Data item # Short name	Item name	Data type and range	Contents	Timer	Int- ernal				Sc	ource							
						ACAS MODE-S	ACAS			ADS-B					MOD	E-S (E	EHS)
		Dland				ICAO Annex 10 Vol	IV		D	0-260/A/B					D	DC 987	71
		Plane	<i>vision</i>			0 4,20 5,21 11	16		17	7			18	19		20,21	
			SYSTEMS				0	1-4 5-8 9-18 19	19 19	20- 23 2	24 28 2	9 30 31			2.0 4	.0 5.	0 6.0
								1,2	3,4T 3,4I								_
	DATA DICTI	ONARY for "	extflightdata.txt" http ser	ver res	ponse	s											
	Version 1.	1															
	Date of is	sue: Februa	r 21, 2016														
	Call conventi	.ons: http:// <c< td=""><td>evice-url:port>/extflightdata.txt?</td><td><param/>&< </td><td>param></td><td>&,,,,</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td></c<>	evice-url:port>/extflightdata.txt?	<param/> &<	param>	&,,,,							-				
	Responses are	e comma delimit	ed ASCII. Each line is terminated	by a CRLF													
	Responses are First line ex Planevision S (1) - Format (2) - Format (3) - Time (U (4) - Command (5) - Longitu (6) - Latitud (7) - Height Subsequent re If no paramet If any one pa List of param "db" - show d "age" - show "db" - show d "age" - show "db" - show d "age" - show "ic" - show I "itis" - show I "itis" - show I "tis" - show I "tis" - show I "all" - all o ** - last lin List of selec "yngr=n" - o "id=nnnnnn" - Caller exampl http://127.0. http://127.0. http://127.0. http://127.0.	e comma delimit cample RECEIVER Systems CSV out description version INIX) of general line de of receiver above ellipsoi esponse lines: ter is set only arameter is set neters/options/ latabase items packet ages - tw ACAS/TCAS it Enhanced Surve Advanced DF17 TIS-B data - * interrogator Co options are act the and final de tion parameter ly flights wit only the flig tes: 0.1/extflightco tions and Para current version	<pre>ed ASCII. Each line is terminated STATUS: put extflightdata.txt,1.1.160221,1 tion of report (RPTTIME) position d of receiver position in meters the BASIC DATASET will be respond the BASIC DATASET and any OPTIONA separators: - *D *A ems - *T illance (or DAP) items - *E - IMPC data items (type codes 23, 28, 29, B (implementation pending) de counts and time since last pack ivated limiter of data file s: h the last seen packet younger tha ht/aircraft with the ICAO code nnr lata.txt?bds&age&ehs&yngr=10 lata.txt?ll&id=4B1A45 lata.txt?id=4B1</pre>	by a CRLF 454076243 ded AL DATASET DRTANT: the , 31 and un ket seen (: an n second nnnn will h	and A ese it known sec) - ds wil be res	669,53.5446,17.3251 LL SEPARATORS will b ems are an estimatio type codes) - *V (u *I l be responded (defa ponded (implementati make sure that befo	e respor n only a nknown p ult: "yr on pendi re proce	nded as no interrogation packet data for DF17 ngr=60") ing) essing any response	data are k and DF19: the "Forma	nown to the implementa t Version"	e receiver ation pend	ing) RECEIVER SI	ratus 1	line i	s ver:	fied	

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal											S	ource	9										
				5			ACAS	MC	DE-S	A	CAS							ADS	6-B								MODE-	S (EH	S)
			Dlanc				ICAG) Anne	x 10	Vol I	V						[00-26	0/A/B								DOC	; 9871	
			riune	VISIOII			0	4,20 5	,21	11	16						1	7							18	19	2	ð,21	_
				SYSTEMS								0 1-	4 5-8	9-18	19	19	19	20- 22	23	24	28	29	30	31		2	2.0 4.0	5.0	6.0
															1,2	3,4T	3,4I												
BASI	IC DATA SET		-																										
0	AA	ICAO aircraft address	Hex integer (String [6])	This 24-bit downlink field shall contain the aircraft address which provides unambiguous identification of the aircraft.	LPA		x	x	x	x	x	x x	x	x	x	x	x				x		x	x					
1	MOPS	MOPS Version	Integer [0,1,2]		AGE31_0, AGE31_1																			x					
2	LPA	Last packet age	Word	The age of the last packet received for this airframe in sec	N/A	x															x		x	x					
3	CAT	Aircraft category	Char [A,B,C,D]+Word (07)	Aircraft category set and category type A0 = Unspecified powered aircraft A1 = Light (< 15 500 lbs.) A2 = Small (15 500 to 75 000 lbs.) A3 = Large (75 000 to 300 000 lbs.) A4 = High Vortex Large(aircraft such as B-757) A5 = Heavy (> 300 000 lbs.) A6 = High Performance (> 5 g acceleration and > 400kts) A7 = Rotorcraft B0 = Unspecified unpowered aircraft or UAV or spacecraft B1 = Glider/sailplane B2 = Lighter-than-Air B3 = Parachutist/Skydiver B4 = Ultralight/hang- glider/paraglider B5 = Reserved B6 = Ummaned Aerial Vehicle B7 = Space/Trans-atmospheric vehicle C0 = Unspecified ground installation or vehicle C1 = Surface Vehicle - Emergency Vehicle C2 = Surface Vehicle - Service Vehicle C3 = Fixed Ground or Tethered Obstruction	AGE17_1							x																	
