We Need To Talk: Some Comms Hot-Spots to Look Out For

OPSGROUP Team
2 July, 2021

Communications in aviation are meant to be standard. **Everyone speaking the same language, in the same way.** Alas, alack, and unglücklicherweise, we all know **this ain't always the case**. Some areas have their own ways of doing things, others just seem to be difficult on purpose.

So here is a rundown of some of the places you might want to listen out for on your international adventures.

Er-can't hear you

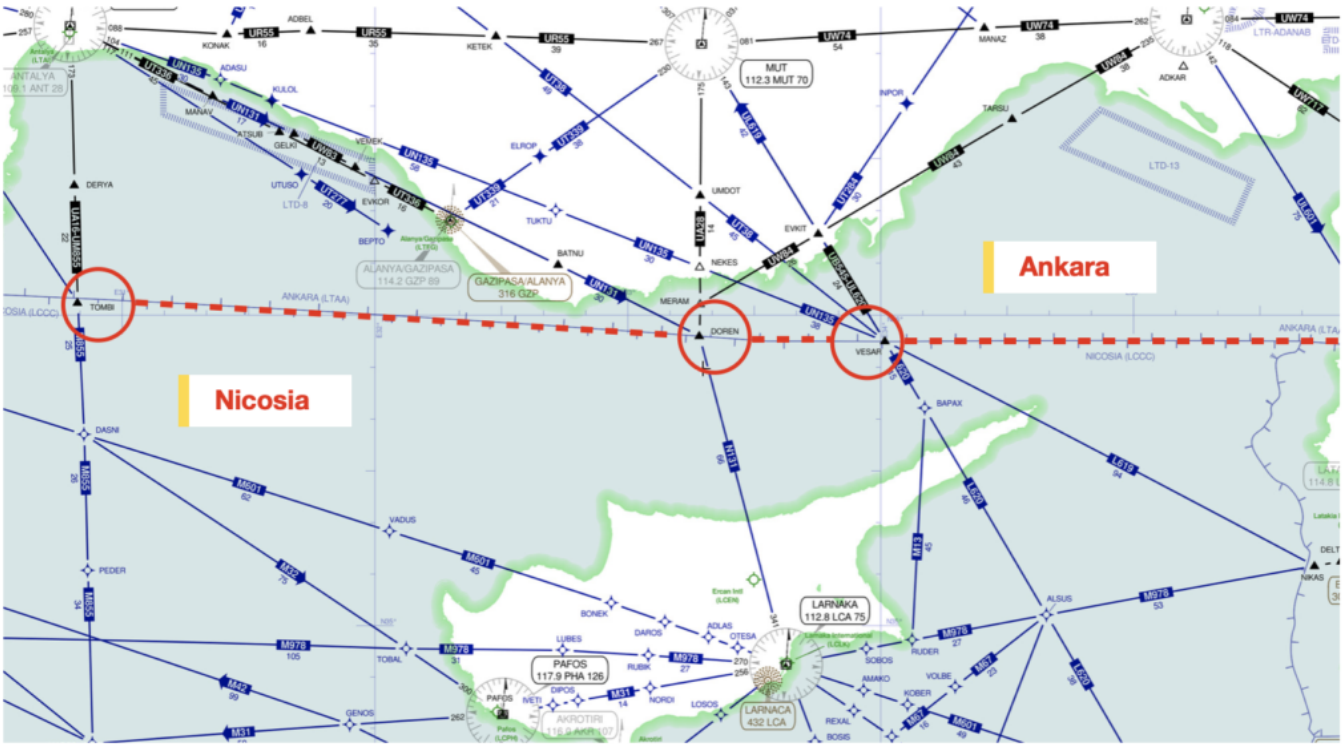
If you are routing between the **Ankara FIR** and **Nicosia FIR** then you are going to need to look out for **Ercan Control**.

Ercan want to control an area over Northern Cyprus, but ICAO don't recognise their authority. So you'll probably have to **call each centre separately** as they don't like to talk to each other directly.

Ercan is that yellow bit (it isn't yellow in real life)

To make matters worse, you need to coordinate with Ankara and Nicosia **ten minutes before reaching their respective FIR boundaries**, which often means relaying via Ercan because Ankara can't hear you.

