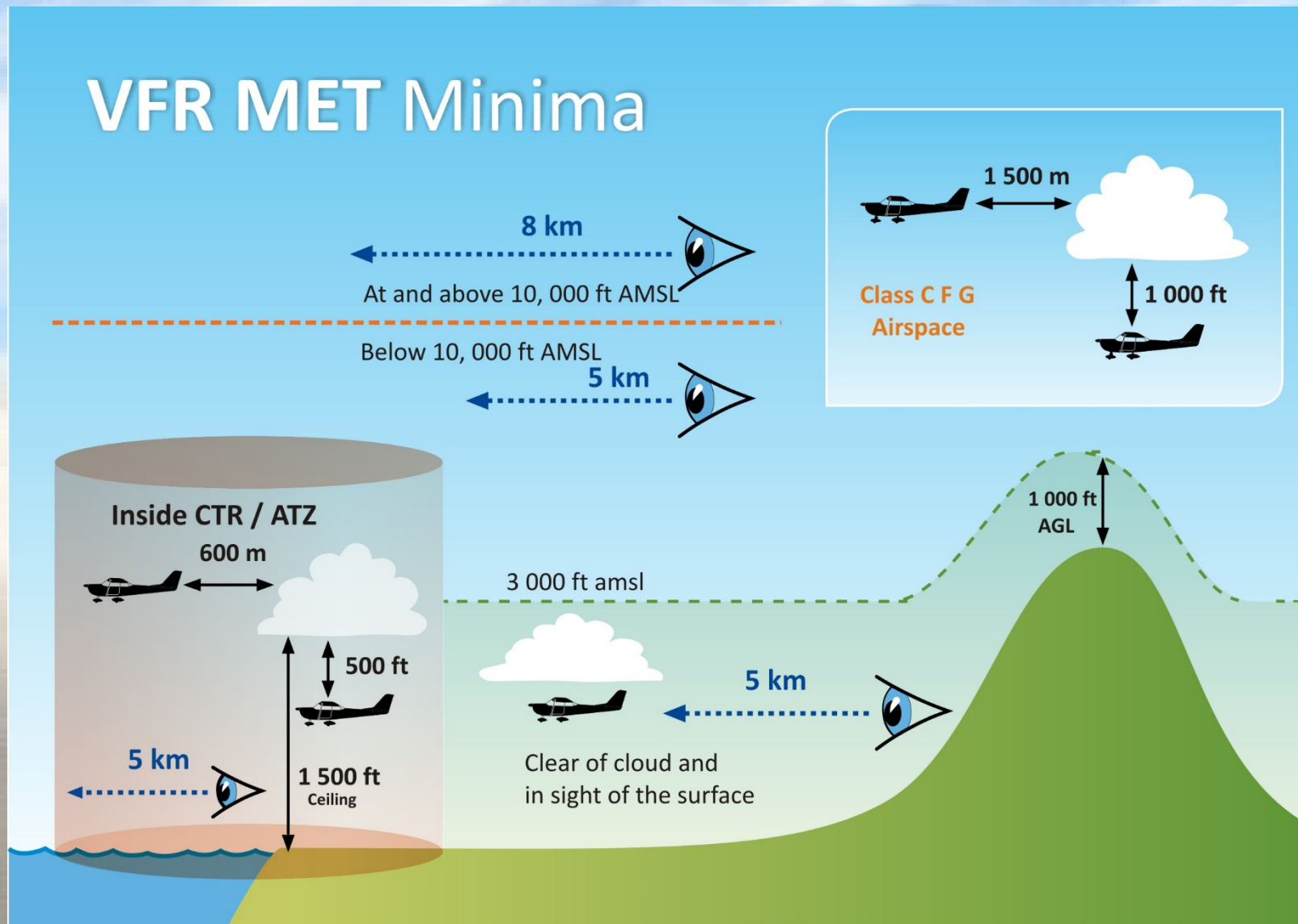




# 4. Weather

A perspective view of a road stretching into the distance under a blue sky with wispy clouds. The road is flanked by fields, and there is a large, bright, hazy area in the center of the road ahead.