4	cs	Callsign	String [07]	The callsign as selected by the pilot in the transponder in ASCII. If the callsign is not set the output is invalidated by an empty string.	AGE17_1							x															x		

Data item Short name	Item name	Data type and range	Contents	Timer	Int- ernal												S	ource												
			2			ACAS	M	ODE-S	ļ	ACAS								ADS	-В								M	DE-S	(EHS	5)
		Dlanc	avision and a state of the stat			ICA	0 Anne	ex 10	Vol	IV							0	0-260)/A/B									DOC	9871	
		FIUITE	EVET ME			0	4,20	5,21	11	16							1	7							18	19		20,	21	
			3131EIVI3								0	1-4	5-8	9-18	19	19	19	20- 22	23	24	28	29	30	31			2.0	4.0	5.0	6.0
5 FS	Flight status	Integer (05)	This 3-bit downlink field shall contain the following information: Coding: 0 signifies no alert and no SPI, aircraft is airborne 1 signifies no alert and no SPI, aircraft is on the ground 2 signifies alert, no SPI, aircraft is airborne 3 signifies alert, no SPI, aircraft is on the ground 4 signifies alert, no SPI, aircraft is airborne or on the ground 5 signifies no alert and SPI, aircraft is airborne or on the ground 6 reserved 7 not assigned	AGE4, 5, 20 21	,		x	x							1,2	3,4T	3,41													
6 CA	Capability	Integer (07)	This 3-bit downlink field shall contain an encoded definition of the communications capability of the transponder Coding: 0 signifies no communications capability (surveillance only), and no ability to set CA code 7 and either airborne or on the ground 1 reserved 2 reserved 3 reserved 4 signifies at least Comm-A and Comm-B capability and ability to set CA code 7 and on the ground 5 signifies at least Comm-A and Comm-B capability and ability to set CA code 7 and airborne 6 signifies at least Comm-A and Comm-B capability and ability to set CA code 7 and airborne 6 signifies at least Comm-A and Comm-B capability and ability to set CA code 7 and either airborne or on the ground 7 signifies the DR field is not equal to 0 or the FS field equals 2, 3, 4 or 5, and either airborne or on the ground When the conditions for CA code 7 are not satisfied, installations that have communications capability but do not have automatic means to set the on- the-ground determination shall use CA code 4 or 5. CA codes 1 to 3 are reserved for use by Mode S transponders that do not have the ability to set CA code 7.	AGE11, 115, 17_ALT, 17_1912, 17_19347, 17_29, 17_29, 17_28, 17_29, 17_30, 17_30, 17_31, 18, 19					x		x	x	x	x	x	x	x	x	×	x	x	x	x	x	(does not n a CA field, but CF index functi ons)	(does not n a CA field, but AF functi ons)				

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal											So	ource												
				2			ACAS	МС	DE-S	AC	AS							ADS	-В								MO	DE-S	(EHS)
			Dlana				ICA0	Anne	x 10	Vol IV	v						D	0-260)/A/B									DOC 9	9871	
			Plane	evision			0 4	,205	5,21	11 1	6						17								18	19		20,	21	
				SYSTEMS							0	1-4	5-8	9-18	19	19	19	20-	23	24	28	29	30	31			2.0	4.0	5.0	6.0
															1 2	3 4T	3 4T	22											_	
7	DR	Downlink Request	Integer (07)	This 5-bit downlink field shall contain requests to downlink information: Coding: 0 signifies no downlink request 1 signifies request to send Comm- B message 2 ACAS message available 3 Comm-B message available 4 signifies Comm-B broadcast message 1 available 5 signifies Comm-B broadcast message 2 available 6 Comm-B broadcast message 1 available 7 Comm-B broadcast message 2 available	AGE4, 5, 20, 21			x	x						.,_		.,													
8	UM	Utility Message	Integer (04)	This 6-bit downlink field shall contain transponder communications status information Coding 0 No operating ACAS 1 Not assigned 2 ACAS with resolution capability inhibited 3 ACAS with vertical-only resolution capability 4 ACAS with vertical and horizontal resolution capability 5-7 Not assigned	AGE4, 5, 20, 21			x	x																					
9	SQ	Identity (Mode A code)	Octal (00007777)	The SSR Mode A code as set in the aircraft transponder (SQUAWK)	AGE5, 21				x																					
10	SQADSB	Identity (Mode A code)	Octal (00007777)	The SSR Mode A code as set in the aircraft transponder (SQUAWK)	AGE DF17_23														x											
