

The DOs and DON'Ts of Controlled Rest

OPSGROUP Team

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Fatigue and tiredness are big topics in aviation, and something we definitely need to have more conversations on. *Particularly with some CEOs who are helping add the 'ZZs' into their airlines name...*

But today we are focusing on just one thing: **In-flight rest**. Actually, we're focusing on three things to do with in-flight resting. Basically, the *what to do* in flight when you find yourself in those "I'm tired, getting tired, think I might get tired, probably should have gone to bed earlier before my flight but now it's too late" type situations.

You're there, in the airplane and are tired, so **what can you do about it?**

It's not too late.

Actually, it is too late to not get into that position. If we could zoom back in time and somehow sleep better then that would be great, but for obvious reasons (the lack of time machine) we can't.

Additionally, complaining about being tired, moaning about how your airline pushes FTLs to the limit, preparing a ranting post for PPrune, or lecturing the other pilot (because they're the tired one) on better sleep management are not going to help.

Why not? **Because they aren't going to change the fact that right then, sat in that flight deck, you're tired** and do still have to eventually land the damn thing.

But, good news, it isn't totally too late to try and fix it. So, here are some things that might help, right then and there:

1. **Take your allocated rest, and make the most of it**
2. **Take some controlled rest (if you're allowed)**
3. **Some other things which other pilots say also help.**

This isn't a "treat your body as a temple" post.

If you're looking for diet tips, exercise info or any of that, move on. That's not what this post is about. It also isn't a 'Let's learn about sleep science and Circadian Rhythms and Fatigue Risk Management' post. If you want all that then you can read the ICAO thing on it here.

Allocated rest strategies.

Right, let's start with these.

These are the **things all operators have to let you do if you fly over a certain length of time**. If you have more than two crew onboard for a flight and one or two of them are referred to as '**augmenting' crew**', then you can take some allocated rest.

How you take it depends on the strategies your operator publishes and also what works best for you.

Don't be *that* captain that hogs the entire cruise for themselves. Not cool. The aim here is to split the rest fairly (doesn't always mean evenly) between the crew. **The focus is on making sure the operating crew are best rested** because they're the ones who are going to have to land the airplane. So most recommend they take the last rest period, and **wake up about an hour or so before landing** so they're fresh and ready for it.

Now, to get these really right, you do need to plan it before you even get on the airplane because you'll need to manage your sleep, think about those timezones and all that joyous stuff. We've posted some pretty generic ones for you.

If you are reading this for the first time and work for an airline or operator that uses different strategies and you like 'em, then tell us about them! We won't share your info, just the strategy details to help others.

'How to do it' - generic strategies

- Make sure the **temperature** is set to something normal
- Think about your **liquid consumption** before hand because having to go to the bathroom halfway through will be annoying
- **Don't watch a movie** or play on your phone, this won't help
- **Don't keep checking the time**. Also won't help

To be honest, these are all fairly common sense 'how to sleep better 101' facts so I'm going to stop there, and instead move onto the '*my allocated rest didn't work/ isn't for hours/ I don't get any and I'm really, really tired*' section.

My allocated rest didn't work/isn't for hours/I don't get any and I'm really, really tired.

Also known as '**Controlled Rest**'.

Now, I take controlled rest for granted and am particularly good at it, but I realise a lot of places don't actually allow it? Or authorities haven't approved it? This is frankly ridiculous. **If you're doing long flights at weird hours then you're going to get tired** because no brain can overcome the perfectly natural and necessary requirement to sleep.

Which is why **controlled rest should be allowed** and if it isn't, get onto your operator and make them

let you do it. I will add that it does need to be done properly though. There are some times when it isn't appropriate.

Times when controlled rest isn't appropriate:

- When you're about to land
- When the other pilot is also taking it
- When there is something going on that probably needs the attention of both pilots like a huge section of stormy weather up ahead, or anytime you're in Chinese airspace, or if something has broken on the airplane that's quite important...

There are also **ways** to do it.

First of all, don't wait until your head is bouncing off the MCP from repeated micro naps. You want to start it when starting to feel snoozy. Having some caffeine before hand is also a good idea because this starts to kick in around the 30 minute mark which means when you wake up, you hopefully won't feel even more dreadful.

Different operators have different rules and methods, but the ones I know are these:

- **Let the cabin crew know** so they don't bug you during it
- **Set a time with the cabin crew** where if they haven't heard from the other pilot by, they check in. In case the other pilot has fallen asleep as well
- **The other pilot should wear their headset.** You should turn your speaker up, but only **have 121.5 on** it. That way, if other pilot nods off, you'll hopefully wake up to the bellowing voice of ATC trying to get hold of you

Then get a pillow and blanket, slide your chair back, put your eye mask on, sleep...

Or just rest. **Resting is also good.** Maybe not as good as a full out snooze fest, but it will help. You should be woken up around the 45 minute mark, and take another 15 minutes to get back to fully alert.