# Review VFR MET Minima:



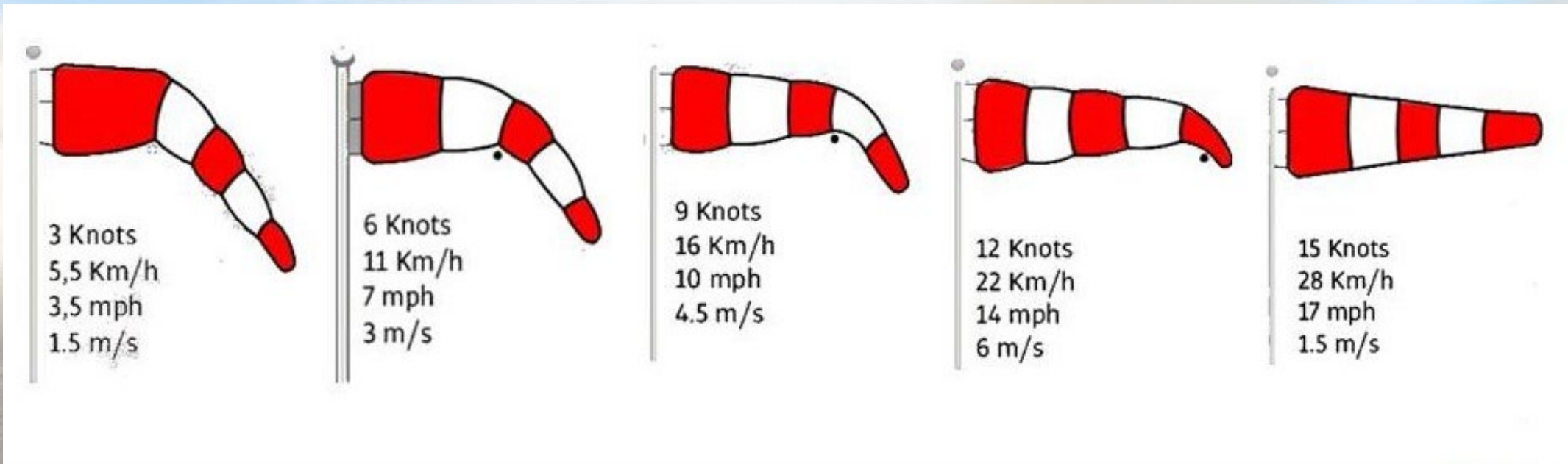
## Cloud Base:

Cloud base = (max temp – dew point) x 410



# Wind Direction & Speed

- At unmanned airports careful **observation**, and **interpretation** of the **windsock** is essential.
- **Pay attention** to a windsock that is not holding a steady direction or speed!



# METAR / TAF:

Pay special attention to:

- **Temperature / Dew point** – The closer they are, fog & cloud are likely to form.
- **Pressure** – Decreasing pressure could indicate convective activity.
- **BCMG** – An expected permanent change in conditions.
- **TEMPO** – Temporary change lasting less than 1hr





## **5. Aeronautical decision making**

## Many accidents include at least one of the following:

- Attempting to squeeze too much **utility** out of the aircraft.
- Pushing the limits of **pilot skill**.
- Trying to have too much fun: buzzing, improper aerobatics.



# Good Decision Making

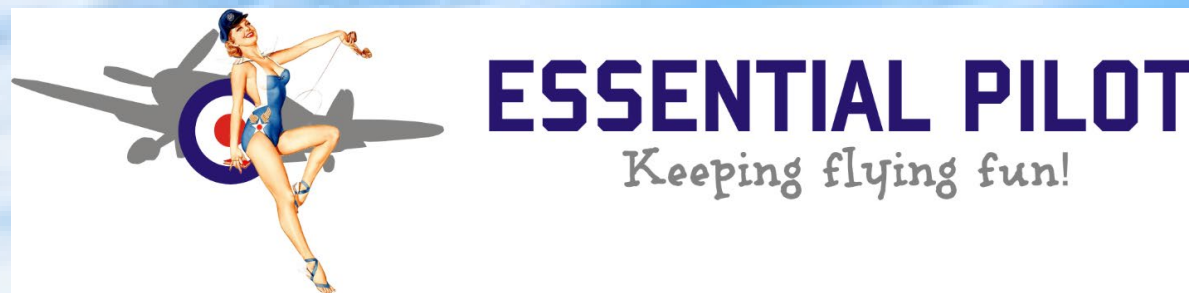
- Most good aeronautical decisions are made on the **ground**.
- Once in the air, enter a **continuous decision making cycle**.