11	LAT	Latitude	Float	Last aircraft/vehicle position latitude in decimal degrees	AGE17_0o, 17_0e, 17_5o, 17_5e, 20								x	x				x							x					
12	LON	Longitude	Float	Last aircraft/vehicle position longitude in decimal degrees	AGE17_0o, 17_0e, 17_5o, 17_5e, 20								x	x				x							x					
13	MLAT	MLAT location	Char [A,M]		N/A	х																								

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal												S	ource	e												
				2			ACAS	i I	MODE-S	5 <i>4</i>	ACAS								ADS	S-B	_							MO	DE-S	(EH	S)	
			Dland	avision			ICA	Ann	nex 10	Vol	IV							[0-26	0/A/E	3								DOC 9	9871		_
			riune	CVISION SVETEME			0	4,20	5,21	11	16							1	7							18	19		20,	21		
				SYSTEMIS								0	1-4	5-8	9-18	19	19	19	20- 22	23	24	28	29	30	31			2.0	4.0	5.0	6.0	3
	1															1,2	3,4T	3,4I														
14	NIC	Navigation Integrity Category	Integer (011)	Radius of Containment (RC) 0 unknown 1 RC < 20 NM (37.04 km) 2 RC < 8 NM (14.816 km) 3 RC < 4 NM (7.408 km) 4 RC < 2 NM (3.704 km) 5 RC < 1 NM (1852 m) 6 RC < 0.6 NM (1111.2 m) 7 RC < 0.2 NM (370.4 m) 8 RC < 0.1 NM (185.2 m) 9 RC < 75m 10 RC < 25m 11 RC < 7.5m	AGE17_0o, 17_0e, 17_5o, 17_5e, 20										x				x													
15	NACV	Navigation Accuracy Category - Velocity	Integer (04)	Navigation Accuracy Category for Velocity Horizontal Velocity Error 0 > 10 m/s 2 < 3 m/s 3 < 1 m/s 4 < 0.3 m/s	AGE17_19-12 19_34T, 19_34I	,										x	x	x														
16	SAF/NIC-B	Single Antenna Flag (DO- 260/A) NIC-Supp B (DO-260B)	Integer (0,1)		AGE17_0o, 17_0e, 17_5o, 17_5e, 17_2	8									x				x													_
17	AC	Altitude code	Integer (- 100099999)	The barometric aircraft altitude (1013.25 mb) in 25 ft steps. Older transponders may have a resolution of 100 feet only.	AGE0, 4, 5, 16, 17_00, 17_0e, 17_20, 20, 21		x	x			x	x			x				x													
18	ACADSB	Altitude code	Integer (- 100099999)	The barometric aircraft altitude (1013.25 mb) in 25 ft steps. Older transponders may have a resolution of 100 feet only.	AGE0, 4, 5, 16, 17_0o, 17_0e, 17_2	9						x			x				x													
19	Μ	Metric altitude	Integer (0,1)	The M bit shall be 0 if the altitude is reported in feet. M equals 1 shall be reserved to indicate that the altitude reporting is in metric units.	AGE0, 4, 20	1	x	x			x																					
20	Q	Altitude resolution	Integer (0,1)	The Q-bit shall be 1 if the resolution is 25 feet	AGE0, 4, 20		x	x			x																					
21	QADSB	Altitude resolution	Integer (0,1)	The Q-bit shall be 1 if the resolution is 25 feet	AGE17_00, 17_0e, 17_50, 17_5e, 17_2	8						x			x				x													
22	GPSDIFF	GPS altitude difference	Integer (- 99999 +99999)	The difference between GNSS and barometric altitude in ft (if GNSS < barometric then the difference is negative)	AGE17_19-12 19_34T, 19_34I	,										x	x	x														
23	GPSH	GPS height calculated	Integer (- 99999 +99999)	The GPS height calculated from AC and GPSDIFF	N/A	x																										
24	HAE	GNSS Height above Ellipsoid	Integer (- 99999 +99999)	The GPS height in 25 ft steps.	AGE17_20														x													

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal												S	ource	2											
				3			ACAS	s M	IODE-S	A	CAS								ADS	6-В								MOE)E-S_((EHS))
			Plane	ovicion			IC	A0 Ann	ex 10	Vol 1	۲V							C	0-26	0/A/E	3							0	98 30	;71	_
			<i>i</i> mine	SVSTEMS			0	4,20	5,21	11	16							1	7							18	19		20,2	1	
				STSTENIS								0	1-4	5-8	9-18	19	19	19	20- 22	23	24	28	29	30	31			2.0 4	1.0 5	.0	6.0
																1,2	3,4T	3,4I												_	
25	VSRC	Vertical rate source	Integer (0,1)	Source of the vertical rate data Ø=GNSS, 1 =Barometric	AGE17_19-12, 19_34T, 19_34I											x	x	x													
26	VRADSB	Vertical rate	Integer (- 99999 +99999)	Barometric vertical rate of the aircraft in feet/min	AGE_17VR											x	x	x													
27	GVRADSB	Geometric Vertical rate	Integer (- 99999 +99999)	Geometric vertical rate of the aircraft in feet/min	AGE_17 GEOVF	2										x	x	x													
28	тт	True track	Integer (035	The true track of the aircraft, referenced to geo North.	AGE17_19 -12	2										x															
29	HDGADSB	Heading (from ADS-B)	Integer (0359)	The heading of the aircraft axis, referenced to magnetic North	AGE17_HDG												x	x													
30	GSADSB	Ground Speed (from ADS-B)	Integer (0999)	The speed over ground of the aircraft	AGE17_19 -12	2										x															
