5 - TEST METHOD

This test is to be performed following C/S T.007 ANNEX A § A.2.5 Satellite Qualitative Test (test no. 14 in Table F.1) in coordination with the Cospas-Sarsat Mission Control Centre (MCC) of CNES Toulouse.

6 - TEST CRITERIA

The pass/fail criteria are as follows:

a. LEOLUT solutions producing the correct beacon 15 hexadecimal identification must be provided for all satellite passes with cross track angles between 1 and 21 degrees; and

b. at least 80% of the LEOLUT Doppler locations, associated with satellite passes with cross track angles between 1 and 21 degrees and with bursts that bracket TCA, must be accurate to within 5 km.

7 - RESULTS

Antenna model	Beacon Type	Antenna Conf.	Sat Test pass/fail criteria	Appendix A to Annex F tables	Battery pack
AK 451.017-4 (S)(Portable Whip)	ELT&PLB	Dry Ground	80 % of Doppler Locations within 5 km (1° < CTA < 21°)	Table F-A. 8	ULTRALIFE U10014 (LiMnO2)
AK 451.017-4 (S)(Portable Whip)	ELT&PLB			Table F-A. 9	SAFT L0263XC ($LiSO_2$)
AK 451.017-4 (S)(Portable Whip)	ELT&PLB			Table F-A. 10	SAFT LM33600 ($LiMnO_2$)

CONCLUSIONS

According to the C/S T.007 Satellite Qualitative Test Criteria the Beacon is declared in the tolerance

APPENDIX A TO ANNEX F

SATELLITE QUALITATIVE TEST SUMMARY REPORT

Table F-A.8 : BUT on Dry Ground

Date of the Test : 21/06/07 to 22/06/07
Time of the Test : 21/06/07 11:30 to 21/06/2007 16:12 = 4,7 hours
Beacon Model : AK-451- ( ) Series ELT &PLB BUT 3 (S/N 008)
Antenna Manufacturer & Model : Ameri-King Portable Antenna AK 451017-4 S (Whip)
Beacon 15 Hex ID : 193E0031BF81FE0
Actual location of the test beacon : Latitude : 43,555 North Longitude : 1,487 East
Beacon or Antenna test configuration (e.g. on dry ground, floating in water, etc) : on dry ground
Battery Type : 450 0010-1 A Ultralife U10014 (LiMnO2)
LUT ID : 2271

Satellite ID	Satellite Pass Number	TIME OF Closest Approach (TCA)	Cross Track Angle	15 Hex ID Provided by LUT	Doppler Location		Location Error (km)
					Lat	Long	
S09	No provided	21/06/2007 11:30	9,5	193E0031BF81FE0	43,556	1,487	0,11
S10	No provided	21/06/2007 12:24	5,9	193E0031BF81FE0	43,571	1,484	1,81
S10	No provided	21/06/2007 14:05	12,1	193E0031BF81FE0	43,56	1,494	0,96
S08	No provided	21/06/2007 14:11	11,8	193E0031BF81FE0	43,565	1,484	1,16
S07	No provided	21/06/2007 14:33	21	193E0031BF81FE0	43,567	1,477	1,74
S08	No provided	21/06/2007 15:51	5,7	193E0031BF81FE0	43,568	1,493	1,59
S07	No provided	21/06/2007 16:12	4,9	193E0031BF81FE0	43,57	1,49	1,70

Ratio of successful solutions = $\frac{\text{number of Doppler solutions within 5 Km with } 1°<CTA<21°}{\text{number of satellites passes over test duration with } 1°<CTA<21°} \frac{7}{7}$ X 100 = **100%**

APPENDIX A TO ANNEX F

SATELLITE QUALITATIVE TEST SUMMARY REPORT

Table F-A.9 : BUT on Dry Ground

Date of the Test : 21/06/07 to 22/06/07
Time of the Test : 21/06/07 17:52 to 21/06/2007 22:53 = 5,0 hours
Beacon Model : AK-451- ( ) Series ELT &PLB BUT 3 (S/N 008)
Antenna Manufacturer & Model : Ameri-King Portable Antenna AK 451017-4 S (Whip)
Beacon 15 Hex ID : 193E0031BF81FE0
Actual location of the test beacon : Latitude : 43,555 North Longitude : 1,487 East
Beacon or Antenna test configuration (e.g. on dry ground, floating in water, etc) : on dry ground
Battery Type : 450 0010-2A Saft LO26SXC
LUT ID : 2271

Satellite ID	Satellite Pass Number	TIME OF Closest Approach (TCA)	Cross Track Angle	15 Hex ID Provided by LUT	Doppler Location		Location Error (km)
					Lat	Long	
S07	No provided	21/06/2007 17:52	13,1	193E0031BF81FE0	43,564	1,496	1,42
S11	No provided	21/06/2007 18:48	20,5	193E0031BF81FE0	43,565	1,483	1,20
S09	No provided	21/06/2007 19:34	19,5	193E0031BF81FE0	43,572	1,474	2,38
S11	No provided	21/06/2007 20:27	4,3	193E0031BF81FE0	43,568	1,486	1,45
S09	No provided	21/06/2007 21:13	3,1	193E0031BF81FE0	43,566	1,488	1,23
S11	No provided	21/06/2007 22:07	13,7	193E0031BF81FE0	43,562	1,492	0,96
S09	No provided	21/06/2007 22:53	15	193E0031BF81FE0	43,569	1,495	1,79

Ratio of successful solutions $= \dfrac{\text{number of Doppler solutions within 5 Km with } 1°<CTA<21°}{\text{number of satellites passes over test duration with } 1°<CTA<21°} \dfrac{7}{7} \times 100 = \mathbf{100\%}$

APPENDIX A TO ANNEX F

SATELLITE QUALITATIVE TEST SUMMARY REPORT

Table F-A.10 : BUT on Dry Ground

Date of the Test : 29/06/07 to 30/06/07
Time of the Test : 29/06/07 09:38 to 29/06/2007 14:23 = 4,8 hours
Beacon Model : AK-451- ( ) Series ELT &PLB BUT 3 (S/N 008)
Antenna Manufacturer & Model : Ameri-King Portable Antenna AK 451017-4 S (Whip)
Beacon 15 Hex ID : 193E0031BF81FE0
Actual location of the test beacon : Latitude : 43,555 North Longitude : 1,487 East
Beacon or Antenna test configuration (e.g. on dry ground, floating in water, etc) : on dry ground
Battery Type : 450 0010-3A Saft LM33600
LUT ID : 2271

Satellite ID	Satellite Pass Number	TIME OF Closest Approach (TCA)	Cross Track Angle	15 Hex ID Provided by LUT	Doppler Location		Location Error (km)
					Lat	Long	
S11	No provided	29/06/2007 09:38	3,6	193E0031BF81FE0	43,557	1,492	0,60
S09	No provided	29/06/2007 10:06	5,3	193E0031BF81FE0	43,558	1,488	0,35
S10	No provided	29/06/2007 11:02	19,3	193E0031BF81FE0	43,564	1,47	2,14
S11	No provided	29/06/2007 11:18	13,6	193E0031BF81FE0	43,559	1,49	0,56
S09	No provided	29/06/2007 11:45	12,1	193E0031BF81FE0	43,553	1,492	0,60
S10	No provided	29/06/2007 12:41	2,8	193E0031BF81FE0	43,565	1,487	1,11
S08	No provided	29/06/2007 14:18	10,8	193E0031BF81FE0	43,567	1,479	1,61
S10	No provided	29/06/2007 14:23	15,4	193E0031BF81FE0	43,56	1,492	0,79

Ratio of successful solutions = $\frac{\text{number of Doppler solutions within 5 Km with } 1°<CTA<21°}{\text{number of satellites passes over test duration with } 1°<CTA<21°}$ $\frac{8}{8}$ X 100 = **100%**

1 - ADMINISTRATION

1. WORK ORDER : Reference ITS : E6557-CS_ws (Add _Sat)

1. TEST TEAM : F. ESQUEVIN - G. PEYROU

1. SCHEDULE : 26 to 30 june 2007

2 - PURPOSE

The Satellite Qualitative Tests are performed complementary of the tests done on july 2006 and reported in the Annex B of the E6557-CS test report
The antenna and beacon in "Portable ELT" / "PLB" Dry Ground Configuration is checked three times with Ultralife U 10014 (LiMnO2), Saft LO26SXC (LiSO2) and Saft LM33600 (LiMnO2) battery packs

3 - ANTENNAS AND RADIO BEACON IDENTIFICATIONS

Beacon : **BUT 2**
- Manufacturer : Ameri-King Corp.
- Type : ELT(AF)(AP)(S) and PLB
- PN / SN : AK-451( ) Series / CS-08

Antenna :

Manufacturer	AUT Type
Ameri-King Corp.	AK 451.017-4S (Whip)

Battery used	Manufacturer / Type
For main C/S SatelliteTest	ULTRALIFE / U 10014 ($LiMnO_2$)
For adittional C/S Satellite Test	SAFT / LO26SXC ($LiSO_2$)
	SAFT / LM33600 ($LiMnO_2$)

Table C 2-1 : SUMMARY OF 406 MHz BEACON TEST RESULTS (AMERI-KING AK-451 ()Series ELT and PLB Main Progam Tests - U10014 $LiMnO_2$)

PARAMÈTRES TO BE MEASURED DURING TESTS	RANGE OF SPECIFICATION	UNITS	TEST RESULTS	COMMENTS
10 - OPERATING LIFETIME AT MINIMUM TEMPERATURE[1]			Battery Pack : AK 450 0010-1A: Ultralife U10014 (LiMnO2)	Data and graphs pages 62 to 74
o Duration	> 24	hours	24 hours for 406 MHz and around 77 hours (90 hr - 13,03 hr) for 121,5/243 MHz	
o Transmitted frequency :				
- nominal value	as specified in C/S T.001 and C/S T.012	MHz	406,027779 / 406,027807	
- short term stability	≤ 2 x 10^{-9}	/100 ms	< 4,5E-10	
- medium term stability				
. slope	(-1 to +1) x 10^{-9}	/minute	-1,5E-09 / 8E-11	Failure
. residual frequency variation	≤ 3 x 10^{-9}		≤ 2,5E-09	See re-test report : E6557-CS_ws
o Transmitted power output	35 - 39	dBm	36,3 / 36,5	
o Digital message	must be corect	√	√	
11 - TEMPERATURE GRADIENT (5° C/hr)[1]				Data and graphs pages 75 to 84
o Transmitted frequency :				
- nominal value	as specified in C/S T.001 and C/S T.012	MHz	406,027712 / 406,027812	
- short term stability	≤ 2 x 10^{-9}	/100 ms	< 4,5E-10	
- medium term stability				
. Slope (A to B, C+15 to D, and E+15 to F)	(-1 to +1) x 10^{-9}	/minute	-9,5E-10 / 4,5E-10	
. Slope (B to C+15, and D to E+15)	(-2 to +2) x 10^{-9}	/minute		
. residual frequency variation	≤ 3 x 10^{-9}		< 1,5E-09	
o Transmitted power output	35 - 39	dBm	35,6 / 36,6	
o Digital message	must be corect	√	√	
12 - OSCILLATOR AGING (data provided)	C/S T.001 (-5 to +2) x 10^{-3}	MHz	Specification Max OCXO manufacturer -1,62E-03	Annex F : Manufacturer explanations (TD-100120-00HW00-87 -rev.00)

