

NZZO Latency Monitor Analysis Jul 20-Jun 21



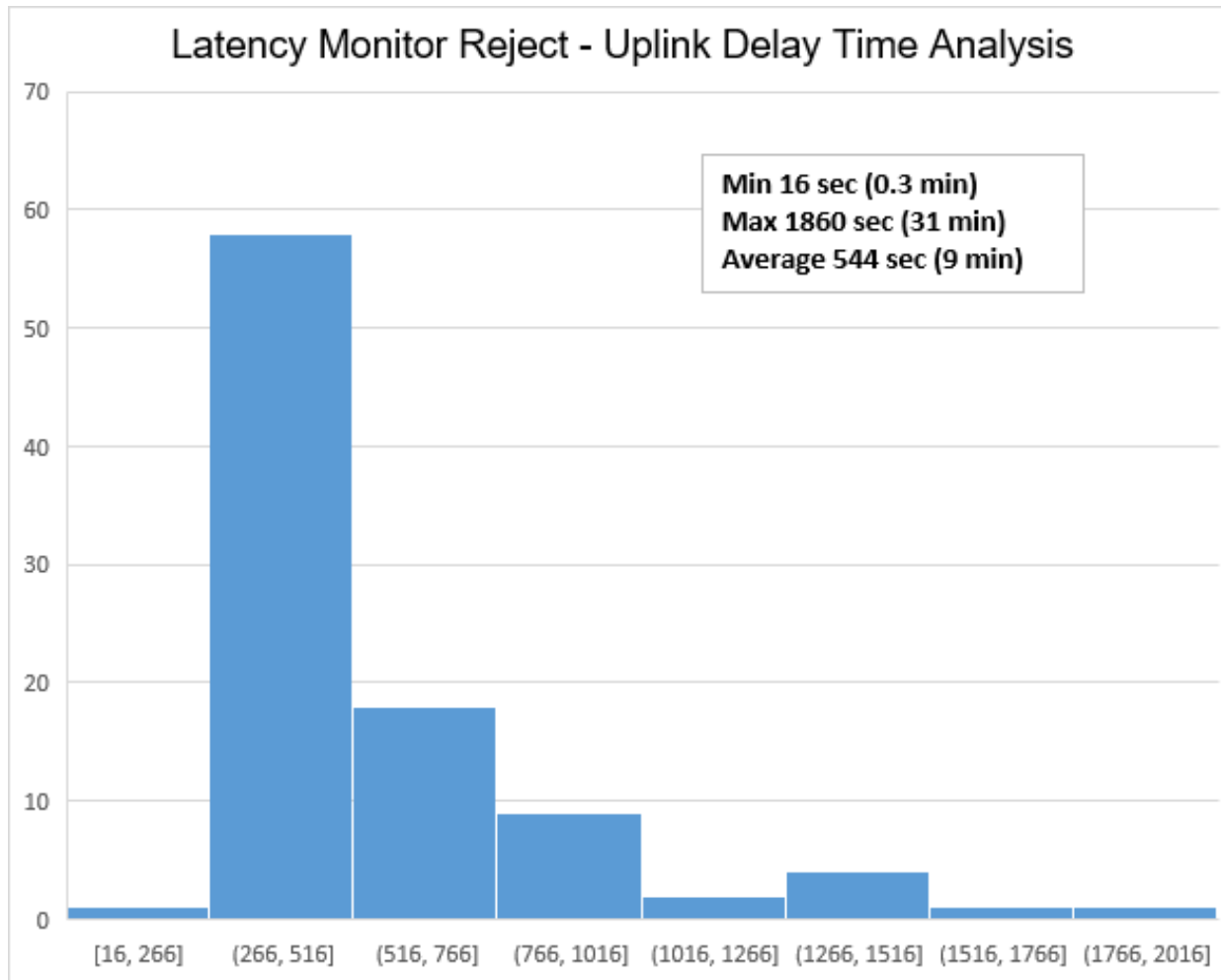
FIT-Asia/11
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Latency Monitor

- NZZO implemented the latency monitor uplink on 21 June 2018.
- The latency monitor supports PBCS safety requirement #15 on aircraft - mitigating late message receipt at the aircraft.
- The latency monitor message is sent by CPDLC free text when NZZO is confirmed as CDA requesting aircraft set the latency monitor at 300 seconds.
- On receipt of an uplink exceeding the 300 second monitored value Airbus aircraft send a reject message to ATC.
- In July 2020 we sent 1200 latency monitor messages, and in June 2021 we sent 2000.
- 5% of traffic is responding as unable to set the latency monitor.
- In the 12-month period 83,376 uplinks initiated with 24,266 sent to Airbus aircraft.
- 12 latency monitor rejects received, a reject rate of 1 in 1022 or 0.05%.

Latency Monitor



Note: Histogram depicts all latency rejects received since implementation in August 2018.

- Problem report raised in June 2021 on 1 latency monitor reject received where the uplink latency was 16 seconds.

Latency Monitor

- Latency rejects by month and classification

Month	# Rejects	Latency Reject Classification						
		Unknown	Time Source	Inmarsat	Iridium	HFDL no SATCOM	Inmarsat sent HFDL	Unable SATCOM via VDL
Jul-20	0	0	0	0	0	0	0	0
Aug-20	0	0	0	0	0	0	0	0
Sep-20	0	0	0	0	0	0	0	0
Oct-20	2	0	0	1	0	0	1	0
Nov-20	0	0	0	0	0	0	0	0
Dec-20	2	0	0	2	0	0	0	0
Jan-21	6	0	0	5	1	0	0	0
Feb-21	0	0	0	0	0	0	0	0
Mar-21	0	0	0	0	0	0	0	0
Apr-21	0	0	0	0	0	0	0	0
May-21	1	0	0	0	1	0	0	0
Jun-21	1	0	0	0	1	0	0	0
Totals	12	0	0	8	3	0	1	0