The waypoints to look out for are **TOMBI** (125.5) or **DOREN** or **VESAR** (126.3). **Call the next FIR 10 minutes before you reach these.**



Where the handover happens… or sometimes doesn't

Southbound is the messiest – make sure you **keep following the instructions from Ankara**, (or relayed

by Ercan 126.7/ 126.9) until you reach these points. Once you do, there is a chance they will tell you you are now under Ercan control, which you should **politely acknowledge and then ignore.**

At this point, talk to Nicosia, **do what they instruct**, and once that's all sorted, then call Ercan as a courtesy to let them know what you're doing.

In Brief:

- **North** of TOMBI/DOREN/VESAR = **Ankara** controls you.
- **South** of TOMBI/DOREN/VESAR = **Nicosia** controls you.

You might have to relay info to Ankara via Ercan, and you might have to tell Ercan what you're doing in Nicosia airspace, but remember – **Ercan don't have control!**

Asia old politics

This is just a plain old case of political rivals. Pakistan and India don't like talking to each other, which often means **they won't hand over to each other between their airspace.** So be sure to have the frequency ready – and a call to let the previous know that you're changing over at boundary is a good idea.

Pakistan Air Defence need to hear from you at least 15 minutes before you enter their airspace, and often ask for your ADC number.

There are different frequencies depending on where you're entering, but the main ones are Karachi 128.350 and Lahore 124.100.

A run in with Iran

Tehran are another strict **"call us first" airspace**, and they take it pretty seriously if you don't get in touch.

The Air Defence want a **10 minutes heads-up**. If you are departing out of a UAE airport, this probably means calling as soon as you pass 10,000ft.

ADIZ can be found on 127.900 and they're going to want to hear:

- Who you are
- Where you are going
- When you'll be reaching them
- What altitude you reckon you'll be at when you do
- Your squawk code

After relaying all this info to them you will probably get a cursory "call xxx", and that's that.

IFBPolite

Over some parts of Africa, there are more giraffes than there is radar coverage. **Big swathes of Africa have little control**, so you are going to need to do some **in-flight broadcasting** here.

The areas where you need to be IFB-ing

It might sound like a chore, but numerous heavy and super jets route through here, and **not hitting their wake** is probably one the best reasons to work out where they are and when. (And if you're one of the big 'uns, then thinking of the little ones is a nice thing to do as well!)

Generally, one IFBP seems to wake everyone else up and triggers a bunch of others, and then you can get a good idea of where everyone is routing.

More info can be found in IATA's IFBP document, but here is a little **IFBP script** in case you need it:

A handy print-it-out-and-take-it-with-you thing

Mumbai, Mumbai HF etiquette

The HF radio over Mumbai airspace is the bane of many a pilot's long-haul life. It often seems to defy all logic of night versus day frequencies, and is usually a trial and error situation to try and work out which one is working.

We found 10018 / 8879 / 5658 tend to have the best reception.

You will know when you do find the golden frequency, because you will hear the ear-aching scratchy hissing, overlaid with a dozen airplanes all calling at once and not listening out for each other.

So try to **avoid talking over another aircraft**, but be ready with your finger on the mic trigger for when a tiny pause occurs and you get your call in. The radio is rarely good at the best of times so **headsets are recommended.**

Mumbai also have CPDLC. The logon is VABF. But they only use it for specific routes. If you cannot get a hold of them, give their SATCOM a go on 441901 or 441920.