# Good Decision Making

- **Anticipate** – What could go wrong?
- **Recognise** – Pay attention and recognise a problem early.
- **Act** – Evaluate your options and choose one:
  - Continue, keeping a close eye on the problem.
  - Continue the flight, but divert from the plan.
  - Get the aircraft on the ground.
- **Evaluate** - Are you getting the desired results?





**Want to brush up your skills?  
5% discount #rustypilot**

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# Cobus Toerien

ALPA-SA

# SAFETY FIRST AVIATOR CAMPAIGN 2021

22 September 2021

SAFETY FIRST



AVIATOR



**PROP CLEAR!!!**

# Spring Flying - Dust off the rust!





# KICK THE TIRES AND LIGHT THE FIRES



## ANOTHER YEAR IN THE BOOKS

# PRE-FLIGHT CHECK LIST



Check your item



Items in blue are available at Flight 001 store in Singapore Changi Airport Terminal 2

Going on holiday should be as fuss free as possible, whether for business or pleasure. We've prepared this checklist to take the brain work out of thinking what needs to be brought and done before your trip. And of course, if you're missing something vital, you know where to turn to for your one-stop flight needs – Flight 001.

### 1. TRAVEL PREPARATIONS

- Arrange for Pet Care
- Check/Renew Passport
- Confirm Hotel Reservations
- Confirm Tickets (Air, Train etc.)
- Foreign Currencies
- Travel Insurance
- Vaccinations

### 2. IN-FLIGHT COMFORT

- Sleep Mask
- Ear Plug
- Socks
- Neck Rest

### 3. ELECTRONICS AND APPLIANCES

- Alarm Clock
- Camera
- Chargers
- Laptop or Tablet
- Mobile Phone
- MP3 Player
- Travel Cooker
- Travel Hair Dryer
- Travel Iron
- Universal Adapter
- Video Camera

### 4. BAGS AND ACCESSORIES

- Backpack
- Business Cards
- Camera Case
- Cardholder
- Coin Pouch
- Document Holder
- Foldable Bag
- Gym Gear Bag
- Luggage Strap
- Laundry Bag
- Luggage
- Luggage Tag
- Passport Cover
- Make-up Pouch
- Messenger Bag
- Luggage Strap
- Sewing Kit
- Passport Cover
- Refillable Bottles
- Organiser
- Tote Bag
- Pens
- Sunglasses
- Safety Pins
- Umbrella
- Shoe Bag
- Toiletry Bag
- Tie Case
- Wet Suit Bag
- TSA Approved Lock
- Wallet
- Torchlight
- Whistle
- Ziplock Bags
- Watch

### 5. PERSONAL CARE

- Body Lotion
- Breath Spray
- Comb
- Conditioner
- Contact Lens & Solutions
- Cosmetics
- Cotton Buds
- Dental Floss/Toothpicks
- Deodorant
- Facial Cleanser
- Foot Powder
- Hair Clip
- Hair Gel
- Hand Sanitiser
- Hand Soap
- Heat Pack
- Insect Repellent
- Lip Balm
- Make-up Remover
- Mirror
- Moisturiser
- Nail Clipper
- Perfume
- Razor/Shaver
- Sanitary Napkins/Tampons
- Shampoo
- Shower Gel
- Sunblock
- Tissues
- Toothbrush
- Toothpaste
- Towel
- Travel Wash
- Tweezers
- Wet Wipes

### 6. WARDROBE

- Beach Wear
- Belt
- Caps or Hats
- Crease-resistant Clothes
- Cufflinks
- Disposable Briefs
- Ear Warmers
- Gloves
- Long Johns
- Raincoat
- Scarf
- Sleepwear
- Socks
- Slippers
- Spacepak System
- Sports Wear
- Sweater/Jacket
- Swimwear
- Ties
- Thermal Wear
- Walking/Running Shoes

