Is breaking the rules always bad?

OPSGROUP Team
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"So, Rebecca, tell us about a time when you didn't follow an SOP?"

I don't know about everyone else, but this question always seemed to pop up in interviews for me. Maybe I come across as 'rigidly adherent' to rules, or perhaps I tick too many of the "like finding alternative solutions" answer on the personality questionnaire and they think I will constantly be bending the SOPs into elaborate balloon animal shapes for the fun of it...

Here's the question:

When can we 'go outside' the SOPs? How do we justify it? How do we actually do it?

It turned into three questions, sorry.

First up, what is the point of an 'SOP'?

To prevent wild cowboy pilots from jaunting about willy nilly? Yes, probably that. But at the root of it, I think a fair definition could be **"to help with safety".**

A cowboy pilot… who was actually a NACA High-Speed Flight Station test pilot.

By the very vague 'help with safety' term, I mean *all the stuff* – providing guidance to help us stick to rules and regulations, helping us deal with situations, ensuring we all know what to do and how to do it, and what to expect. They create a sort of script, a choreographed dance to lead us.

Basically, making sure we're all playing by the same rules.

Standard operating procedures are put out there not just to be a "that's how we do it" rule book, but more a **"that's how we can do it, because it should help with safety"** guidance book.

So compliance equals safety?

Now, a quick interlude on the word 'compliance' because **I don't like it much.** If you search the definition of someone who is compliant it says they are "disposed to agree with others or obey rules, especially to an excessive degree".

OK, the rules bit is fine, but the excessive degree? Following rules for rules sake, excessively? Nope.

But…

But compliance is necessary in aviation, and much of my dislike really comes from the fact I think it is generally **misunderstood, misused and misapplied.**

Someone wise said that *'compliance is the foundation and structure which helps build safety'* (I may have not quoted that completely right), but it sounds good to me.

So being compliant doesn't automatically equal being safe. **Rigid adherence for the sake of saying you adhered** does not automatically lead to safety. The two can absolutely go hand in hand, but just ticking boxes and saying *"I ticked them all, so I'm compliant, so I'm safe"* doesn't actually work, at least not all the time.

Sometimes it might, but it's not a guarantee.

Don't comply? Better explain why.

The same goes for SOPs. Sort of...

An SOP generally isn't (shouldn't be) created for the sake of creating an SOP. Then you just end up in a hideous loop of *'the SOP says I must follow the SOP that says I must follow the SOP that says...'* you get the picture.

This is pointless.

Any procedure should be put in place because it does 'something safetyish', and so following it will help you be 'safetyish'.

Which brings me, finally, to the two occasions where I think it is ok to let something non-standard occur.

First up: The 'letting it slide' situation.

If I say *"checked"* instead of *"check"* on a checklist then I might not be compliant with the checklist

terminology, my *'knowing the correct response on the checklist SOP'* might be subpar, but has that really impacted safety? No, it hasn't, because the same outcome has been achieved.

You pulling me up on it might impact safety though because it will make me angry at you!

So 'non-standard' stuff, for me, has to have some common sense applied to it. If it hasn't impacted safety, then the balance between rubbish CRM versus helping correct a bad habit (that could become more of a thing) has to be considered.

That's letting something slide.

Secondly: The 'blind obedience' situation.

Fastidiously following for following's sake.

There could be times when an SOP might actually decrease safety, and that's probably when you might want to **bend it, break it, or work outside of it.** I guess this is what all those interviewers are hoping to get at by asking this question?

Ultimately, safety is the aim of SOPs, and **if they don't achieve it – do what will.**

And this can be tough to do, because often we fall into the trap of thinking SOPs are everything, and we become reliant on them to keep everything OK, rather than using them alongside our professional judgement and experience.

A very obedient pilot.

What about less black and white situations?

You're stuck in a box that says 'no permission, no can do' and the operation is grinding to a halt? This is when to really think about the "instructions" that go with that box, so to speak. **The actual intent or purpose of the procedure,** and what you can do to maintain that. Because not being able to tick 'exactly compliant with procedure' is less important that ticking the 'compliant with safety awareness and standards'.

