

AF447 F-GZCP CVR/FDR/Narrative Combination based on BEA July Report

For discussion purposes only

TIME UTC	AP AT	LAW	L ASI	ISIS	ALT	VSI	T/L SPLR	N1	AoA 1	AoA 2	AoA 3	STALL WARN	Pitch	THS	Roll	STICK LEFT	STICK RIGHT	VOICE/REMARKS/REPORT BRIEF or SOURCES	
22:10:00	N/A	NL	OK	OK	N/A														
22:29:00	N/A	NL	OK	OK	N/A														
1:35:15	OK	NL	OK	OK	350	0	CLB											INTOL, SALPU 01:48:00 ORARO 02:00:00	
1:48:00	OK	NL	OK	OK	350	0	CLB											SALPU	
1:55:00	OK	NL	OK	OK	350	0	CLB											PIC woke 2nd FO	
1:59:32	OK	NL	OK	OK	350	0	CLB											BRIEFING START	
2:00:00	OK	NL	OK	OK	350	0	CLB											ORARO	
2:01:46	OK	NL	OK	OK	350	0	CLB											BRIEFING END	
2:06:04	OK	NL	0.8M	OK	350	0	CLB											Turb warning for 02:08	
2:08:07	OK	NL	275	275	350	0	CLB											PM You can maybe go a little to the left	
2:10:05	OFF	ALT2	274	275	349	1	CLB						0		1R		N	A/P A/T D/C	
2:10:06	OFF	ALT2	274	275	349	-1	THLK						1		2R		N	PF I have control	
2:10:08	OFF	ALT2	156	245	349	0	THLK						2		8.4R		0.25U		
2:10:08	OFF	ALT2	70	139	349	0	THLK	83%					2		8.4R		0.5L		
2:10:09	OFF	ALT2	52	139	348	0	THLK						2		4L		0.5D/R		
2:10:10	OFF	ALT2	65	270	348	1	THLK		2.1	4.9	5.3	STALL	3		6L		0.2U/0.5R	PF Ignition start	
2:10:11	OFF	ALT2	70	270	348	7	THLK						4.5		2R		0.2U/0.2R	PM What's that ?	
2:10:12	OFF	ALT2	55	270	349	11	THLK						4.5		11R		0.5U/Lx	Report: ISIS Invalid = 2:10:51 + 15 secs - 54 secs	
2:10:13	OFF	ALT2	60	265	349	15	THLK		2.1	4.6	4.9	STALL	6.5		0		0.2U		
2:10:14	OFF	ALT2	70	223	349	20	THLK						7		4L		0.5U/0.8R	PF We don't have a good... we don't have a good indication of ...	
2:10:16	OFF	ALT2	65	85	350	38	THLK						9		11R		0.2U/Lx		
2:10:16	OFF	ALT2	65	85	350	38	THLK						9		11R		0.2U/Lx	ReportVSI went to 7000fpm, roll went 10L - 12R	
2:10:17	OFF	ALT2	75	73	352	40	THLK						10.5		0		0.5U	PM We've lost the the speeds so ... engine thrust A/THR (off) engine lever thrust	
2:10:18	OFF	ALT2	75	80	353	47	THLK						11	3	0		0.2U/0.8R	PF ... of speed	
2:10:21	OFF	ALT2	93	83	355	56	THLK						10.5	3	4L		0.2U/0.8/R	FDI/2 FLAGS	
2:10:22	OFF	ALT2	100	75	357	62	THLK						11	3	0		0.2U/0.8R	PM Alternate law protections	
2:10:24	OFF	ALT2	105	80	358	62	CLB	UP					12.5	3	0		0.1U/0.8L	PF Wait we're losing...	
2:10:25	OFF	ALT2	105	100	359	67	CLB	UP					12.5	3	3L		0.2D/0.5R	PM Wing anti-ice	
2:10:26	OFF	ALT2	111	105	362	70	CLB	UP					12	3	1L		0.2U/0.5R		
2:10:27	OFF	ALT2	105	105	363	69	CLB	UP	2.1	3.9	4.2		12.2	3	9L-1R		0.4R	PM Watch your speed Watch your speed	
2:10:28	OFF	ALT2	105	105	363	69	CLB	UP	2.1	dec	dec		12.5	3	9L-1R		0.4U/0.4R	PF ok ok ok I'm going back down	
2:10:30	OFF	ALT2	105	105	366	60	CLB	UP	2.1	to	to		12	3	9L-1R		0.1D/0.8R	PM stabilize ("Stay there")	
2:10:30	OFF	ALT2	105	105	366	60	CLB	UP	2.1	3.2	3.2		12	3	9L-1R		0.1D/0.8R	PF Yeah	
2:10:31	OFF	ALT2	105	105	367	58	CLB	UP					11	3			0.8R	PM You're going back down	
2:10:33	OFF	ALT2	105	105	368	52	CLB	UP			4		10.2	3			0.5U/R	PM According to the three you're going up, so you go back down (3 VSIs)	
2:10:34	OFF	ALT2	105	115	369	42	CLB	UP					11	3			0.2D/0.7L	Report: Speed invalid for 29secs	
2:10:35	OFF	ALT2	180	115	370	41	CLB	104%					11	3			0.5U/0.7R	PF Agreed	
2:10:36	OFF	ALT2	223	115	371	40	CLB	104%					11	3			0.5R	PM You're at ... go back down !	
2:10:37	OFF	ALT2	220	120	372	40	CLB	104%					10	3			0.2D	PF On our way we're going (back) down	
2:10:39	OFF	ALT2	217	120	373	32	CLB	104%					8	3			0.2D	PM I'm putting you in in A T T	
2:10:42	OFF	ALT2	220	120	373	19	CLB	104%					6.7	3			0.1U	PF We're in yeah we're in climb	