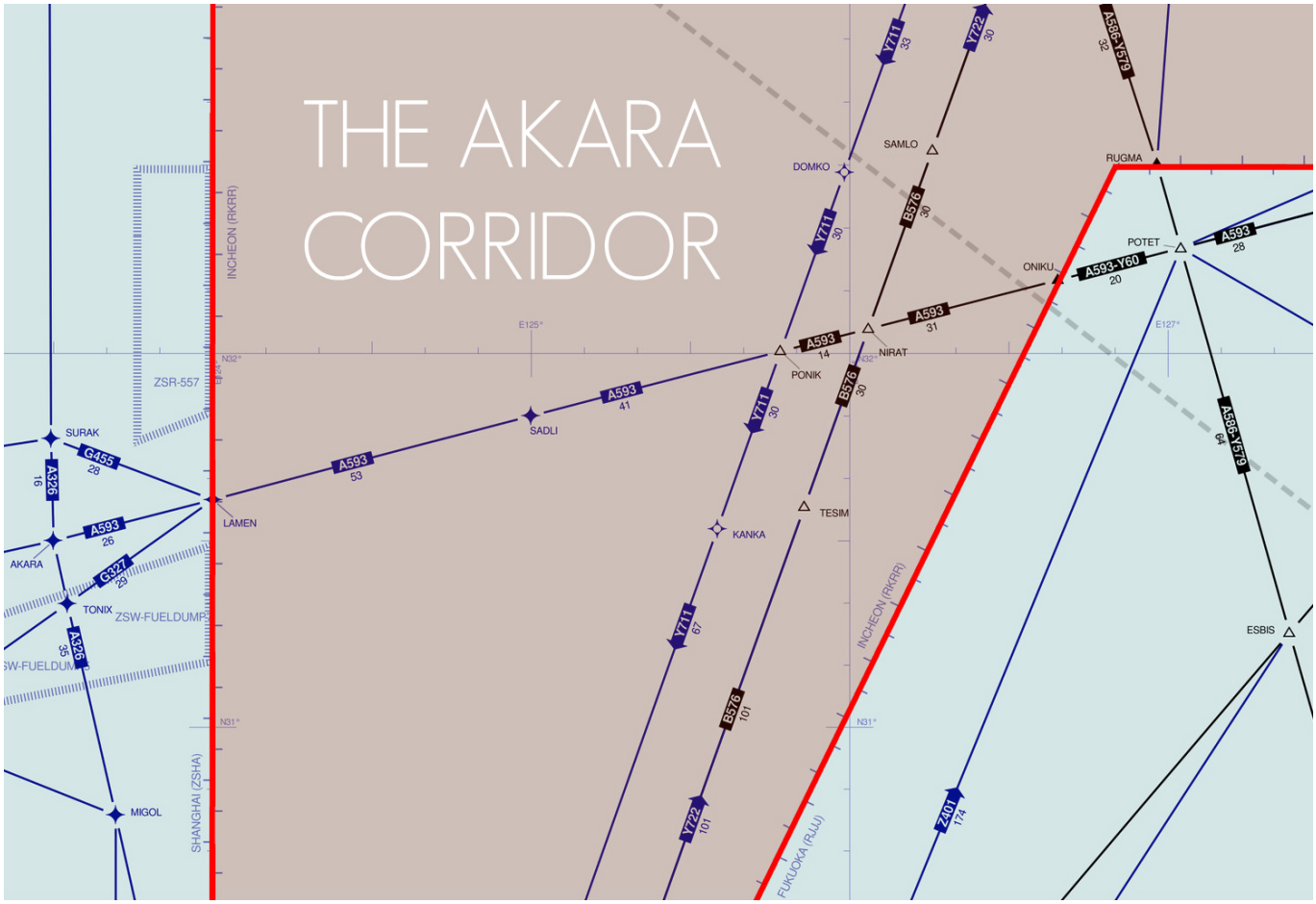
The lingo Down Under

Australia are like teenagers – **happy to text, but rarely do they actually want to talk to you.** Nearly all of the Upper Preferred Routes in Australian airspace use CPDLC. Which is actually great. But only if you've got it, and only if you get it right (you do need **RNP10** and **ADS-C/CPDLC** to route along these).

You can logon to YMMM/Melbourne or YBBB/Brisbane (15-45 minutes before) and when you enter, they like to receive a **position report**. From then on its very straightforward.

A593: The Akara Corridor

There's a bit of airspace off the coast from ZSPD/Shanghai known as the 'Akara Corridor', where **different ATC centres are responsible for the control of aircraft at various different crossing points.** South Korea (RKRR/Incheon) controls north-south flights here, while Japan (RJJJ/Fukuoka) controls east-west flights.



The Akarridor...

This area has always been unusual in that more than one center has had responsibility for controlling aircraft at different waypoints.

But on 11 Jan, 2021, ATC authorities in Japan, China and South Korea agreed to implement a proposal from ICAO regarding ATC management in this area – **so from 25 March, 2021, South Korea will control all flights in this area.**

