CAPTAIN KEITH GODFREY

Flying WITHOUT FEAR

Ground Course Notes

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For people attending the

Flyingwithoutfear.com Ground Course

with

Captain Keith Godfrey and the Crew

Contents

Using this booklet

Welcome to your Fear of Flying course. This booklet covers the subjects we discussed on the course. However the course is not limited to these subjects only. To help understand complex technical and safety matters I have tried to present information in a way that is accurate and simple to understand.

The way that I have described the various aspects of commercial aviation here is in the way that seems to have been most helpful to the many people who have attended the flyingwithoutfear.com ground course.

Although a lot of the book has a technical slant it is designed not just to 'inform' you about flying but to build your confidence in flying generally. On our course I start the day by answering questions, as the day progresses I get fearful flyers to answer the questions asked by other fearful flyers and by the end of the day I get everyone to answer their own questions.

I do that because it would be impossible to answer every question that any fearful flyer has, because questions come as the result of experiences. By learning to answer you own questions now, you will be able to do that when you are flying on your own, and when you are feeling stressed. When you can do that…and re-assure yourself at the same time you will have overcome your fear of flying.

Why isn't a flight a part of the course?

The fear you have is with you now… here on the ground. It just doesn't start when you're at an airport or about to board…that's the time when you get evidence of the 'behaviour' that comes with your fear.

Overcoming your fear on the ground by re-structuring your thoughts will enable you to control your thoughts when you go to the airport.

And what's more, while you're away sunning yourself on holiday you'll be able to keep your thoughts under control so that you don't spend your holiday worrying about the flight home.

I hope that you'll not only learn and gain confidence from this book; I hope that you'll enjoy reading and get a new and confident insight to how simple and safe flying really is.

Remember, that although it may be very difficult, you can choose how you feel.

Notes

What I used to think

What I think now

Reason for the change

Why am I likely to stop believing this?

What I can do to make sure I continue to think like this

Hints and tips to myself

The Flying Without Fear ground course

Introduction

Any fear of flying course will introduce subjects and information that are unknown to a fearful flyer. On our course we answer as many questions as needed before we start talking about any aspect of fear or of flying so that there are no nagging worries overshadowing the things we talk about in more detail during the day.

In recognising the amount of information that needs to be thought about this booklet gives a thorough preview of many of the topics that we will talk about on the day of the course. It's also valuable to anyone who wants more information about the subject of flying but perhaps is unable to attend a course in person. This booklet is complete in itself and will be a useful and valuable source of material to anyone who has a fear of flying.

We start with a route map of overcoming your fear. This is important because most people attending a course such as this have a mind buzzing with misinformation myths, fears and confusion about flying. So the first few pages outline the sort of plan you should develop, and dispelling some of the popular myths. Not only will you overcome your fear of flying, you will grow as a person.

Then I'll take you through a flight from when the crew check in for their duty until they finish that period of work.

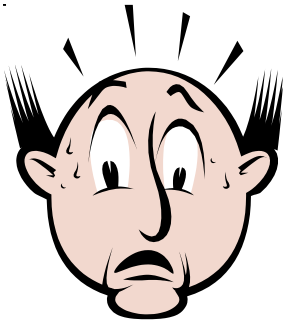
There is information of a general nature of subjects that often come up on our courses. None of it is so technical that it can't be understood!

But it is important for you to understand the general picture of commercial flying and how anything and everything that you have doubts about has in fact already been thought about.

The plan…by the time you get to the end of the book/course is for you to be able to answer your own questions about anything and everything that used to worry you about flying.

An impossible task you say? Not at all because you'll eventually be satisfied that everything is safety driven and even if you can't get the technically perfect answer you'll be sufficiently close as to make no difference.

Fear



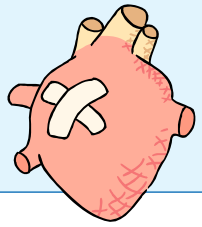
What is Fear?
What are the common Fears?
What you can do about your Fear?

Fear is the reaction to a perceived threat or apprehension about a realistic danger. Anxiety is the reaction to the fear. Fear manifests itself through changes in the body's physiological state.

Those changes are well known to most anxious flyers but it won't hurt to revise them briefly.

Fear brings about these physiological reactions

- Increase in heart rate
- Sweating
- Dilation of pupils
- Rapid breathing
- Diversion of blood from the stomach to the muscles



The most common reasons for a fear of flying are

- A bad flight experience
- A go around
- Noises
- Claustrophobia
- Panic attacks
- Turbulence
- Loss of control
- Increased awareness
- Taking off

And this is what you can do about your fear

- Breath normally or use a breathing technique
- Get information
- Expose yourself gradually to the thing you fear
- Learn a relaxation technique
- Learn a thought stopping technique
- Sleep properly

Your route…
Part 1

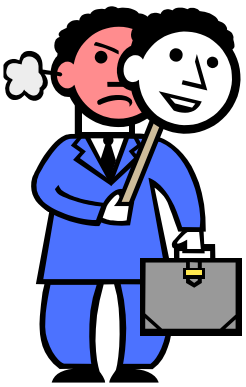
How do you want to feel when you fly?

- ☐ Like the Captain and Crew?
- ☐ Like the Leader of the Red Arrows?
- ☐ You want to go Wing Walking?
- ☐ Take part in Air Racing?
- ☐ Feel a whole lot better than you do now?
- ☐ Feel just a bit better than you do now?

So let's find out what it will feel like to you when you've overcome your fear.

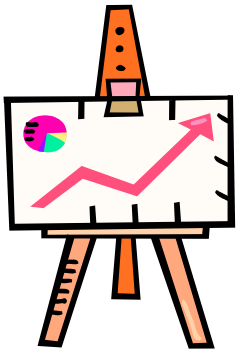
When you have overcome your fear of flying how would you feel in these situations?

	Terrified	Ok	Happy?
Buying the tickets			
Travelling to the airport			
Checking in			
Getting on Board			
Hearing the doors close			
When the engines start			
Taxiing			
Taking off			
Cruising			
Descending			
Landing			
Getting off			



The answers to these questions should define what you want to achieve and then you must map out exactly what you must do to achieve this. Remember the plan isn't to get to the top of the mountain…just get up as far as you can each time you try.

Your route… Part 2



Here are some tips and a map to help you to overcome your fear of flying.

- Define your goals
- Take small steps
- Get information
- Avoid emotive language when you describe flying
- Mark each success by congratulating yourself
- Don't expect a miracle cure

Define your goals

Make a plan

Gain confidence
- By facing your fear
- Pushing your boundaries

Knowledge
- Dispel myths
- Learn the facts

Action
- Develop good habits
- Do positive things

Allocate 10 minutes a day for fear until you can manage without it

Control

Body
- Breathing
- Quality Sleep
- Good diet

Mind
- Un-emotive words
- Thought stopping
- Avoid twisted thinking

THE KEY TO SUCCESS IS ACTION

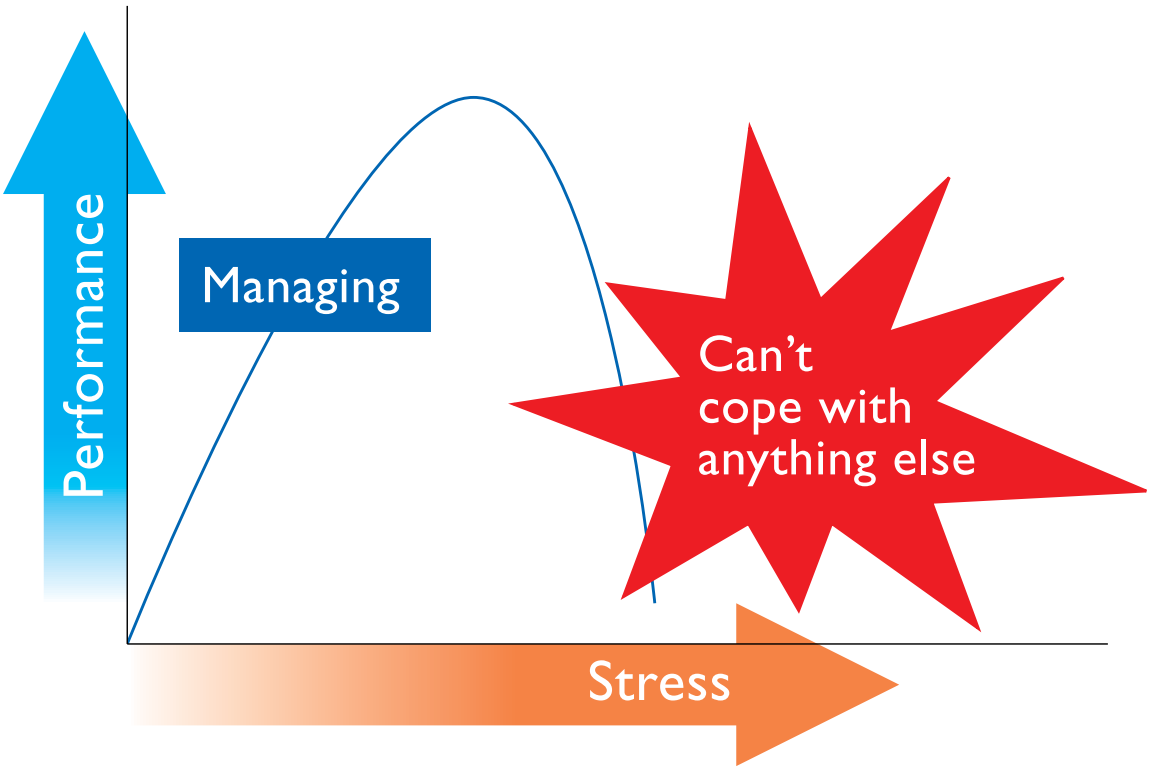
Stress - Yerkes Dodson

This simple graph shows that as your stress increases your performance improves… up to a point and then as stress continues to increase your performance decreases rapidly.

It's important that you recognise that when you think about flying you are in a very high state of stress. If you have to deal with anymore 'problems' the chances are that you will go over the top of the graph and find it difficult to manage even normal things.

It is vital therefore that you try to be as unstressed as possible so that you never 'peak' and that you always have some reserve in you.

This is why thought stopping techniques and breathing routines are so important; they reduce your present level of stress so that you never go over the point where you can't manage.



Your flight

Now we're going to look at some things that are the cause of worry and anxiety to fearful flyers.

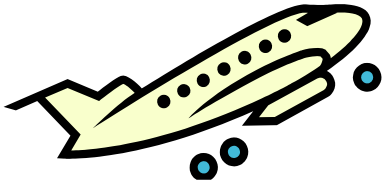
We're going to go through the things that happen before and during a flight but from YOUR point of view. I've met many fearful flyers and the descriptions and explanations that follow are the things that come up time and time again. You won't be affected by all the things in the explanations but I hope that you'll gain confidence in planes pilots and passengers (that's you) as we take off now for your confidence building flight.

We'll be looking at the following things:

- Crew briefing
- Weather
- Fuel
- At the plane
- Taking off
- Climbing
- Cruising
- Descending
- Landing
- Parking

> "Hello Ladies and Gentlemen, this is the Captain speaking, welcome aboard for this short flight. You'll be pleased to know that the weather en route is fine and the landing conditions are excellent, so may I encourage you to relax and enjoy you flight with me today?"

What we're going to do now is go through a complete flight in the way that we do on our fear of flying ground course. The reason for going through these things is to show that in commercial flying nothing is left to chance. There are no surprises in flying; we plan everything down to the smallest detail. One of the points that often arises on the course is where someone has been on an aircraft which has done a Go Around. Most people describe this as having suddenly zoomed back into the sky. *(continue over)*



Their fears are that this was an instantaneous decision made in the heat of the moment and quite unexpected. I explain that far from being a decision taken, as they would say, at the last minute, it was the implementation of a decision that was prepared for when the flight was being planned. There are some occasions when a go around is not expected but that doesn't prevent it from being a routine and simple procedure for the pilots.

The way I explain the go around is to go right back to the training the pilots have when they learn to fly. Then I say that the airline's training supports those techniques, and, that they are regularly practiced and tested every six months. This means that whilst the experience may be unusual and uncomfortable for the passengers…for the crew it's quite routine.

Routine is the thing that I want fearful flyers to believe and have faith in. Fearful flyers believe that everything that happens on a plane could put them at risk. Even the most ordinary events are perceived as dangerous. As I now go through each part of the flight I'm going to encourage you to put aside any worries that you have and let me show you the preparation that goes into every flight. This will show you quite clearly that nothing happens suddenly and that everything is prepared for.

Crew briefing

When an airline offers flights to the public it has to satisfy the authorities that it is competent to do so. Part of the Operators Certificate demands that the crew operating the service are properly licensed and trained and that their Licences are current. This means that both pilots will have been tested in the six months prior to the flight and that the cabin crew are also up to date with their procedures.

Normally the crew will meet up an hour before take-off, or up to 2 hours before a long-haul flight.

They will collect all the information relevant to their flight from a flight planner who is responsible for the administration of that flight. He will supply the crew with the necessary weather charts and forecasts and information about all the airports and facilities they will need on the route. He will also supply information about the route, why it has been used and any significant weather on the route. The crew will be supplied with a fuel plan and information about diversion airfields.

On flights across the Atlantic Ocean the Tracks (Routings) for that day will be notified to the crew in the expectation that they will be using one of them.

The Captain will confer with his or her crew members and decide on the amount of fuel required either accepting the dispatchers figure or asking for more according to his assessment of the conditions. The fuel figure will be passed to the Traffic dispatcher at the gate.

The cabin crew will be going through their checks and discussing the cabin service and answering questions about safety and medical situations. They will normally travel to the aircraft with the pilots.

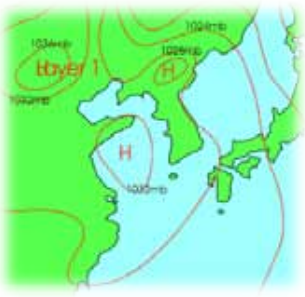
Meanwhile the passengers will be checking in and the Traffic dispatcher will calculate the weight of the aircraft in the way shown on pages 20 and 24.

He will get the total of aircraft weight, fuel, passengers and freight together to find the take-off weight which is then checked against the figure provided by the crew to confirm that the aircraft can take off at that weight on the runway in use.
(see pages 54 and 55)

Let's look at some of the paperwork involved in these parts of the flight. Don't be put off by the word paperwork…I've simplified it so that you can see exactly how much planning and preparation goes into each flight. And this is why these split second decisions you think the crew are making only happen in Hollywood…not the real world.

Here are the first few bits of the paperwork given to the crew by the Flight Planner.

The weather maps



The first map the pilots will study is the overall weather situation on the route. This will allow him to confirm that the planner has made the correct allowances for headwinds or tailwinds and that the route is avoiding areas of very bad weather. It will also give the crew an idea of what the weather will be like at the destination at the time of arrival. If you think how much the weather changes on a normal day, then getting the right forecast for a destination 5000 miles away is important so that the correct amount of fuel can be loaded. We shall see how the amount of fuel needed is worked out shortly.

The planner will give the crew the actual and predicted weather reports from all the airports that may be needed for diversions en-route, diversions and at the destination. Unlike listening to the TV weather people these forecasts are coded and give only the information important to flying a plane.

Here is a sample code of what a pilot will receive and whilst it looks mysterious to you it's as easy to read as something like a bank statement…though without the fear that comes with them!

