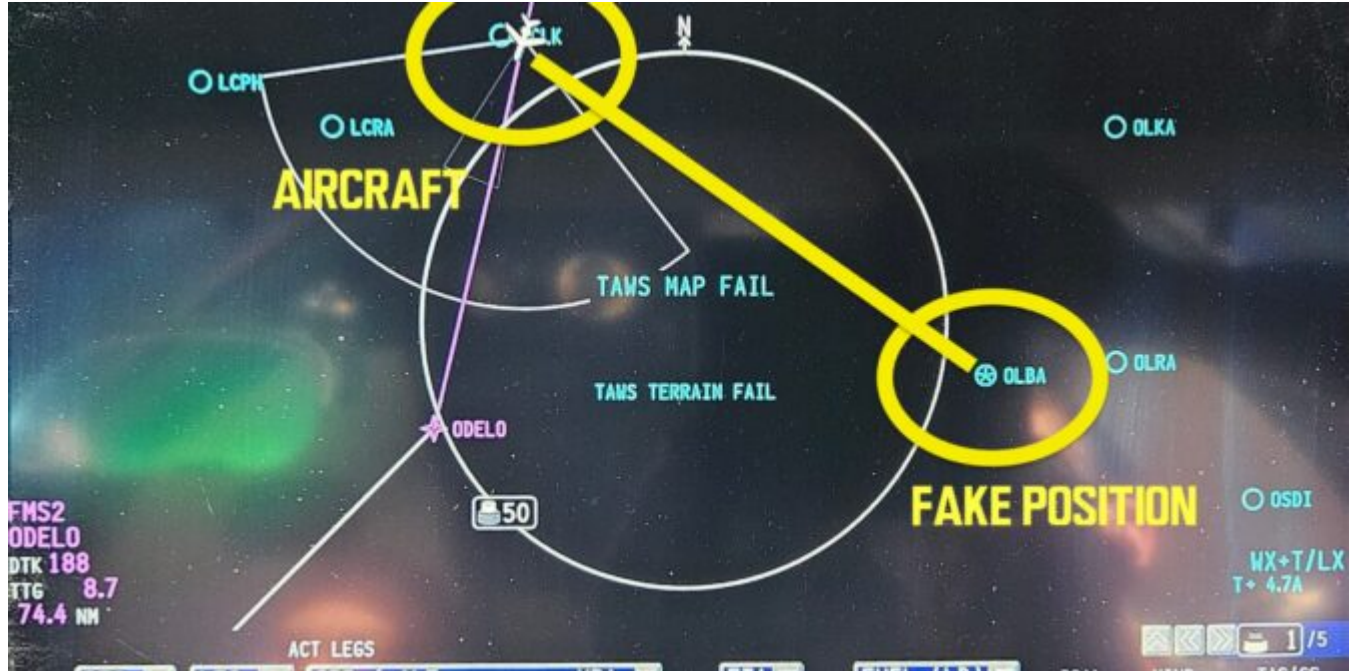


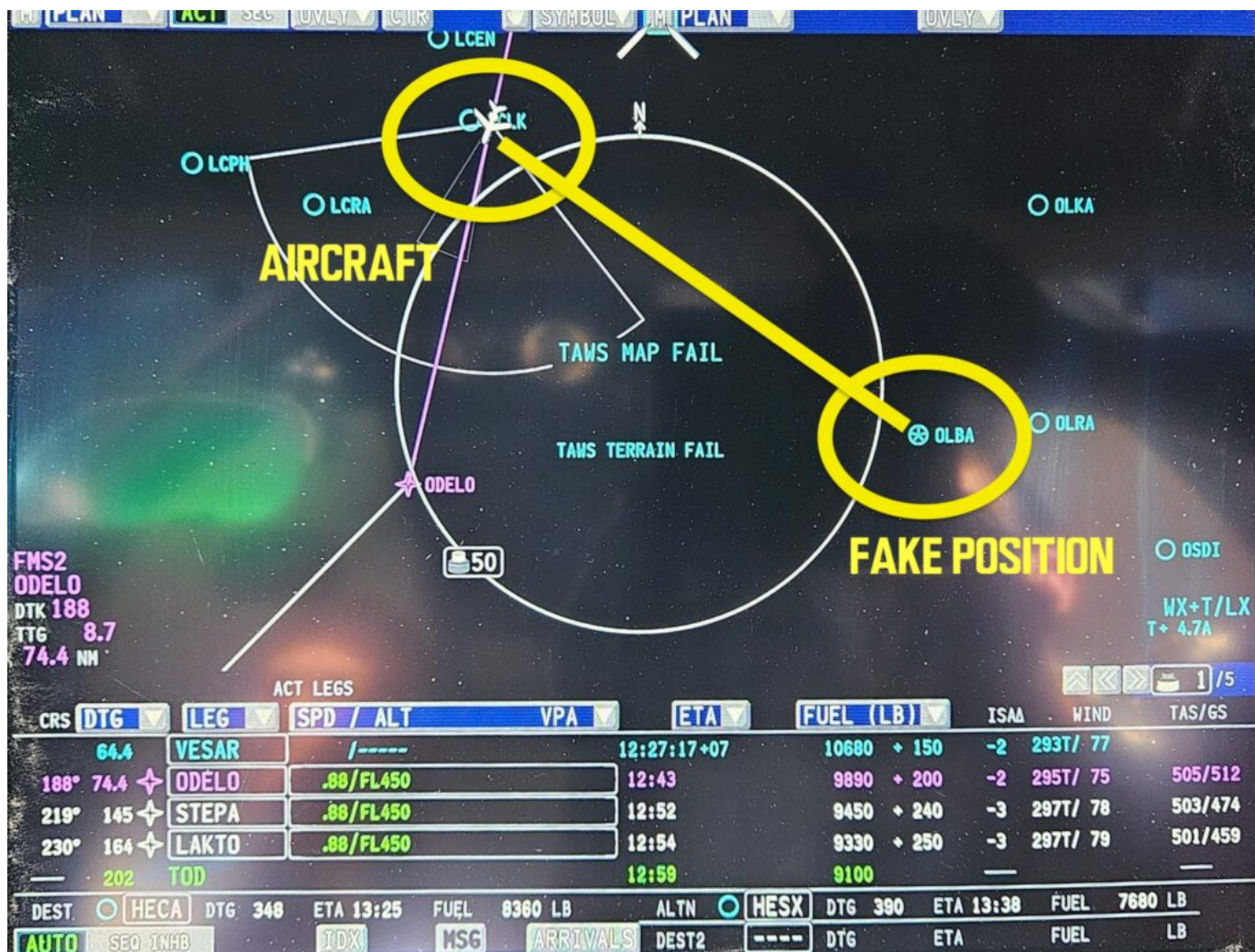
New GPS spoofing incident shows how it works

OPSGROUP Team
21 November, 2023



An OPSGROUP member reported a new **GPS spoofing encounter** yesterday in the Ankara FIR, while flying southbound between UDVET and INPOR.

The encounter began around 1200Z, when both selected GPS positions **began to show the aircraft position as being over OLBA/Beirut** – approx **120nm** away.



The crew had disabled GPS inputs prior to the area, but briefly selected them again on the PNF side – when the spoofing began. The route flown during the event was essentially a straight line from LTAF/Adana to LCLK/Larnaca.

The aircraft was a Global Express 7500 at FL470. OLBA/Beirut is in one of the three hotspot areas for GPS spoofing, but this one over Adana is perhaps the furthest away yet to report the problem.

Analysis

This is a great example of how GPS spoofing works. The Nav Display shows the fake **GPS position** with the star symbol – located exactly at OLBA/Beirut airport.

The **aircraft position** however – thanks to the crew disabling GPS sensors – is correctly shown over LCLK/Larnaca.

If the crew had not proactively disabled those sensors, the aircraft position would also be shown as over OLBA – and if the spoofing was subtle, the FMS would tend to start suggesting a right turn back to the track inbound ODELO.

Further reading:

- GPS Spoofing Hotspots

- GPS Spoofing QRH - Pilot Guide
- Nov 8 update - Maps, Scenarios, Guidance
- Special Briefings on GPS Spoofing (with reports)