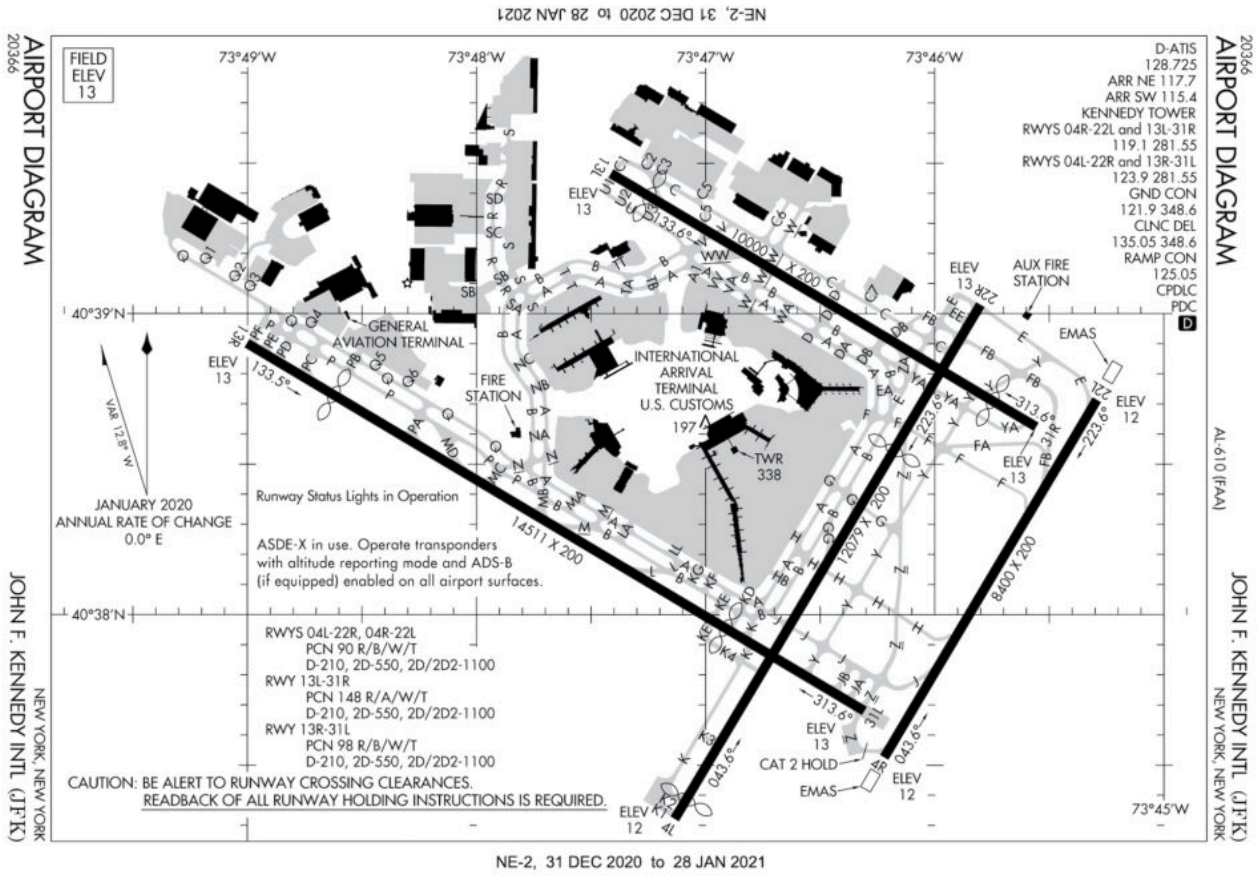
Wild comms in Idlewild (JFK)

No briefing on 'The Comms Hot-Spots to Look Out For' would be complete without a mention of KJFK/New York controllers.

Granted, this is a busy airport, in busy airspace, but operating into JFK is not for the faint-hearted. **Controllers speak fast, only say what they need to say once, and get very mean very fast if you mess up.**

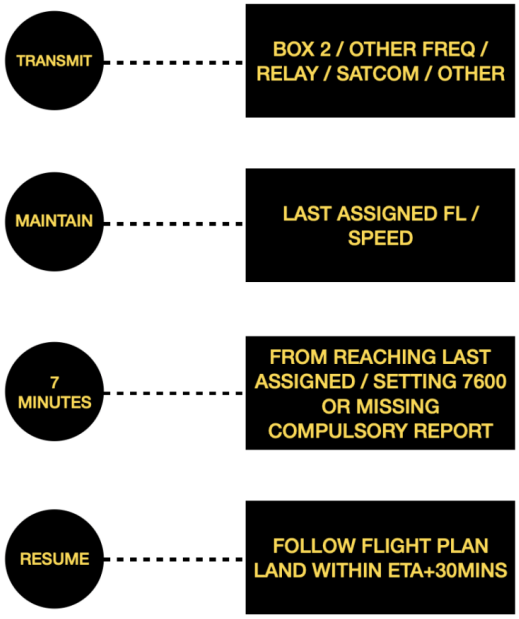
Expect multiple runway changes for landing, and on departure keep an eye on the ATIS because they won't always tell you if your departure runway changes, you'll just find out on the taxi.