2:10:46	OFF	ALT2	220	120	374	15	33	dec					6.2	3			0.4U/0.3L	REP: ATT/HDG FO to 3, ADR FO to 3 FD Transient avail :42, avail :46	
2:10:49	OFF	ALT2	216	121	375	11	33	to	2.1	4.6	4.9		6	3.1	0.4L		0.2D/0.3L	PM Uh, where is he?	
2:10:50	OFF	ALT2	215	121	374	9.5	33	85%					6	3.1			0.2U/0.1R	PNF tried to Call Captain back several times	
2:10:51	OFF	ALT2	215	121	374	7.5	33	85	2.1	6	6	YES	6.5	3.2	2.8L		0.66U	Report: Stall Warning from 2:10:51 and lasted for 54 seconds	
2:10:54	OFF	ALT2	215	to	375	to	CLB	inc				YES	9						
2:10:56	OFF	ALT2	210	to	375	to	TOGA	to	to	to	to	YES	12		and		0.5 L-R	PF TOGA	
2:10:57	OFF	ALT2	210	to	376	to	TOGA	to	7.4	10.2	10.2	YES	13	3.6	1.4R				
2:10:58	OFF	ALT2	207	125	377	23			17.4	10.9	10.9	YES	var	3.8	var			0.5D	
2:11:00	OFF	ALT2	195	to	377	to	TOGA	103%				YES	17.9		8.8			to	
2:11:03	OFF	ALT2	190	to	377	to	TOGA	103%	to	to	to	YES	10.5		to		0.75U	PM Above all, try to touch the controls as little as possible in in lateral, hey ?	
2:11:06	OFF	ALT2	185	129	378	to	TOGA	103%				YES	var					0.8L	PF I'm in TOGA, no ?
2:11:07	OFF	ALT2	183	129	378	to	TOGA	103%				YES	17.9						PM Is he coming or not ?
2:11:08	OFF	ALT2	180	180	378			103%				YES	10.5						
2:11:10	OFF	ALT2	180	180	379	0		103%				YES	var						
2:11:16	OFF	ALT2	170	170	378	to	TOGA	103%				YES	17.9						
2:11:21	OFF	ALT2	161	164	377	-39	TOGA	103%	18.3	22.9	22.9	YES	10.5	8.3			0.8R	PF We've got the engines yet (nothing is happening), what's going on (...)?	
2:11:22	OFF	ALT2	161	164	376	-39		103%		22.9	22.9	YES	16	8.3			0-0.5U	Controls "Felt unresponsive", despite TOGA. Disorientation begin to win	
2:11:31	OFF	ALT2																	Entry into Stall, Right Wing increase drop rate at 2:11:32
2:11:32	OFF	ALT2	140	140	370	to	TOGA	103%		to	to	YES	17	to	0-26L	0-Lx	2x1s	PF I no longer have control of the plane; I no longer have any control at all of the plane	
2:11:35	OFF	ALT2	133	128	364	-68		103%		29.9	29.9	YES	13	11.5			0.5D		
2:11:35	OFF	ALT2	133	128	364		TOGA	103%				YES	13	11.5	16R-40R		U-Ux		
2:11:38	OFF	ALT2	125	125	365			103%				YES	10.5				Lx	PM Controls to the left! (Left Stick Priority is pressed)	
2:11:40	OFF	ALT2	120	120	361		TOGA	103%	N/A	N/A	33	YES					0.66U	Right Stick Priority Pressed	
2:11:41	OFF	ALT2	120	120		to	TOGA	103%	N/A	N/A		YES		to	to	16R-40R	Lx	PF I have the impression (that we have) some speed	
2:11:42	OFF	ALT2	110	115		to	TOGA	103%	N/A	N/A		YES							Captain re-entered.
2:11:43	OFF	ALT2	100	110			MCT	102%	N/A	N/A		YES		13.5	16R-40R				CPT Hey what are you doing?
2:11:44	OFF	ALT2	70	90			MCT	102%	N/A	N/A	41.5	YES		15					Stall Entered 2:11:46
2:11:45	OFF	ALT2	38	60	357	-100	MCT	102%	N/A	N/A	N/A	NO	15		32R inc		0.66U	Deep AoA results in unstable ram pressure.	
2:11:46	OFF	ALT2	75	0		-70	MCT	102%	N/A	N/A	N/A	NO	15				Lx	Airspeed display incoherent numbers with spikes until Impact unless numbers with trend is above 60kts	
2:11:47	OFF	ALT2	Spd	0	350	N/A	IDLE	102%	N/A	N/A	N/A	NO					Ux, Lx		
2:11:51	OFF	ALT2	Osc	Spd	350	N/A	IDLE	100%	N/A	N/A	N/A	NO		11.5	16R-40R		Ux, Lx	PF What's happening? I don't know I don't know what's happening	
2:11:52	OFF	ALT2	30	0		-130	IDLE		N/A	N/A	N/A	NO					Ux, Lx	CPT So here take take that	
2:11:53	OFF	ALT2	75	0		-148			N/A	N/A	41	YES							
2:11:57	OFF	ALT2	75	75		oscl	IDLE		40	40	41	YES		to	16R-40R		Ux, Lx		
2:11:58	OFF	ALT2				-153	IDLE	to	N/A	N/A	N/A	NO					Ux, Lx	PF I have a problem it's that I no longer have vertical speed	
UNKN	OFF	ALT2	spike	spike		oscl	IDLE		N/A	N/A	N/A	NO		13.5	16R-40R		Ux, Lx	CPT OK	
UNKN	OFF	ALT2	0	0		oscl	IDLE		N/A	N/A	N/A	NO					Ux, Lx	PF	