The procedure might turn out different, but the outcome will still be achieved.

If you're not getting my point on intent, refer back to the earlier paragraph where I used the splendid word 'safetyish' – it's not in the dictionary, but you understood it, and it got the point across (hopefully).

Be Effective!

The final question then, if we're going with the **"same purpose, so all good!"** principle is the "Effectiveness Test". Quick definition – doing something effectively means doing it the best way.

Which is what SOPs are sort of there for. **Getting us to the most efficient (safest) outcome, the most effective way.**

So I can't just ignore a load of SOPs and say *"but the outcome was the same, what's the problem!"* And if that's the case, then how much should we be considering the effectiveness (rightness) of our process alongside the outcome?

To try to comply with the Effectiveness Test, we can fall down a rabbit hole of ticking every box, crossing every 'T', dotting every 'I' so to speak – basically, **worrying about the effectiveness versus the outcome too much.** Which is exactly what this whole post started out talking about.

But I can't swing the other way and barrel roll an airplane down an approach disregarding every stabilisation criteria but touchdown on speed not the blocks and say *"hey, the outcome was fine."*

So where do we draw this line? Is it even a line?

It comes down to airmanship. This might feel like it's not really an answer at all, but I think it will be **different for each of us** at the time, on the day, when we're faced with something that has us asking it.

And this leads to a last question, that came up as I thought through all of this – *"Is there a chance that too stringent SOPs actually stop us from thinking and judging, because we expect there to be an answer to every situation?"* Because SOPs help keep everything predictable, but often the situations are anything but.

My motto is this.

Let's aim for safety, and use the SOPs because they provide us with the most effective way of achieving that. **Until they don't.** And that's when we will do what we need to to maintain safety. But we'll try and do it with the SOPs, rules, regulations in mind *as best we can.*

Flying outside the Procedures

OPSGROUP Team
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Aviation is full of procedures. We fly by them, sometimes we kind of live by them. But other times there are situations where we need to disregard them. So when is it ok to throw the rule book out the window?

In an airplane, never.

In the literal sense anyway, given the risk of opening a window mid-flight and getting sucked out. But what about in the less literal sense?

Procedures are not there to stop us just doing whatever we want. They are there to keep us safe, to make sure everyone is operating to the same standards and to provide pilots with a guideline of what they should do in ***most situations.**

Why the asterix?

I will come back to that. But for now, that reasoning makes sense. If every airplane did what it wanted, flew how and where it wanted, the sky would be a messy mass of chaos. So, we have procedures and we have them so we know what to do, when to do it and how to do it.

More importantly, everyone else knows as well. Which brings us back to the "most situations" comment.

We cannot expect there to be a procedure in place for every possible event. They are there to offer guidelines and standards, but they are not designed to cover everything.

And they are definitely not supposed to **remove the need to think.**

So what should we think?

Well, thinking about situations where we might be without a procedure, or where there is a procedure but it no longer leads to a safe outcome is a good place to start.