### 7. ESSENTIALS

- Antacids
- Anti-diarrhea Medicine
- Credit Cards
- Emergency Contact List
- Flu Medicine
- Frequent Traveller Card
- Guidebooks/Maps
- Increase Credit Limit
- International Driving License
- Jet Lag Medication
- Fever/Headache Medicine
- Mild Laxatives
- Medicated Oil/Tiger Balm
- Mini First Aid Kit
- Prescription Medication
- Sleeping Pills
- Supplements/Vitamins

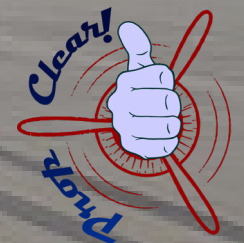


FLIGHT 001



## Prepping Your Plane for Spring Flying

“As one of the coldest winters on record slowly thaws away, we are reminded that it’s time to prep our planes for the spring/summer flying season!”



# Prepping Your Plane for Spring Flying

As any pilot worth his or her wings knows, preparing a plane after a period of inactivity is one of the most important times to conduct a thorough maintenance checklist and pre-flight.

Seek technical advice and assistance!





# Pre-flight Inspection



What do  
you think?







## Who does a Pre/Post-flight Inspection?

- The short answer: YOU 
- Don't shirk this responsibility. It's not just your life you are putting at risk 
  - You put at risk the lives of other crew, pax, ground personnel
  - The financial viability of the company that you work for can be destroyed in a single accident
- What you can expect when deployed on operations
  - AME conducts a pre-flight before handing over to the pilot/s
  - Co-Pilot conducts external pre-flight before assisting with the internal pre-flight





# Understanding how is as important as actually doing it

The key to a good pre-flight is understanding **what** you are checking and **why** you are checking it.

You must know what is normal & abnormal, what is airworthy and what is not





# Review your aircraft's maintenance history:

- Paperwork in order?
- Repairs and preventative maintenance
- Repairs that have been put on hold

**Now is the time to do them!**

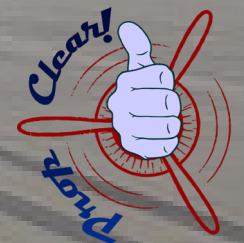




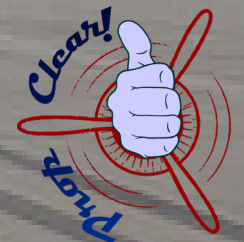
## Change the oil and check the fuel system:

*Important to do a spring oil change and fuel system check*

- Remove the fuel filter, clean and replace
- Check that the fuel cocks are open and master switches are back on.



- ✓ Check the battery and other electrical components
- ✓ Inspect tire pressure and wear
- ✓ Wings, fins, propeller and landing gear
- ✓ Is there any structural damage



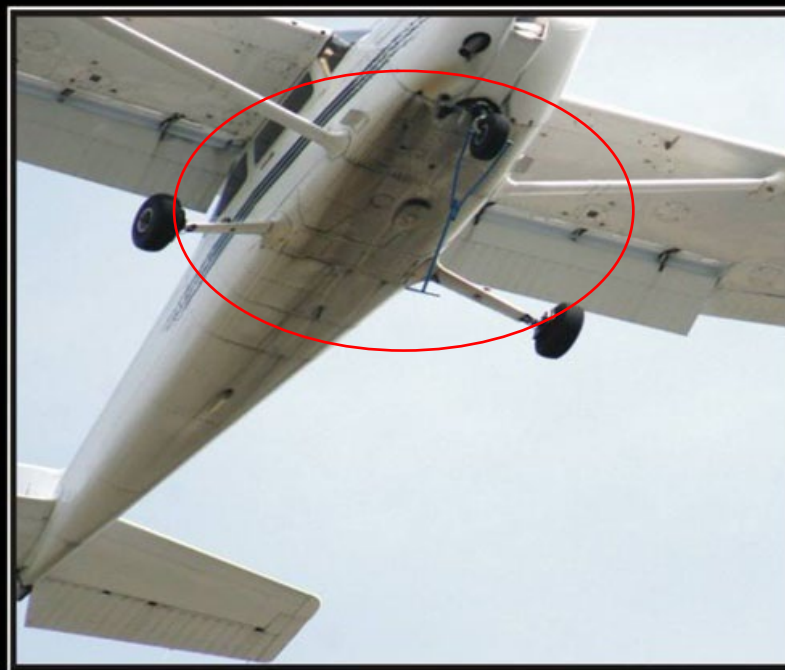


✓ Show it some TLC by a proper wash



Inadequate preflight's result from either  
insufficient training or complacency

I.e: Removal of locking and safety devices



**Preflight Inspections**  
**You failed!**







Great to get up again. Been months! See

“Slow is smooth,  
and smooth is fast!”





