Iridium fault prompts ban by Oceanic ATC

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Aircraft Operators using the Iridium Satellite service for ATC comms should be aware of an equipment issue that has prompted a ban by a number of Oceanic ATC agencies in the last few days

Right now, Chile (SCIZ), Japan (RJJJ), Anchorage (PAZA), Oakland (KZAK), New York (KZNY and KZWY) have all told operators **not to use Iridium for CPDLC or ADS-C.** Until the fault is fixed, in those regions you'll have to either use HF for ATC comms, or use another SAT provider. Auckland (NZZO) and Brazil (Atlantico SBAO) have so far only applied the ban to CPDLC alone. Nothing has been published yet by Gander (CZQX), Shanwick (EGGX), Reykjavik (BIRD) or Santa Maria (LPPO) – although we're keeping a close eye on them for any update.

Here's what happened:

On Sep 12th, an Alaskan Airlines flight had a failure of their CMU (Comms Management Unit) that caused the Iridium connection to stop working. An ATC message was sent to the aircraft but not delivered. On the next flight, the CMU power was reset and corrected the issue, and the pending message was delivered. The CMU did not recognise the message as being old, and so it was presented to the Flight Crew as a control instruction. **FSB understands that this aircraft took the climb instruction and executed the level change**, climbing 1000 feet .

Another flight, operated by Hawaiian out of Oakland, had a similar problem. This aircraft had both Iridium and Inmarsat on board, and during the flight switched over to Inmarsat as the provider. An ATC message was routed via Iridium, but didn't reach the aircraft before the switch. Some 23 hours later, on the next flight, Iridium was activated again and again the ATC message presented as a "live" instruction. On this occasion, the crew queried the instruction and did not climb.

The problem in simple terms is that if ATC sends a CPDLC message like "**Climb FL370**", which is obviously only valid for "right now", but another crew gets the message hours later, then you have a very high risk of the new crew accepting that and climbing.

For now, Iridium has a plan to fix the ground side to not allow older SBD messages to be delivered, and

they say they are testing it at the moment and expect to release it soon.

OpsGroup members will be updated directly on further news.

Notam copies below:

ANCHORAGE PAZA A0626/17 - USE OF CPDLC AND ADS-C VIA IRIDIUM SATCOM IS PROHIBITED WITHIN THE ANCHORAGE OCEANIC, DOMESTIC AND ARCTIC FLIGHT INFORMATION REGIONS (FIRS). SFC - UNL, 13 OCT 19:40 2017 UNTIL 13 NOV 00:00 2017 ESTIMATED.
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NEW ZEALAND AUCKLAND NZZO B4985/17 - USE OF CPDLC (DATALINK) VIA IRIDIUM SATCOM
IS PROHIBITED WI NZZO FIR. COMMUNICATION WI NZZO FIR IS TO BE VIA HF RDO ON THE APPROPRIATE SP6 FREQ. OPERATORS USING IRIDIUM SATCOM MAY CONTINUE TO USE ADS-C FOR POSITION REPORTING WI NZZO FIR. HF VOICE POSITION REPORTS ARE NOT REQUIRED UNLESS SPECIFICALLY REQUESTED.
08 OCT 21:56 2017 UNTIL 08 JAN 21:00 2018 ESTIMATED.
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OAKLAND KZAK A4306/17 - FOR ACFT EQUIPPED WITH IRIDIUM SATCOM, USE OF CPDLC AND ADS-C VIA IRIDIUM SATCOM IS PROHIBITED WITHIN OAKLAND CENTER OCEANIC AIRSPACE. COMMUNINCATION WITH KZAK MUST BE VIA HF FOR IRIDIUM USERS.
13 OCT 19:49 2017 UNTIL 31 DEC 23:59 2017. CREATED: 13 OCT 19:54 2017

NEW YORK KZNY A0334/17 - USE OF CPDLC AND ADS-C VIA IRIDIUM SATCOM IS PROHIBITED WITHIN NEW YORK CENTER OCEANIC AIRSPACE. 13 OCT 19:27 2017 UNTIL 30 DEC 08:00 2017. CREATED: 13 OCT 19:38 2017

NEW YORK KZWY A0502/17 - USE OF CPDLC AND ADS-C VIA IRIDIUM SATCOM IS PROHIBITED WITHIN NEW YORK CENTER OCEANIC AIRSPACE. 13 OCT 19:27 2017 UNTIL 30 DEC 08:00 2017. CREATED:13 OCT 19:36 2017

BRAZIL ATLANTICO SBAO N0095/17 - FOR ACFT EQUIPPED WITH IRIDIUM SATCOM, USE OF CPDLC IS PROHIBITED WITHIN ATLANTICO CENTER OCEANIC AIRSPACE. FLIGHT CREWS CAN LOG ON SBAO TO ALLOW THE USE OF ADS-C FOR POSITION REPORTING. COMMUNICATION WITH SBAO MUST BE VIA HF. IF USING ADS-C POSITION REPORTING, HF VOICE POSITION REPORTS ARE NOT REQUIRED UNLESS SPECIFICALLY REQUESTED. 15 OCT 12:00 2017 UNTIL
13 JAN 12:00 2018. CREATED: 15 OCT 01:22 2017

JAPAN FUKUOKA RJJJ J7236/17 - FOR ACFT EQUIPPED WITH IRIDIUM SATCOM, USE OF CPDLC AND ADS-C VIA IRIDIUM SATCOM IS PROHIBITED WITHIN FUKUOKA OCEANIC AIRSPACE. COMMUNINCATION WITH RJJJ MUST BE VIA HF FOR IRIDIUM USERS. 16 OCT 10:08 2017 UNTIL UFN. CREATED: 16 OCT 10:09 2017