GATWICK LONDON	
LGW	SA181020 VRB03 KT 9999 FEW035 09/04 Q1021
EGKK	SA180950 VRB02KT CAVOK 08/04 Q1021
	FC180900 1810191 8004KT 9999 FEW030
	FT 181206 15005KT 9999 FEW040 BECMG 0104 6000 RA BKN0005
	PROB30 TEMPO 0306 1500+RA BKN002 BKN030CB

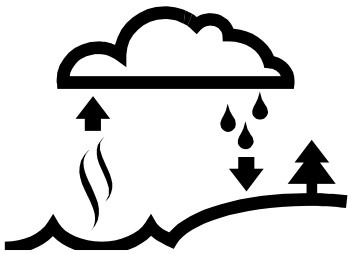
Even years into my retirement from those few lines of code I can picture what the weather is like, what it's going to be like and the chances of any changes. As a pilot I look for the visibility the cloud base and the wind because those are the restrictions on landing

GATWICK LONDON	
LGW	SA181020 VRB03 KT 9999 FEW035 09/04 Q1021

London Gatwick Surface actual weather at 20 past 10 on the 18th
VRB Variable wind direction at 3 knots unlimited visibility little bit of cloud at 3500 feet
Temperature 9 degrees C Dew point 4 degrees C and the local pressure 1021 millibars.

Then I'd look at the FC (ForeCast) part which give me the forecast weather first from the hours between 10:00 to 19:00 and from 1200 until 0600 the next day.

So armed with this information I will not be surprised what the weather is when I approach to land. If the forecast was saying low cloud and poor visibility I'd prepare for a Go Around so that at the time I need to decide…I can just go straight into the routine. And later I'll show you why I'd be familiar with what to do on any occasion that I'm not able to land. (page 34)



A quick note on how clouds form. Hot air rises. Air over towns heats up more than the countryside around it. When it's hot enough it'll form a bubble and rise. When the bubble gets to a height where it is so cool that the water in it condenses (like warm air on bathroom tiles) it forms a cloud. An average size cloud has the equivalent of a bath tub of water in it. If the cloud gets bigger the condensation falls out of it as rain. If it's cold enough it'll become snow, if it's big enough and cold enough it'll make hailstones. If warm air rises quickly it'll make bubbly clouds if it rises slowly it'll make flat clouds.

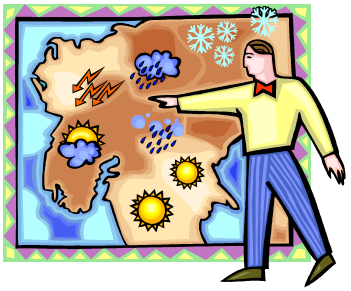
Now that I know what the weather is like I need to decide how much fuel to have loaded onto my plane. Although the Flight planner will have calculated what I need it is the Captain's legal responsibility to take enough fuel for the flight.

Meanwhile here are a couple of questions for you. If you get a flat map and draw a line between two places say London and Mumbai and then get a Globe and put a piece of string between the two places they seem to pass over different places.

Which is the shorter of the two routes, but which one would a plane take if it were flying between the two places in a direct line?

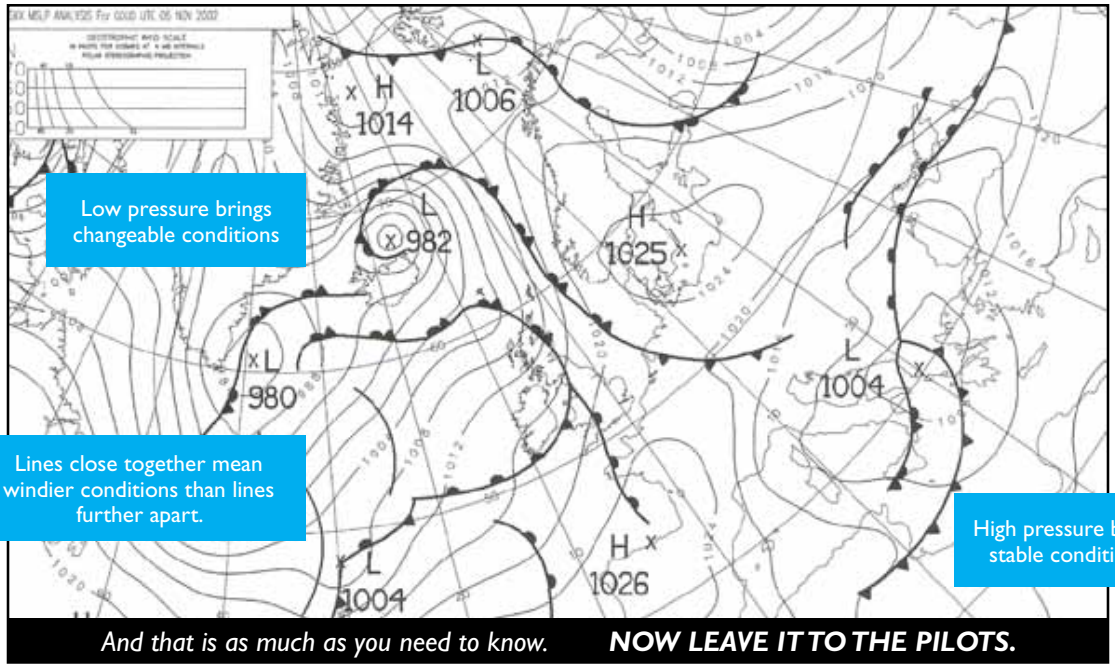
Why does a plane carry more fuel to get somewhere when it flies into the wind, than if there were no wind at all?

Don't do your own weather forecasting



I know that one of the things that anxious flyers do is to check the weather before they fly. I have to say that this is NOT necessary…the pilots are adequately trained to do this for you. What's more they've been doing it since day one of their flying career. They pick up the weather about an hour before they fly because IT IS RELEVANT TO THE FLIGHT. They do not check the weather days before their flight because it is always changing. Now to see if you know enough about the weather to help the pilots, here is a short test.

1	What is the crosswind component if the wind is 30 degrees across the runway and at 30 knots?
2	Is this outside the limits?
3	What is the minimum RVR for take-off?
4	The icing level is 3000' should you make any allowance for this?
5	An area of intense low pressure is located half way along your route what will you need to do about that?
6	What minimum cloud base will you accept at your destination and alternate?
7	Your destination airport is SNOCLO what effect will this have on your cruising altitude?



And that is as much as you need to know. ***NOW LEAVE IT TO THE PILOTS.***

Thunderstorms and lightning

Everyone is surprised when I tell them that I have been struck by lightning thirteen times. I've no idea whether this is more or less than average for a pilot. Doesn't really mean any more than how many clouds I've seen while flying. The simple fact is that lightning doesn't cause an aircraft any harm.

From an electrical point of view the plane acts as a Faraday's Cage (named after the discovery made by the 19th century scientist Michael Faraday). He discovered that if something is inside a 'cage' of metal then any electricity hitting the outside cannot does not and will not pass inside and cause any harm to anything inside.

Now we have to introduce the influence of the media…and their photographs of damaged aircraft. In thunderstorms and certain conditions, hail stones form and very very occasionally dent parts of the aircraft structure, but never to the extent that the plane is in danger. However what the newspapers often show is the aircraft nose severely battered and damaged … causing alarm among its readership.

The reason that the nose cone gets damaged is that it is made of thinner metal than the main part of the aircraft and the reason for this is that the weather radar is located in the nose cone and would not work if the metal were too thick. How simple.

And you'll be pleased to know that the nose cone is not pressurised nor is it part of the main structure of the plane.

Many people believe that they have flown through a thunderstorm. The fact is that no airliner is allowed to fly closer than 20 miles to the centre of a storm. Storms are easily detected on the plane's weather radar…(the radar has to be serviceable for an aircraft to fly with passengers).

The reason that people think that they have flown through a storm is simple. The air around a storm is usually turbulent…not always, but usually, so if the plane is in cloud and it's turbulent and the pilot has mentioned thunderstorms then it's normal to put two and two together and make ….five. Of course at night the millions of candlepower of light that is produced reflects through the cloud even though the storm may be 50 miles away. So I can understand why passengers get the impression that they have flown through a storm.

In turbulence put on your seatbelt and tighten it as much as you can.

Fuel

There's a saying among pilots that says the most useless thing in the world is fuel that's left in the bowser.

Certainly once upon a time before the fuel prices rocketed in the 1970's most pilots would load as much fuel as possible. Now with modern navigation systems and very reliable and efficient engines fuel requirements can be calculated to the nearest Kilogram. Air Traffic Control services are now streamlined so that aircraft spend as little time as possible holding at their destination. And more and more frequently aircraft make direct routings across areas where there were once lots of changes of route. The fuel savings achieved by 'direct routings' is about 10 %.

How is the fuel requirement worked out?

Almost every fearful flyer we have on our course can work out the sensible amount of fuel that a flight should carry. The surprising thing is that they always UNDER estimate the fuel we actually carry.

Here's what most fearful flyers would want to have on board.

1. Enough for the journey.
2. Plus a bit for waiting.
3. Some more in case we divert.

…and the bit they never think of a percentage of all that fuel for a 'just in case' situation.

And what they don't realise is that we must have about half an hour's fuel remaining when we land.

Here's what we call those amounts officially,

1. Trip Fuel
2. Contingency Fuel
3. Diversion Fuel
4. Final Reserve Fuel
5. Taxi Fuel

It sounds complicated but it's no different to filling up your car…except we very rarely fill the tanks completely.

Here is a simplified Fuel plan for a plane flying from Glasgow to Luton

PLAN NUMBER 1234	GLASGOW TO LUTON SPEED M.80	DATE
Non stop computed at 1515 for departure at 1900		
Fuel Plan Boeing 737-800 Engine type RR		
Take off weight 053829 KG Landing Weight 51245 KG		
Distance 389 NM WIND Plus 25 Knots		
1 Trip	2385	1 Hour 1 min
2 Contingency	200	5 min
3 Diversion Fuel LONDON STANSTED	750	19 min
4 Final reserve Fuel	1100	30 min
5 Taxi Fuel	110	
TOTAL REQUIRED	**4545**	**1 Hour 55 min**

For every extra 1000 KG Difference in weight from this plan add or subtract 24 KG

Valid up to + or - 3000 KG

Route Glasgow New Galloway Carlisle Manchester direct London GW

ALTERNATE DATA	
Stansted	Cruise Height 11000 feet wind tailwind 7 knots distance 79 Miles
East Midlands	Cruise Height 12000 feet wind tailwind 4knots distance 113 Miles
Gatwick	Cruise Height 11000 feet wind tailwind 5 knots distance 135 Miles