They were “100% sure” too.

**CHECK YOUR FUEL BEFORE EVERY FLIGHT.**

Easy to say here on the ground, isn't it! Will you really do it?

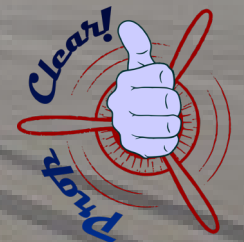


## Capt. Karl Jensen:

### Pre-flight:

Is your flight thoroughly planned for whatever the mission might be?

- Fuel balance
- Tyre condition
- Propeller Check



I could almost hear the pilot thinking:  
"The aileron moved, so it  
must be rigged correctly."

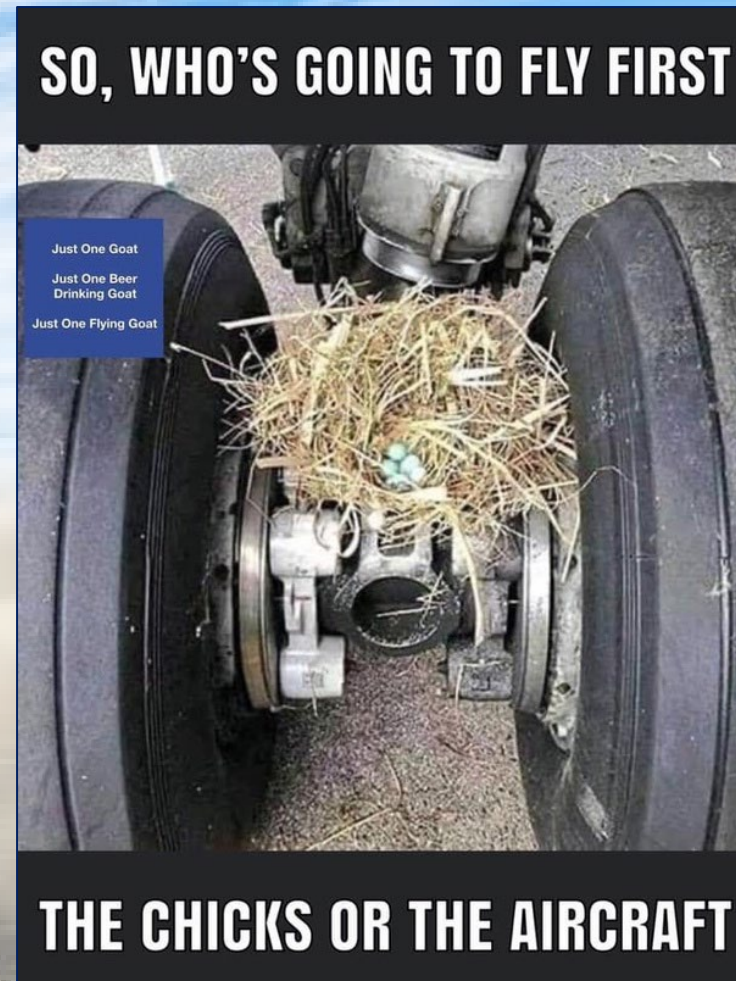




# The Big Decision:

Is the aircraft **safe and legal** to fly right now?

**"Go/No-Go decision".**



## In conclusion

- “Aviation is intolerant of Mediocrity” - Eric Fisher
- The pre-flight inspection is your best opportunity to catch a potentially fatal issue before your flight
- Always aspire to be a professional AVIATOR in all aspects of operations!

Any more suggestions?

Any Questions?