Let's take a look at **ICAO Doc 007** – the "bible" for the North Atlantic. It is quite clear on a lot of things – for example, what the **contingency procedures** are if you experience some sort of emergency while flying in the NAT.
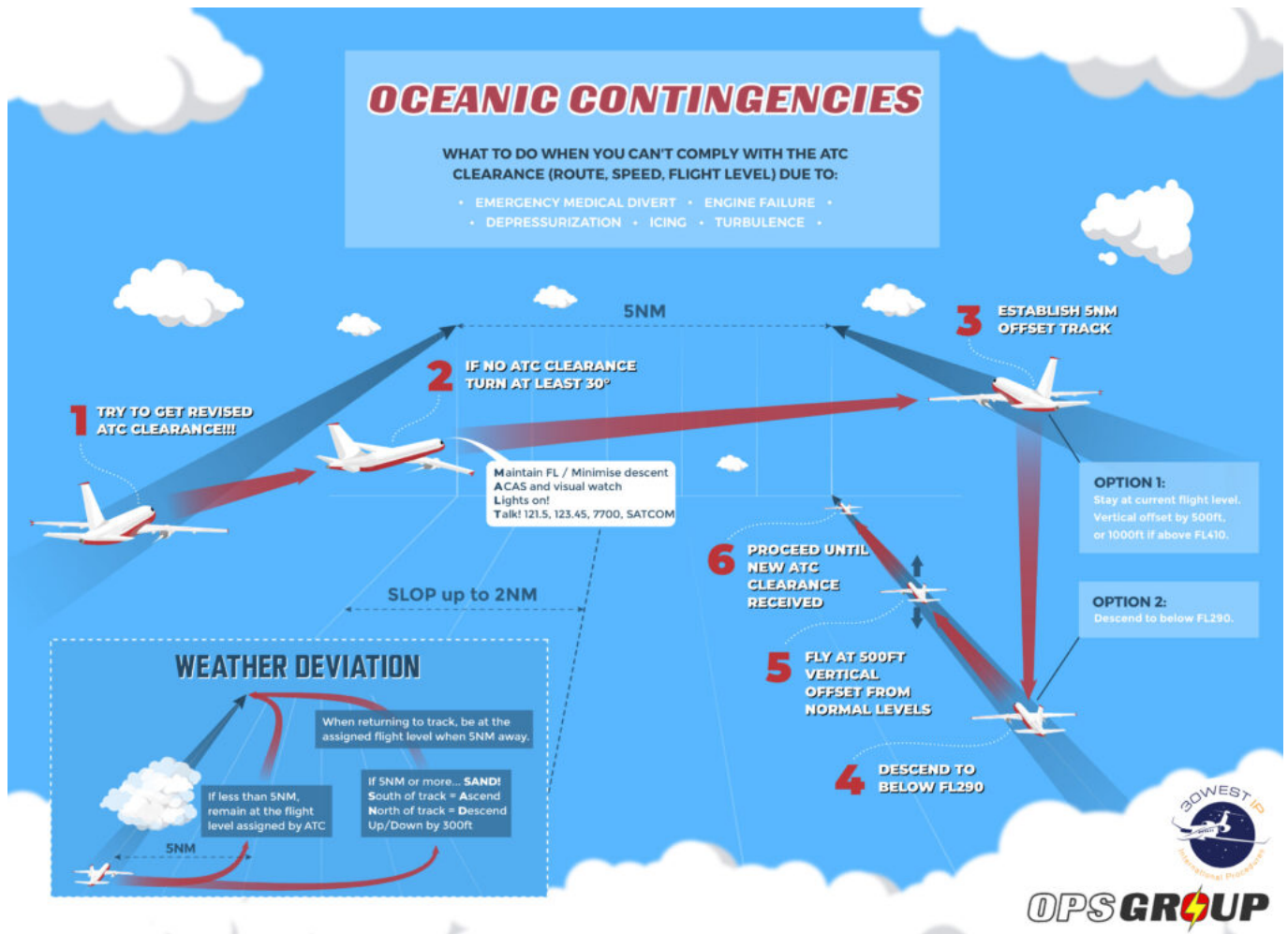
We are talking some busy airspace out there, with a lot of aircraft flying on specific tracks, and so the last thing you want is aircraft barreling across them setting off TCAS warnings as they zoom off on a diversion.

So NAT Doc 007 lays out some procedures to follow. Things like turning **30 degrees off track and offsetting 5nm**. And one that says –

"W*hen below FL290, establish and maintain 500' vertical offset when able and proceed as required".*

Ok, great, it is pretty clear. Get yourself down to below FL290, establish on your offset, and now go where you need to go.