1 Attach graphs depicting test results.

Table C 2-1 : SUMMARY OF 406 MHz BEACON TEST RESULTS (AMERI-KING AK-451 ()Series ELT and PLB Main Progam Tests - U10014 $LiMnO_2$)

PARAMÈTRES TO BE MEASURED DURING TESTS	RANGE OF SPECIFICATION	UNITS	TEST RESULTS				COMMENTS
13 - PROTECTION AGAINST CONTINUOUS TRANSMISSION o Description provided	≤ 45	seconds	≤ 1				Annex F : Manufacturer explanations
14 - SATELLITE QUALITATIVE TESTS[2] (results provided)	15 Hex ID provided by LUT and position within 5 km 80% of time	√	√				Annex B : Satellite Qualitative test report and E6557-CS_ws(Add_Sat) rep
15 - ANTENNA CHARACTERISTICS			AK 451.017-1B (Whip Antenna)	AK 451.017-2A (Rod Antenna)	AK 451.017-3A (Blade Antenna)	AK 451.017-4(S) (Whip Portable Ant.)	Annex A : Antenna test report
o Polarization	linear or RHCP	√ √	Linear	Like RHCP Ant	Like RHCP Ant	Linear	and E6557-CS_ws report
o VSWR	≤ 1.5	-	1,33	1,15	1,40	1,29	
	Polar of Search Antenna Test configuration		LINEAR B3	RHCP B3	RHCP B3	LINEAR B2	
o ERPLOSS		dB	-0,2	-0,2	-0,2	-0,2	
o $ERP_{max\ EOL}$	≤ 43	dBm	43,0	44,7*	44,7*	40,5	* out-of-spec but the results are
o $ERP_{min\ EOL}$	≥ 32	dBm	30,6*	32,0	31,3*	32,2	aceptable with the C/S T008
o azimuth gain variation at 40° elevation angle	≤ 3	dB	0,7	3,52*	5,7*	0,31	measurement uncertainty applied
	Test configuration					B5	
o ERPLOSS		dB				-0,2	
o $ERP_{max\ EOL}$	≤ 43	dBm				40,5	
o $ERP_{min\ EOL}$	≥ 30	dBm				32,2	
o azimuth gain variation at 40° elevation angle	≤ 3	dB				0,31	
16 - BEACON CODING SOFTWARE[3] o sample message provided for each coding option of the applicable coding types	correct	√	√				See Table F-D in Annex E Rev1
o sample self-test message provided for each coding option of the applicable coding types	correct	√	√				

2 Attach a satellite qualitative test summary report (Appendix A to Annex F) for each test configuration.

3 Attach examples of each requested coding option as per Appendix D to Annex F.

PARAMÈTRES TO BE MEASURED DURING TESTS	RANGE OF SPECIFICATION	UNITS	TEST RESULTS	COMMENTS
17 - NAVIGATION SYSTEM[4]				See data page 85 to 93
o position data default values	correct	√	√	
o position acquisition time	< 10 / 1	minutes	0,83	Annex E - Test Results per Table F-C.5
o position accuracy	C/S T.001			
o encoded positon data update interval	> 20	minutes	20:51	
o positon clearance after deactivation	cleared	√	√	A.3.8.4 Test Result page :
o positon data input update interval (as applicable)	20 / 1	minutes		
o positon data encoding	correct	√	√	Annex E Rev1: Results per Table F-C.1, F-C.2 and F-C.3
o retained last valid position after navigation input lost	240 (± 5)	min	239,4	A.3.8.6 Test Result page : 89
o default position data transmitted after 240(± 5) minutes without valid position data	cleared	√	√	
o information provided on protection against beacon degradation due to navigation device, interface or signal failure or malfunction		√	√	Annex F : Manufacturer explanations

4 Attach navigation system test results as per Appendix C to Annex F

PARAMÈTRES TO BE MEASURED DURING TESTS	RANGE OF SPECIFICATION	UNITS	TEST RESULTS	COMMENTS
10 - OPERATING LIFETIME AT MINIMUM TEMPERATURE[1]				Data and graphs pages 32 to 45
o Duration	> 24	hours	24 hours for 406 MHz and around 66 hours (85,5 hr - 19,48 hr) for 121,5/243 MHz	of E6567-CS Annex C
o Transmitted frequency :				
- nominal value	as specified in C/S T.001 and C/S T.012	MHz	406.027776 / 406.027805	
- short term stability	≤ 2 x 10^{-9}	/100 ms	< 5.0E-10	
- medium term stability				
. slope	(-1 to +1) x 10^{-9}	/minute	-1,4E-9 / 1E-10	Failure
. residual frequency variation	≤ 3 x 10^{-9}		≤ 2,5E-09	See re-test report : E6557-CS_ws
o Transmitted power output	35 - 39	dBm	35,8 / 36,6	
o Digital message	must be corect	√	√	
14 - SATELLITE QUALITATIVE TESTS[2] (results provided)	15 Hex ID provided by LUT and position within 5 km 80% of time	√	√	Table F-A6 page 11 of E6567-CS Annex C

1 Attach graphs depicting test results.
2 Attach a satellite qualitative test summary report (Appendix A to Annex F) for each test configuration.

Control of Ameri-King AK-451 () Series beacon message
obtained during Operating Life Tests
Test report refence: **E6557-CS_ws**
Test period : June 2007

Operating Life test messages with battery Ultralife U10014	**N°**
FFFE2F8C9EAF0F0F2B80348B18758E01401E	**1**
FFFE2F8C9EAF0F0F2B80348B18758E414D34	**2**
FFFE2F8C9EAF0F0F2B80348B18758E814F73	**3**
FFFE2F8C9EAF0F0F2B80348B18758E015527	**4**
FFFE2F8C9EAF0F0F2B80348B18758E41580D	**5**

Operating Life test messages with battery Saft LO26SCX	**N°**
FFFE2F8C9EAF0F0F2B80348B18758E41580D	**5**
FFFE2F8C9EAF0F0F2B80348B18758E414D34	**2**
FFFE2F8C9EAF0F0F2B80348B18758E01401E	**1**
FFFE2F8C9EAF0F0F2B80348B18758EC1682B	**6**
FFFE2F8C9EAF0F0F2B80348B18758E4133A2	**7**
FFFE2F8C9EAF0F0F2B80348B18758E015527	**4**
FFFE2F8C9EAF0F0F2B80348B18758E41727F	**8**

1-FFFE2F8C9EAF0F0F2B80348B18758E01401E

ITEM	BITS	VALUE
Message format: long format	25	1
Protocol: Location Protocol	26	0
Country code: 201	27-36	0011001001
Type of location protocol: Standard Location - Test	37-40	1110
Test Protocol: Test Protocol (No Decode information in bits 41 to 64)	41-64	101011110000111100001111
Latitude Sign: North	65	0
Latitude Degrees: 43	66-72	0101011
Latitude Minutes: 30	73-74	10
Longitude Sign: East	75	0
Longitude Degrees: 1	76-83	00000001
Longitude Minutes: 30	84-85	10
BCH 1 Encoded:	86-106	10010000110001100001
BCH 1 Calculated:	N/A	10010000110001100001
Fixed bits (1101): Pass	107-110	1101
Position Data: Encoded Position Data Source From External Navigation Device	111	0
Aux Device: 121.5 MHz homer	112	1
Latitude Offset Sign: +	113	1
Latitude Offset Minutes: 3	114-118	00011
Latitude Offset Seconds: 32	119-122	1000
Longitude Offset Sign: -	123	0
Longitude Offset Minutes: 1	124-128	00001
Longitude Offset Seconds: 16	129-132	0100
BCH 2 Encoded:	133-144	000000011110
BCH 2 Calculated:	N/A	000000011110
Composite Latitude: 43.55888888888889 Degrees North	N/A	Composite Longitude: 1.478888888888889 Degrees East
15 Hex ID:	N/A	193D5E1E1EFFBFF

2 – FFFE2F8C9EAF0F0F2B80348B18758E414D34

Message format: long format	25	1
Protocol: Location Protocol	26	0
Country code: 201	27-36	0011001001
Type of location protocol: Standard Location - Test	37-40	1110
Test Protocol: Test Protocol (No Decode information in bits 41 to 64)	41-64	101011110000111100001111
Latitude Sign: North	65	0
Latitude Degrees: 43	66-72	0101011
Latitude Minutes: 30	73-74	10
Longitude Sign: East	75	0
Longitude Degrees: 1	76-83	00000001
Longitude Minutes: 30	84-85	10
BCH 1 Encoded:	86-106	10010000110001100001
BCH 1 Calculated:	N/A	10010000110001100001
Fixed bits (1101): Pass	107-110	1101
Position Data: Encoded Position Data Source From External Navigation Device	111	0
Aux Device: 121.5 MHz homer	112	1
Latitude Offset Sign: +	113	1
Latitude Offset Minutes: 3	114-118	00011
Latitude Offset Seconds: 36	119-122	1001
Longitude Offset Sign: -	123	0
Longitude Offset Minutes: 1	124-128	00001
Longitude Offset Seconds: 16	129-132	0100
BCH 2 Encoded:	133-144	110100110100
BCH 2 Calculated:	N/A	110100110100
Composite Latitude: 43.559999999999995 Degrees North	N/A	Composite Longitude: 1.478888888888889 Degrees East
15 Hex ID:	N/A	193D5E1E1EFFBFF

3 - FFFE2F8C9EAF0F0F2B80348B18758E814F73

ITEM	BITS	VALUE
Message format: long format	25	1
Protocol: Location Protocol	26	0
Country code: 201	27-36	0011001001
Type of location protocol: Standard Location - Test	37-40	1110
Test Protocol: Test Protocol (No Decode information in bits 41 to 64)	41-64	101011110000111100001111
Latitude Sign: North	65	0
Latitude Degrees: 43	66-72	0101011
Latitude Minutes: 30	73-74	10
Longitude Sign: East	75	0
Longitude Degrees: 1	76-83	00000001
Longitude Minutes: 30	84-85	10
BCH 1 Encoded:	86-106	10010000110001100001
BCH 1 Calculated:	N/A	10010000110001100001
Fixed bits (1101): Pass	107-110	1101
Position Data: Encoded Position Data Source From External Navigation Device	111	0
Aux Device: 121.5 MHz homer	112	1
Latitude Offset Sign: +	113	1
Latitude Offset Minutes: 3	114-118	00011
Latitude Offset Seconds: 40	119-122	1010
Longitude Offset Sign: -	123	0
Longitude Offset Minutes: 1	124-128	00001
Longitude Offset Seconds: 16	129-132	0100
BCH 2 Encoded:	133-144	111101110011
BCH 2 Calculated:	N/A	111101110011
Composite Latitude: 43.56111111111111 Degrees North	N/A	Composite Longitude: 1.478888888888889 Degrees East
15 Hex ID:	N/A	193D5E1E1EFFBFF

4 - FFFE2F8C9EAF0F0F2B80348B18758E015527

ITEM	BITS	VALUE
Message format: long format	25	1
Protocol: Location Protocol	26	0
Country code: 201	27-36	0011001001
Type of location protocol: Standard Location - Test	37-40	1110
Test Protocol: Test Protocol (No Decode information in bits 41 to 64)	41-64	101011110000111100001111
Latitude Sign: North	65	0
Latitude Degrees: 43	66-72	0101011
Latitude Minutes: 30	73-74	10
Longitude Sign: East	75	0
Longitude Degrees: 1	76-83	00000001
Longitude Minutes: 30	84-85	10
BCH 1 Encoded:	86-106	10010001011000100001
BCH 1 Calculated:	N/A	10010001011000100001
Fixed bits (1101): Pass	107-110	1101
Position Data: Encoded Position Data Source From External Navigation Device	111	0
Aux Device: 121.5 MHz homer	112	1
Latitude Offset Sign: +	113	1
Latitude Offset Minutes: 3	114-118	00011
Latitude Offset Seconds: 32	119-122	1000
Longitude Offset Sign: -	123	0
Longitude Offset Minutes: 1	124-128	00001
Longitude Offset Seconds: 20	129-132	0101
BCH 2 Encoded:	133-144	010100100111
BCH 2 Calculated:	N/A	010100100111
Composite Latitude: 43.55888888888889 Degrees North	N/A	Composite Longitude: 1.4777777777777778 Degrees East
15 Hex ID:	N/A	193D5E1E1EFFBFF