31	TASADSB	True Air Speed (TAS) from ADS-B	Integer (0999)	The True Air Speed of the aircraft (referenced to its surrounding air)	AGE17_19 - 34T												x														
32	IASADSB	Indicated Air Speed (IAS) (from ADS-B)	Integer (0999)	The Indicated Air Speed of the aircraft (as indicated on the flight deck)	AGE17_19 - 34I													x													
33	IC	Intent Change	Integer (0,1)	An Intent Change is reported if the vertical intention (Selected Altitude or MCP/FCU mode), the active ATC frequency or the next FMS waypoint is changed	AGE17_19-12, 19_34T, 19_34I											x	x	x													
34	SSC	Supersonic	Integer (0,1)	Current airspeed conditions of the aircraft are supersonic	AGE17_19-12, 19_34T, 19_34I											x	x	x													
35	IFR	IFR capability	Integer (0,1)	ADS-B equippage is IFR capable (this flag is removed from DO- 260B and set to "0")	AGE17_19-12 19_34T, 19_34I											x	x	x													
36	TIME	Time sync	Integer (0,1)	The Time Sync subfield is a 1-bit field that shall indicate whether or not the epoch of validity for the horizontal position data in an Airborne Position Message is an exact 0.2 second UTC epoch. If the time of applicability of the position data is synchronized to an exact 0.2 second UTC epoch, the subfield shall be set to 1; otherwise, the subfield shall be set to 0.	AGE17_0o, 17_0e, 17_5o, 17_5e, 17_26	5								x	x				x												
37	ALRT	Alert flag	Integer (0,1)	An alert condition shall be reported in the FS field if the Mode A identity code transmitted in Mode A replies and in downlink formats DF 5 or 21 are changed by the pilot. The alert condition shall be temporary and shall cancel itself after 18 seconds, if the Mode A identity code is changed	AGE4, 5, 20 21			x	x																						

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal				Source E-S ACAS ADS-B MODE-S (E																					
				2			ACAS	١	10DE-:	S,	ACAS								ADS	5-В								MOL	E-S	(EHS)
			Dlana				ICA	0 Ann	ex 16	Vol	IV							[0-26	0/A/E	3							[)OC 9	871	
			Plane	evision			0	4,20	5,21	11	16							1	7							18	19		20,2	21	
				SYSTEMS								0	1-4	5-8	9-18	19	19	19	20-	23	24	28	29	30	31			2.0	4.0	5.0	6.0
																1 2	3 4T	3 4T	22												
38	SPI	SPI flag	Integer (0,1)	An equivalent of the SPI pulse shall be transmitted by Mode S transponders in the FS field and the surveillance status subfield (SSS) when manually activated. This pulse shall be transmitted for 18 seconds after initiation.	AGE4, 5, 20, 21			x	×							1,2	3,41	3,41													
39	PA	Permanent alert (Emergency)	Integer (0,1)	The alert condition shall be maintained if the Mode A identity code is changed to 7500, 7600 or 7700. The permanent alert condition shall be terminated and replaced by a temporary alert condition when the Mode A identity code is set to a value other than 7500, 7600 or 7700.	AGE4, 5, 20 21			x	x																						
40	GROUND	Ground flag	Integer (0,1)	The on-the-ground status of the aircraft shall be reported in the FS field and the VS field and the CA field. If a means for automatically indicating the on- the-ground condition (e.g. a weight on wheels or strut switch) is available at the transponder data interface, it shall be used as the basis for the reporting of vertical status. If a means for automatically indicating the on- the-ground condition is not available at the transponder data interface, the FS and VS codes shall indicate that the aircraft is either airborne or on the ground (CA = 6). The ground flag is also set to 1 if a surface position report indicates an aircraft is on the ground. It is set to 0 if an airborne position report indicates the aircraft is not on the ground.	LPA	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
41	TRUST				N/A	x																									
42	IDCNTR				N/A	x																									
OPTIO	N: DATABASE (DB)	Call parameter	: "db"	Call example: http:// <ip>/flightd</ip>	ata.txt?db)																							4		
0	*D	Separator	Length=7																												
1	CNTRY					x																									
2	REG					x																									
3	ACTYPE					x																							\rightarrow		
4	OP					x																							\rightarrow		
5						X																							\rightarrow		
OPTIO AGE (N: AGE)	Call parameter	: "age"	Call example: http:// <ip>/extflig</ip>	ntdata.txt	?age																									