# Santjie White

*ICAO SAR EXPERT*





**SPRING FLYING -  
DUST OFF THE  
RUST**

**EMERGENCY -  
WHEN TO ASK FOR  
HELP AND WHERE  
TO GET IT!**



# Loss of radio contact!



## Stuff Pilots (and Controllers) Say!



*TransGlobal 2, Lincoln Tower  
Cleared for the ILS to  
two-niner*

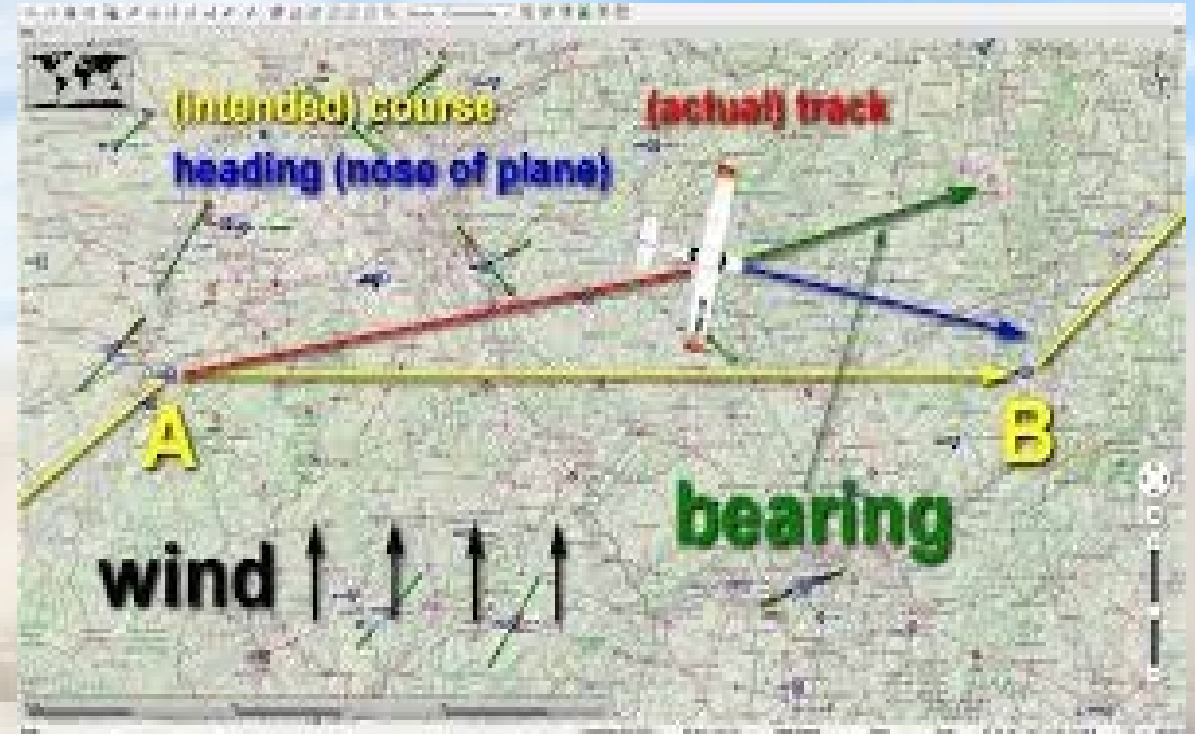


*We have clearance, Clarence  
Roger, Roger. What's our vector, Victor?*

AeroSavvy



Unable to follow the correct track or maintaining the correct flight levels!



"November SEVEN FOUR FOUR,  
Cleared direct ROCKI, Climb Maintain  
Flight Level TWO ZERO ZERO."





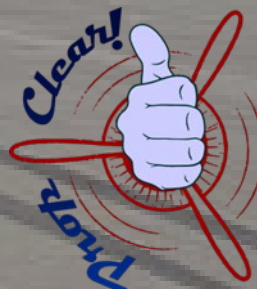
# Not in normal communication!