5- FFFE2F8C9EAF0F0F2B80348B18758E41580D

ITEM	BITS	VALUE
Message format: long format	25	1
Protocol: Location Protocol	26	0
Country code: 201	27-36	0011001001
Type of location protocol: Standard Location - Test	37-40	1110
Test Protocol: Test Protocol (No Decode information in bits 41 to 64)	41-64	101011110000111100001111
Latitude Sign: North	65	0
Latitude Degrees: 43	66-72	0101011
Latitude Minutes: 30	73-74	10
Longitude Sign: East	75	0
Longitude Degrees: 1	76-83	00000001
Longitude Minutes: 30	84-85	10
BCH 1 Encoded:	86-106	10010001011000110001
BCH 1 Calculated:	N/A	10010001011000110001
Fixed bits (1101): Pass	107-110	1101
Position Data: Encoded Position Data Source From External Navigation Device	111	0
Aux Device: 121.5 MHz homer	112	1
Latitude Offset Sign: +	113	1
Latitude Offset Minutes: 3	114-118	00011
Latitude Offset Seconds: 36	119-122	1001
Longitude Offset Sign: -	123	0
Longitude Offset Minutes: 1	124-128	00001
Longitude Offset Seconds: 20	129-132	0101
BCH 2 Encoded:	133-144	100000001101
BCH 2 Calculated:	N/A	100000001101
Composite Latitude: 43.559999999999995 Degrees North	N/A	Composite Longitude: 1.4777777777777778 Degrees East
15 Hex ID:	N/A	193D5E1E1EFFBFF

6- FFFE2F8C9EAF0F0F2B80348B18758EC1682B

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - Test	**37-40**	**1110**
Test Protocol: Test Protocol (No Decode information in bits 41 to 64)	**41-64**	**101011110000111100001111**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 30	**84-85**	**10**
BCH 1 Encoded:	**86-106**	**10010000110001100001**
BCH 1 Calculated:	**N/A**	**10010000110001100001**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 44	**119-122**	**1011**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 1	**124-128**	**00001**
Longitude Offset Seconds: 24	**129-132**	**0110**
BCH 2 Encoded:	**133-144**	**100000101011**
BCH 2 Calculated:	**N/A**	**100000101011**
Composite Latitude: 43.56222222222222 Degrees North	**N/A**	**Composite Longitude: 1.4766666666666668 Degrees East**
15 Hex ID:	**N/A**	**193D5E1E1EFFBFF**

7- FFFE2F8C9EAF0F0F2B80348B18758E4133A2

ITEM	BITS	VALUE
Message format: long format	25	1
Protocol: Location Protocol	26	0
Country code: 201	27-36	0011001001
Type of location protocol: Standard Location - Test	37-40	1110
Test Protocol: Test Protocol (No Decode information in bits 41 to 64)	41-64	101011110000111100001111
Latitude Sign: North	65	0
Latitude Degrees: 43	66-72	0101011
Latitude Minutes: 30	73-74	10
Longitude Sign: East	75	0
Longitude Degrees: 1	76-83	00000001
Longitude Minutes: 30	84-85	10
BCH 1 Encoded:	86-106	10010000110001100001
BCH 1 Calculated:	N/A	10010000110001100001
Fixed bits (1101): Pass	107-110	1101
Position Data: Encoded Position Data Source From External Navigation Device	111	0
Aux Device: 121.5 MHz homer	112	1
Latitude Offset Sign: +	113	1
Latitude Offset Minutes: 3	114-118	00011
Latitude Offset Seconds: 36	119-122	1001
Longitude Offset Sign: -	123	0
Longitude Offset Minutes: 1	124-128	00001
Longitude Offset Seconds: 12	129-132	0011
BCH 2 Encoded:	133-144	001110100010
BCH 2 Calculated:	N/A	001110100010
Composite Latitude: 43.559999999999995 Degrees North	N/A	Composite Longitude: 1.48 Degrees East
15 Hex ID:	N/A	193D5E1E1EFFBFF

8- FFFE2F8C9EAF0F0F2B80348B18758E41727F

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - Test	**37-40**	**1110**
Test Protocol: Test Protocol (No Decode information in bits 41 to 64)	**41-64**	**101011110000111100001111**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 30	**84-85**	**10**
BCH 1 Encoded:	**86-106**	**10010000110001100001**
BCH 1 Calculated:	**N/A**	**10010000110001100001**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 36	**119-122**	**1001**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 1	**124-128**	**00001**
Longitude Offset Seconds: 28	**129-132**	**0111**
BCH 2 Encoded:	**133-144**	**001001111111**
BCH 2 Calculated:	**N/A**	**001001111111**
Composite Latitude: 43.559999999999995 Degrees North	**N/A**	**Composite Longitude: 1.4755555555555555 Degrees East**
15 Hex ID:	**N/A**	**193D5E1E1EFFBFF**

APPENDIX D TO ANNEX F

BEACON CODING SOFTWARE RESULTS

Table F-D.1: Examples of User Protocol Beacon Messages
(Examples required for each protocol requested for inclusion on the type approval certificate)

Protocol	Operational Message (in hexadecimal including bit and frame synchronisation bits)	Self-Test Message (in hexadecimal including bit and frame synchronisation bits)
Maritime User Protocol with MMSI	N/A	N/A
Maritime User Protocol with Radio Call Sign	N/A	N/A
Radio Call Sign User Protocol	N/A	N/A
Serial User: Float-Free EPIRB with Serial Number	N/A	N/A
Serial User: Non Float-Free EPIRB with Serial Number	N/A	N/A
Aviation User Protocol	FFFE2F4C9269B7380BA60B571C1F	FFFED04C9269B7380BA60B571C1F
Serial User: ELT with Serial Number	FFFE2F4C962000C6007CEE044F5F	FFFED04C962000C6007CEE044F5F
Serial User: ELT with Aircraft Operator Designator & Serial Number	FFFE2F4C967C71C031FCED09181F	FFFED04C967C71C031FCED09181F
Serial User: ELT with Aircraft 24-bit address	FFFE2F4C96F5E1E1E07CE9F59D5F	FFFED04C96F5E1E1E07CE9F59D9F
Serial User: PLB with Serial Number	FFFE2F4C97A000C6007CEBC6BCDF	FFFED04C97A000C6007CEBC6BCDF
National User (Short)	FFFE2F4C9800000000000052615F	FFFED04C9800000000000052615F
National User (Long)	FFFE2F CC98000000000003AAC25F000007C3	FFFED0 CC98000000000003AAC25F000007C3

APPENDIX D TO ANNEX F

BEACON CODING SOFTWARE RESULTS

Table F-D.2: Examples of Location Protocol Beacon Messages
(Examples required for each protocol requested for inclusion on the type approval certificate)

Protocol	Operational Message (in hexadecimal including bit and frame synchronisation bits)		Self-Test Message (in hexadecimal including bit and frame synchronisation bits)
	Location "A"[1]	Location "B"[1]	
Standard Location: EPIRB with MMSI	N/A	N/A	N/A
Standard Location: EPIRB with Serial Number	N/A	N/A	N/A
Standard Location: ELT with 24-bit Address	FFFE2F 8C93AF0F0F2B80337042B58E41580D	FFFE2F 8C93AF0F0F2B803AC63A758E0548F7	FFFED0 8C93AF0F0F7FDFF8296A7583E0FAA8
Standard Location: ELT with Serial Number	FFFE2F 8C94F9C0632B80367B05358E41580D	FFFE2F 8C94F9C0632B803FCD7DF58E0548F7	FFFED0 8C94F9C0637FDFFD222DF583E0FAA8
Standard Location: ELT with Aircraft Operator Designator	FFFE2F 8C95C630082B8031EA83358E41580D	FFFE2F 8C95C630082B80385CFBF58E0548F7	FFFED0 8C95C630087FDFFAB3ABF583E0FAA8
Standard Location: PLB with Serial Number	FFFE2F 8C970040012B80354A2CF58E41580D	FFFE2F 8C970040012B803CFC54358E0548F7	FFFED0 8C970040017FDFFE13043583E0FAA8
National Location: EPIRB	N/A	N/A	N/A
National Location: ELT	FFFE2F 8C980018CAE20171509CB50D2B0778	FFFE2F 8C980018CAE201A784D6B50E1305CC	FFFED0 8C980018DFC0FF061D86B59F3F0548
National Location: PLB	FFFE2F 8C9B0018CAE201736303750D28F3C8	FFFE2F 8C9B0018CAE201A5B749750E10F17C	FFFED0 8C9B0018DFC0FF042E19759F3CF1F8
User-Location[2]	FFFE2F CC962000C6007CEDFCEC4570017F76	FFFE2F CC962000C6007CEDFCEC457001A828	FFFED0 CC962000C6007CEDFCEC4FE0FF0F61

Location coordinates	
Location "A"	Location "B"
N 43° 33' 36" E 1° 28' 39"	N 43° 33' 33 E 1° 39' 42"

[1] Location “A” and location “B” must be separated by at least 500 metres for the Standard and National location protocols, and by at least 10 km for the User-Location protocol.

[2] Conformance of User-Location protocol demonstrated by a single example of “A”, “B”, and self-test messages provided in Table F-D.2 supplemented by Table F-D.1 completed with the specific User protocol variations requested.