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal													Sour	ce											
				2			ACAS	M	DDE-S	,	ACAS			-	_	-	_		A	DS-B	_							MO	DE-S	(EHS	5)
			Dland	avision			ICA	0 Anne	x 10	Vol	IV								D0-2	60/A/	/B								DOC 9	871	
			FIUITE	SVSTEARS			0	4,20 5	5,21	11	16								17							18	19		20,2	21	
				3131EIVI3								0	1-4	5-8	9-18	3 19	19	19	20- 22	23	24	28	29	30	31			2.0	4.0	5.0	6.0
0	* Δ	Separator	Length=31												-	1,2	3,4	1 3,4.	L											_	
1	AGEØ		Integer	Age between the relevant data item or packet and RPTTIME		x																									
2	AGE4		Integer	Age between the relevant data item or packet and RPTTIME		x																									
3	AGE5		Integer	Age between the relevant data item or packet and RPTTIME		x																									
4	AGE11		Integer	Age between the relevant data item or packet and RPTTIME		x																									
5	AGE11S		Integer	Age between the relevant data item or packet and RPTTIME		x																									
6	AGE16		Integer	Age between the relevant data item or packet and RPTTIME		x																									
7	AGE17_50		Integer	Age between the relevant data item or packet and RPTTIME		x																									
8	AGE17_5e		Integer	Age between the relevant data item or packet and RPTTIME		x																									
9	AGE17_00		Integer	Age between the relevant data item or packet and RPTTIME		x																									
10	AGE17_0e		Integer	Age between the relevant data item or packet and RPTTIME		x																									
11	AGE17_1		Integer	Age between the relevant data item or packet and RPTTIME		x																									
12	AGE17_19-12		Integer	Age between the relevant data item or packet and RPTTIME		x																									
13	AGE17_19-34I		Integer	Age between the relevant data item or packet and RPTTIME		x																									
14	AGE17_19-34T		Integer	Age between the relevant data item or packet and RPTTIME		x																									
15	AGE17_ALT		Integer	Age between the relevant data item or packet and RPTTIME		x																									
16	AGE17_VR		Integer	Age between the relevant data item or packet and RPTTIME		x																									
17	AGE17_GE0VR		Integer	Age between the relevant data item or packet and RPTTIME		x																									
18	AGE17_HDG		Integer	Age between the relevant data item or packet and RPTTIME		x																									
19	AGE17_20		Integer	Age between the relevant data item or packet and RPTTIME		x																									
20	AGE17_23		Integer	Age between the relevant data item or packet and RPTTIME		x																									
21	AGE17_24		Integer	Age between the relevant data item or packet and RPTTIME		x																									
22	AGE17_28_1		Integer	Age between the relevant data item or packet and RPTTIME		x																									
23	AGE17_28_2		Integer	Age between the relevant data item or packet and RPTTIME		x																									

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal										Sourc	e											
				2			ACAS	M	DDE-S	ACA	١S					AD	S-B								MO	DE-S	(EHS	5)
			DIana				ICA	0 Anne	ex 10 \	'ol IV						D0-26	60/A/B									DOC 9	9871	
			Plane	evision			0	4,20	5,21 1	1 16	5					17							18	19		20,	21	
				SYSTEMS							0	1-4 5-	-8 9-18	19	19 1	9 ²⁰⁻ 22	23	24	28	29	30 3	1			2.0	4.0	5.0	6.0
														1,2 3	,4T 3,	4I												
24	AGE17_29_0		Integer	Age between the relevant data item or packet and RPTTIME		x																						
25	AGE17_29_1		Integer	Age between the relevant data item or packet and RPTTIME		x																						
26	AGE17_30		Integer	Age between the relevant data item or packet and RPTTIME		x																						
27	AGE17_31_0		Integer	Age between the relevant data item or packet and RPTTIME		x																						
28	AGE17_31_0		Integer	Age between the relevant data item	n or packe	e x																						
29	AGE18		Integer	Age between the relevant data item or packet and RPTTIME		x																						
30	AGE19		Integer	Age between the relevant data item or packet and RPTTIME		x																						
31	AGE20		Integer	Age between the relevant data item or packet and RPTTIME		x																						
32	AGE21		Integer	Age between the relevant data item or packet and RPTTIME		x																						
OPTION ACAS (: ACAS)	Call parameter:	acas"	Call example: http:/ <ip>/extflight</ip>	tdata.txtî	acas?																						