Here is the final load sheet for the captain

Aircraft Registration and route

```
H E E T              CHECKED          APPROVED      EDNO
S IN KILOS                                          02

ROM/TO FLIGHT      A/C REG VERSION      CREW    DATE     TIME
OU AMS CB3884/25   GBWIR   00C31M       02/2    25OCT98  1652

                      WEIGHT              DISTRIBUTION
OAD IN COMPARTMENTS     428      5/  126   6/  302

ASSENGER/CABIN BAG     2373  18/  9/  3/  1 TTL  31
                           FCY   0/  0/ 30 SOC   0/  0/  0
                           BLKD 0
**************************************************************
'OTAL TRAFFIC LOAD        2801
)RY OPERATING WEIGHT      9097
:ERO FUEL WEIGHT ACTUAL  11898 MAX  12610      ADJ
'AKE OFF FUEL             1670
'AKE OFF WEIGHT  ACTUAL  13568 MAX  13990      ADJ
'RIP FUEL                  640
.ANDING WEIGHT   ACTUAL  12928 MAX  13230  L   ADJ

                          **********************************
3ALANCE AND SEATING CONDITIONS *      LAST MINUTE CHANGES
)OI      59.4   LITOW   77.0   *DEST  SPEC    CL/CPT # - WEIGHT
.ILAW    77.0   MACTOW  28.7   *
MACLAW   28.3                  *
'RIM BY SEATROW                *
35.B5.C12.D6.E2.               *
                               *
                               *
                               *
UNDERLOAD BEFORE LMC      302*          LMC TOTAL
**************************************************************
LOADMESSAGE AND CAPTAINS INFORMATION BEFORE LMC

WING TANK FUEL  :    1670

-AMS.18/9/3/1.T428.5/126.6/302.PAX/0/0/30.PAD/0/0/0.BAL/6/80
.CSU/5/26
SI BW9020 BI#56.1
**** PL TEXT ADDITION ****
CAPT MUGFORD
ACTUAL BAG WTS USED
NOTOC/NO
 PILOTS CERTIFICATE.  I AM SATISFIED THE LOAD IS OF PERMISSIBLE
 WEIGHT SAFELY DISTRIBUTED AND SECURED FOR FLIGHT
 SIGNED                  CAPT          DATE          TIME
 I HEREBY CERTIFY THE LOADDISTRIBUTION TO BE IN ACCORDANCE WITH
 THE RELEVANT TRAFFIC INSTRUCTIONS
 OFFICER RESPONSIBLE FOR TRIM
AMS   FRE     0  POS       0        BAG   26/  322   TRA      0
1652Z
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Passenger seating information

Weight of aircraft at TAKE OFF LANDING

Captain 's signature for accepting aircraft according to the information on this certificate

There's no need for you to worry that the plane is too heavy or that the baggage hasn't been accounted for or that the pilot doesn't know how much fuel is on board….it's all here, checked, double checked and checked again… according to the rules and regulations.

At the plane

At the plane each member of the crew will set about their individual tasks according to the position they hold. Normally the cabin crew will check all the safety equipment while the Captain inspects the outside of the aircraft. The co-pilot will be setting the cockpit for starting the engines and the departure procedure.

When the Captain boards he or she will read and check the aircraft Technical Log which records any engineering work performed on the plane and checks that the engineer has signed the Log to indicate that the plane is serviceable and ready for flight. The captain will check that the engineer has checked the amount of fuel loaded and will sign the appropriate part of the Log.

The crew will be at the aircraft approximately 45 minutes before departure. At certain intervals up to the departure time various things will have to be completed. For example re-fuelling will be completed before the passengers board…or special procedures used if it takes place while the passengers are boarding…for instance the seat belt sign would NOT be on, all exits would have to remain clear and so on.

When all the checks are completed the Traffic Dispatcher will confirm with the Senior Cabin Crew member that the number of people actually on board agrees with the number checked in. The refueller will have confirmed with the pilot and the Dispatcher the amount of fuel on board and then the pilot will check that against the amount required for the flight.

The co-pilot will then load the flight computer with flight information i.e. amount of fuel on board, the amount calculated as reserves so the flight computer can monitor the fuel used. The pilots will then receive and sign the 'Ships Papers' and call Air Traffic Control for permission to start the engines. When the doors are shut the engineer will do his final check of the exterior of the aircraft and call the Captain 'Clear to Start engines'

Starting engines is just like starting a car engine except that it takes longer because they're bigger.

Engines

Some people find the thought of flying on a plane with propellers more worrying than flying on a big plane like a jumbo. They feel or believe that those engines are older and therefore less reliable than the other engines. However propeller engined planes, except for a tiny minority, have jet engines with propellers at the front.

In fact the propeller has almost the same function as the enormous turbine that you sometimes see being blown around when you get on board a jet plane. The big fan or propeller throws backwards a large amount of cold air. On a jumbo that air goes through the engine, is heated up by several hundreds of degrees and is squirted out the back through a much smaller hole.

The advantages of propellers are considerable where a lot of passengers need to be carried over a short distance. Most short routes begin and end at small-ish airports with short-ish runways. It's necessary therefore to get the best performance from a plane to carry the passengers and freight from these runways. The propellers are very effective at low speed because, like a fine wood screw they cut their way into the air to give maximum acceleration and climb performance, which means they can get up high relatively quickly and benefit from the fuel efficiency of the jet at cruising altitude.

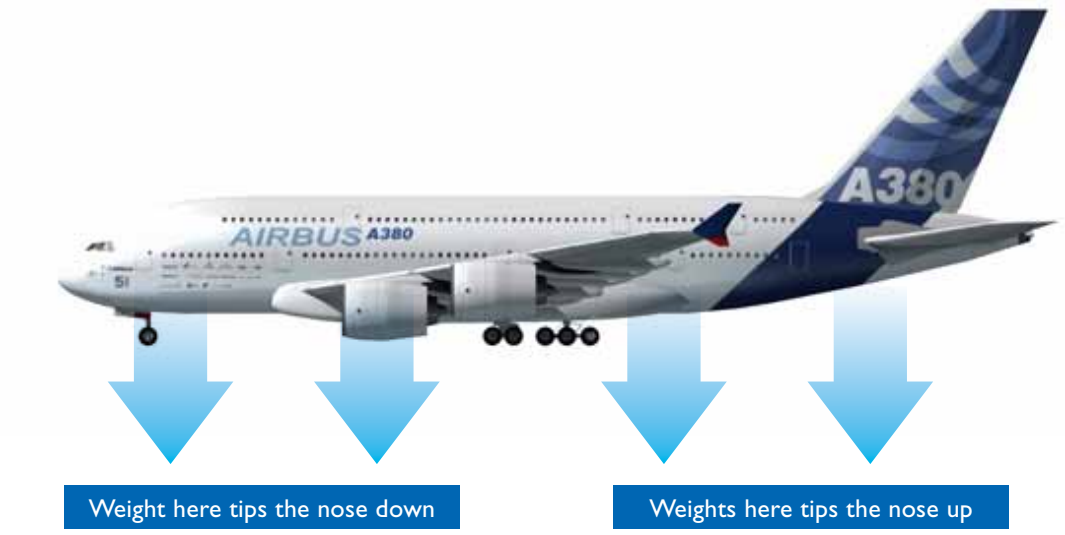
The principle of jet engines is very simple the big hole at the front either sucks in air or, air is forced into it by forward movement. Once inside the engine 'core' it is heated up which increases its pressure, then it finds its way out the back through the small hole. The principle is like a balloon being inflated and then released… the rush of air out the hole makes the balloon (engine and plane) move forward.

Load sheet

Just as these children have more fun when the se-saw is balanced so a plane a plane flies better when it's properly balanced. But how do we balance something as big as a Jumbo jet? First of all we start at an advantage because when it leaves the factory it's already been balanced properly and it's been weighed too!

When an airline fills it up with fuel, passengers and freight they just have to make sure it's loaded according to the manufacturer's rules. They supply a chart that says "if you put fuel in this tank it will unbalance the plane this way…so you need to re balance it by making sure the passengers are located here here and here" The next rule will say if you have this number of passengers sitting behind the wheels you'll have to have this number sitting in front of them. And so on…

But of course it's not quite like that it's calculated much much more accurately the work for the dispatcher. He or she just enters the weight of the passengers, fuel or freight and moves the balance line according to arrows which say the point of balance is here, and, as more passengers, fuel or freight are added so the balance point can be calculated. It's just like adding more kids on to the see saw. If you put one child on one end and two on the other…to balance it you have to move the two children in until it balances. Simple as that.



Load sheet - continued

Basic Weight

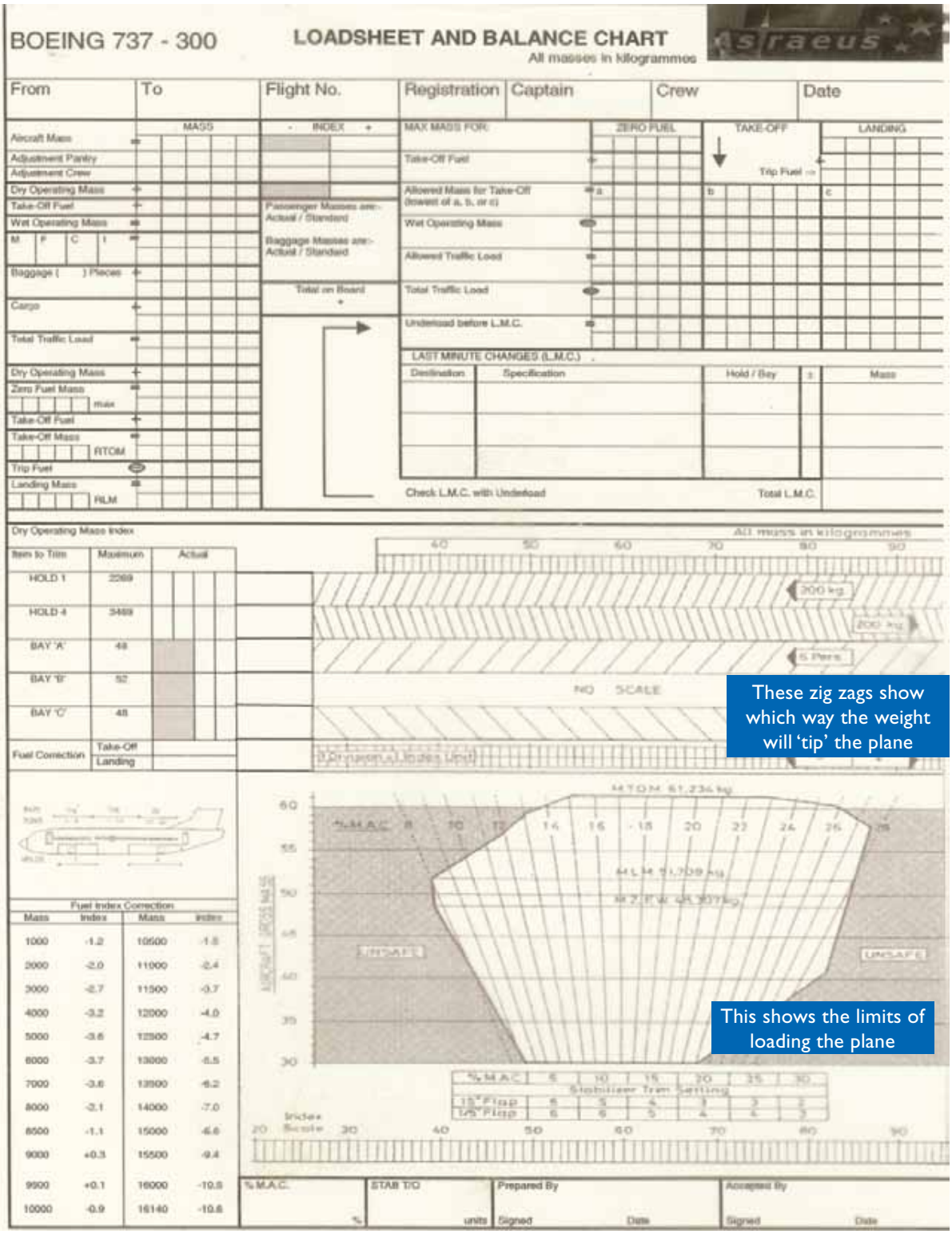
Passengers

Freight

Fuel

Take-off and landing weights

These boxes show how much freight is in each hold



These zig zags show which way the weight will 'tip' the plane

This shows the limits of loading the plane

Dispatchers Signature

Captain's signature

Taking off

So many anxious flyers say that the take-off really worries them. The reasons are obvious…it's the psychological point of no return for them and it's a noisy business. But after a few explanations and watching our videos a few times most people manage to overcome their worries about take-off.

They say the take-off is 'uncomfortable' because:

1. It's noisy
2. It's bumpy
3. It's straining the engines
4. It's the most dangerous time for the plane

Fortunately only the first two are correct. The reason it's noisy is simple, because the plane is designed to travel at 600 miles an hour the noise from the engines surrounds the plane and isn't 'blown away' by the slipstream. The other thing that makes take off unnerving is all the bumping around on the runway…which incidentally adds to the noise because of the grooves in it.

If you think that the 'suspension' on a plane has to manage your plane when it lands at 140 miles an hour you wouldn't be surprised to hear that the springs are quite stiff. During take-off then it feels more like a sports car than a limousine.

High up on the list of worries during take-off is that the engines are straining. My question is: Why on earth would anyone design a plane worth millions of pounds that strained its engines on take-off?

Surely it would be worth designing a plane that didn't do that? And that of course is exactly what is done. It just doesn't seem that way to you! The reality is that a plane usually limits the power on take-off to about 90% of the maximum available.

And to imagine that the plane can keep going up and up until it tips over is like thinking that a car will go round in circles just because you steered to the left or right. They just wouldn't make planes that do that. And what's more

- There's always enough runway to stop.
- There's always enough runway to take off.

And we've done all the checks to be certain.

Climbing…and then that feeling of falling!

Before take-off a plane will be allocated a height to climb to. It's normally about 6000. This allows Air Traffic Control to let aircraft that are approaching the airport descend to a height where it can prepare for landing without being obstructed by departing planes. The plane will level out and stay at that height until it is given clearance to climb higher.

As it levels out you will think that the aircraft is falling. This is an illusion. It's caused by several things but the main one is the sudden reduction of engine noise. But if you think about it when you've climbed a hill in your car you ease off the gas or accelerator so that your car doesn't suddenly speed up. Why should a plane be any different? When a plane stops going 'uphill' it has to reduce power too. This is the only time in flight that a plane will make such a large reduction in power. So if you DIDN'T notice it you'd be the odd one out. Because I'm a pilot I expect it to happen, so it doesn't alarm me…and of course I know why it's happening. It's normal to me but unusual and unexpected to you the first time you experience it.

Here's why it feels as if the plane is falling:

- Reduction in noise.
- Reduction in rate of climb to zero.
- Reduction of nose angle.

When the plane levels out you will feel as if you are being tipped forward as the nose lowers, because your weight will have been on your back and your bottom. You will also feel lighter than usual because the plane will stop going up but you will continue to go up..and if you are kept in place by the seat belt …your tummy and some other organs will keep going up because they are floating around inside your body. These feelings are just like the ones you get as you go over the top of a roller coaster ride.

After this the plane will probably climb on up to its cruising height…which will take about another 20 minutes or so. Then you can settle back to enjoy your flight if you haven't already done so and enjoy the meal service.