1- Aviation User Protocol : 4C9269B7380BA60B571C1F

ITEM	BITS	VALUE
Message format: short format	**25**	**0**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: Aviation User	**37-39**	**001**
Aircraft Identification: 00C7518	**40-81**	**00110100110110111001110000000101110100 1100**
Spare	**82-83**	**00**
Aux radio device: 121.5 MHz	**84-85**	**01**
Encoded BCH 1:	**86-106**	**01101010111000 1110000**
Calculated BCH 1:	**N/A**	**01101010111000 1110000**
Emerg Code: Emergency Code Data Not Entered	**107**	**0**
Activation Type: Automatic and Manual Activation	**108**	**1**
Emergency Code: No information entered if all 0s, otherwise Nationally assigned	**109-112**	**1111**
15 Hex ID:	**N/A**	**9924D36E70174C1**

2 - Serial User: ELT with Serial Number : 4C962000C6007CEE044F5F

```
Message recu                  (1-112): FFFE2F4C962000C6007CEE044F5F
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 011
Protocole utilise                    : User - Serialized user
Identification code           (26-85): 992C40018C00F9D
Identification (Baudot)       (40-81): ::5O:9W
Numero                               : 00
BCH 1 lu/calcule     (86-106/25-85): 18113D/18113D
Homing                        (84-85): 01
Activation type                 (108): Automatic
Position GPS de reference lab        : N 43°33'34'' E 1°28'42
Position GPS                         : No

Message balise_____________________________________________________

Message recu                  (1-112): FFFED04C962000C6007CEE044F5F
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 011
Protocole utilise                    : User - Serialized user
Identification code           (26-85): 992C40018C00F9D
Identification (Baudot)       (40-81): ::5O:9W
Numero                               : 00
BCH 1 lu/calcule     (86-106/25-85): 18113D/18113D
Homing                        (84-85): 01
Activation type                 (108): Automatic
Position GPS de reference lab        : N 43°33'34'' E 1°28'42
Position GPS                         : No
```

ITEM	BITS	VALUE
Message format: short format	**25**	**0**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: Serial User	**37-39**	**011**
Serial Type: ELT with Serial Identification	**40-42**	**000**
Cospas-Sarsat Certificate Number in bits 74-83: Yes	**43**	**1**
Serial Number: 99	**44-63**	**00000000000001100011**
All 0s or National Use	**64-73**	**0000000000**
C/S Number or National Use (bit 43 refers): 999	**74-83**	**1111100111**
Aux radio device: 121.5 MHz	**84-85**	**01**
Encoded BCH 1:	**86-106**	**11000000100010011101**
Calculated BCH 1:	**N/A**	**11000000100010011101**
Emerg Code: Emergency Code Data Not Entered	**107**	**0**
Activation Type: Automatic and Manual Activation	**108**	**1**
Emergency Code: No information entered if all 0s, otherwise Nationally assigned	**109-112**	**1111**
15 Hex ID:	**N/A**	**992C40018C00F9D**

3- <u>Serial User</u>: ELT with Aircraft Operator Designator & Serial Number 4C967C71C031FCED09181F

```
Message recu                  (1-112): FFFE2F4C967C71C031FCED09181F
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 011
Protocole utilise                    : User - Serialized user
Identification code           (26-85): 992CF8E38063F9D
Identification (Baudot)       (40-81): :OO:::W
Numero                               : E3
BCH 1 lu/calcule     (86-106/25-85): 142460/142460
Homing                        (84-85): 01
Activation type                (108): Automatic
Position GPS de reference lab        : N 43°33'34'' E 1°28'42
Position GPS                         : No

Message balise_____________________________________________________

Message recu                  (1-112): FFFED04C967C71C031FCED09181F
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 011
Protocole utilise                    : User - Serialized user
Identification code           (26-85): 992CF8E38063F9D
Identification (Baudot)       (40-81): :OO:::W
Numero                               : E3
BCH 1 lu/calcule     (86-106/25-85): 142460/142460
Homing                        (84-85): 01
Activation type                (108): Automatic
Position GPS de reference lab        : N 43°33'34'' E 1°28'42
Position GPS                         : No
```

ITEM	BITS	VALUE
Message format: short format	**25**	**0**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: Serial User	**37-39**	**011**
Serial Type: ELT with Aircraft Operator Designator & Serial Number	**40-42**	**001**
Cospas-Sarsat Certificate Number in bits 74-83: Yes	**43**	**1**
Three letter designator: AAA	**44-61**	**111000111000111000**
Serial number 99	**62-73**	**000001100011**
C/S Number or National Use (bit 43 refers): 999	**74-83**	**1111100111**
Aux radio device: 121.5 MHz	**84-85**	**01**
Aux radio device: 121.5 MHz	**84-85**	**01**
oded BCH 1:	**86-106**	**10100001001000110000 0**
Calculated BCH 1:	**N/A**	**10100001001000110000 0**
Emerg Code: Emergency Code Data Not Entered	**107**	**0**
Activation Type: Automatic and Manual Activation	**108**	**1**
Emergency Code: No information entered if all 0s, otherwise Nationally assigned	**109-112**	**1111**
15 Hex ID:	**N/A**	**992CF8E38063F9D**

4- Serial User: ELT with Aircraft 24-bit address - 4C96F5E1E1E07CE9F59D5F

```
Message recu                  (1-112): FFFE2F4C96F5E1E1E07CE9F59D5
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 011
Protocole utilise                    : User - Serialized user
Identification code           (26-85): 992DEBC3C3C0F9D
Identification (Baudot)       (40-81): :V9EU9W
Numero                               : AF
BCH 1 lu/calcule     (86-106/25-85): 07D675/07D675
Homing                        (84-85): 01
Activation type                 (108): Automatic
Position GPS de reference lab        : N 43°33'34'' E 1°28'42
Position GPS                         : No

Message balise_____________________________________________________

Message recu                  (1-112): FFFED04C96F5E1E1E07CE9F59D5
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 011
Protocole utilise                    : User - Serialized user
Identification code           (26-85): 992DEBC3C3C0F9D
Identification (Baudot)       (40-81): :V9EU9W
Numero                               : AF
BCH 1 lu/calcule     (86-106/25-85): 07D675/07D675
Homing                        (84-85): 01
Activation type                 (108): Automatic
Position GPS de reference lab        : N 43°33'34'' E 1°28'42
Position GPS                         : No
```

ITEM	BITS	VALUE
Message format: short format	**25**	**0**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: Serial User	**37-39**	**011**
Serial Type: ELT with Aircraft 24-bit Address	**40-42**	**011**
Cospas-Sarsat Certificate Number in bits 74-83: Yes	**43**	**1**
24-bit Aircraft ID: 11472655 or in hexidecimal AF0F0F	**44-67**	**101011110000111100001111**
Number of Additional ELTs: 0	**68-73**	**000000**
C/S Number or National Use (bit 43 refers): 999	**74-83**	**1111100111**
Aux radio device: 121.5 MHz	**84-85**	**01**
Aux radio device: 121.5 MHz	**84-85**	**01**
Encoded BCH 1:	**86-106**	**00111110011001110101**
Calculated BCH 1:	**N/A**	**00111110011001110101**
Emerg Code: Emergency Code Data Not Entered	**107**	**0**
Activation Type: Automatic and Manual Activation	**108**	**1**
Emergency Code: No information entered if all 0s, otherwise Nationally assigned	**109-112**	**1111**
15 Hex ID:	**N/A**	**992DEBC3C3C0F9D**

5- Serial User: PLB with Serial Number - 4C97A000C6007CEBC6BCDF

```
Message recu                  (1-112): FFFE2F4C97A000C6007CEBC6BCDF
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 011
Protocole utilise                    : User - Serialized user
Identification code           (26-85): 992F40018C00F9D
Identification (Baudot)       (40-81): S:50:9W
Numero                               : 00
BCH 1 lu/calcule    (86-106/25-85): 0F1AF3/0F1AF3
Homing                        (84-85): 01
Activation type                (108): Automatic
Position GPS de reference lab      : N 43°33'34'' E 1°28'42
Position GPS                       : No

Message balise_____________________________________________________

Message recu                  (1-112): FFFED04C97A000C6007CEBC6BCDF
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 011
Protocole utilise                    : User - Serialized user
Identification code           (26-85): 992F40018C00F9D
Identification (Baudot)       (40-81): S:50:9W
Numero                               : 00
BCH 1 lu/calcule    (86-106/25-85): 0F1AF3/0F1AF3
Homing                        (84-85): 01
Activation type                (108): Automatic
Position GPS de reference lab      : N 43°33'34'' E 1°28'42
Position GPS                       : No
```

ITEM	BITS	VALUE
Message format: short format	**25**	**0**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: Serial User	**37-39**	**011**
Serial Type: PLB with Serial Identification Number	**40-42**	**110**
Cospas-Sarsat Certificate Number in bits 74-83: Yes	**43**	**1**
Serial Number: 99	**44-63**	**00000000000001100011**
All 0s or National Use	**64-73**	**0000000000**
C/S Number or National Use (bit 43 refers): 999	**74-83**	**1111100111**
Aux radio device: 121.5 MHz	**84-85**	**01**
Encoded BCH 1:	**86-106**	**01111000110101111 0011**
Calculated BCH 1:	**N/A**	**01111000110101111 0011**
Emerg Code: Emergency Code Data Not Entered	**107**	**0**
Activation Type: Automatic and Manual Activation	**108**	**1**
Emergency Code: No information entered if all 0s, otherwise Nationally assigned	**109-112**	**1111**
15 Hex ID:	**N/A**	**992F40018C00F9D**

6- National User (Short) - 4C98000000000000052615F

```
Message recu                  (1-112): FFFE2F4C98000000000000052615F
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 100
Protocole utilise                    : User -
Identification code           (26-85): 993000000000000
Identification (Baudot)       (40-81): :::::::
Numero                               : 00
BCH 1 lu/calcule     (86-106/25-85): 014985/014985
Homing                        (84-85): 00
Activation type                 (108): Automatic
Position GPS de reference lab        : N 43°33'34'' E 1°28'42
Position GPS                         : No

Message balise_____________________________________________________

Message recu                  (1-112): FFFE2F4C98000000000000052615F
Format flag                     (25): 0
Protocole flag                  (26): 1
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-39): 100
Protocole utilise                    : User -
Identification code           (26-85): 993000000000000
Identification (Baudot)       (40-81): :::::::
Numero                               : 00
BCH 1 lu/calcule     (86-106/25-85): 014985/014985
Homing                        (84-85): 00
Activation type                 (108): Automatic
Position GPS de reference lab        : N 43°33'34'' E 1°28'42
Position GPS                         : No
```

ITEM	BITS	VALUE
Message format: short format	**25**	**0**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: National User	**37-39**	**100**
National Use	**40-85**	**0000000000000000000000000000000000000000000000**
Encoded BCH 1:	**86-106**	**00001010010011000101**
Calculated BCH 1:	**N/A**	**00001010010011000101**
National Use	**107-112**	**011111**
15 Hex ID:	**N/A**	**993000000000000**

7- National User (Long) - CC98000000000003AAC25F000007C3

```
Message balise_____________________________________________________________

Message recu                (1-144): FFFE2FCC98000000000003AAC25F000007C3
Format flag                   (25): 1
Protocole flag                (26): 1
Code pays                   (27-36): 0201
Pays                               : ALBANIA
Code protocole              (37-39): 100
Protocole utilise                  : User -
Identification code         (26-85): 993000000000000
Identification (Baudot)     (40-81): :::::::
Numero                             : 00
BCH 1 lu/calcule    (86-106/25-85): 0EAB09/0EAB09
BCH 2 lu/calcule (133-144/107-132): 7C3/7C3

Message balise_____________________________________________________________

Message recu                (1-144): FFFED0CC98000000000003AAC25F000007C3
Format flag                   (25): 1
Protocole flag                (26): 1
Code pays                   (27-36): 0201
Pays                               : ALBANIA
Code protocole              (37-39): 100
Protocole utilise                  : User -
Identification code         (26-85): 993000000000000
Identification (Baudot)     (40-81): :::::::
Numero                             : 00
BCH 1 lu/calcule    (86-106/25-85): 0EAB09/0EAB09
BCH 2 lu/calcule (133-144/107-132): 7C3/7C3
```

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: National User	**37-39**	**100**
National Use	**40-85**	**000000000000000000000000000000000000000000000000**
Encoded BCH 1:	**86-106**	**01110101010110000 1001**
Calculated BCH 1:	**N/A**	**01110101010110000 1001**
National Use	**107-112**	**011111**
National Use	**113-132**	**00000000000000000000**
BCH 2 Encoded:	**133-144**	**011111000011**
BCH 2 Calculated:	**N/A**	**011111000011**
15 Hex ID:	**N/A**	**993000000000000**

