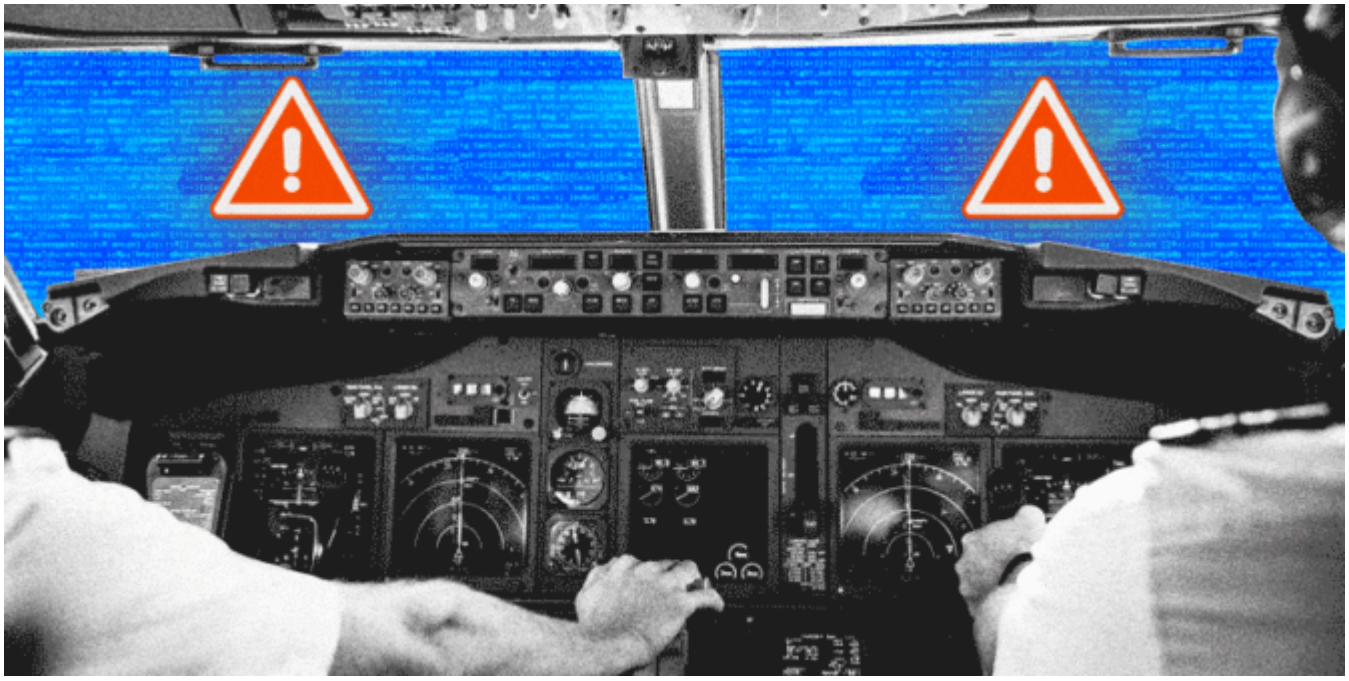
Spoofed Before the NAT? Here's What to Do

Chris Shieff
21 October, 2025



An OPSGROUP member on a recent westbound NAT flight from the Middle East received the following message via CPDLC:



The crew contacted Shanwick via HF, who requested their **RNP capability** and operational status.

The controller explained that due to their point of departure (OMAA/Abu Dhabi) they wanted to be certain the aircraft had not been **contaminated by GPS jamming or spoofing** before it entered oceanic airspace.

It's been a while since we wrote about this procedure, and since then we've had this NAT Ops Bulletin published by ICAO telling operators what to do on the NAT if they've experienced jamming/spoofing, so we reached out to NATS directly for an update. **Here's what they had to say…**

Defensive Measures

NATS reported they continue to receive a large number of flights every day that have been impacted by GPS interference prior to oceanic boundaries.

The issue is that once an aircraft's navigation system has been 'contaminated' by bad GPS data, it may not be possible to recover full RNP capability in flight, even if the normal GPS signal is restored.

These aircraft may no longer meet RNP 4/10 accuracy required in the NAT HLA, even **long after the trigger event occurred.**

The NAT Ops Bulletin which was published back in Jan 2025 requires crew of NAT-bound aircraft that have encountered GPS interference to notify their first NAT ANSP via RCL. Even if your aircraft shows no lingering effects, **ATC still want to know.**

NATS advise that late notification by pilots of a RNP degradation (such as approaching an oceanic entry point) greatly **increases controller workload.** They often need to move other aircraft out of the way to provide increased separation (in some cases from 14nm to 10 minutes), it's a big deal.

As a result, they are employing **defensive controlling measures.** Based on previously spoofed/jammed flights and regions of known risks, they may proactively contact flights assessed as higher risk to confirm status before entry – although the exact selection criteria isn't public. Increased separation will be applied until normal navigation performance is confirmed by the pilots.

In a nutshell, this is why the OPSGROUP member received the message above.

A special thank you to NATS for their help in answering this question.

Jammed or spoofed? You need to let your NAT ANSP know

The NAT Ops Bulletin we keep mentioning – this provides the guidance for NAT traffic on how to manage GNSS interference. Here it is again, so you can't miss it! ⬇



NAT OPS BULLETIN

Serial Number: 2025_001 **Issued: 7 January 2025**
Subject: NAT GNSS Interference Procedures **Effective: 7 January 2025**
Originator: NAT SPG

The purpose of North Atlantic Operations Bulletin 2025-001 is to provide background information and guidance to aircraft operators in the North Atlantic (NAT) on the requirement to notify ATC of GNSS interference, and the Air Navigation Service Provider (ANSP) procedures that will be applied to aircraft that have been exposed to Global Navigation Satellite Systems (GNSS) interference (GNSS jamming and/or spoofing) during their flight.