Cruising… or how planes fly

Lots of fearful flyers are happy once the plane is up in the sky flying along. And there are lots of fearful flyers who dislike this bit so much that they can't even think of leaving their seat...let alone moving around or visiting the toilets.

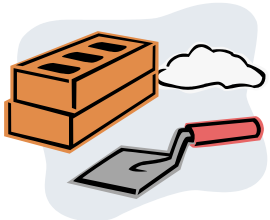
The second group doubt the fact that a plane can really fly. They look out and wonder why and how it's all possible. I have to say that I think a lot of us do that…but we do it because we are amazed how clever we humans are to have achieved such a thing. A few of important facts to start with:

- There's no magic involved
- There's no luck involved
- There's no mystery about it

And here are some things that you must say to yourself about flying.

- Planes don't defy the laws of gravity… they use them
- Planes use the laws of gravity, physics, engineering and mathematics
- Laws don't change…that's why they're Laws

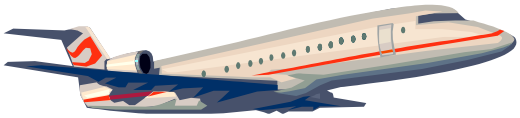
Here is a brick.



Here is why it doesn't fly too well.

- It's not built to
- It's the wrong shape any way
- It hasn't got wings

Here is an aircraft



Here is why it does fly well.

- It's built to
- It's the right shape
- It's got wings

And that's all there is to it. What evidence do you have that a plane shouldn't be able to fly? Why do boats float? Suppose you couldn't see water…what a strange old thing mucking about in boats would look. Suppose you could 'see' the air like a jelly, how do you think planes floating through it would look?

Air Traffic Control

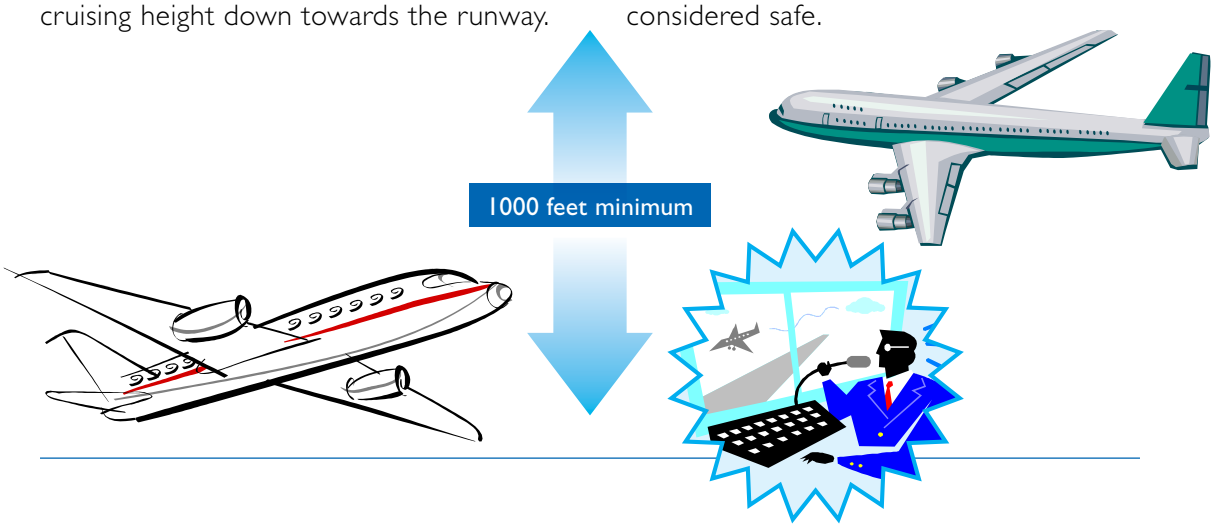
Air Traffic Control (ATC) is responsible for the safe conduct of flights under their control. There is only one person who has more responsibility for the safety of the plane and that is the captain; however the procedures are that the captain must obey the instructions of ATC. At major airports the captain must obtain clearance before starting engines, taxiing taking off and any subsequent part of the flight until the engines are switched off after flight.

Each part of the flight is allocated to a different controller and a different geographic area when necessary. The controllers at an airport will probably be in the control tower. When the plane has taken off it will be handed over to an 'Area' controller who will give clearances and instructions to the pilot to keep it clear of other aircraft by at least 5 miles horizontally and 1000 feet vertically. As the plane passes from one place…say London to Paris one controller hands over to the next one on the route…all the way to the destination.

At the destination subsequent controllers allow the plane to descend from its cruising height down towards the runway.

Around an airport the airspace rises from ground level up to about 5000 feet. Other bits of airspace are from that height up to 30,000 feet or more. Finally away from the airports but connecting them are the air corridors which go even higher. These blocks of airspace are reserved solely for aircraft on flight plans that are controlled by ATC. No other aircraft are allowed into them.

There is no such thing as an near miss … this is a media expression used to spice up a story. The correct expression is Air Prox meaning that in the opinion of a pilot or controller two or more aircraft have been closer to each other than was considered safe.



Descending

From the pilots point of view descending is just a matter of reducing the power from the engines allowing the nose to go down by about 2 degrees and leaving the rest to the laws of science. If the plane doesn't have enough power from the engines to pull it along and get sufficient airflow over the wings to keep it flying at a constant height, the pilot must allow the nose to go down so that it maintains speed.

The combination of less power and same speed means the plane will go down. During the descent the plane will leave its cruising height and go all the way down to landing in a continuous descent with only one or two occasions when it will level off before approaching to land.

To lose height more quickly an aircraft doesn't usually increase its speed but will use air brakes on the top of the wings to 'spoil' the otherwise smooth airflow so that the plane is less streamlined. We never use the technique referred to by fearful flyers as 'plummeting'

And 'plummeting' is an expression that you are not allowed to use from now on!

From the start of the descent all the way to parking the plane, everything is strictly controlled by a series of Air Traffic Controllers who watch the aircraft on radar as it passes through each area as the plane descends approaches and lands.

Before the aircraft descends towards its destination, the crew will have informed its company of its expected time of arrival so that all the ground equipment will be in place to deal with the passengers, unload the freight and prepare the aircraft for its departure.

On a short haul flight the aircraft will be ready to depart within an hour. A long-haul flight will be ready to depart within two hours.

During the wait on the ground the aircraft will undergo some engineering checks that are part of the maintenance schedule that the plane requires.

Landing

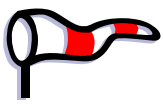
There's a common mis-understanding amongst the public that aircraft are 'talked down' by air traffic controllers. I know that many anxious flyers I meet get some sort of re-assurance from the thought that if all else fails the controllers can bring the plane in. It's one of those myths of flying that never gets corrected.

The purpose of the controllers is to ensure that aircraft are safe from other planes around them and that they follow the prescribed routes for taking off during their flight en route and then at the destination. The pilot always has total responsibility for what the aircraft does and the routes followed.

Instrumentation on board allows the aircraft to fly so accurately that even when the runway is invisible due to weather the aircraft can land automatically on a spot on the runway within a few feet regularly on each and every landing.

It's quite easy to land a modern jet airliner. As long as the Flaps are set in the correct position and the wheels are down there's not very much else to do except raise the nose at the right time and keep the wings level.

As the plane gets close to the runway (about 60 feet above it) the cushion of air under the wing gets squashed between the wing and the runway…this means that conventional aircraft like the Jumbo will land more softly than a plane with high set wings even though it's 20 times heavier.



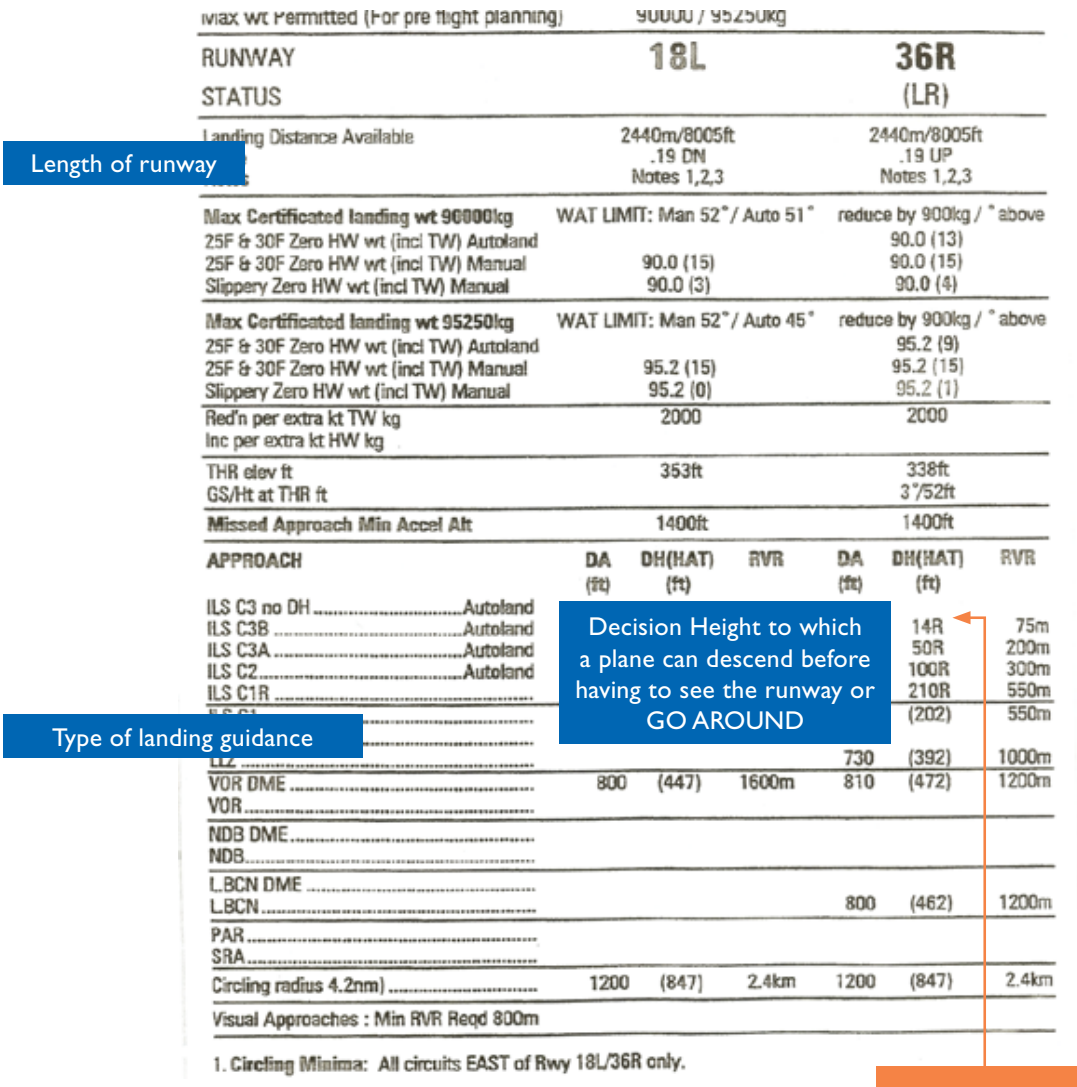
Sometimes people tell me that the plane they were on was too fast, or dropping too quickly and other emotive descriptions. These things cannot be assessed from anything other than the instruments in the cockpit. Everything else is imagination caused by the senses being confused.

When aircraft do hard landings, as you might describe them, this is probably because they're landing on a wet runway and has the effect of squeezing the water out of the tyres so that they can grip the runway for more effective braking.

How we know if the weather is good enough to land

This page is a part of a manual which has every aiport that an airline's plane is likely to land at. It shows the runways at the airport…in this case one that runs North to South numbered 18L and the same runway in the opposite direction 36R. Under each runway is the information regarding that particular runway. Including the maximum weight it could ever land at and all the variations of wind and surface condition that would either allow or prevent the plane from landing.

You'll see that runway 36R has a number of entries where runway 18L has none. This is because 36R is equipped with automatic landing capability which the plane can use if it has the right equipment on board.



Max wt Permitted (For pre flight planning)	90000 / 95250kg					
RUNWAY	18L			36R		
STATUS				(LR)		
Landing Distance Available	2440m/8005ft .19 DN Notes 1,2,3			2440m/8005ft .19 UP Notes 1,2,3		
Max Certificated landing wt 90000kg	WAT LIMIT: Man 52° / Auto 51°			reduce by 900kg / ° above		
25F & 30F Zero HW wt (incl TW) Autoland				90.0 (13)		
25F & 30F Zero HW wt (incl TW) Manual	90.0 (15)			90.0 (15)		
Slippery Zero HW wt (incl TW) Manual	90.0 (3)			90.0 (4)		
Max Certificated landing wt 95250kg	WAT LIMIT: Man 52° / Auto 45°			reduce by 900kg / ° above		
25F & 30F Zero HW wt (incl TW) Autoland				95.2 (9)		
25F & 30F Zero HW wt (incl TW) Manual	95.2 (15)			95.2 (15)		
Slippery Zero HW wt (incl TW) Manual	95.2 (0)			95.2 (1)		
Red'n per extra kt TW kg	2000			2000		
Inc per extra kt HW kg						
THR elev ft	353ft			338ft		
GS/Ht at THR ft				3°/52ft		
Missed Approach Min Accel Alt	1400ft			1400ft		
APPROACH	DA (ft)	DH(HAT) (ft)	RVR	DA (ft)	DH(HAT) (ft)	RVR
ILS C3 no DH ..... Autoland						
ILS C3B ..... Autoland					14R	75m
ILS C3A ..... Autoland					50R	200m
ILS C2 ..... Autoland					100R	300m
ILS C1R					210R	550m
.....					(202)	550m
.....				730	(392)	1000m
VOR DME	800	(447)	1600m	810	(472)	1200m
VOR						
NDB DME						
NDB						
L.BCN DME						
L.BCN				800	(462)	1200m
PAR						
SRA						
Circling radius 4.2nm)	1200	(847)	2.4km	1200	(847)	2.4km
Visual Approaches : Min RVR Reqd 800m						

1. Circling Minima: All circuits EAST of Rwy 18L/36R only.

Length of runway

Type of landing guidance

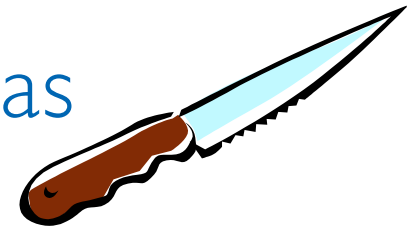
Decision Height to which a plane can descend before having to see the runway or GO AROUND

Minimum visibility to land

75 metres visibility on the runway is equivalent to about 20 metres on a motorway

YES. That's 14 feet above the runway

Flying a plane is not as hard as you think

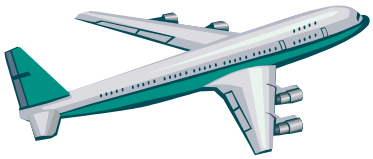


So many fearful flyers think that every flight is balanced on a knife edge and that if the slightest thing goes wrong that it'll end in tragedy. If this is the case why would anyone take it up even as a temporary job let alone a lifelong career?

The simple fact is that a plane flies well within its capabilities to the extent that it would be like driving a Ferrari at 30 mph instead of 180mph. Or using a lorry to bring home your weekly shopping from the supermarket. Or using an excavator to dig over your vegetable patch. There is so much in reserve that you'd never believe me if I talked for a month.

Taking off is not difficult.

If you came with me to the Simulator I could teach you how to take off in a half an hour or so. Admittedly you wouldn't be allowed to do it with passengers but I could teach you the technique.



Climbing;

A plane climbs because the upward force on the plane's wings is more than the weight of the plane. A plane doesn't struggle to climb, or do anything that you might be nervous about.

A plane doesn't care about the following things;

Wind, Rain, Snow, Cloud, Darkness, Turbulence,

A plane doesn't have emotions! It's built to deal with this list of things so relax and leave it to the pilots…even if you think you can do it better…they enjoy the practice.

Landing;

You won't approach too fast too steeply or too anything. You will stop in time before the end of the runway …even if you think it won't.

Non Normals

(If things go wrong…as you would describe it) (page33)

- We have a check list for every possible malfunction.
- One pilot reads what to do…and the other does it.
- It's called challenge and response, and works like this…
- If this happens……..do that
- If that happens……..do this

Emergency Checklists

Or as I would call them Non Normal checklists

Here's an example of the checklist we'd use if, as it says we needed to do an emergency descent. This is an interesting example because it's an old style check list; the new style ones do not call it an emergency. I have included it here because I want you to show you that aviation is always getting safer by improving its procedures.