1-Location A : Standard Location: ELT with 24-bit Address

```
Message recu                  (1-144): FFFE2F8C93AF0F0F2B80337042B58E41580D
Format flag                     (25): 1
Protocole flag                  (26): 0
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-40): 0011
Protocole utilise                    : Standard - ELT - 24 bits
Identification                       :
Numero                               : 10101111100001111100001111
BCH 1 lu/calcule    (86-106/25-85): 0DC10A/0DC10A
BCH 2 lu/calcule (133-144/107-132): 80D/80D
Pos. Data Source              (111): External
121.5 MHz Homing              (112): Yes
Position GPS de reference lab        : N 43° 33' 36'' E 1° 28' 39''
Position GPS                         : Yes
Position GPS par defaut              : No
Latitude position                    : 43.5°3'36'' Nord
Longitude position                   : .5°58'40'' Est
Delta position                       : 0.022 km
```

FFFE2F8C93AF0F0F2B80337042B58E41580D

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (24-bit Address)	**37-40**	**0011**
24 Bit Aircraft ID (decimal): 11472655	**41-64**	**101011110000111100001111**
24 Bit Aircraft ID (Hex): AF0F0F	**41-64**	**101011110000111100001111**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 30	**84-85**	**10**
BCH 1 Encoded:	**86-106**	**01101110000100001010**
BCH 1 Calculated:	**N/A**	**01101110000100001010**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 36	**119-122**	**1001**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 1	**124-128**	**00001**
Longitude Offset Seconds: 20	**129-132**	**0101**
BCH 2 Encoded:	**133-144**	**100000001101**
BCH 2 Calculated:	**N/A**	**100000001101**
Composite Latitude: 43.559999999999995 Degrees North	**N/A**	**Composite Longitude: 1.4777777777777778 Degrees East**
15 Hex ID:	**N/A**	**19275E1E1EFFBFF**

1 Location B: Standard Location: ELT with 24-bit Address

```
Message recu                  (1-144): FFFE2F8C93AF0F0F2B803AC63A758E0548F7
Format flag                     (25): 1
Protocole flag                  (26): 0
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-40): 0011
Protocole utilise                    : Standard - ELT - 24 bits
Identification                       :
Numero                               : 101011111000011111000011111
BCH 1 lu/calcule    (86-106/25-85): 0B18E9/0B18E9
BCH 2 lu/calcule (133-144/107-132): 8F7/8F7
Pos. Data Source              (111): External
121.5 MHz Homing              (112): Yes
Position GPS de reference lab      : N 43° 33' 33'' E 1° 39' 42''
Position GPS                       : Yes
Position GPS par defaut            : No
Erreur position GPS >5 km          : Yes
Latitude position                  : 43.5°3'32'' Nord
Longitude position                 : .75°54'44'' Est
Delta position                     : 0.054 km
```

FFFE2F8C93AF0F0F2B803AC63A758E0548F7

Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (24-bit Address)	**37-40**	**0011**
24 Bit Aircraft ID (decimal): 11472655	**41-64**	**101011110000111100001111**
24 Bit Aircraft ID (Hex): AF0F0F	**41-64**	**101011110000111100001111**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 45	**84-85**	**11**
BCH 1 Encoded:	**86-106**	**01011000110001110100 1**
BCH 1 Calculated:	**N/A**	**01011000110001110100 1**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 32	**119-122**	**1000**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 5	**124-128**	**00101**
Longitude Offset Seconds: 16	**129-132**	**0100**
BCH 2 Encoded:	**133-144**	**100011110111**
BCH 2 Calculated:	**N/A**	**100011110111**
Composite Latitude: 43.55888888888889 Degrees North	**N/A**	**Composite Longitude: 1.6622222222222222 Degrees East**
15 Hex ID:	**N/A**	**19275E1E1EFFBFF**

1 Self Test message : Standard Location: ELT with 24-bit Address

```
Message recu                    (1-144): FFFED08C93AF0F0F7FDFF8296A7583E0FAA8
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                       (27-36): 0201
Pays                                  : ALBANIA
Code protocole                  (37-40): 0011
Protocole utilise                     : Standard - ELT - 24 bits
Identification                        :
Numero                                : 101011110000111100001111
BCH 1 lu/calcule     (86-106/25-85): 00A5A9/00A5A9
BCH 2 lu/calcule (133-144/107-132): AA8/AA8
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Position GPS de reference lab         : N 43° 33' 36'' E 1° 28' 39''
Position GPS                          : Yes
Position GPS par defaut               : Yes
```

FFFED08C93AF0F0F7FDFF8296A7583E0FAA8

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (24-bit Address)	**37-40**	**0011**
24 Bit Aircraft ID (decimal): 11472655	**41-64**	**101011110000111100001111**
24 Bit Aircraft ID (Hex): AF0F0F	**41-64**	**101011110000111100001111**
Latitude Sign: default	**65**	**0**
Latitude Degrees: default	**66-72**	**1111111**
Latitude Minutes: default	**73-74**	**11**
Longitude Sign: default	**75**	**0**
Longitude Degrees: default	**76-83**	**11111111**
Longitude Minutes: default	**84-85**	**11**
BCH 1 Encoded:	**86-106**	**00000101001011010 1001**
BCH 1 Calculated:	**N/A**	**00000101001011010 1001**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: default	**113**	**1**
Latitude Offset Minutes: default	**114-118**	**00000**
Latitude Offset Seconds: default	**119-122**	**1111**
Longitude Offset Sign: default	**123**	**1**
Longitude Offset Minutes: default	**124-128**	**00000**
Longitude Offset Seconds: default	**129-132**	**1111**
BCH 2 Encoded:	**133-144**	**101010101000**
BCH 2 Calculated:	**N/A**	**101010101000**
Composite Latitude: default	**N/A**	**Composite Longitude: default**
15 Hex ID:	**N/A**	**19275E1E1EFFBFF**

2 Location A : Standard Location: ELT with Serial Number

```
Message recu                  (1-144): FFFE2F8C94F9C0632B80367B05358E41580D
Format flag                     (25): 1
Protocole flag                  (26): 0
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-40): 0100
Protocole utilise                    : Standard - ELT - serial
Identification                       :
Numero                               : Serial N° 99
BCH 1 lu/calcule    (86-106/25-85): 19EC14/19EC14
BCH 2 lu/calcule (133-144/107-132): 80D/80D
Pos. Data Source              (111): External
121.5 MHz Homing              (112): Yes
Position GPS de reference lab        : N 43° 33' 36'' E 1° 28' 39''
Position GPS                         : Yes
Position GPS par defaut              : No
Latitude position                    : 43.5°3'36'' Nord
Longitude position                   : .5°58'40'' Est
Delta position                       : 0.022 km
```

FFFE2F8C94F9C0632B80367B05358E41580D

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (Serial)	**37-40**	**0100**
Cospas-Sarsat #: 999	**41-50**	**1111100111**
Serial Number: 99	**51-64**	**00000001100011**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 30	**84-85**	**10**
BCH 1 Encoded:	**86-106**	**11001111010000010100**
BCH 1 Calculated:	**N/A**	**11001111010000010100**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 36	**119-122**	**1001**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 1	**124-128**	**00001**
Longitude Offset Seconds: 20	**129-132**	**0101**
BCH 2 Encoded:	**133-144**	**100000001101**
BCH 2 Calculated:	**N/A**	**100000001101**
Composite Latitude: 43.559999999999995 Degrees North	**N/A**	**Composite Longitude: 1.4777777777777778 Degrees East**
15 Hex ID:	**N/A**	**1929F380C6FFBFF**

2 Location B: Standard Location: ELT with Serial Number

```
Message recu                    (1-144): FFFE2F8C94F9C0632B803FCD7DF58E0548F7
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                       (27-36): 0201
Pays                                  : ALBANIA
Code protocole                  (37-40): 0100
Protocole utilise                     : Standard - ELT - serial
Identification                        :
Numero                                : Serial N° 99
BCH 1 lu/calcule     (86-106/25-85): 1F35F7/1F35F7
BCH 2 lu/calcule (133-144/107-132): 8F7/8F7
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Position GPS de reference lab         : N 43° 33' 33'' E 1° 39' 42''
Position GPS                          : Yes
Position GPS par defaut               : No
Erreur position GPS >5 km             : Yes
Latitude position                     : 43.5°3'32'' Nord
Longitude position                    : .75°54'44'' Est
Delta position                        : 0.054 km
```

FFFE2F8C94F9C0632B803FCD7DF58E0548F7

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (Serial)	**37-40**	**0100**
Cospas-Sarsat #: 999	**41-50**	**1111100111**
Serial Number: 99	**51-64**	**00000001100011**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 45	**84-85**	**11**
BCH 1 Encoded:	**86-106**	**11111001101011111011 1**
BCH 1 Calculated:	**N/A**	**11111001101011111011 1**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 32	**119-122**	**1000**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 5	**124-128**	**00101**
Longitude Offset Seconds: 16	**129-132**	**0100**
BCH 2 Encoded:	**133-144**	**100011110111**
BCH 2 Calculated:	**N/A**	**100011110111**
Composite Latitude: 43.55888888888889 Degrees North	**N/A**	**Composite Longitude: 1.6622222222222222 Degrees East**
15 Hex ID:	**N/A**	**1929F380C6FFBFF**

2 Self Test: Standard Location: ELT with Serial Number

```
Message recu                    (1-144): FFFED08C94F9C0637FDFFD222DF583E0FAA8
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                      (27-36): 0201
Pays                                  : ALBANIA
Code protocole                 (37-40): 0100
Protocole utilise                     : Standard - ELT - serial
Identification                        :
Numero                                : Serial N° 99
BCH 1 lu/calcule    (86-106/25-85): 1488B7/1488B7
BCH 2 lu/calcule (133-144/107-132): AA8/AA8
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Position GPS de reference lab         : N 43° 33' 36'' E 1° 28' 39''
Position GPS                          : Yes
Position GPS par defaut               : Yes
```

FFFED08C94F9C0637FDFFD222DF583E0FAA8

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (Serial)	**37-40**	**0100**
Cospas-Sarsat #: 999	**41-50**	**1111100111**
Serial Number: 99	**51-64**	**00000001100011**
Latitude Sign: default	**65**	**0**
Latitude Degrees: default	**66-72**	**1111111**
Latitude Minutes: default	**73-74**	**11**
Longitude Sign: default	**75**	**0**
Longitude Degrees: default	**76-83**	**11111111**
Longitude Minutes: default	**84-85**	**11**
BCH 1 Encoded:	**86-106**	**10100100010010110111**
BCH 1 Calculated:	**N/A**	**10100100010010110111**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: default	**113**	**1**
Latitude Offset Minutes: default	**114-118**	**00000**
Latitude Offset Seconds: default	**119-122**	**1111**
Longitude Offset Sign: default	**123**	**1**
Longitude Offset Minutes: default	**124-128**	**00000**
Longitude Offset Seconds: default	**129-132**	**1111**
BCH 2 Encoded:	**133-144**	**101010101000**
BCH 2 Calculated:	**N/A**	**101010101000**
Composite Latitude: default	**N/A**	**Composite Longitude: default**
15 Hex ID:	**N/A**	**1929F380C6FFBFF**

3 Location A : Standard Location: ELT with Aircraft Operator Designator

```
Message recu                (1-144): FFFE2F8C95C630082B8031EA83358E41580D
Format flag                    (25): 1
Protocole flag                 (26): 0
Code pays                   (27-36): 0201
Pays                              : ALBANIA
Code protocole              (37-40): 0101
Protocole utilise                 : Standard - ELT - aircraft operator designato
Identification                    :
Numero                            : 8
ECH 1 lu/calcule    (86-106/25-85): 07AA0C/07AA0C
ECH 2 lu/calcule (133-144/107-132): 80D/80D
Pos. Data Source              (111): External
121.5 MHz Homing              (112): Yes
Position GPS de reference lab     : N 43° 33' 36'' E 1° 28' 39''
Position GPS                      : Yes
Position GPS par defaut           : No
Latitude position                 : 43.5°3'36'' Nord
Longitude position                : .5°58'40'' Est
Delta position                    : 0.022 km
```