There are quite specific when's and where's to call on the ground as well – once clear of the runway, check in with ground, but also apron to find out your gate and entry to the apron, because ground will probably want to know this, and sometimes the two don't seem to talk to each other.



JFKrazy taxiways

Lost Comms



ICAO Doc 4444 contains the **standard lost comms procedure**. Some countries have their own versions too.

If you're in IMC:

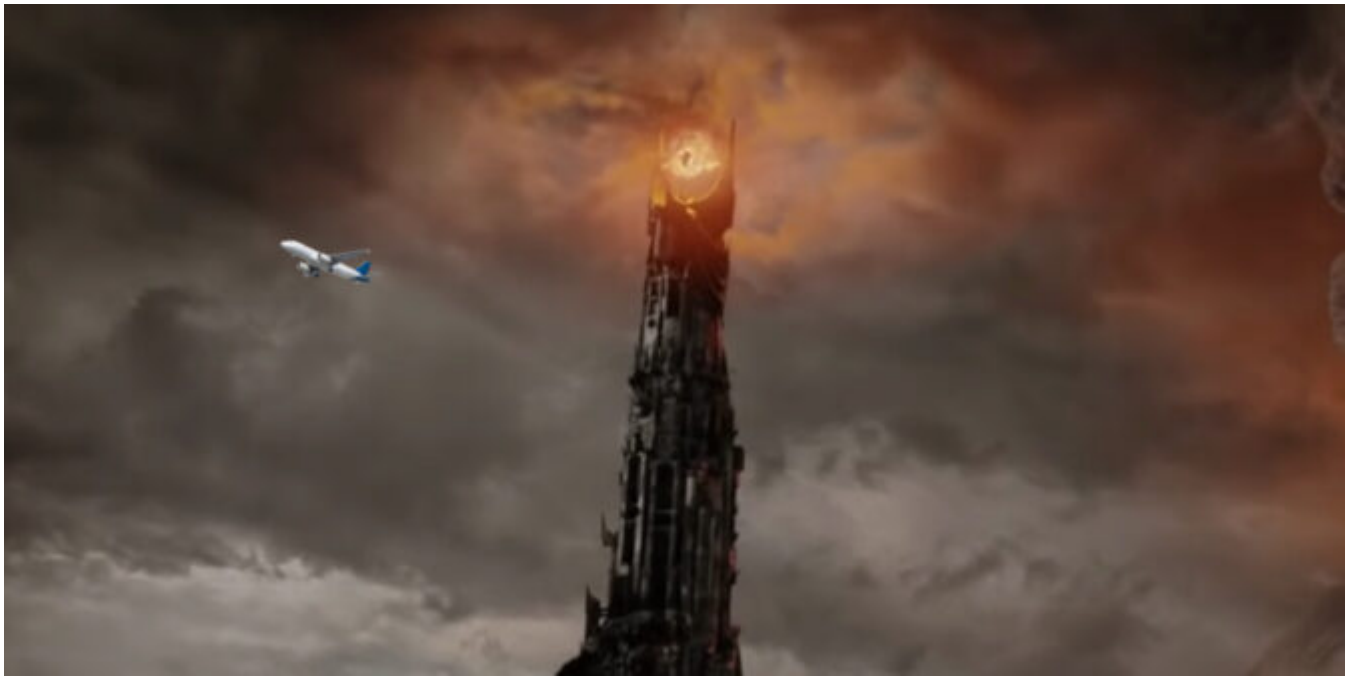
- Maintain last assigned speed and level (or minimum flight altitude if higher) for 20 minutes after the point you failed to report at.
- Then follow your flight plan.

If you're in IMC and in an area with ATS surveillance:

- Maintain your last assigned clearance (minimum flight altitude if higher) for 7 minutes. The 7 minutes runs from when you first reach the last assigned altitude (because you lost your comms in the climb), from when you set 7600 (because you realised you'd lost comms while cruising), or from when you were unable to report at a compulsory point (you tried and it didn't work because your comms aren't working…)
- Then follow your flight plan.

One Contingency Procedure to rule them all

Chris Shieff
2 July, 2021



From 5 Nov 2020, there will be **one standard set of Contingency and Weather Deviation Procedures for all oceanic airspace worldwide**.