On modern aircraft this statement here will be the same as the indication that the pilots receive on their instruments i.e.

CABIN PRESSURE

EMERGENCY DESCENT

Condition: **Unable to control cabin pressure with airplane above 14,000 feet MSL or conditions require a rapid descent.**

EMERGENCY DESCENT ..... Announce

ENGINE START switches ..... CONT

THRUST levers ..... CLOSE
Reduce thrust to minimum.

SPEED BRAKE ..... FLIGHT DETENT

DESCENT ..... Initiate

Target speed ..... Mmo/Vmo
If structural integrity is in doubt, limit speed as much as possible and avoid high manoeuvring loads.

Level-off altitude ..... Lowest safe altitude or 10,000 feet, whichever is higher

These things within the Box have to be done from memory

When the 'Boxed' items have been done the pilot will read from the checklist ALL items on the checklist so that nothing is missed

SPEED BRAKE ..... DOWN DETENT
Smoothly lower the SPEED BRAKE lever and level off.
Add thrust and stabilize on altitude at desired airspeed.

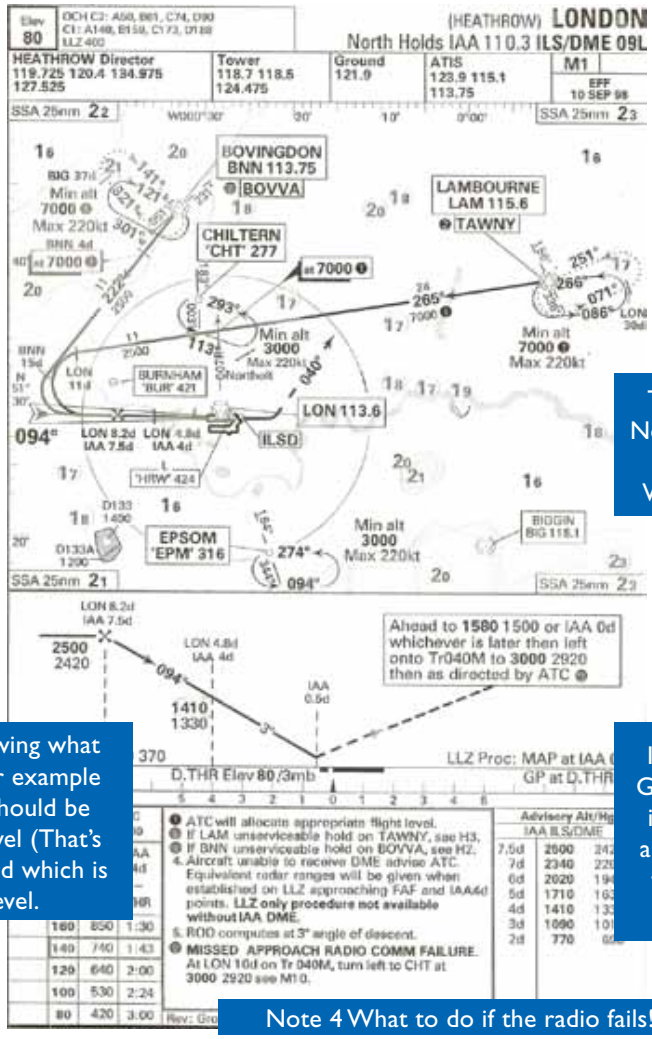
CREW OXYGEN REGULATORS ..... NORMAL
Flight crew must use oxygen when cabin altitude is above 10,000 feet.
To conserve oxygen, position the regulator to NORMAL.

ENGINE START switches ..... As needed
The new course of action is based on weather, oxygen, fuel remaining and available airports. Use of long range cruise may be appropriate.

The action to be taken after using any checklist will be determined by the company and the Licensing authority. That information is available to the crew from their Flight Crew Orders Book

How does the pilot find the airport

Most airports have radar controllers who guide aircraft into a position where the plane can pick up a radio beam which connects to equipment on the plane which will take it to the runway and if foggy, help it to land there. Radar controllers usually guide an aircraft along the same route that the pilots' map shows. Here is an example of a map used for landing at London Heathrow on the runway that brings planes in over Windsor Castle



Airport and Landing Runway

London 094 degrees

110.3 is the frequency for the landing system.

The Landing System has to be set to the direction of the runway 94 degrees

This map takes pilots from the North East. There are procedures from three other directions. Watford Epsom and Biggin Hill

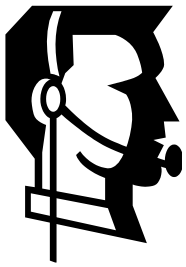
This is the side view showing what heights to go down to for example 4 miles away the plane should be at 1410 feet above sea level (That's 1330 feet above the airfield which is 80 feet above sea level.

If a plane can't land and does a Go Around this shows the route it must take. Here it is straight ahead until the plane is at 1580 feet then it has to turn left so that it is going 040 degrees.

Note 4 What to do if the radio fails!

Overshooting,

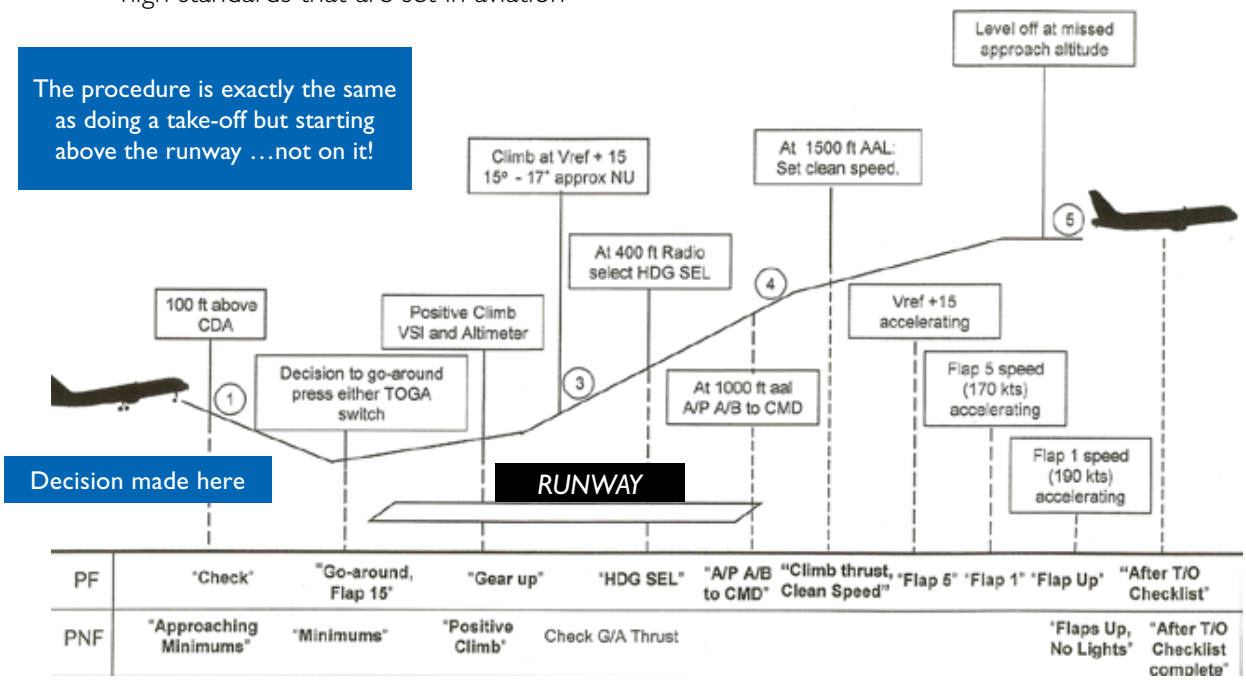
Aborted Landing, Missing the runway
Zooming back up again



Those are some of the ways fearful flyers describe a Go Around. Another common misconception is that the decision to Go Around is made suddenly and without warning. Neither of those things are true. Most GA's are expected and the crew just wait until the proper moment to do it. This is usually because of weather and not being able to see enough of the runway to land. Remember that they probably knew this was possible from the weather forecast before they departed. The crew are allowed to make 3 landing attempts before they have to divert.

Here is the standard to which pilots learn to do this manoeuvre, so far from being something that alarms you, perhaps you should think of this as being part of the extremely high standards that are set in aviation

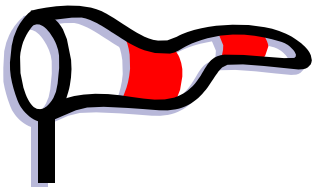
The procedure is exactly the same as doing a take-off but starting above the runway …not on it!



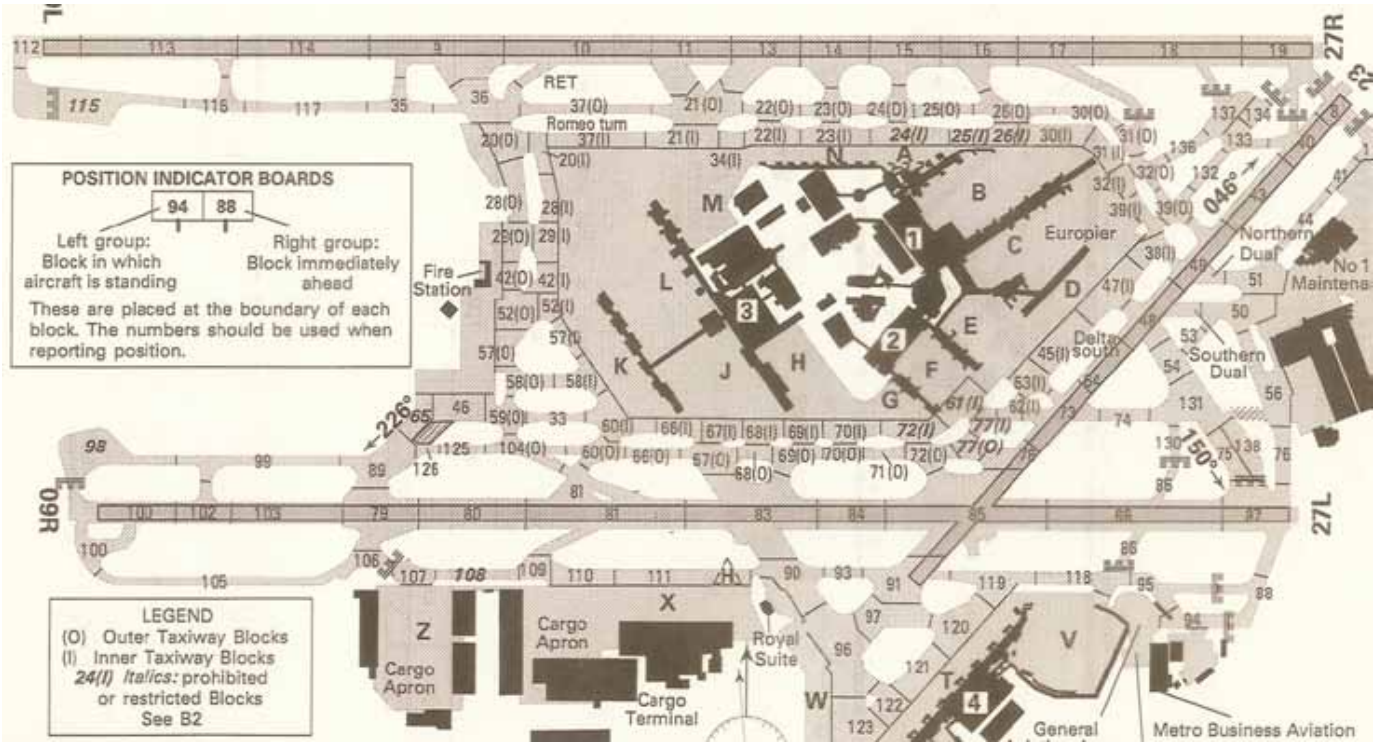
This diagram shows what each pilot has to do during a Go Around…remember to pilots this is the procedures that they use every time they take off. PF stands for the Pilot Flying and lists the things that crew member does. PNF is the pilot NOT flying and the diagram shows the duties for that role. Each pilot has specific duties and calls to make.

IN YOUR LANGUAGE THIS IS			
A	Decide	E	Raise Flaps
B	Increase power	F	Gather speed
C	Raise nose	G	Raise more Flaps
D	Raise wheels	H	Level out

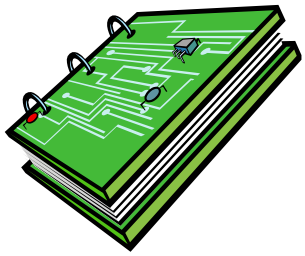
Airfields and where to go …and park.



This map shows the layout of London Airport. It shows the three main runways, which can be used in either direction. It shows the taxiways. You'll also see that almost every part of the dark shaded areas has a number. This is how Air Traffic Control keep aircraft apart…they give permission to go to a certain point…defined by those numbers…that's why sometimes you stop on the airfield for no apparent reason. You may have to stop to let another plane go to where ever it needs to go. This is how a pilot unfamiliar with an airfield knows where to go after landing. The ground maps are studied during the flight or at the briefing before the flight.



Aircraft technical Log



The aircraft technical Log is specific to each aircraft and is identified by the aircraft's registration mark. For example G-OFWF

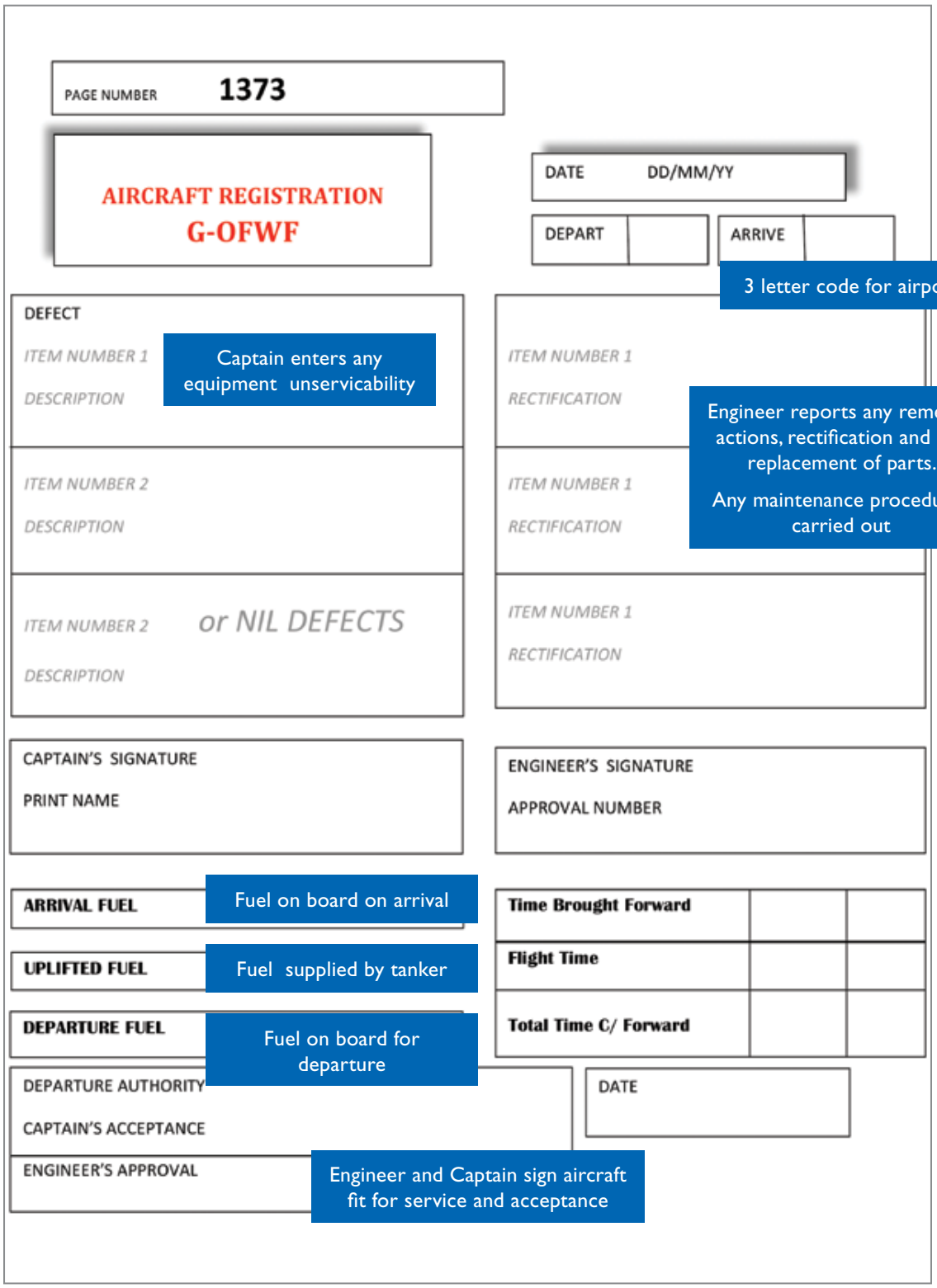
The first letter in this case G- shows that the aircraft is registered in the UK, other letters are allocated in the same way as vehicle registrations, either alphabetically or by owners' choice.

(D is used in Germany, F in France, I in Italy In the USA registrations begin with N and are followed by numbers)

1. Date.
2. Flight duration.
3. Total airborne time.
4. Departure and arrival airports.
5. Fuel remaining after a flight.
6. Fuel loaded before a flight.
7. Engineer's signature after a departure check.
8. Captains' signature accepting the aircraft for flight.
9. A record of faults and equipment performance
10. A record opposite the faults showing the remedial action taken, with the maintenance engineer's signature.
11. A record of the validity of the airworthiness Certificate.
12. A record of any maintenance carried out.
13. The Specific Gravity of the fuel and its freezing point.
14. The number of landings performed (e.g. . . On a training flight)

The log is carried on board whenever the aircraft is in service. The only time it is removed from the aircraft is on the authority of an engineer.

Typical Technical Log Page

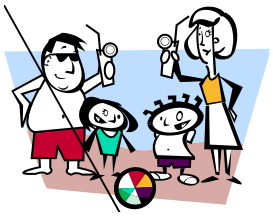


A Simple Strategy

KNOW YOUR REACTIONS

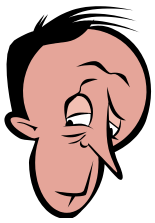
1. When do you start to get anxious?
2. Where do you get anxious?
3. Efforts to avoid thoughts only gives us more of them

REMEMBER WHY YOU FLY



1. Write down why in 2 sentences
2. Keep a photograph of the reason

BE WILLING TO HAVE YOUR REACTIONS



1. Hold your breath
2. Make room for stress
3. Let it come for the ride

STAY IN THE PRESENT

1. Sit down for 5 minutes
2. Notice things, listen to things
3. Focus on your breathing

ACT ASSERTIVELY

1. Find something positive to do

Diaphragmatic Breathing

We know that at times of anxiety, our breathing becomes shallow. This can sometimes lead to hyperventilation, which is when you get too much oxygen into your lungs and blood stream. This can make you feel dizzy and you may feel like you're going to pass out or faint. Also, you may feel some tingling in your fingers and toes. This is because your brain reacts to the amount of carbon dioxide going to it via your bloodstream, and you are supplying it with too much oxygen.

1. Here is a breathing exercise which can help you to avoid these symptoms.
2. Breathe in through your nose for a count of five seconds, hold your breath for two seconds and then exhale through your mouth for seven seconds.

3. It is important to breathe in a way we call diaphragmatic breathing, which is where you get the oxygen right down into your lungs. When you breathe in, your stomach should expand – a bit like a balloon.
4. If you can place one hand on your stomach and the other on your chest. Your stomach should rise and fall while your chest should stay still.
5. This is a very healthy way of breathing, because it maintains the correct balance of carbon dioxide and oxygen.
6. You should practice this method daily so that you can use it as soon as you feel anxious.
7. Your daily exercise need only to last for around five minutes or so, and the good thing about this technique is that you can practice and implement this in your daily life without drawing attention to yourself.

8. **Remember, you can't panic while you're concentrating on breathing.**

Relaxation and your peaceful place

One of the things that is recognised to be useful when overcoming a fear of flying is to let anxiety levels rise, so that the fearful flyer can see that they rise to a level and then stay at that level. Because we can run the take-off video as many times as we need to it's easy to measure the gradual easing of anxiety over a short period of time. The take-off is usually one of the high anxiety situations that fearful flyers suffer from, so it's a very good demonstration that the more you expose yourself to a fearful situation the less the fear it holds.

Before the take-off videos we try to encourage a period of relaxation. During the take-off we encourage correct breathing and after the take-off we suggest a visit to 'your peaceful place'.

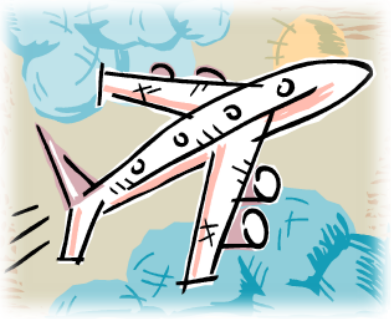
I'LL EXPLAIN NOW.

As you are taxiing out to the runway you should be going through your relaxation technique.

The exercise that I find works for me whether I'm just relaxing or needing to sleep is this one. (You should of course choose an exercise you can do when seated!)

Start by tensing and squeezing your toes then do the same with your ankles and then up to your calf muscles, all the while maintaining the tension all the way up from your toes. The idea is to tense every muscles all the way up to your head including your face muscles... then you hold that tension for a few seconds and gradually relax your muscles all the way down slowly to your toes again. The longer you take to tense yourself and then relax the better. But it's hard boring work. I was very sceptical about this helping me to sleep because I was told that if you aim to do this six times then you'll be very drowsy and ready to sleep. Each time I've used it I've only ever managed three cycles and I've been asleep.

Of course the best exercise is the one that works for you but which ever you choose you MUST practise doing it. It is pointless to save it until you need it because in a state of anxiety you'll struggle to 'know how it should feel'. So get used to what works for you, how long it takes you to settle, what effect it has and so on. You should, ideally, be able to go into your routine almost instantly.



Before the take-off and as the engine noise increases you should expect and allow your anxiety to rise. Let this happen rather than resisting it. Take a breath as the power increases fully and turn your hands over so that your palms are facing up wards and the backs of your hands are resting on your thighs. Breathe in for a count of five, hold for a count of two then exhale for seven seconds, pause, then repeat the exercise. It is vital that you practice your breathing technique regularly so that you can go straight into it without thinking.

The take-off won't last much more than 40 seconds so you should be able to complete three cycles of breathing and you'll be airborne.

YOUR PEACEFUL PLACE. (Visualisations)

Keep your breathing pattern going until your anxiety decreases and as it does start to think of your peaceful place taking over your thoughts. You have been through your relaxation, breathing and now into your peaceful place without a break. This is a sequence you can easily and usefully practice daily so that when you fly it's as normal to you as possible.