FFFE2F8C95C630082B8031EA83358E41580D

Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (Aircraft Operator Designator)	**37-40**	**0101**
ELT Operator: AAA	**41-55**	**110001100011000**
ELT Number: 8	**55-64**	**0000001000**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 30	**84-85**	**10**
BCH 1 Encoded:	**86-106**	**00111101010100000110 0**
BCH 1 Calculated:	**N/A**	**00111101010100000110 0**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 36	**119-122**	**1001**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 1	**124-128**	**00001**
Longitude Offset Seconds: 20	**129-132**	**0101**
BCH 2 Encoded:	**133-144**	**100000001101**
BCH 2 Calculated:	**N/A**	**100000001101**
Composite Latitude: 43.559999999999995 Degrees North	**N/A**	**Composite Longitude: 1.4777777777777778 Degrees East**
15 Hex ID:	**N/A**	**192B8C6010FFBFF**

3-location B: Standard Location: ELT with Aircraft Operator Designator

```
Message recu                  (1-144): FFFE2F8C95C630082B80385CFBF58E0548F7
Format flag                     (25): 1
Protocole flag                  (26): 0
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-40): 0101
Protocole utilise                    : Standard - ELT - aircraft operator designato
Identification                       :
Numero                               : 8
BCH 1 lu/calcule    (86-106/25-85): 0173EF/0173EF
BCH 2 lu/calcule (133-144/107-132): 8F7/8F7
Pos. Data Source              (111): External
121.5 MHz Homing              (112): Yes
Position GPS de reference lab      : N 43° 33' 33'' E 1° 39' 42''
Position GPS                       : Yes
Position GPS par defaut            : No
Erreur position GPS >5 km          : Yes
Latitude position                  : 43.5°3'32'' Nord
Longitude position                 : .75°54'44'' Est
Delta position                     : 0.054 km
```

FFFE2F8C95C630082B80385CFBF58E0548F7

Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (Aircraft Operator Designator)	**37-40**	**0101**
ELT Operator: AAA	**41-55**	**110001100011000**
ELT Number: 8	**55-64**	**0000001000**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 45	**84-85**	**11**
BCH 1 Encoded:	**86-106**	**000010111001111101111**
BCH 1 Calculated:	**N/A**	**000010111001111101111**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 32	**119-122**	**1000**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 5	**124-128**	**00101**
Longitude Offset Seconds: 16	**129-132**	**0100**
BCH 2 Encoded:	**133-144**	**100011110111**
BCH 2 Calculated:	**N/A**	**100011110111**
Composite Latitude: 43.55888888888889 Degrees North	**N/A**	**Composite Longitude: 1.6622222222222222 Degrees East**
15 Hex ID:	**N/A**	**192B8C6010FFBFF**

3-Self Test : Standard Location: ELT with Aircraft Operator Designator

```
Message recu                  (1-144): FFFED08C95C630087FDFFAB3ABF583E0FAA8
Format flag                     (25): 1
Protocole flag                  (26): 0
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-40): 0101
Protocole utilise                    : Standard - ELT - aircraft operator designato
Identification                       :
Numero                               : 8
BCH 1 lu/calcule    (86-106/25-85): 0ACEAF/0ACEAF
BCH 2 lu/calcule (133-144/107-132): AA8/AA8
Pos. Data Source              (111): External
121.5 MHz Homing              (112): Yes
Position GPS de reference lab      : N 43° 33' 36'' E 1° 28' 39''
Position GPS                       : Yes
Position GPS par defaut            : Yes
```

FFFED08C95C630087FDFFAB3ABF583E0FAA8

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - ELT (Aircraft Operator Designator)	**37-40**	**0101**
ELT Operator: AAA	**41-55**	**110001100011000**
ELT Number: 8	**55-64**	**0000001000**
Latitude Sign: default	**65**	**0**
Latitude Degrees: default	**66-72**	**1111111**
Latitude Minutes: default	**73-74**	**11**
Longitude Sign: default	**75**	**0**
Longitude Degrees: default	**76-83**	**11111111**
Longitude Minutes: default	**84-85**	**11**
BCH 1 Encoded:	**86-106**	**01010110011101010111 1**
BCH 1 Calculated:	**N/A**	**01010110011101010111 1**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: default	**113**	**1**
Latitude Offset Minutes: default	**114-118**	**00000**
Latitude Offset Seconds: default	**119-122**	**1111**
Longitude Offset Sign: default	**123**	**1**
Longitude Offset Minutes: default	**124-128**	**00000**
Longitude Offset Seconds: default	**129-132**	**1111**
BCH 2 Encoded:	**133-144**	**101010101000**
BCH 2 Calculated:	**N/A**	**101010101000**
Composite Latitude: default	**N/A**	**Composite Longitude: default**
15 Hex ID:	**N/A**	**192B8C6010FFBFF**

4-Location A: Standard Location: PLB with Serial Number

```
Message recu                  (1-144): FFFE2F8C970040012B80354A2CF58E41580D
Format flag                     (25): 1
Protocole flag                  (26): 0
Code pays                     (27-36): 0201
Pays                                 : ALBANIA
Code protocole                (37-40): 0111
Protocole utilise                    : Standard - PLB - serial
Identification                       :
Numero                               : Serial N° 1
BCH 1 lu/calcule    (86-106/25-85): 1528B3/1528B3
BCH 2 lu/calcule (133-144/107-132): 80D/80D
Pos. Data Source              (111): External
121.5 MHz Homing              (112): Yes
Position GPS de reference lab        : N 43° 33' 36'' E 1° 28' 39''
Position GPS                         : Yes
Position GPS par defaut              : No
Latitude position                    : 43.5°3'36'' Nord
Longitude position                   : .5°58'40'' Est
Delta position                       : 0.022 km
```

FFFE2F8C970040012B80354A2CF58E41580D

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - PLB (Serial)	**37-40**	**0111**
Cospas-Sarsat #: 1	**41-50**	**0000000001**
Serial Number: 1	**51-64**	**00000000000001**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 30	**84-85**	**10**
BCH 1 Encoded:	**86-106**	**10101001010001011 0011**
BCH 1 Calculated:	**N/A**	**10101001010001011 0011**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 36	**119-122**	**1001**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 1	**124-128**	**00001**
Longitude Offset Seconds: 20	**129-132**	**0101**
BCH 2 Encoded:	**133-144**	**100000001101**
BCH 2 Calculated:	**N/A**	**100000001101**
Composite Latitude: 43.559999999999995 Degrees North	**N/A**	**Composite Longitude: 1.4777777777777778 Degrees East**
15 Hex ID:	**N/A**	**192E008002FFBFF**

4 Location B : Standard Location: PLB with Serial Number

```
Message recu                    (1-144): FFFE2F8C970040012B803CFC54358E0548F7
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                      (27-36): 0201
Pays                                  : ALBANIA
Code protocole                 (37-40): 0111
Protocole utilise                     : Standard - PLB - serial
Identification                        :
Numero                                : Serial N° 1
BCH 1 lu/calcule     (86-106/25-85): 13F150/13F150
BCH 2 lu/calcule (133-144/107-132): 8F7/8F7
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Position GPS de reference lab         : N 43° 33' 33'' E 1° 39' 42''
Position GPS                          : Yes
Position GPS par defaut               : No
Erreur position GPS >5 km             : Yes
Latitude position                     : 43.5°3'32'' Nord
Longitude position                    : .75°54'44'' Est
Delta position                        : 0.054 km
```

FFFE2F8C970040012B803CFC54358E0548F7

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - PLB (Serial)	**37-40**	**0111**
Cospas-Sarsat #: 1	**41-50**	**0000000001**
Serial Number: 1	**51-64**	**00000000000001**
Latitude Sign: North	**65**	**0**
Latitude Degrees: 43	**66-72**	**0101011**
Latitude Minutes: 30	**73-74**	**10**
Longitude Sign: East	**75**	**0**
Longitude Degrees: 1	**76-83**	**00000001**
Longitude Minutes: 45	**84-85**	**11**
BCH 1 Encoded:	**86-106**	**10011111000010101000 0**
BCH 1 Calculated:	**N/A**	**10011111000010101000 0**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: +	**113**	**1**
Latitude Offset Minutes: 3	**114-118**	**00011**
Latitude Offset Seconds: 32	**119-122**	**1000**
Longitude Offset Sign: -	**123**	**0**
Longitude Offset Minutes: 5	**124-128**	**00101**
Longitude Offset Seconds: 16	**129-132**	**0100**
BCH 2 Encoded:	**133-144**	**100011110111**
BCH 2 Calculated:	**N/A**	**100011110111**
Composite Latitude: 43.55888888888889 Degrees North	**N/A**	**Composite Longitude: 1.6622222222222222 Degrees East**
15 Hex ID:	**N/A**	**192E008002FFBFF**

4 Self test : Standard Location: PLB with Serial Number

```
Message recu                    (1-144): FFFED08C970040017FDFFE13043583E0FAA8
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                      (27-36): 0201
Pays                                  : ALBANIA
Code protocole                 (37-40): 0111
Protocole utilise                     : Standard - PLB - serial
Identification                        :
Numero                                : Serial N° 1
BCH 1 lu/calcule     (86-106/25-85): 184C10/184C10
BCH 2 lu/calcule (133-144/107-132): AA8/AA8
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Position GPS de reference lab         : N 43° 33' 36'' E 1° 28' 39''
Position GPS                          : Yes
Position GPS par defaut               : Yes
```

FFFED08C970040017FDFFE13043583E0FAA8

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: Standard Location - PLB (Serial)	**37-40**	**0111**
Cospas-Sarsat #: 1	**41-50**	**0000000001**
Serial Number: 1	**51-64**	**00000000000001**
Latitude Sign: default	**65**	**0**
Latitude Degrees: default	**66-72**	**1111111**
Latitude Minutes: default	**73-74**	**11**
Longitude Sign: default	**75**	**0**
Longitude Degrees: default	**76-83**	**11111111**
Longitude Minutes: default	**84-85**	**11**
BCH 1 Encoded:	**86-106**	**11000010011000010000**
BCH 1 Calculated:	**N/A**	**11000010011000010000**
Fixed bits (1101): Pass	**107-110**	**1101**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: default	**113**	**1**
Latitude Offset Minutes: default	**114-118**	**00000**
Latitude Offset Seconds: default	**119-122**	**1111**
Longitude Offset Sign: default	**123**	**1**
Longitude Offset Minutes: default	**124-128**	**00000**
Longitude Offset Seconds: default	**129-132**	**1111**
BCH 2 Encoded:	**133-144**	**101010101000**
BCH 2 Calculated:	**N/A**	**101010101000**
Composite Latitude: default	**N/A**	**Composite Longitude: default**
15 Hex ID:	**N/A**	**192E008002FFBFF**