OCEANIC CONTINGENCIES

WHAT TO DO WHEN YOU CAN'T COMPLY WITH THE ATC
CLEARANCE (ROUTE, SPEED, FLIGHT LEVEL) DUE TO:

• EMERGENCY MEDICAL DIVERT • ENGINE FAILURE •
• DEPRESSURIZATION • ICING • TURBULENCE •

1 TRY TO GET REVISED ATC CLEARANCE!!!

2 IF NO ATC CLEARANCE TURN AT LEAST 30°

Maintain FL / Minimise descent
ACAS and visual watch
Lights on!
Talk! 121.5, 123.45, 7700, SATCOM

3 ESTABLISH 5NM OFFSET TRACK

OPTION 1:
Stay at current flight level. Vertical offset by 500ft, or 1000ft if above FL410.

OPTION 2:
Descend to below FL290.

4 DESCEND TO BELOW FL290

5 FLY AT 500FT VERTICAL OFFSET FROM NORMAL LEVELS

6 PROCEED UNTIL NEW ATC CLEARANCE RECEIVED

WEATHER DEVIATION

When returning to track, be at the assigned flight level when 5NM away.

If less than 5NM, remain at the flight level assigned by ATC

If 5NM or more... **SAND!**
South of track = Ascend
North of track = **D**escend
Up/Down by 300ft

SLOP up to 2NM

But...

What if our emergency is a decompression, and we are right out in the middle of the NAT where routing at 10,000ft the whole way to an airport might turn into a fuel problem?

Do we still need to get to FL95 before starting a diversion?

There might not be a black and white, right or wrong answer, **but this is the point** – there are situations where there isn't necessarily a procedure telling us what to do, or when to follow another procedure.

So this is something we should probably be thinking about a bit more. The "What If?" things that could happen.

So, what is the rule for breaking procedures?

Is there sort of **a checklist for when we can, can't, ought to or must?** Why isn't there a rule for every time you are allowed to break a rule?

Well, the reason is no-one can think through every situation, and more importantly they shouldn't try to!

The day pilots can only do something if a procedure tells them to is the day you might as well replace them with a computer. We need to retain the skill of weighing up risk and reward, consequence of actions, because there are so many situations out there which are **not going to be black and white.**

NAT Doc 007 document actually states quite clearly several times –

"The pilot shall take action as necessary to ensure the safety of the aircraft..."

And this goes for any procedure, any rule, anytime you are flying.

Just because the book says "No, don't do that!" never means you cannot do it if it is what you need to do to maintain safety.

The tragic Swissair Flight 111 accident is often raised in CRM discussions as an example of when following procedures to the book **might not lead to a safe outcome**.

But…

Not following procedures because you think there is a quicker, better, easier way to do something is probably not the best idea either.

A Qantas pilot experienced "incapacitating" symptoms after a technical malfunction where they decided to cary out their own troubleshooting, rather than following the checklist.

So, having a good reason to not follow a procedure is important because you are going to have to justify why you broke the rule. **If you need to break it for safety then break it,** but the key seems to be having a **valid, justifiable and safety related reason.**

That is airmanship, and that is why the Commander has final authority. It is also a cornerstone of our pilot licence that we "agree" to accept the ultimate responsibility for the safety of the flight.

Why are we even having this discussion?

Possibly because *we sometimes forget why we have procedures in the first place*.

Unfortunately none of us are immune to this. I can remember several times in my career when **procedure-following took over from common sense.** The time when we shut down an engine with 10 meters of taxi left, ran out of steam, and had to be towed the last 9… *But hey, we still ticked the one engine out taxi box.*

So, all of us stepping back and considering why the procedures are there, and then what we might do when we find ourselves potentially having to operate outside of them, is important.

Which brings us back to the debate about FL95 over the NAT.

Different folk might answer this question differently. It is going to depend on the day, on you and on the situation, and there probably isn't a definitive answer to be given.

What is clear is that at some point in our flying career we will all probably find ourselves in a situation where there is no procedure, no clear cut answer, no simple solution, and this is where our **experience, airmanship and judgement** will really be put to the test.

When we end up in that situation we should't be asking *"What is the risk of me getting into trouble if I do?"* but rather *"What is the risk to my safety if I don't?"* because all the procedures we fall back on were not put there to be blindly followed, and were not written into stone to keep you out of trouble – they are there to be thoughtfully followed when they keep *your aircraft out of trouble.*