This is something to me both as a man and a pilot seemed a bit touchy feely but I have to admit that in thinking about it, it has more merit that I would have thought. I add that in case there are any readers who are inclined to dismiss this type of help without trying it.

It is somewhere that you can think of and immediately feel a sense of peace and tranquillity where there are no pressures and where you feel safe and unthreatened.

I've also heard someone describe this as their 'safe place'. Some people think that it should actually be a picture in your mind of a place, with no people in it at all, and I think that probably that's a good place to start. People in your mind's picture are likely to change the image, because they'll be doing things and taking over your thoughts and you'll become more of an participant rather than an observer of the scene.

The picture you have should be of a place that is stress free and reminds you of a happy occasion. You should be able to smile spontaneously when you recall it.

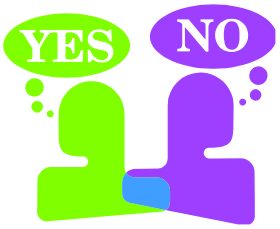
As the plane climbs you should gradually transfer your thoughts to your peaceful place until you are ready to entertain yourself with a book or in flight film.

Twisted Thinking

Here are some of the 'thinking mistakes' that psychologists have discovered about anxious people.

1. All or nothing thinking; it's either 100% or nothing. Dead or alive.
2. Generalising. If it happens now… it will always happen.
3. Selective information. Choosing the negatives and ignoring anything positive.
4. Negation. If there is a positive it doesn't count.
5. Unfounded conclusions. You assume negativity without evidence, or you make predictions of negative outcomes.
6. Making things either bigger than they really are or less important according to what is convenient to you.

7. Emotional reasoning. You draw factual conclusions from emotional feelings for example: I feel guilty therefore I am guilty; this is stupid therefore I am stupid.
8. Being too strict with yourself. I should do this, I should do that, I ought to be able, I have to.
9. Labelling. You identify yourself with your weaknesses instead of saying I got it wrong, you say something like I'm a loser.



10. Personalisation and blame. You hold yourself responsible or even blame yourself for something you're not entirely responsible for. Sometimes you blame other people and overlook the fact that what you do or think may well contribute to your anxiety.
11. Catastrophising. Focusing on the consequences not the risk.

Progress Survey

FEAR LEVEL STARTING THE COURSE

1	2	3	4	5	6	7	8	9	10
NOT BAD									**TERRIFIED**

What do you want to achieve today?

What are you most worried about?

Where is the evidence for what I think?

What are my chances of success today?

How much twisted thinking have I done today?

What have I learned?

What has surprised me most?

What can I change?

What will I change?

What will I DO differently?

FEAR LEVEL ENDING THE DAY

1	2	3	4	5	6	7	8	9	10
NOT BAD									**TERRIFIED**

Keeping even the simplest record of where you have come from will help you to keep on course. And it will show you how much you have achieved in the time you've been trying.

Almost everyone who tries to overcome their fear actually succeeds

Almost everyone who tries to overcome their fear actually succeeds

Sensations, movements and physiology

So many of the impressions we get about flying stem from the simple biological fact that our body is designed to move at 4 mph and in a plane we're travelling at 600 mph.

We're also designed to be facing the direction that we're travelling in, that is to say if we're travelling sideways…we look sideways…if we're travelling forward… we look forward. In a plane we are rarely looking in the direction of travel. One of the advantages of looking where we're going is that our brain, muscles, senses and eyes are working together and that helps us to keep our balance and our sense of movement, so that if we 'topple' we can feel it.

All this normal physiological stuff is upset in a plane, and regardless of how much of a super person you think you are, you can't changes the effects movement. In fact the first thing pilots are told when they learn to fly on instruments is to ignore what they feel and believe only the instruments. Any other sensation will be WRONG.

When you're a passenger and the plane is in cloud, you won't have any idea whether the plane is going up or down or whether it's turning or flying with the wings level or not. You might have a vague idea as a plane starts to do these things but after a while your senses will be fooled.

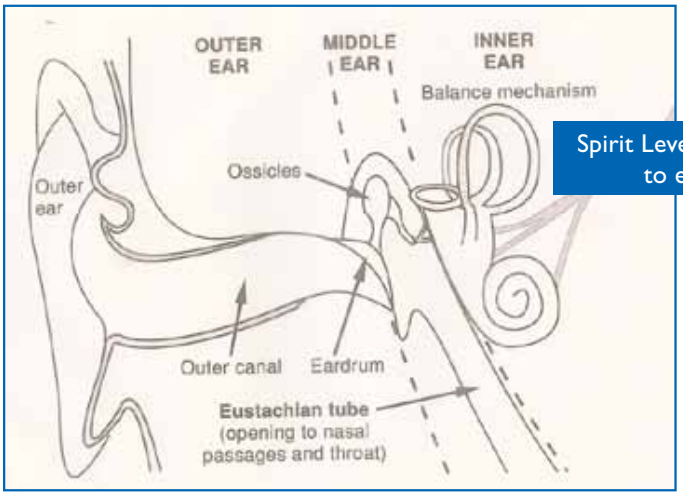
If you can see out and it's light you can tell which way is up or down but it probably WON'T feel right.

Amazing facts!

- A feeling of going UP (try in a lift) and slowing down is similar to starting to go DOWN.
- In a steady turn you will feel as if the plane is flying with the wings level.
- Feeling 'lighter' will give you the feeling of falling.
- Speeding up when the plane is flying level will make you think it's going up.
- Slowing down when the plane is flying level will make you think it's going down.

More on sensations...

This is a diagram of the ear and the parts of it that are of most interest to us are bits each side of the ear drum and the balance mechanism.



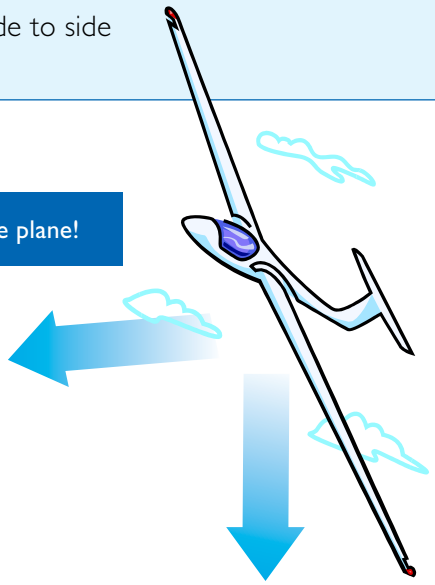
Spirit Levels at 90 degrees to each other.

Don't fly if you have a bad cold and can't 'clear' your ears because the pressure can't balance each side of the ear drum, which could result in a burst ear drum.

The balance mechanism

… works like three spirit levels which measure these movements of your head.

- Nodding
- Side to side
- Backwards and forwards
- …and to tell you which way is up and down.



DOWN in the plane!

The normal down

In a plane 'down' is always towards you feet…that is to say if you drop something it will always fall towards your feet. If you can see out of the window when the plane is turning 'down' won't look the same as it feels.

No wonder some of the movements on board feel strange.

Sleep

Most of us can remember our parents insisting that sleep was important. The role of children though is to dispute our parents' advice. Of all the advice our parents gave us the one we continue to ignore is about sleep, all the rest we find were more or less true.

Ignoring that advice has left us with a legacy of undervaluing the benefits of sleep. As a consequence our ability to resist stress is diminished.

It is a physiological fact that, give or take a few exceptions, we need eight hours sleep each night in order to give us sixteen hours of activity.

If you don't sleep for a full 8 hours you go into sleep deficit. You can only regain 1 hour of deficit each night. So if you miss 4 hours it'll take you at least 4 days to be back where you should be.

BUT

Sleep needs to be taken between 10 pm and 8 am.

AND

Sleep needs to be in a dark quiet room.

AND

Sleep needs to be taken after a period of relaxation.

WITHOUT

Any stimulant like coffee and/ or alcohol.

AND

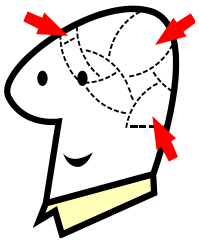
If you don't sleep or you wake for more than about 30 minutes. Get up, get cold, get tired and then go back to bed.

Sleep allows physical and mental rest. It allows any information to be sifted sorted and allocated to our memory stores.

Quite often problems that seem to be without solution can often be solved after a night's sleep.

AN HOUR OF SLEEP GIVES YOU 2 HOURS COMPETENT ACTIVITY

How your brain works

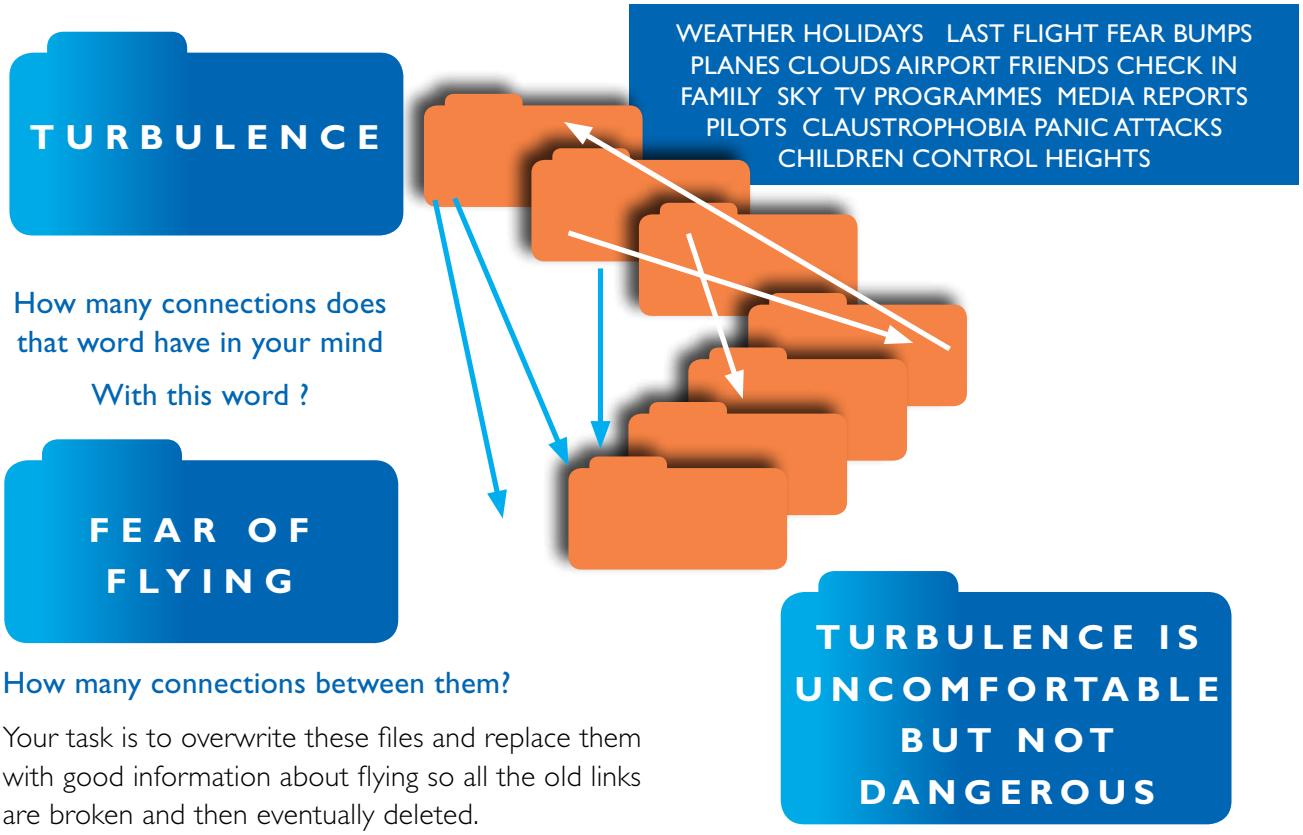


Our brain collects sorts and stores information. That's fairly obvious, but how does it do it?

We receive information through our senses. Each time we experience something our brain checks to see if we've had that experience previously. If it can't get an exact match it will find something similar and work on the basis that it can adjust for errors as and when they occur. Similar experiences or knowledge are sent to the same 'file' in the memory, so everything about cooking is in one file everything about sport in another. BUT and it is a big but there are also millions of routes between files. For instance if you always cook a meet pie before you go to football, you'll set up a link. If you've set fire to a chip pan and you call the fire brigade (Department) you'll have a connection between those things too.

If you pass a fire station on the way to football you'll make another connection.

The more connections you make the more easily you can cross reference and remember things, in this case about cooking football, meat pies and fire services.



Your task is to overwrite these files and replace them with good information about flying so all the old links are broken and then eventually deleted.

This is why a plane can always take off and land safely on any flight

THE MANUFACTURER

In the beginning the designers built the plane so that it would be able to carry a certain number of people over a certain distance at a particular speed. It was also designed so that it could take off and land at airports of a certain size.

So when the plane was built, it was tested to make sure that it was able to do the things the designers and the airlines needed it to do. This testing consists of flying the plane to its limits and then deciding how to fly it in airline service.

When the plane has met all the safety standards it is allowed into service.

During testing the exact performance of the plane is measured so that the airlines know all the weather conditions it can take off in.

Because take off conditions vary the manufacturer records the range of conditions in which the plane can fly. These calculations take into account.

THE WEIGHT OF THE PLANE AND
The air pressure at the time of take-off. (Low pressure means the air is thin)
The temperature at the time of take-off (High temperature means the air is thin)
The length of the runway and any slope. (The longer the runway the more time there is to get up speed.)
The conditions of the runway i.e. Ice Snow and Water.
It puts all this information into THE PERFORMANCE MANUAL

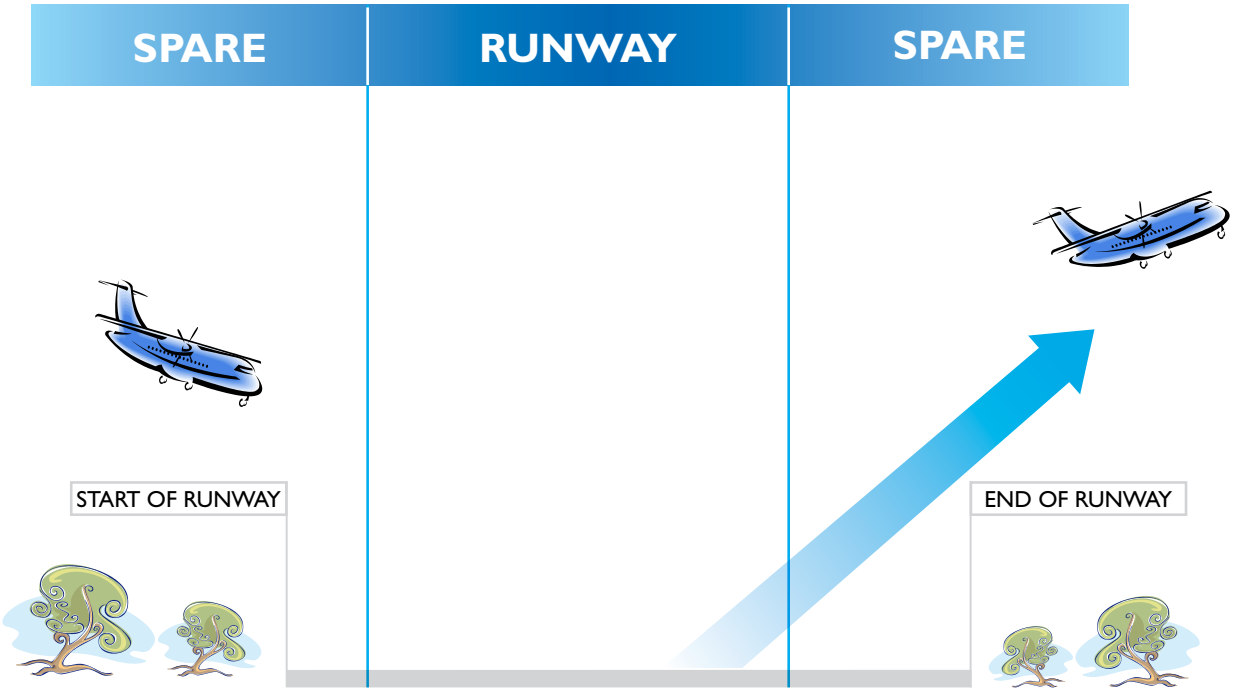
The performance manual...

How we work out whether a plane can take off on a particular runway.

FIRST WE NEED TO KNOW HOW LONG THE RUNWAY IS

The runway is made up of three parts as shown. Sometimes the spare strips at the end can be used for taking off but not for landing because there may be obstructions on the approach that would affect landing aircraft but not ones that were taking off

- Does it have a slope?
- Is it high up like Nairobi where the air is thin?
- Is there only one place on the runway to take off from or can we start from another point?
- Is the wind blowing?
- Is there snow or ice on the runway?
- What flap position will the pilot use?
- Is there anything in the line of take-off like hills or buildings?



SO IMAGINE A PLANE WHICH COULD TAKE OFF AT A MAXIMUM WEIGHT OF 200 TONNES
Part of this weight will be the plane itself say 80 tonnes
Say the fuel weighs 40 tonnes
The freight weighs 40 tonnes
Passengers weigh 40 tonnes
This is the maximum weight it could ever take off at because the wheels have to be able to support the plane
The plane needs to take off a sensible speed And at most big airports the runways would be long enough for it to take off on.

"But suppose it flew to an airport where the runways weren't so long? How can we work out what the maximum weight it could take off at?"

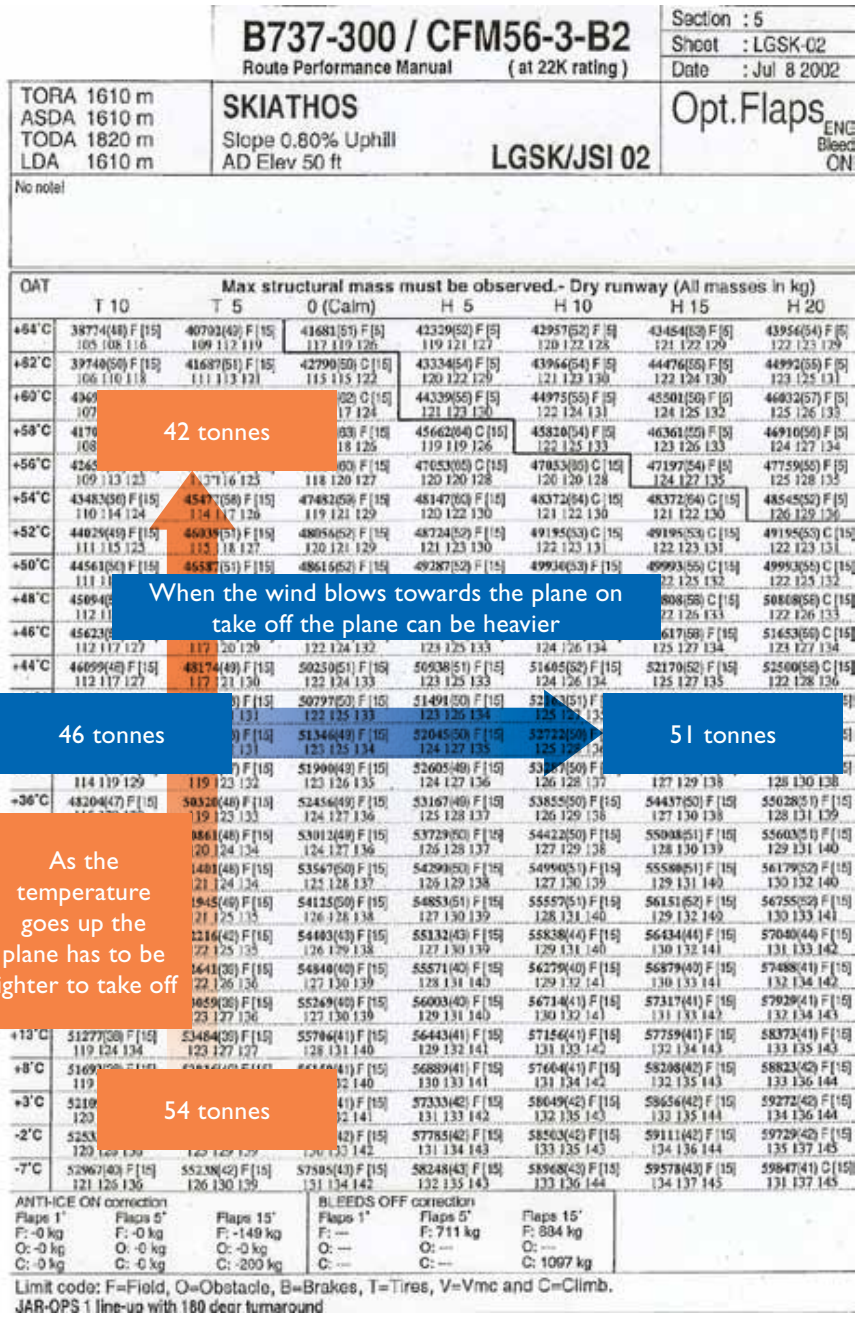
If the runway is shorter then we know the plane would have to be lighter

You can't change the weight of the plane so

It would have to carry

1. **Less fuel**