5 Location A : **National Location: ELT**

```
Message recu                          (1-144): FFFE2F8C980018CAE20171509CB50D2B0778
Format flag                             (25): 1
Protocole flag                          (26): 0
Code pays                             (27-36): 0201
Pays                                         : ALBANIA
Code protocole                        (37-40): 1000
Protocole utilise                            : National - ELT
Identification                               :
Numero                                       : 99
BCH 1 lu/calcule     (86-106/25-85): 054272/054272
BCH 2 lu/calcule (133-144/107-132): 778/778
Pos. Data Source                      (111): External
121.5 MHz Homing                      (112): Yes
Additional Data Pos.                  (110): delta Pos.
Position GPS de reference lab                : N 43° 33' 36'' E 1° 28' 39''
Position GPS                                 : Yes
Position GPS par defaut                      : No
Latitude position                            : 43°33'36'' Nord
Longitude position                           : 1°28'40'' Est
Delta position                               :  0.022 km
```

FFFE2F 8C980018CAE20171509CB50D2B0778

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: National Location - ELT	**37-40**	**1000**
Serial Number: 99	**41-58**	**000000000001100011**
Latitude Flag: North	**59**	**0**
Latitude (Degrees): 43	**60-66**	**0101011**
Latitude (Minutes): 34	**67-71**	**10001**
Longitude Flag: East	**72**	**0**
Longitude (Degrees): 1	**73-80**	**00000001**
Longitude (Minutes): 28	**81-85**	**01110**
BCH 1 Encoded:	**86-106**	**00101010000101110010**
BCH 1 Calculated:	**86-106**	**00101010000101110010**
Fixed bits (110): Pass	**107-109**	**110**
Bits 113 - 132 provides offset data location	**110**	**1**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Loc. Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: -	**113**	**0**
Latitude Offset Minutes: 0	**114-115**	**00**
Latitude Offset Seconds: 24	**116-119**	**0110**
Longitude Offset Sign: +	**120**	**1**
Longitude Offset Minutes: 0	**121-122**	**00**
Longitude Offset Seconds: 40	**123-126**	**1010**
Additional Id (Nat Use)	**127-132**	**110000**
BCH 2 Encoded:	**133-144**	**011101111000**
BCH 2 Calculated:	**N/A**	**011101111000**
Composite Latitude: 43.56 Degrees North	**N/A**	**Composite Longitude: 1.4777777777777778 Degrees East**
15 Hex ID:	**N/A**	**19300031BF81FE0**

5 Location B: National Location: ELT

```
Message recu                    (1-144): FFFE2F8C980018CAE201A784D6B50E1305CC
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                      (27-36): 0201
Pays                                  : ALBANIA
Code protocole                 (37-40): 1000
Protocole utilise                     : National - ELT
Identification                        :
Numero                                : 99
BCH 1 lu/calcule     (86-106/25-85): 1E135A/1E135A
BCH 2 lu/calcule (133-144/107-132): 5CC/5CC
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Additional Data Pos.            (110): delta Pos
Position GPS de reference lab         : N 43° 33' 33'' E 1° 39' 42''
Position GPS                          : Yes
Position GPS par defaut               : No
Erreur position GPS >5 km             : Yes
Latitude position                     : 43°33'32'' Nord
Longitude position                    : 1°39'44'' Est
Delta position                        : 0.054 km
```

FFFE2F8C980018CAE201A784D6B50E1305CC

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: National Location - ELT	**37-40**	**1000**
Serial Number: 99	**41-58**	**000000000001100011**
Latitude Flag: North	**59**	**0**
Latitude (Degrees): 43	**60-66**	**0101011**
Latitude (Minutes): 34	**67-71**	**10001**
Longitude Flag: East	**72**	**0**
Longitude (Degrees): 1	**73-80**	**00000001**
Longitude (Minutes): 40	**81-85**	**10100**
BCH 1 Encoded:	**86-106**	**11110000101101011010**
BCH 1 Calculated:	**86-106**	**11110000101101011010**
Fixed bits (110): Pass	**107-109**	**110**
Bits 113 - 132 provides offset data location	**110**	**1**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Loc. Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: -	**113**	**0**
Latitude Offset Minutes: 0	**114-115**	**00**
Latitude Offset Seconds: 28	**116-119**	**0111**
Longitude Offset Sign: -	**120**	**0**
Longitude Offset Minutes: 0	**121-122**	**00**
Longitude Offset Seconds: 16	**123-126**	**0100**
Additional Id (Nat Use)	**127-132**	**110000**
BCH 2 Encoded:	**133-144**	**010111001100**
BCH 2 Calculated:	**N/A**	**010111001100**
Composite Latitude: 43.558888888888894 Degrees North	**N/A**	**Composite Longitude: 1.662222222222222 Degrees East**
15 Hex ID:	**N/A**	**19300031BF81FE0**

5 Self Test: National Location: ELT

```
Message recu                    (1-144): FFFED08C980018DFC0FF061D86B59F3F0548
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                       (27-36): 0201
Pays                                   : ALBANIA
Code protocole                  (37-40): 1000
Protocole utilise                      : National - ELT
Identification                         :
Numero                                 : 99
BCH 1 lu/calcule     (86-106/25-85): 18761A/18761A
BCH 2 lu/calcule (133-144/107-132): 548/548
Pos. Data Source                  (111): External
121.5 MHz Homing                  (112): Yes
Additional Data Pos.              (110): delta Pos
Position GPS de reference lab          : N 43° 33' 36'' E 1° 28' 39''
Position GPS                           : Yes
Position GPS par defaut                : Yes
```

FFFED08C980018DFC0FF061D86B59F3F0548

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: National Location - ELT	**37-40**	**1000**
Serial Number: 99	**41-58**	**000000000001100011**
Latitude Flag: default	**59**	**0**
Latitude (Degrees): default	**60-66**	**1111111**
Latitude (Minutes): default	**67-71**	**00000**
Longitude Flag: default	**72**	**0**
Longitude (Degrees): default	**73-80**	**11111111**
Longitude (Minutes): default	**81-85**	**00000**
BCH 1 Encoded:	**86-106**	**11000011011000011010**
BCH 1 Calculated:	**86-106**	**11000011011000011010**
Fixed bits (110): Pass	**107-109**	**110**
Bits 113 - 132 provides offset data location	**110**	**1**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Loc. Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: default	**113**	**1**
Latitude Offset Minutes: default	**114-115**	**00**
Latitude Offset Seconds: default	**116-119**	**1111**
Longitude Offset Sign: default	**120**	**1**
Longitude Offset Minutes: default	**121-122**	**00**
Longitude Offset Seconds: default	**123-126**	**1111**
Additional Id (Nat Use)	**127-132**	**110000**
BCH 2 Encoded:	**133-144**	**010101001000**
BCH 2 Calculated:	**N/A**	**010101001000**
Composite Latitude: default	**N/A**	**Composite Longitude: default**
15 Hex ID:	**N/A**	**19300031BF81FE0**

6-Location A: National Location: PLB

```
Message recu                    (1-144): FFFE2F8C9B0018CAE201736303750D28F3C8
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                      (27-36): 0201
Pays                                  : ALBANIA
Code protocole                 (37-40): 1011
Protocole utilise                     : National - PLB
Identification                        :
Numero                                : 99
BCH 1 lu/calcule     (86-106/25-85): 0D8C0D/0D8C0D
BCH 2 lu/calcule (133-144/107-132): 3C8/3C8
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Additional Data Pos.            (110): delta Pos.
Position GPS de reference lab         : N 43° 33' 36'' E 1° 28' 39''
Position GPS                          : Yes
Position GPS par defaut               : No
Latitude position                     : 43°33'36'' Nord
Longitude position                    : 1°28'40'' Est
Delta position                        :  0.022 km
```

FFFE2F8C9B0018CAE201736303750D28F3C8

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: National Location - PLB	**37-40**	**1011**
Serial Number: 99	**41-58**	**000000000001100011**
Latitude Flag: North	**59**	**0**
Latitude (Degrees): 43	**60-66**	**0101011**
Latitude (Minutes): 34	**67-71**	**10001**
Longitude Flag: East	**72**	**0**
Longitude (Degrees): 1	**73-80**	**00000001**
Longitude (Minutes): 28	**81-85**	**01110**
BCH 1 Encoded:	**86-106**	**01101100011000000 1101**
BCH 1 Calculated:	**86-106**	**01101100011000000 1101**
Fixed bits (110): Pass	**107-109**	**110**
Bits 113 - 132 provides offset data location	**110**	**1**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Loc. Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: -	**113**	**0**
Latitude Offset Minutes: 0	**114-115**	**00**
Latitude Offset Seconds: 24	**116-119**	**0110**
Longitude Offset Sign: +	**120**	**1**
Longitude Offset Minutes: 0	**121-122**	**00**
Longitude Offset Seconds: 40	**123-126**	**1010**
Additional Id (Nat Use)	**127-132**	**001111**
BCH 2 Encoded:	**133-144**	**001111001000**
BCH 2 Calculated:	**N/A**	**001111001000**
Composite Latitude: 43.56 Degrees North	**N/A**	**Composite Longitude: 1.4777777777777778 Degrees East**
15 Hex ID:	**N/A**	**19360031BF81FE0**

6-Location B: **National Location: PLB**

```
Message recu                    (1-144): FFFE2F8C9B0018CAE201A5B749750E10F17C
Format flag                        (25): 1
Protocole flag                     (26): 0
Code pays                       (27-36): 0201
Pays                                   : ALBANIA
Code protocole                  (37-40): 1011
Protocole utilise                      : National - PLB
Identification                         :
Numero                                 : 99
BCH 1 lu/calcule     (86-106/25-85): 16DD25/16DD25
BCH 2 lu/calcule (133-144/107-132): 17C/17C
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Additional Data Pos.            (110): delta Pos.
Position GPS de reference lab          : N 43° 33' 33'' E 1° 39' 42''
Position GPS                           : Yes
Position GPS par defaut                : No
Latitude position                      : 43°33'32'' Nord
Longitude position                     : 1°39'44'' Est
Delta position                         : 0.054 km
```

FFFE2F8C9B0018CAE201A5B749750E10F17C

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: National Location - PLB	**37-40**	**1011**
Serial Number: 99	**41-58**	**000000000001100011**
Latitude Flag: North	**59**	**0**
Latitude (Degrees): 43	**60-66**	**0101011**
Latitude (Minutes): 34	**67-71**	**10001**
Longitude Flag: East	**72**	**0**
Longitude (Degrees): 1	**73-80**	**00000001**
Longitude (Minutes): 40	**81-85**	**10100**
BCH 1 Encoded:	**86-106**	**10110110111010010101**
BCH 1 Calculated:	**86-106**	**10110110111010010101**
Fixed bits (110): Pass	**107-109**	**110**
Bits 113 - 132 provides offset data location	**110**	**1**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Loc. Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: -	**113**	**0**
Latitude Offset Minutes: 0	**114-115**	**00**
Latitude Offset Seconds: 28	**116-119**	**0111**
Longitude Offset Sign: -	**120**	**0**
Longitude Offset Minutes: 0	**121-122**	**00**
Longitude Offset Seconds: 16	**123-126**	**0100**
Additional Id (Nat Use)	**127-132**	**001111**
BCH 2 Encoded:	**133-144**	**000101111100**
BCH 2 Calculated:	**N/A**	**000101111100**
Composite Latitude: 43.558888888888894 Degrees North	**N/A**	**Composite Longitude: 1.662222222222222 Degrees East**
15 Hex ID:		**19360031BF81FE0**