If you've been flying in the **North Atlantic Region** over the past year and a half, you'll be familiar with how it works – the new procedures were introduced there back in March 2019, **and now they're being rolled out everywhere**.

The FAA has already published a Notice to say that these procedures will take effect in US oceanic airspace from 5 Nov 2020, and ICAO is expected to formally publish the Standard in an update to PANS-ATM (ICAO Doc 4444) to take effect from the same date.

Rarely do we see worldwide oceanic contingency procedures undergo a formal revision. The last time a major revision occurred was in 2006 when ICAO standardized a 15 NM offset executed with a turn of at least 45 degrees. Prior to that, the North Atlantic and the Pacific had used different offset distances and a 90 degree turn.

Wait… what are "contingency procedures"?

These are basically any time you have to do things differently if you need to deviate from your cleared route, and for one reason or another you cannot get permission from ATC first.

Why would you need to bust your clearance? You may not have the ability or capacity to communicate with ATC, or they may not be able to respond to your request quickly enough for a variety of reasons – meteorological conditions (severe turbulence and weather avoidance), aircraft performance, loss of pressurisation, immediate diversion, or a loss of navigational accuracy.

What are the new procedures?

The short answer
Contingency offsets that previously were 15 NM are basically now all 5 NM offsets with a turn of at least 30 degrees (not 45 degrees).

The long answer
Read the FAA Notice.

The slightly less long answer

– Turn at least 30 degrees (reduced from 45) to the left or right of track and establish yourself on a parallel track that is offset by 5nm (reduced from 15).
– The direction of turn is up to you, but you should consider airways around you – the likely direction of other aircraft, the applicable SLOP procedures, the direction of your diversion airport and of course terrain. (If going left or right is a 50/50 choice, going right is probably better – it gets you out of the way of all the SLOP offset traffic that might be coming at you from the opposite direction!)
– When established on your offset track, maintain an altitude that is vertically offset by 500 feet from normal levels (or 1000 feet if above FL410).
– In areas of parallel airways, it is recommended you descend below FL290.
– Watch your TCAS, and if possible, keep your eyes outside for other aircraft.
– Make sure your transponder is set to TA/RA (if able).
– Be seen – turn on as many exterior lights as possible.
– Squawk 7700.
– Try and talk to ATC via voice or CPDLC, and declare a PAN PAN, or MAYDAY.
– Establish comms with other aircraft on 121.5 MHz or 123.45 MHz. Make a position/intention report as you would in TIBA procedures.

The best answer
A picture! So often the best answer. And this one's pretty neat. Not least because you can click on it, download it, print it out, and put it in your flight bag to take with you. (If you'd also like to laminate it, we're ok with that).

Weather deviations

If you have to deviate from your assigned track due to anything weather-related, there's a whole different procedure to follow.

Here's what to do:

- In the first instance, up the urgency with the phrase "WEATHER DEVIATION REQUIRED." ATC will attempt to provide separation, and if they can't they will ask you to advise your intentions.
- If you intend to deviate, let them know. Say something like – "I am deviating under PIC emergency authority. At 5 NM from course I will employ the Weather Deviation contingency."

Then apply the following:

- Declare a PAN.
- Deviate away from other airways if practical.
- Talk to other aircraft on 121.5 and 123.45.
- Keep an eye on your TCAS and outside.
- Turn on all your exterior lights.

For deviations of **less than 5 NM**, remain at the flight level assigned by ATC.

For deviations of **5 NM or more**, when you are at the 5 NM point initiate a change as follows:

If flying **EAST**, **descend** left by 300ft, or **climb** right by 300ft.

If flying **WEST**, **climb** left by 300ft, or **descend** right by 300ft.

In other words – **SAND!** (**S**outh of track = **A**scend, **N**orth of track = **D**escend; Up/Down by 300ft)

Once you are back on track, resume your cleared level. If you're already deviating and cannot get a clearance to deviate further. Change your level immediately in accordance with the table above.

Turnback procedure

The new guidance has left out any specific reference to how to divert across the flow of traffic or turn-back procedure, and instead simplified it to just "proceed as required by the operational situation". Turning back would assume you either employ the 5NM offset as per the new contingency procedure, or else get a new revised clearance.

Bottom line

Download the pic, and give the new procedures a good read (they're not actually *that* long). Beginning 5 Nov 2020, the new procedures are expected to be implemented. You might want to prepare changes for your ops manuals and checklists too.