2. **Less weight or**
3. **Fewer passengers**

Take off run available1610
Take off distance available1610
Runway 02 0.80% uphill slope
50 feet above sea level
Skiathos Airport
Boeing 737 fitted with CFM56-3-B2 Engines



B737-300 / CFM56-3-B2
Route Performance Manual (at 22K rating)

Section : 5
Sheet : LGSK-02
Date : Jul 8 2002

TORA 1610 m
ASDA 1610 m
TODA 1820 m
LDA 1610 m

SKIATHOS
Slope 0.80% Uphill
AD Elev 50 ft
LGSK/JSI 02

Opt.Flaps
ENG Bleed ON

No note!

Max structural mass must be observed.- Dry runway (All masses in kg)

OAT	T 10	T 5	0 (Calm)	H 5	H 10	H 15	H 20
+64°C	38774(48) F [15] 105 108 116	40702(42) F [15] 109 112 119	41681(51) F [5] 117 119 126	42329(52) F [5] 119 121 127	42957(52) F [5] 120 122 128	43454(53) F [5] 121 122 129	43956(54) F [5] 122 123 129
+62°C	39748(50) F [15] 106 110 118	41687(51) F [15] 111 113 121	42790(50) C [15] 115 115 122	43334(54) F [5] 120 122 129	43966(54) F [5] 121 123 130	44476(55) F [5] 122 124 130	44992(55) F [5] 123 125 131
+60°C	4365 107	[illegible]	[illegible] 17 124	44339(55) F [5] 121 123 130	44975(55) F [5] 122 124 131	45501(56) F [5] 124 125 132	46032(57) F [5] 125 126 133
+58°C	4170 108	[illegible]	[illegible] 18 126	45662(64) C [15] 119 119 126	45820(54) F [5] 122 125 133	46361(55) F [5] 123 126 133	46910(56) F [5] 124 127 134
+56°C	4265 109 113 123	[illegible] 116 123	[illegible] 118 120 127	47053(65) C [15] 120 120 128	47053(65) C [15] 120 120 128	47197(54) F [5] 124 127 135	47759(55) F [5] 125 128 135
+54°C	43483(56) F [15] 110 114 124	45472(58) F [15] 114 117 126	47482(59) F [15] 119 121 129	48147(60) F [15] 120 122 130	48372(64) C [15] 121 122 130	48372(64) C [15] 121 122 130	48545(52) F [5] 126 129 136
+52°C	44029(49) F [15] 111 115 125	45035(51) F [15] 115 118 127	48056(52) F [15] 120 121 129	48724(52) F [15] 121 123 130	49195(53) C [15] 122 123 131	49195(53) C [15] 122 123 131	49195(53) C [15] 122 123 131
+50°C	44561(50) F [15] 111 [illegible]	46537(51) F [15] [illegible]	48616(52) F [15] [illegible]	49287(52) F [15] [illegible]	49930(53) F [15] [illegible]	49993(55) C [15] 122 125 132	49993(55) C [15] 122 125 132
+48°C	45094 112 11	[illegible]	[illegible]	[illegible]	[illegible]	50808(58) C [15] 122 126 133	50808(58) C [15] 122 126 133
+46°C	45623 112 117 127	[illegible] 117 120 129	[illegible] 122 124 132	[illegible] 123 125 133	[illegible] 124 126 134	[illegible] 125 127 134	51653(56) C [15] 123 127 134
+44°C	46099(48) F [15] 112 117 127	48174(49) F [15] 117 121 130	50250(51) F [15] 122 124 133	50938(51) F [15] 123 125 133	51605(52) F [15] 124 126 134	52170(52) F [15] 125 127 135	52500(58) C [15] 122 128 136
	[illegible] 114 119 129	[illegible] 119 123 132	[illegible] 123 126 135	[illegible] 124 127 136	[illegible] 126 128 137	[illegible] 127 129 138	[illegible] 128 130 138
+36°C	48204(47) F [15] [illegible]	[illegible] 119 123 133	[illegible] 124 127 136	[illegible] 125 128 137	[illegible] 126 129 138	[illegible] 127 130 138	[illegible] 128 131 139
	[illegible]	[illegible] 120 124 134	[illegible] 124 127 136	[illegible] 126 128 137	[illegible] 127 129 138	[illegible] 128 130 139	[illegible] 129 131 140
	[illegible]	[illegible] 121 124 134	[illegible] 125 128 137	[illegible] 126 129 138	[illegible] 127 130 139	[illegible] 129 131 140	[illegible] 130 132 140
	[illegible]	[illegible] 121 125 135	[illegible] 126 128 138	[illegible] 127 130 139	[illegible] 128 131 140	[illegible] 129 132 140	[illegible] 130 133 141
	[illegible]	[illegible] 122 125 135	[illegible] 126 129 138	[illegible] 127 130 139	[illegible] 129 131 140	[illegible] 130 132 141	[illegible] 131 133 142
	[illegible]	[illegible] 122 126 136	[illegible] 127 130 139	[illegible] 128 131 140	[illegible] 129 132 141	[illegible] 130 133 141	[illegible] 132 134 142
	[illegible]	[illegible] 123 127 136	[illegible] 127 130 139	[illegible] 129 131 140	[illegible] 130 132 141	[illegible] 131 133 142	[illegible] 132 134 143
+13°C	51277(58) F [15] 119 124 134	53484(58) F [15] 123 127 137	55706(41) F [15] 128 131 140	56443(41) F [15] 129 132 141	57156(41) F [15] 131 133 142	57759(41) F [15] 132 134 143	58373(41) F [15] 133 135 143
+8°C	5169 119	[illegible]	[illegible] 32 140	56889(41) F [15] 130 133 141	57604(41) F [15] 131 134 142	58208(42) F [15] 132 135 143	58823(42) F [15] 133 136 144
+3°C	5219 120	[illegible]	[illegible] 32 141	57333(42) F [15] 131 133 142	58049(42) F [15] 132 135 143	58656(42) F [15] 133 135 144	59272(42) F [15] 134 136 144
-2°C	5253 120	[illegible]	[illegible] 42 142	57785(42) F [15] 131 134 143	58563(42) F [15] 133 135 143	59111(42) F [15] 134 136 144	59729(42) F [15] 135 137 145
-7°C	52967(40) F [15] 121 126 136	55238(42) F [15] 126 130 139	57585(43) F [15] 131 134 142	58248(43) F [15] 132 135 143	58968(43) F [15] 133 136 144	59578(43) F [15] 134 137 145	59847(41) C [15] 131 137 145

ANTI-ICE ON correction

Flaps 1°	Flaps 5°	Flaps 15°
F: -0 kg	F: -0 kg	F: -149 kg
O: -0 kg	O: -0 kg	O: -0 kg
C: -0 kg	C: -0 kg	C: -200 kg

BLEEDS OFF correction

Flaps 1°	Flaps 5°	Flaps 15°
F: ---	F: 711 kg	F: 884 kg
O: ---	O: ---	O: ---
C: ---	C: ---	C: 1097 kg

Limit code: F=Field, O=Obstacle, B=Brakes, T=Tires, V=Vmc and C=Climb.
JAR-OPS 1 line-up with 180 deg turnaround

42 tonnes

When the wind blows towards the plane on take off the plane can be heavier

46 tonnes

51 tonnes

As the temperature goes up the plane has to be lighter to take off

54 tonnes

This is an actual performance chart which looks more complicated than it is. A pilot will be familiar with this sort of information from the start of his/her flying career. Both pilots would check this information independently before flight.

BOEING 757 Elevation 80ft	**TAKE OFF DATA**	**London Heathrow**

FULL LENGTH	**RWY 27R**	**TWY ALPHA (900)**	**RWY 27R**
RVR DAY 150	**RVR NIGHT 150**	**RVR DAY 150**	**RVR NIGHT 150**
TOR 3440 **ED 3500**	**TOD 3500**	**TOR 2500** **ED 2560**	**TOD 2560**

FLAP 15	**FLAP 15**
Notes 1, 2	Notes 1, 2

Temp Deg C	Zero wind	Max Wind	Extra weight Per Knot	**VR** Speed Dry Runway	**VR** Speed Wet Runway
52	92500	20	90	0	1
48	95800	↓	100	↓	2
40	102300	↓	110	↓	↓
32	108600	↓	120	↓	↓
20	111900	↓	↓	↓	3
15	112100	↓	↓	↓	↓
4	112600	↓	↓	↓	↓

Pressure above 1013 + 70 KGS
Pressure Below 1013 -120 KGS

REDUCE TAKE OFF WEIGHT BY 1000 KGS PER KNOT OF TAILWIND

NOTES (1) Temporary Crane in Position until May6 in Take-off Cone

(2) Min Accel Alt (Aa) Rwy 27R 1800'

Terrain Clearance Straight Ahead to 3000 feet

Emergency turn Straight Ahead to 3000 feet LEFT Heading 180

A I R P O R T

R U N W A Y

Shows the runway details. How long the various sections are. And the minimum visibility to allow take of (RVR)

AMOUNT OF FLAP TO BE USED

All planes can take off with different amounts of flaps set, and each has different benefits. This table is for Flaps at 15 degrees

MAXIMUM ALLOWED TAKE OFF WEIGHT ACCORDING TO THE TEMPERATURE

MAX WIND AND EXTRA WEIGHT

When the wind blows towards the plane on take off the plane can carry extra weight for the take. For every extra knot of wind the plane can take this number of extra kilograms of weight

THIS WARNING SHOWS THE REDUCTION IN WEIGHT IF THE TAKE OFF WIND IS BLOWING WITH THE PLANE

IF THE PRESSURE IS ABOVE 'Standard' it means the air is 'thicker' so the wings and engines will work more efficiently so the plane can carry more weight. This box shows the extra weight allowed.

NOTES THAT APPLY TO THIS PARTICULAR RUNWAY.

Terrain Clearance means the route to take if there are mountains, obstacles in the take-off direction

Emergency turn means the route the plane must take if there is an engine problem during the take-off.

Cognitive Behavioural Therapy and the course

Our fear of flying course is based on very simple principles and uses the recommendations made at the World Fear of Flying Conference held in Montreal. The conference agreed that the most effective way to overcome a fear of flying is to adopt a multi-dimensional approach. This means not just doing it one way but using several techniques in a co-ordinated programme.

The multi-dimensional approach means

- Working in a group
- Working with experts in the field
- Using graded exposure techniques
- Dealing in facts
- Conducting courses in an environment appropriate to the fear
- Encouraging and developing a 'safe and trusting' environment
- Incorporating proven psychological processes

We employ a 'clean slate' technique which means that we start by removing, myths and misunderstandings and replacing them with facts. Without knowing the facts it's likely that in times of stress that you will revert to your old habits of doubting without reason. For example if you believe that the wings could fall off no amount of self belief or hypno-therapy will stop that doubt surfacing. The wings cannot fall off a plane.

- We do not say that we can cure your fear, because only you can do that
- We offer as much help and support as you need for as long as you need it.
- We ask you to face your fear and your anxieties
- We ask you to describe flying in un-emotive language

Your feelings are brought about by what you think, what you think determines how you behave. You don't get on a plane because of how you feel. You feel as you do because your thoughts tell you something that is not true.

THOUGHTS FEELINGS ACTIONS

Always ask yourself this simple question

Where is the evidence for what I think?

Turbulence

I can almost guarantee that if you flicked through the index, this page would have been of more interest to more people than any other. Why? Because almost everyone is anxious about turbulence…even people who like flying. There's no doubt that bad turbulence can be unnerving but that's not the same as dangerous. And that's the message I want you to concentrate on and say to yourself when you feel anxious about turbulence.

There's quite a bit on the subject here but let me tell you a couple of things about my experience of turbulence. Only twice in all my 20,000 hours did I ever experience severe turbulence, I never was out of control in turbulence, it was never difficult to fly my plane in turbulence and my plane was never in danger in turbulence.

ALWAYS WEAR YOUR SEAT BELT, AND TIGHTEN IT IN TURBULENCE.

Turbulence, or a bad experience in the air, are probably the most common reasons for a fear of flying. Most people believe that turbulence is dangerous; the truth is, that during turbulence the pilots remain in complete control of the aircraft, and it is no harder to fly an aircraft during turbulence than it is in normal flight. Many people claim that they have been in an aircraft, which has fallen thousands of feet during turbulence.

Curiously, they never make claims that the aircraft has climbed thousands of feet. It certainly would defy the laws of science if all the air in an area of turbulence were just falling; one might wonder what fills the space that it leaves. There is a chapter on turbulence on our Audio CD Set.

There is a description of turbulence in our Book Flying without Fear.

1. Turbulence is uncomfortable, but that's not the same as dangerous
2. Turbulence will not affect the aircraft's performance
3. Turbulence does not make an aircraft harder to fly

The truth is that aircraft go up and down during turbulence but the reason that we believe that they are always falling is that the sensation or falling is much more alarming and unpleasant than the sensation of going up. If you have ever put a sleeping baby into its cot you'll know that the action of lowering it, often wakes it. The sensation of going down feels much worse than going up.

ALWAYS WEAR YOUR SEAT BELT, AND TIGHTEN IT IN TURBULENCE.

Causes of turbulence

Turbulence is caused by the movement of the air. At the equator, air rises because it is heated by the sun and this air is replaced by cold air which travels from the Poles resulting in a flow of air from the north or south towards the equator. This causes winds from the North or South.

