

EUROCONTROL Stakeholder Forum on Global Navigation Satellite System (GNSS)



“Can aviation continue to rely on satellite navigation?”

The Air Traffic Management perspective

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Effects of Losing GPS on final



- "TOO LOW – TERRAIN"
- GOING AROUND
- Follow Missed Approach Procedure



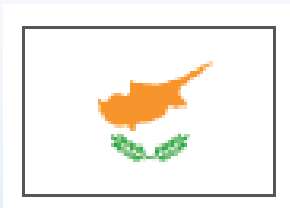


Effects of GPS Loss to ATCO



- Unable RNAV
- Request vectors
- New STAR / SID
- Req VOR/DME APP

GPS SIGNAL LOST REPORT							
DATE	TIME	A/C		POSITION	FL	UNIT	REMARKS
		CALLSIGN	TYPE				
14-09-19	16:39	EJU3350	A320	N//B PASOS	FL320	ACC	
17-09-19	16:38	MYX507	A320	BONEK	FL130	LCA	Requested B1A instead of B1R.
19-09-19	22:55	DLH1294	A320	ADLAS - OTESA	FL110 -	LCA	BIR proceeded to LCA VOR.
01-10-19	19:50	NJE044R	E55P	BAPAX	FL400	ACC	GPS FAILURE
02-10-19	13:15	EXS572V	B738	10NM TO BONEK	FL180 -	LCA	Requested B1A instead of B1R.
13-10-19	18:34	OAL909	A321	12 DME OUTBOUND	9000ft	LCA	Signal loss on both GPS.
13-10-19	21:11	WZZ100G	A320	LC2	ground	LCA	none
13-10-19	21:20	EXS944	A321	LC2	ground	LCA	Signal loss on both GPS.
02-11-19	5:36	BAW162	B772	APLON	FL 380	ACC	35 NM SE APLON
26-11-19	9:40	RYR8275	B738	35E OF KAROL	FL380	ACC	GPS ON ANF OFF
05-12-19	16:56	KAL957	B772	10 MLS SOUTH OF RUDER	FL350	ACC	GPS ON ANF OFF
08-12-19	22:40	BRK13	C17	BALMA	FL220	ACC	FMS MADE BY HONEYWELL
13-12-19	18:43	KL971	B744	SOLIN	FL180	ACC	I READ IN AN ARTICLE ABOUT GPS JAMMING IN THE EASTERN MED. THAT MOSTLY AFFECTED ARE FMS/GPS MADE BY HONEYWELL AS IN THIS CASE WHEN THE PIC
30-12-19	13:20	BRU781	CRJ2	ALSUS	FL 270	ACC	
30-12-19	13:21	AFL503	A333	VELOX	FL 360	ACC	
09-01-20	10:52	EWG903	B738	DAROS	FL200	ACC	
12-02-20	7:06	QTR1397	A359	10NM WEST OF BALMA	FL400	ACC	LOSS OF GPS
12-02-20	17:05	NJE988M	E55P	10NM WEST OF ERIMO	FL455	ACC	LOSS OF GPS
12-02-20	17:15	DLH692	A321	ASPIS	FL350	ACC	LOSS OF GPS
12-02-20	8:40	QTR1379	B788	BALMA	FL430	ACC	LOSS OF GPS
13-02-20	9:15	AIZ413	E195	MERVA	FL 210	ACC	GPS INTERFERENCE
13-02-20	10:21	NJE988M	E55P	APLAS	FL 140↑	ACC	LOSS OF GPS
16-02-20	15:27	EJU582	A320	KAROL	FL 280↑	ACC	LOSS OF GPS
16-02-20	17:14	UAE94	B77N	PASOS	FL350	ACC	LOSS OF GPS
17-02-20	5:33	ASL39J	A319	SUVAS	FL 200↑	ACC	LOSS OF GPS



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RFI of the GNSS affects aviation

need to raise awareness

exercise political pressure

develop technical solutions

tools to support pilots and ATCOs

standard mitigation procedures