Just to be clear, there are a few things the other pilot shouldn't do:

- Also sleep
- Watch downloaded Netflix on their iPad (had this happened to me once)
- Call a cabin crew member in and talk incessantly because they're bored
- Not wake you up if something starts going wrong

The basics, in juicy Opsicle format

CONTROLLED REST

Catching some zzz's in the flight deck...

Resting Pilot:

- Plan to take controlled rest before you get too tired.
- Drink caffeine before you nap.
- Rest for 45 minutes, wakeup for 15.
- Keep 121.5 on the speaker.
- Wait too long to take rest. If you're micro napping, that's not good!
- Try to force sleep. Just relaxing helps.
- Sleep on the cockpit floor. You might need to be near an Oxygen mask.
- Sleep for hours and not consider the other pilot.

Flying Pilot:

- Put your headset on.
- Arrange times for you to contact the Cabin Crew.
- Dim the cockpit lighting.
- Go to the toilet before the other pilot starts their rest.
- Forget to monitor the aircraft.
- Also fall asleep.
- Not wake the other pilot up if you need them.
- Forget to call the Cabin Crew.
- Turn the radio down so much you miss calls.
- Let the other pilot sleep for hours.
- Say you aren't tired when you are.

Bottom Line:

Don't rely on controlled rest as your only sleep management tactic!

Jazzy colors to help keep you awake. Click to download PDF.

The other things you can do

You're in flight, you can't take allocated rest or controlled rest and you're fast approaching exhausted. What other things can you do?

I mean, this feels like common sense again but here we go.

- **Drink coffee. Caffeine helps.** But don't drink so much you're constantly having to go to the toilet because that gets annoying for everyone else.
- **Stand up and stretch them limbs out.** A good old stretch and walk around can be invigorating
- **Turn the temperature down.** Not to artic cold, but fresh keeps you more alert

I want controlled rest and my operator says no.

They suck. To help convince them here are some more resources.

- A thing on it from FlightSafety.
- Some more on it from us that we wrote before.
- A pretty shoddy looking presentation, but its by some clever folk at NASA, talking about

controlled rest.

- Our email address – so your operator can send in their questions and concerns about it, and we can tell them how foolish they're being.

Cockpit napping – what are the rules?

Mark Zee
29 June, 2022



As is too often forgotten by regulators, aircraft flown by humans require rules that match human needs.

One of those needs is **sleep**. Normally, we do this for about 33% of the day. If you manage to get a perfect night's sleep, have a short ride to the airport, and then operate a long haul flight that departs on schedule, you *might* get away with not feeling tired during it. Most of the time, these perfect conditions don't show up on the day.

Especially with the cumulative fatigue we suffer as pilots, a quick nap works wonders.

NASA did extensive research on this in 1994, and the findings showed that "The benefits of the nap were observed through the critical descent and landing phases of flight ... The nap did not affect layover sleep or the cumulative sleep debt displayed by the majority of crew members. The nap procedures were implemented with minimal disruption to usual flight operations and there were no reported or identified concerns regarding safety." This gave us the term, "**the NASA Nap**".

So, napping is good. NASA says so. But, around the world, we have very different regulatory approaches to this. To make it sound better, the regulators call it "Controlled Rest", or CR.

Places where you can:

Australia, Bolivia, Canada, China, Europe, Israel, India, New Zealand, Turkey, and the United Arab Emirates.

[source: *Flight Safety*, 2018]. Know more? Comment on the article and we'll update.

Places where you definitely can't:

The US. Although the Air Force and the Coast Guard allow it, the FAA does not – neither for Part 91, nor Part 121. CR was considered when the latest FAA rules were developed beginning in 2010, but it was excluded from the final regulations. FAA Advisory Circular 120-100 (FAA, 2010, page 11) states: Although a number of foreign air carriers authorized in-seat cockpit naps during flight, **the FAA does not authorize such in-seat cockpit naps.**

Just drink coffee!

That seems to be the FAA position. No napping allowed. There are some wonderful resource guides, listed below, that delve deep into the subject, but in terms of napping – it's still forbidden. Why? That's a good question. We don't know.

Beverage	Caffeine Amount
Espresso coffee	78-106 mg/100ml
Brewed coffee	36-112 mg/100ml
Instant coffee	23-73 mg/100ml
Decaffeinated coffee	0-5mg/100ml
Black tea	13-47 mg/100ml
Energy drinks (e.g. V, Red Bull, Monster)	15-42 mg/100ml
Soft drinks (e.g. Coca-Cola, Pepsi, Lift, Mountain Dew)	9-14 mg/100ml
Dark chocolate	43-125mg/100g
White and milk chocolate	21-23 mg/100g

Guidance Docs:

- Fatigue Management for Airline operations (ICAO/IATA/IFALPA)
- Fatigue Management for GA operations (ICAO/IBAC/Flight Safety)
- Controlled Rest Resource Guide (Flight Safety)
- NASA Research Document (1994): Effects of Planned Cockpit Rest on Crew Performance and Alertness in Long-Haul Operations

Discussion



We will discuss the topic in the Ops Chat on December 12th, 2019 at 12pm EST – register here: <https://ops.group/opschat>