0	*T	Separator	Length=5																									
1	ACAS	ACAS alert	Integer (0,1)	An ACAS (TCAS) was announced to be ready to be extracted by the ground station. This flag is set for 120 secs.	AGE4, 5, 20 21	,		x	x																			

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal												Sour	ce											
				5			ACAS	М	ODE-S	AC	AS							,	DS-B								MO	DE-S	(EHS)
			Dlana				ICA	0 Ann	ex 10 V	/ol I\	'							D0-	260/A/	'B								DOC 9	871	
			Plane	VISION			0	4,20	5,21 1	1 1	6							17							18	19		20,	21	
				SYSTEMS								0 1	-4 5	5-8 9-	-18	19	19 1	9 20	- 23	24	28	29	30	31			2.0	4.0	5.0	6.0
				-											-	1 2 3	47.2	ат 2	2	_	-									
2	RI	Reply Information	Integer (0,15)	This 4-bit downlink field shall report the aircraft's maximum cruising true airspeed capability and type of reply to interrogating aircraft. The coding shall be as follows: 0 signifies a reply to an air-air interrogation UF = 0 with AQ = 0, no operating ACAS 1 Not assigned 2 ACAS with resolution capability inhibited 3 ACAS with vertical-only resolution capability 4 ACAS with vertical and horizontal resolution capability 5-7 Not assigned 8-15 signifies a reply to an air- air interrogation UF = 0 with AQ = 1 and that the maximum airspeed is as follows: 8 no maximum airspeed data available 9 maximum airspeed is .LE. 140 km/h (75 kt) 10 maximum airspeed is .GT. 140 and .LE. 280 km/h (75 and 150 kt) 11 maximum airspeed is .GT. 560 and .LE. 1110 km/h (300 and 600 kt) 12 maximum airspeed is .GT. 1 110 and .LE. 2 220 km/h (600 and 1 200 kt) 14 maximum airspeed is more than 2 220 km/h (1 200 kt) 15 not assigned. The RI field shall report "no operating ACAS" (RI = 0) if the ACAS unit has failed or is in standby. The RI field shall report "ACAS with resolution capability inhibited" (RI = 2) if sensitivity level is 2 or TA only mode has been selected.	AGE0, 16		x									,,2 3	,41 3,													

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal												Sou	^ce											
				2			ACAS	М	ODE-S	A	CAS								ADS-B								MO	DE-S	(EHS)	
			Dland	avision and a state of the stat			ICA	0 Ann	ex 10	Vol I	V							DO-	260/A	/B								DOC 9	871	
			Plulle	VISION			0	4,20	5,21	11	16							17							18	19		20,2	21	
				SYSTEMS								0	1-4	5-8 9	-18	19	19	19 20	2 23	24	28	29	30	31			2.0	4.0	5.0	6.0
															-	1,2 3	,4T 3	,4I	-											
3	сс	Crosslink Capability	Integer (0,1)	This 1-bit downlink field shall indicate the ability of the transponder to support the cross- link capability, i.e. decode the contents of the DS field in an interrogation with UF equals 0 and respond with the contents of the specified GLGB register in the corresponding reply with DF equals 16. Coding: 0 signifies that the transponder cannot support the cross-link capability 1 signifies that the transponder supports the cross-link capability.	AGE0, 16		x				x							,												
4	SL	Sensitivity level report	Integer (0,7)	This 3-bit (9-11) downlink field shall be included in both short and long air-air reply formats (DF = 0 and 16). This field shall denote the sensitivity level at which ACAS is currently operating. Coding 0 ACAS inoperative 1 ACAS is operating at sensitivity level 1 2 ACAS is operating at sensitivity level 2 3 ACAS is operating at sensitivity level 3 4 ACAS is operating at sensitivity level 4 5 ACAS is operating at sensitivity level 4 5 ACAS is operating at sensitivity level 5 6 ACAS is operating at sensitivity level 6 7 ACAS is operating at sensitivity level 7	AGE0, 16		x				x																			
OPTION EHS	N:	Call parameter	: "ehs"	Call example: http:// <ip>/extfligh</ip>	tdata.tx	t?ehs																								
0	*E	Separator	Length=23																											
1	AGE_E20	BDS 2.0 age				x																							+	
2	CSBDS	Callsign			AGE_E20																						x			
3	CFLSRC	Source of commanded FL	Integer (0,3)	0 unknown source 1 FCU/MCP selected altitude 2 aircraft altimeter 3 FMS selected altitude	AGE_E40																							x		
4	МСР	Selected altit	Integer (065	The selected altitude on the autopilot in 100 feet	AGE_E40																							x		
5	AGE_FMS	Selected altit	Integer (065	The selected altitude on the FMS in 100 feet	AGE_FMS																							x		
6	AGEFMS					х																								