Any queries about the content of the attached document should be addressed to:
ICAO EUR/NAT Office: icaoeurnat@icao.int

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NAT OPS Bulletin 2025_001_GNSS_RFI.docx Issued date: 07 January 2025

Key takeaway from this: If you suspect or know that your aircraft has encountered any kind of GPS interference (both jamming or spoofing), NAT-bound traffic must let their first NAT ANSP know in the RCL – even if the aircraft appears to have recovered.

This is prefixed by ‘ATC REMARKS/GNSS INTERFERENCE’ and must include details of any system degradations.

A few messages to keep handy are:

‘ATC REMARKS/GNSS INTERFERENCE NO IMPACT.’

‘ATC REMARKS/GNSS INTERFERENCE NO CPDLC/ADS’

‘ATC REMARKS/GNSS INTERFERENCE RNP 10 ONLY’

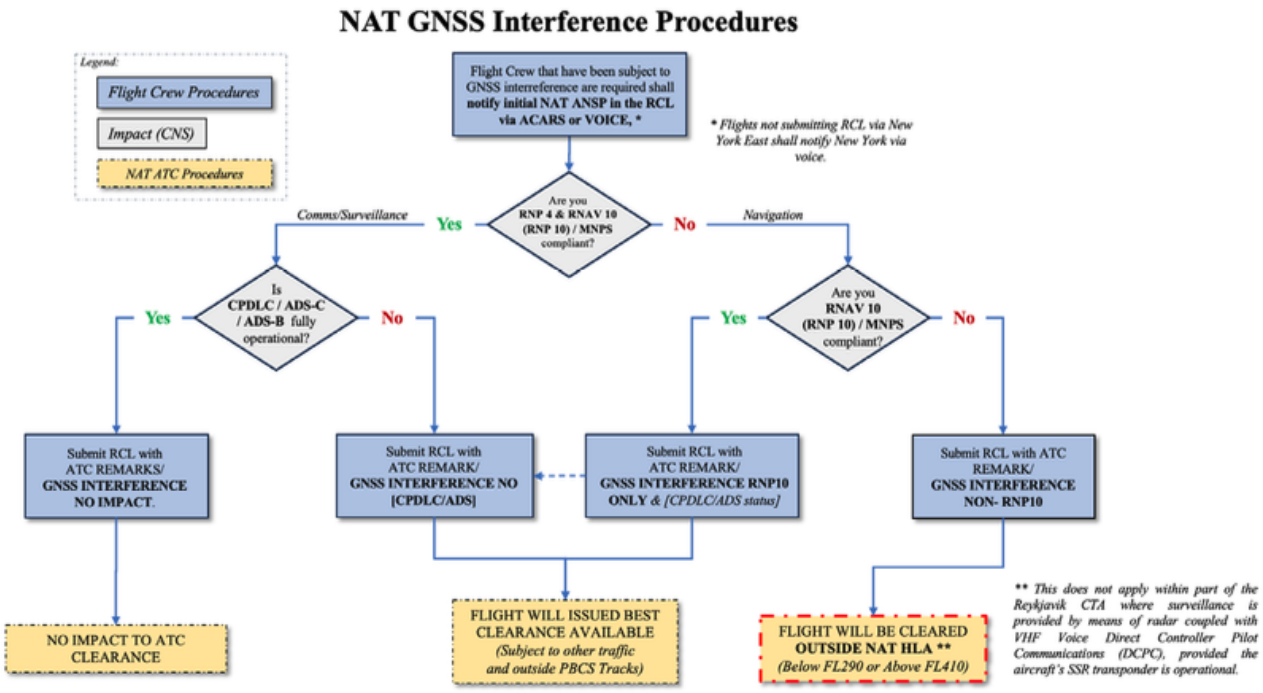
‘ATC REMARKS/GNSS INTERFERENCE NON-RNP10

By including your status in the RCL, you are **giving ATC a head’s up before you arrive.**

In most cases, you will still be allowed in the NAT HLA. A loss of RNP 4 isn’t a deal breaker, as you can still enter under RNP 10. But your clearance may be less optimal (likely level changes) due to the increased separation from other traffic.

The big one to look for is a loss of RNP 10. You will not be cleared into the NAT HLA, and instead will need to remain below FL290 or above FL410. With an obvious fuel impact, this may lead to an unplanned diversion.

The Bulletin includes a handy flow chart that’s worth printing and keeping in your flight bag.



Click for PDF.

Latest ICAO Feedback

The latest three-yearly ICAO Assembly was held in Montreal from Sep 23 – Oct 3.

During the event, ICAO issued its strongest condemnation yet of both **Russia and North Korea**, directly blaming them for **deliberate GNSS interference** in violation of the Chicago Convention. Russia, in particular, has been blamed by ICAO for **destabilising navigation across European airspace.**

We continue to receive regular reports from OPSGROUP members of both jamming and spoofing. Interference is now a regular occurrence in the **Baltic region, particularly around Kaliningrad, Eastern Finland, the Baltic Sea, and nearby airspace.** Other reports have been received from **Germany, Poland and Norway.**

Recent airspace incursions, airstrikes and drone activity associated with the **ongoing conflict in Ukraine** have almost certainly escalated the use of GPS interference as a defensive measure. Civil aviation will continue to operationally grapple with this hazard. **With no obvious solution in site, our best defence remains procedures like the one detailed above.**