## Radio Failure Procedures

- Check equipment
- Squawk "7600"
- Transmit intentions in the blind
- Over fly the airport at 500 feet above pattern altitude
- Join pattern of active runway
- Look for light gun signals

Created by Louis A. Kinnard ©2009

## Radio Failure? Squawk 7600





# Unable to use appropriate navigation aids!

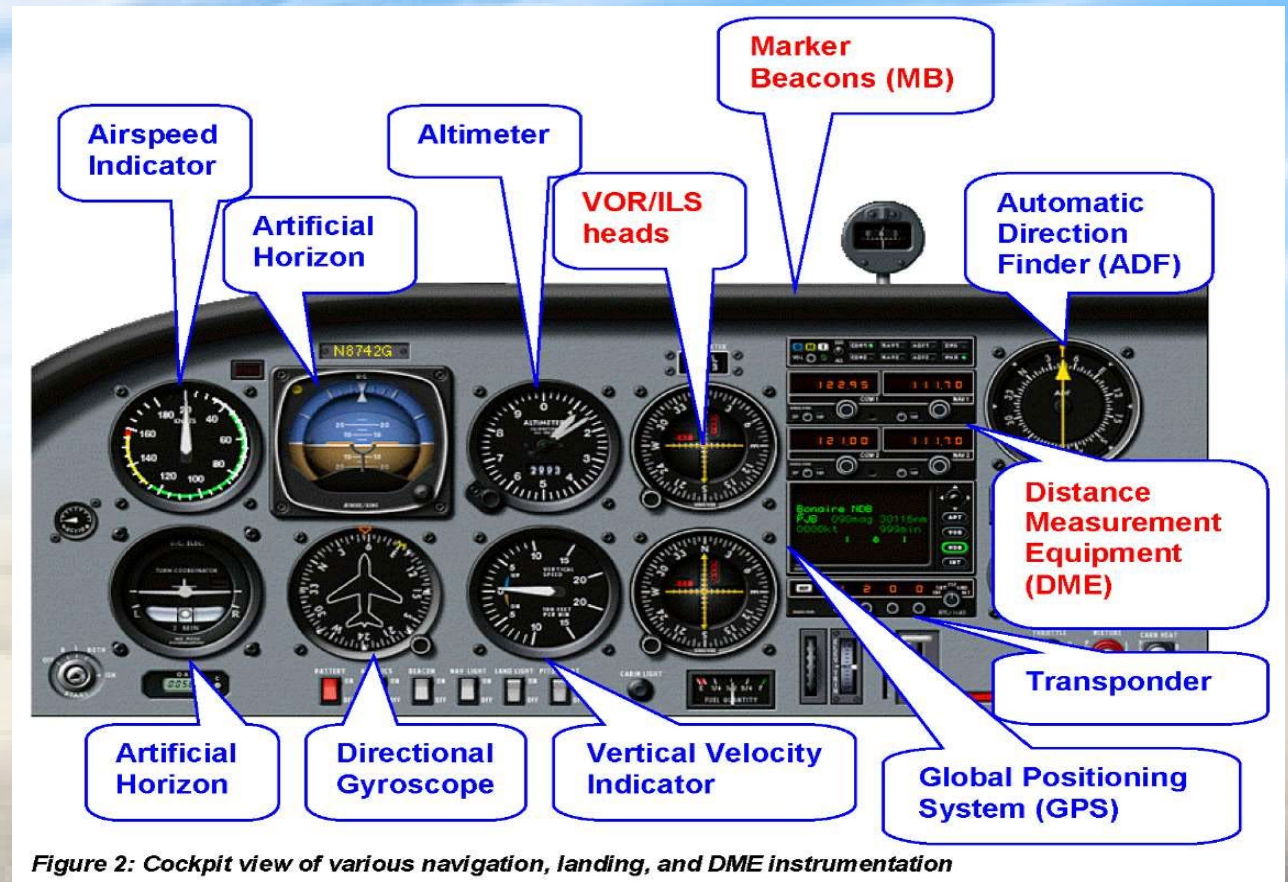


Figure 2: Cockpit view of various navigation, landing, and DME instrumentation



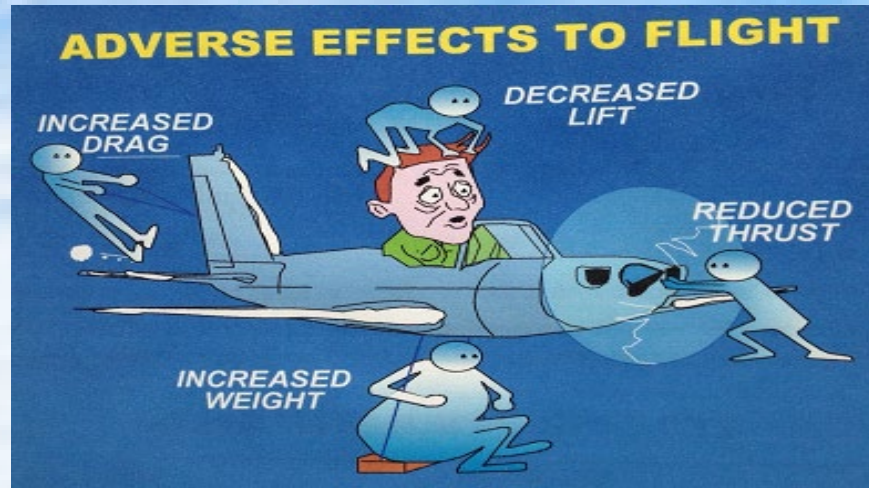
# Experiencing navigational difficulties!



 alamy stock photo



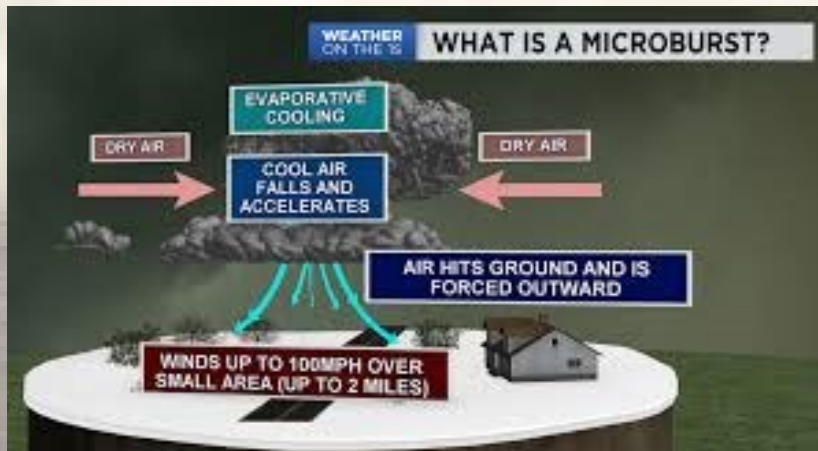
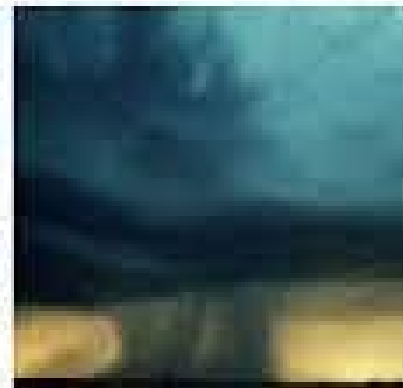
# Experiencing hazardous weather conditions.



**What is turbulence?**  
A sudden, violent shift in airflow

**Causes:**

- Wind
- Storms
- Jet stream
- Objects near the plane (particularly mountain ranges)





Experiencing impaired operating efficiency/technical difficulties, but not to the extent that the flight cannot be completed.

SAFETY FIRST



CS192895





DO NOT WAIT - MAKE THAT CALL TO ATC AND  
SQUAWK!!!!

## EMERGENCY CODES

There are three worldwide codes, which used for notification of ATC about emergency situation on board.

**7700** – Emergency (SOS, MAYDAY);

**7600** – Radio Failure (Lost Communications);

**7500** – Aircraft hijacking;

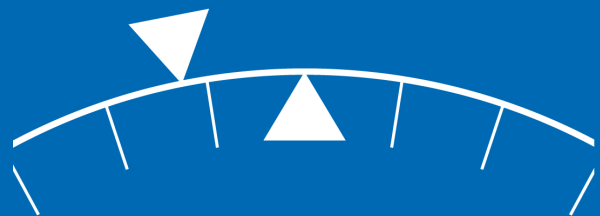


FLY SAFE, STAY SAFE AND IF YOU NEED  
A GUARDIAN ANGEL - PHONE ME, I  
WILL FLY WITH YOU!!!!

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**AERO**  
SOUTH AFRICA

**Q&A**



# Spring Flying: Dust off the Rust!