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal												ç	Sourc	e											
				5			ACAS	М	IODE-S	A	CAS								AD	S-B								MC	DDE-S	(EHS)
			Dlana				ICA	0 Ann	ex 10	Vol 1	I۷					_			D0-26	50/A/	В								DOC	9871	
			Plane	<i>evision</i>			0	4,20	5,21	11	16							1	7							18	19		20,	,21	
				SYSTEMS								0	1-4	5-8	9-18	19	19	19	20-	23	24	28	29	30	31			2.0	4.0	5.0	6.0
																1 2	2 /T	2 41	22												
7	QNH	Altimeter sett	nteger (8001	The selected altimeter setting on the altimeter or FMS in hPa	AGE_E40											1,2	3,41	3,41											x		
8	APMODE			0 no data available 1 VNAV 2 Alt Hold mode 3 VNAV + Alt Hold 4 Approach mode 5 VNAV + Approach mode 6 Alt Hold + Approach mode 7 VNAV + Alt Hold + Approach	AGE_E40																								x		
0	ACE E40	PDS 4 0 are	Integer (0)																		-										
10	TASBDS	True Air Speed	Integer (099	The True Air Speed of the aircraft (referenced to its surrounding air) in kts	AGE_E50	x																								x	
11	RA	Bank angle	Integer (-90	The bank angle of the aircraft in degrees. Left bank is negative values.	AGE_E50																									x	
12	TR	Turn rate	Integer (-90	The turn rate of the aircraft in degrees per 10 secs . Left turn is negative values.	AGE_E50																									x	
13	GSBDS	Ground Speed (Integer (099	The speed over ground of the aircraft in kts	AGE_E50																									x	
14	AGE_E50	BDS 5.0 age	Integer			x																									
15	HDGBDS	Heading	Integer (035	The magnetic heading of the aircraft, in degrees referenced to magnetic North	AGE_E60																										x
16	IASBDS	Indicated Air Speed (IAS)	Integer (099	The Indicated Air Speed of the aircraft (as indicated on the flight deck)	AGE_E60																										x
17	MACH	Mach number	Integer (099	The mach number of the aircraft, times 1000	AGE_E60																										х
18	AGE_E60	BDS 6.0 age	Integer			x																									
19	VRBDS	Barometric vertical rate	Integer (- 99999 +99999)	Barometric vertical rate of the aircraft in feet/min	AGE_E60 VR																										x
20	AGE60VR																														
21	GEOVRBDS	Geometric vertical rate	Integer (- 99999 +99999)	Geometric vertical rate of the aircraft in feet/min	AGE_E60 GEOVR																										x
22	AGE60 GEOVR					x			_																						
OPTION ADV	N:	Call parameter	: "adv"	Call example: http:// <ip>/extfligh</ip>	ntdata.tx1	t?adv																									
0	*V	Separator	Length=81																	x											
1	DF17_23_st																				_	x									
2	DF17_28_st																					x									
3	DF17_28_1_ eme																					x									
4	DF17_28_2_ acasra																					x									
5	DF17_28_2_racsrec																					x									

Data item Short name #	Item name	Data type and range	Contents	Timer	Int- ernal	nt- Source																							
		ACAS MODE-S ACAS ADS-B													MODE-S (EHS)														
		01	<u>ີ</u> ທີ			ICA) Anne	ex 10 \				-			DO-26	0/A/E	3							DOC 9					
		Plane	vision			0	4.20	5.21 1	1 1	6						1	7							18	19		20,	21	
			SYSTEMS			-	, -	- /									20-											-	
										0	1-4	4 5-8	9-18	19	19	19	22	23	24	28	29	30	31			2.0	4.0	5.0	6.0
														1,2	3,4T	3,4I													
6 DF17_28_2_raterm																				x									
7 DF17_28_2_mte																				x									
8 DF17_28_2_threattype																				x									
9 DF17_28_2_threadid																				x									
10 DF17_29_st																					x								
11 DF17_29_0_vda_si																					x								
12 DF17_29_0_tat																					x								
13 DF17_29_0_bcf																					x								
14 DF17_29_0_tac																					x								
15 DF17_29_0_vmi																					x								
16 DF17_29_0_targetalt																					x								
17 DF17_29_0_hda_si																					x								
18 DF17_29_0_targethdg																					х								
19 DF17_29_0_thdg_ti																					x								
20 DF17_29_0_hmi																					x								
21 DF17_29_0_nacp																					х								
22 DF17_29_0_nicbaro																					х								
23 DF17_29_0_sil																					x								
24 DF17_29_0_cap_mc																					x								
25 DF17_29_0_eme_ps																					x								
26 DF17_29_1_silsuppl																					x								