At the same time, because the world is rotating and the air is not stuck to the surface of the earth, the air stays 'still' while the world spins around under it. This causes the winds across the earth i.e. East / West. When these two flows of air (N-S and E-W) collide with each other, they cause turbulence just as two rivers meeting will cause currents and eddies and make a boat bounce around. Turbulence is just the airborne and invisible version of this. (Movement of air accounts for all the weather we experience.) A hot air balloon rises because the air inside has been heated up by the burner underneath; similarly any air which is heated up, for example, over a town, will do the same thing, and rise. If you are travelling in an aircraft as it passes through this rising air you will feel it as a bump.

The hot air from the ground rises to form a cloud; flying through the rising air would be bumpy and so would flying through the descending air that's replacing it. Both though, would be perfectly safe. Normally the source of the rising air would not be so obvious of course, for example another clue to rising air would be fluffy white cumulus clouds.

Turbulence is also caused when the wind blows against things like mountains and buildings and is displaced up and around them. Finally remember that turbulence is "uncomfortable but not dangerous" and that weather maps and reports show pilots where the areas of turbulence can be expected so that they can be avoided by climbing, descending, or flying around them.

ALWAYS WEAR YOUR SEAT BELT, AND TIGHTEN IT IN TURBULENCE.

Psychological shortcuts and tips

Now that you have your plan for overcoming your fear here are a few things that you should bear in mind as you gradually overcome your fear.

At first it will be important to make sure that you limit your exposure to the negative and unhelpful thoughts that will sometimes nag at you. The simplest and most effective solution is to put an elastic band around your wrist and snap it each time you get an unhelpful thought. This will do two things, firstly show you how often you get unhelpful thoughts and secondly will be painful enough to encourage you to stop thinking those thoughts!

Here are ways some ways to deal with your unhelpful thoughts.

- Write down your thoughts…makes them more visible!
- Examine the evidence for your thoughts
- Be understanding of yourself rather than critical
- Grade your thoughts …make things part of success rather than part of failure
- Find out how many other people think like you
- Use un-emotive descriptions of your experiences and thoughts
- Don't blame yourself

These questions will help you to avoid twisted thinking

- Is it logical?
- Where is the evidence?
- Where is this belief written down?
- Is it realistic?
- Would my friends agree with me ?
- Why doesn't everybody think this way?
- Am I trying to be perfect?
- Why is it so bad?
- Am I making a mountain out of a Molehill?
- Will it seem this bad next year?
- Is this as bad as losing someone?
- Am I fortune telling and predicting something that I can't be certain of?
- Will the outcome really be as bad as I think?
- Am I dealing with things as they are…not as I think they are?
- Where is this way of thinking getting me?
- Is what I am doing helping or hindering me?
- Am I asking more of myself than is reasonable?
- Do I blame other things to make myself avoid responsibility.

Thoughts and notes

What I like on this page

What I'm going to do

What I'm not going to do

What is new to me

My helpful comment in times of stress

Getting started

Facing the fear can't be worse than fearing the fear…which is where you are now.

Many anxious flyers live with the idea that if they don't worry, something will happen to their flight. Worry doesn't make anything safer; it does nothing positive, it only feeds your fear.

The truth is that you have to face your fear. I will do everything I can to help you but you must be willing to keep going regardless of how much you've gone through already. The chances are that you WILL overcome your fear, just like the thousands of people we've helped word in the past and are helping now.

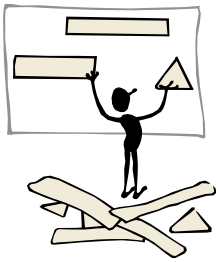
Think about these questions

- Why am I delaying?
- Why will next month or next year be better than this week or this month?
- What good reasons are there not to start?
- Has doing nothing ever reduced my anxiety or worries?

Now do these things

- Join our Social Network.
- Organise an action plan.
- Get information and knowledge.
- Get someone to support you.

Revision



Here are some ideas for you to develop your strategy

Think about these important things

- Have an objective, aim or defined outcome to work towards.
- Clear your mind of myths doubts and mis-understandings by gaining knowledge.
- Ask questions.
- Develop and practice thought stopping techniques.
- Develop and practice muscle relaxation techniques.
- Expose yourself gradually to the things you fear.
- Learn to accept some level of anxiety.
- Find support.
- Keep a progress report of your achievements.
- Join our Social Network for fearful flyers at LOGBOOK24/7

Flyingwithoutfear.com can help you by

- Helping you to prepare a plan.
- Giving you information via the Blog
- Giving you help on the LOGBOOK24/7 social network.
- By answering your questions.
- By encouraging you and supporting you for as long as you need it.
- Offering you a range of products
  i) Books
  ii) DVD
  iii) CD set
  iv) Audio course
  v) In flight guide
  vi) Ground course
  vii) Simulator course

Why you will succeed with us…

- Because we know that overcoming your fear of flying is a journey…not an event.
- Because you are a customer to us…not one of a crowd.
- Because we will try to look after you as an individual.
- Because we'll get you flying…that's our promise.
- Because you can choose from a variety of our methods to overcome your fear of flying.
- Because we have more products than anyone else in the world.
- Because we deal in facts, not gimmicks.
- Because we accept that you have to face your fear, only you can do that.
- Because we care about helping you to overcome your fear.
- Because we can offer you one to one help in dealing with your fear of flying.
- Because we offer unlimited help support, encouragement and guidance.
- Because Captain Keith's experience is unequalled.
- Because we don't dumb down, or use inappropriate comparisons.
- Because we know our subject backwards.
- Because we'll listen to what you want and guide you along your journey.

A guide for supporters

A SUPPORTER SHOULD:

1. Be supportive
2. Do what the fearful flyer asks
3. Ask what you can do for them
4. Not give advice, give support
5. Be patient but firm
6. Not listen to wishful thinking
7. Encourage realistic thinking
8. Not say…it'll be alright
9. Never underestimate the fear
10. Always be kind and considerate but firm
11. Not listen to self doubt
12. Make supportive statement
13. Ask them to explain what's going on around them
14. Say it's ok to be a little anxious
15. Let them take some anxiety along for the ride
16. Tell them to stay in the present
17. Discourage predictions, hoping and fortune telling
18. Ask what sort of support they need
19. Ask for the evidence that supports their fearful view of things
20. Not allow avoidance strategies
21. Know about the features of a fear of flying
22. Not allow wishful thinking e.g. "I hope the weather will be good"
23. Encourage realistic thinking.

The anxious flyer should

1. Explain what causes your anxiety
2. Tell the supporter exactly what sort of help you need i.e. conversation or silence involvement or exclusion
3. Have thought stopping techniques
4. Have supportive statements to repeat
5. Know about diaphragmatic breathing
6. Know muscle relaxation techniques
7. Accept help
8. Recognise the difficulties of their supporter

Challenge yourself with these questions

- Is it logical?
- Where is the evidence for my belief?
- Is my belief realistic?
- Would my friends agree with my belief?
- Does everybody share my belief? If not, why not?
- Am I expecting myself to be perfect as opposed to human?
- What makes this situation so terrible?
- Am I making a mountain out of a molehill?
- Will it seem this bad in 6 months or a year?
- Is it as bad as bereavement or a serious accident?
- Am I exaggerating the importance of this?
- Am I fortune telling?
- If I "can't stand it" or "Can't bear it" what will actually happen?
- Where are these thoughts getting me?
- Do these thoughts help me?
- Are these beliefs helping me towards my outcome?
- If a friend did the things I do, would I be as critical?

Here are some questions to see if you have passed

You are watching the weather reports on the television before you fly. You see that there are thunderstorms forecast when you are flying. What do you do?

A Cancel the flight.

B Keep watching to see if there is any change as the days pass.

C Leave it to the pilots to decide.

At the departure gate you see an engineer checking the engines. Do you?

A Demand to know what's wrong with the plane.

B Worry that something will go wrong when you're flying.

C Realise that the engineer is doing part of the normal servicing of the plane.

During the flight one of the cabin crew looks worried. You think…

A There's something wrong and they're not telling you.

B The plane is obviously in danger if she looks worried.

C She's worried about her car starting when she gets back.

The pilot puts on the Seat Belt sign and says nothing. This means.

A The aircraft is in danger and is too busy flying the plane to talk.

B You are about to enter severe and dangerous turbulence.

C It's so routine that he's just forgotten to say anything.

The airline announces a delay due to Technical reasons. This means that.

A There is something wrong with your plane.

B There is something wrong with your plane and they don't know how to fix it.

C Someone was airsick and they are changing the seat.

You are feeling anxious about your flight. Should you?

A Realise that it was all a big mistake and you wished you hadn't come

B Wait for a panic attack to happen.

C Stay in the 'present' and start your breathing routine.

You realise that you have answered c) to every question. Have you?

A Got every question wrong.

B Got every question wrong.

C Got every question right !!

Fear of Flying simulator course

The flight simulator course will give you all the experiences of flight that you want to have and we can do these things and as many times as you want to see them. For example in a two hour session we could fly 8 take offs', all in different weather conditions.

We can vary the weather conditions from perfect to extremes of flight.

The flight simulator cockpit is part of a real aircraft. The flight deck is perfect in every detail; in fact it is an actual cockpit which instead of being connected to the normal systems on a plane is connected to computers that make it react just like the real plane. But it gets better because the 'visual' the bit you see out of the window is replicated in the way that you'd see if the plane were doing it for real. It gets even better because if you tell the simulator that it's up to its maximum weight for flying it will behave like that if it's empty then it will fly like that too. Can it get more realistic? Yes of course because then we can alter the weather that's affecting the plane, snow, desert heat, high altitude crosswinds…anything that the plane might experience can be programmed in.

The experience will be beyond your best expectations.

You can experience

- Starting engines
- Taxiing
- Taking off
- Climbing and descending
- Automatic landing
- Go Around
- TURBULENCE
- Cross winds
- Night flying

And if you want to you can

- Taxy the plane
- Fly the plane
- Fly the take off
- Fly the plane in TURBULENCE (Just to see how easy it really is)