6-Self Test: National Location: PLB

```
Message recu                    (1-144): FFFED08C9B0018DFC0FF042E19759F3CF1F8
Format flag                       (25): 1
Protocole flag                    (26): 0
Code pays                      (27-36): 0201
Pays                                  : ALBANIA
Code protocole                 (37-40): 1011
Protocole utilise                     : National - PLB
Identification                        :
Numero                                : 99
BCH 1 lu/calcule    (86-106/25-85): 10B865/10B865
BCH 2 lu/calcule (133-144/107-132): 1F8/1F8
Pos. Data Source                (111): External
121.5 MHz Homing                (112): Yes
Additional Data Pos.            (110): delta Pos.
Position GPS de reference lab         : N 43° 33' 36" E 1° 28' 39"
Position GPS                          : Yes
Position GPS par defaut               : Yes
```

FFFED08C9B0018DFC0FF042E19759F3CF1F8

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: Location Protocol	**26**	**0**
Country code: 201	**27-36**	**0011001001**
Type of location protocol: National Location - PLB	**37-40**	**1011**
Serial Number: 99	**41-58**	**000000000001100011**
Latitude Flag: default	**59**	**0**
Latitude (Degrees): default	**60-66**	**1111111**
Latitude (Minutes): default	**67-71**	**00000**
Longitude Flag: default	**72**	**0**
Longitude (Degrees): default	**73-80**	**11111111**
Longitude (Minutes): default	**81-85**	**00000**
BCH 1 Encoded:	**86-106**	**10000101110000l100101**
BCH 1 Calculated:	**86-106**	**10000101110000l100101**
Fixed bits (110): Pass	**107-109**	**110**
Bits 113 - 132 provides offset data location	**110**	**1**
Position Data: Encoded Position Data Source From External Navigation Device	**111**	**0**
Aux Loc. Device: 121.5 MHz homer	**112**	**1**
Latitude Offset Sign: default	**113**	**1**
Latitude Offset Minutes: default	**114-115**	**00**
Latitude Offset Seconds: default	**116-119**	**1111**
Longitude Offset Sign: default	**120**	**1**
Longitude Offset Minutes: default	**121-122**	**00**
Longitude Offset Seconds: default	**123-126**	**1111**
Additional Id (Nat Use)	**127-132**	**001111**
BCH 2 Encoded:	**133-144**	**000111111000**
BCH 2 Calculated:	**N/A**	**000111111000**
Composite Latitude: default	**N/A**	**Composite Longitude: default**
15 Hex ID:	**N/A**	**19360031BF81FE0**

7-Location A: **User-Location**

```
Message recu                    (1-144): FFFE2FCC962000C6007CEDFCEC4570017F76
Format flag                       (25): 1
Protocole flag                    (26): 1
Code pays                      (27-36): 0201
Pays                                  : ALBANIA
Code protocole                 (37-39): 011
Protocole utilise                     : User - Serialized user
Identification code            (26-85): 992C40018C00F9D
Identification (Baudot)        (40-81): ::5O:9W
Numero                                : 00
BCH 1 lu/calcule     (86-106/25-85): 17F3B1/17F3B1
BCH 2 lu/calcule (133-144/107-132): F76/F76
Homing                         (84-85): 01
Pos. Data source                 (107): External
Position GPS de reference lab         : N 43° 33' 36'' E 1° 28' 39''
Position GPS                          : Yes
Position GPS par defaut               : No
Latitude position                     : 43°32'0'' Nord
Longitude position                    : 1°28'0'' Est
Delta position                        : 3.094 km
```

FFFE2FCC962000C6007CEDFCEC4570017F76

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: Serial User	**37-39**	**011**
Serial Type: ELT with Serial Identification	**40-42**	**000**
Cospas-Sarsat Certificate Number in bits 74-83: Yes	**43**	**1**
Serial Number: 99	**44-63**	**00000000000001100011**
All 0s or National Use	**64-73**	**0000000000**
C/S Number or National Use (bit 43 refers): 999	**74-83**	**1111100111**
Aux radio device: 121.5 MHz	**84-85**	**01**
Encoded BCH 1:	**86-106**	**10111111001110110001**
Calculated BCH 1:	**N/A**	**10111111001110110001**
Encoded Position Data Source From External Navigation Device	**107**	**0**
North	**108**	**0**
Latitude (degrees): 43	**109-115**	**0101011**
Latitude (minutes): 32	**116-119**	**1000**
East	**120**	**0**
Longitude (degrees): 1	**121-128**	**00000001**
Longitude (minutes): 28	**129-132**	**0111**
Encoded BCH 2:	**133-144**	**111101110110**
Calculated BCH 2:	**N/A**	**111101110110**
15 Hex ID:	**N/A**	**992C40018C00F9D**

7 Location B: User-Location

```
Message recu                    (1-144): FFFE2FCC962000C6007CEDFCEC457001A828
Format flag                        (25): 1
Protocole flag                     (26): 1
Code pays                       (27-36): 0201
Pays                                   : ALBANIA
Code protocole                  (37-39): 011
Protocole utilise                      : User - Serialized user
Identification code             (26-85): 992C40018C00F9D
Identification (Baudot)         (40-81): ::SO:9W
Numero                                 : 00
BCH 1 lu/calcule    (86-106/25-85): 17F3B1/17F3B1
BCH 2 lu/calcule (133-144/107-132): 828/828
Homing                          (84-85): 01
Pos. Data source                  (107): External
Position GPS de reference lab          : N 43° 33' 33'' E 1° 39' 42''
Position GPS                           : Yes
Position GPS par defaut                : No
Erreur position GPS >5 km              : Yes
Latitude position                      : 43°32'0'' Nord
Longitude position                     : 1°40'0'' Est
Delta position                         :
                                         2.904 km
```

FFFE2FCC962000C6007CEDFCEC457001A828

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: Serial User	**37-39**	**011**
Serial Type: ELT with Serial Identification	**40-42**	**000**
Cospas-Sarsat Certificate Number in bits 74-83: Yes	**43**	**1**
Serial Number: 99	**44-63**	**00000000000001100011**
All 0s or National Use	**64-73**	**0000000000**
C/S Number or National Use (bit 43 refers): 999	**74-83**	**1111100111**
Aux radio device: 121.5 MHz	**84-85**	**01**
Encoded BCH 1:	**86-106**	**10111111001110110001**
Calculated BCH 1:	**N/A**	**10111111001110110001**
Encoded Position Data Source From External Navigation Device	**107**	**0**
North	**108**	**0**
Latitude (degrees): 43	**109-115**	**0101011**
Latitude (minutes): 32	**116-119**	**1000**
East	**120**	**0**
Longitude (degrees): 1	**121-128**	**00000001**
Longitude (minutes): 40	**129-132**	**1010**
Encoded BCH 2:	**133-144**	**100000101000**
Calculated BCH 2:	**N/A**	**100000101000**
15 Hex ID:	**N/A**	**992C40018C00F9D**

7 Self Test: **User-Location**

```
Message recu                    (1-144): FFFED0CC962000C6007CEDFCEC4FE0FF0F61
Format flag                       (25): 1
Protocole flag                    (26): 1
Code pays                       (27-36): 0201
Pays                                   : ALBANIA
Code protocole                  (37-39): 011
Protocole utilise                      : User - Serialized user
Identification code             (26-85): 992C40018C00F9D
Identification (Baudot)         (40-81): ::5O:9W
Numero                                 : 00
BCH 1 lu/calcule     (86-106/25-85): 17F3B1/17F3B1
BCH 2 lu/calcule (133-144/107-132): F61/F61
Homing                          (84-85): 01
Pos. Data source                  (107): Exte---'
Position GPS de reference lab          : N 43 33' 36'' E 1° 28' 39''
Position GPS                           : Yes
Position GPS par defaut                : Yes
```

FFFED0CC962000C6007CEDFCEC4FE0FF0F61

ITEM	BITS	VALUE
Message format: long format	**25**	**1**
Protocol: User	**26**	**1**
Country code: 201	**27-36**	**0011001001**
User type: Serial User	**37-39**	**011**
Serial Type: ELT with Serial Identification	**40-42**	**000**
Cospas-Sarsat Certificate Number in bits 74-83: Yes	**43**	**1**
Serial Number: 99	**44-63**	**00000000000001100011**
All 0s or National Use	**64-73**	**0000000000**
C/S Number or National Use (bit 43 refers): 999	**74-83**	**1111100111**
Aux radio device: 121.5 MHz	**84-85**	**01**
Encoded BCH 1:	**86-106**	**10111111001110110001**
Calculated BCH 1:	**N/A**	**10111111001110110001**
Encoded Position Data Source From External Navigation Device	**107**	**0**
default	**108**	**0**
Latitude (degrees): default	**109-115**	**1111111**
Latitude (minutes): default	**116-119**	**0000**
default	**120**	**0**
Longitude (degrees): default	**121-128**	**11111111**
Longitude (minutes): default	**129-132**	**0000**
Encoded BCH 2:	**133-144**	**111101100001**
Calculated BCH 2:	**N/A**	**111101100001**
15 Hex ID:	**N/A**	**992C40018C00F9D**

4.8 TEST 12 RESULT
AUXILIARY RADIO-LOCATING DEVICE TRANSMITTER TEST

PEIRP (Radiated)

Report Number: C70223J2	C61222M1
Standards: FCC	

MEASUREMENTS OF RADIATED EMISSIONS

COMPANY	**Ameri-king Corp.**
EUT : Emergency Locator Transmitter	
S/N	**E1**
TEST ENGINEER Eli McClure	
ANTENNA	**Whip 2 Fixed**
REFERENCE LEVEL READINGS	

DATE	**12/29/2006**
MODEL	**AK-451**
TEST DIST.	**30 inches**
LAB	**M**
M/N:	**451017-1A**

DELTA = REF - READING

PERP MEASUREMENTS WITH AMERIKING ANTENNA						
	SIGNAL GENERATOR	**ANTENNA**	**REFERENCE LEVEL WITH VERTICAL DIPOLE**			
FREQUENCY (MHz)	**OUTPUT (dBuV)**	**HEIGHT (inches)**	**METER READING (dBm)**	**METER READING (dBm)**	**TEST RESULTS** PEIRP = $Log^{-1}\frac{P_{REC}-G_{REC}+L_C+L_P}{10}$	
121.5	80	24.3	REF: 3.9dBm with 75mW input (18.75 dBm input)	REF: 2.14dBm with 50mW input (16.99dBm input)		
FREQUENCY (MHz)	**AZIMUTH (degrees)**	**HEIGHT (inches)**	**PERP READING / DELTA (dBm)**	**PERP READING / DELTA (dBm)**		
121.5	0	24.3	5 / -1.1	5 / -2.86	19.5 (dBm)	Pass
121.5	30	24.3	5.1 / -1.2	5.1 / -2.96	19.5 (dBm)	Pass
121.5	60	24.3	5.1 / -1.2	5.1 / -2.96	19.3 (dBm)	Pass
121.5	90	24.3	5.1 / -1.2	5.1 / -2.96	19.4 (dBm)	Pass
121.5	120	24.3	5.1 / -1.2	5.1 / -2.96	19.4 (dBm)	Pass
121.5	150	24.3	4.8 / -0.9	4.8 / -2.66	19.5 (dBm)	Pass
121.5	180	24.3	5 / -1.1	5 / -2.86	19.3 (dBm)	Pass
121.5	210	24.3	5 / -1.1	5 / -2.86	19.5 (dBm)	Pass
121.5	240	24.3	5 / -1.1	5 / -2.86	19.4 (dBm)	Pass
121.5	270	24.3	5.2 / -1.3	5.2 / -3.06	19.4 (dBm)	Pass
121.5	300	24.3	5.3 / -1.4	5.3 / -3.16	19.5 (dBm)	Pass
121.5	330	24.3	5 / -1.1	5 / -2.86	19.4 (dBm)	Pass