27 DF17_29_1_selalttype																					х								
28 DF17_29_1_selalt																					х								
29 DF17_29_1_baropress																					х								
30 DF17_29_1_selhdg																					х								
31 DF17_29_1_nacp																					x								
32 DF17_29_1_nicbaro																					x								
33 DF17_29_1_sil																					x								
34 DF17_29_1_mcpfcu																					x								
35 DF17_29_1_ap																					x								
36 DF17_29_1_vnav																					x								
37 DF17_29_1_althold																					x								
38 DF17_29_1_appr																					x								
39 DF17_29_1_tcas																					х								
40 DF17_29_1_lnav																					х								
41 DF17_31_st																							x						
42 DF17_31_ver																							x						
43 DF17_31_om_acasra																							x						
44 DF17_31_om_ident																							x						
45 DF17_31_om_rcvatc																							x						
46 DF17_31_2_om_saf																							x						

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal Source																							
				2			ACAS MODE-S ACAS ADS-B												MODE-S (EHS)										
			Dlana				ICAC) Annex	10 Vo	L IV D0-260/A/B											DOC 987								
			Plane	<i>vision</i>			0	4,205,	21 11	16		17 18 19 2												20,2	0,21				
				SYSTEMS							a	1-4	5-8	9-18	19	19	19	20-	23	24	28	29	30	31		204	10 5	5 0	6 0
										_			5.0	5 10	15	15	15	22	25	21	20	25	50	51		2.0	.0 5		0.0
															1,2	3,4T	3,4I											_	
47	DF17_31_2_om_sda									-														x	 				
48	DF17_31_n1csuppa																							X	 				
49 50	DF17_31_nacp									-														x					
50	DF17_31_511																							×	 				
52	DF17_31_uatin																							Ŷ					
53	DF17_31_1090in																							x					
54	DF17_31_acas																							x				_	
55	DF17_31_2_gps					_																		x					
56	DF17 31 0 1 accc cdti					_																		x					
57	DE17 31 0 accc arv																							x					
58	DF17 31 0 accc ts																							x					
59	DF17_31_0_accc_tc																							x					
60	DF17_31_0_nicbaro					_																		x					
61	DF17_31_1_sccc_poa																							x					
62	DF17_31_1_sccc_cdti																							x					
63	DF17_31_1_sccc_b2																							x					
64	DF17_31_1_sccc_len																							x					
65	DF17_31_1_sccc_wid																							x					
66	DF17_31_1_trk_hdg																							x					
67	DF17_31_1_2_sccc_nacv																							x					
68	DF17_31_1_2_sccc_nicc																							x					
69	DF17_24_age					x																							
70	DF17_24																			х									
71	DF17_25_age					x																							
72	DF17_25																												
73	DF17_26_age					x																							
74	DF17_26																												
75	DF17_27_age					x					_														 				
76	DF17_27																												
77	DF17_30_age					x																							
78	DF17_30									_													х						
79	DF19_age					x				_	_														 				
80	DF19								_																 x			_	
OPTION IC	:	Call parameter	: "ic"	Call example: http:// <ip>/extflig</ip>	htdata.tx	t?ic		1																					
0	*I	Separator	Length=82																										
1-16	CNTII	II interrogator count and timeout	Integer	Count of DF-11 interrogations from II-00 to II-15																									

Data item #	Short name	Item name	Data type and range	Contents	Timer	Int- ernal	t- nal Source																			
		3					ACAS MODE-S ACAS ADS-B														МС	MODE-S (EHS)				
			Dianovicion				ICA	0 Ann	ex 10) Vol	IV		D0-266)/A/B								DOC	9871			
			SYSTEMS				0	4,20	5,21	11	16		17	17												
												0	-4 5-8 9-18 19 19 19 20- 22	23 2	24 2	28 29	30	31			2.0	4.0	5.0	6.0		
													1,2 3,4T 3,4I													
17-81	CNTSI	SI interrogator count and timeout	Integer	Count of DF-11 interrogations from SI-00 to SI-15																						
	**	Final delimiter																								
				Table lengths		DB	AGE	1015	FHS	ADV	TIST	EOE														
				Basic	43	43	50	83	88	111	192	274														
				DB	7	13	43	76	81	104	185	267														
				AGE	33	_	-	43	48	71	152	234														
				ACAS	5				43	66	147	229														
				EHS	23					43	124	206														
				ADV	81						43	125														
				IISI	82																					