

CHAPTER 2

INITIAL ALIVENESS TEST

2.1. TEST SPECIFICATIONS AND SEQUENCE

Following :

- Section A2.1 of C/S T. 007 standard ;
- Section A1.0 of RTCM 76-2002/SC110-STD

• Measurements at ambient temperature :

- Transmitter power output,
- Digital Message,
- Digital Message Generator,
- Modulation,
- Transmitted frequency ,
- Spurious output,
- VSWR check,
- Self-test mode

2.2. EQUIPMENT UNDER TEST

Beacon Unit : 1/3

Name : ACR / TeraFixTM 406GPS I/O PLB

Type : PLB200

Number : 07

2.3 TEST SITE

INTESPACE - AP/ET.

2.4. TEST EQUIPMENT

- Argos - Cospas/Sarsat Test Bench.

2.5. RESULTS

The Initial Aliveness Test was done with the « Certification » C/S Test at 22 °C
(C/S test report chapter 9)

A summary of Aliveness Test results is reported next page .

INITIAL ALIVENESS TEST RESULTS

Beacon Unit : 1/3

Name : ACR / TeraFixTM 406GPS I/O PLB

Type : PLB200

Number : 07

Date : 10 June 2004

406 MHZ MEASUREMENTS

1 – Environmental Temperature (° C)			22.2 ° C
2 – POWER OUTPUT			
- Transmission power	dBm	37 ± 2	37.1
- Power risetime	ms	< 5	0.63 ms
- Power falltime	ms	< 5	0.10 ms
3 – SPURIOUS OUTPUT			
- In band	*		OK
- Carrier harmonics	*		
4 – DIGITAL MESSAGE GENERATOR			
- Repetition rate	**		OK
- Bit rate	bits/S	400 ± 4	398.4
- Transmission time	ms	520 ± 5.2	521.0
- CW preamble	ms	160 ± 1.6	159.37
5 – DIGITAL MESSAGE			
- Bit and frame sync	bits	1-24	FFFE2F
- Format flag	bit	25	1
- Protocol flag	bit	26	0
- Country code	bits	27-36	366
- Protocol	bits	37-40	1110
- Homing	bits	112	1
- Encoded Position Data Source	bits	111	1
- BCH 1 code read / calculated	bits	86-106 / 25-85	00B717 / 00B717
- BCH 2 code read / calculated	bits	133-144 / 107-132	2B8 / 2B8
6 – FREQUENCY			
- Nominal value	KHz	406 028 ± 1	406 027.889
- Short term stability		< 2x10 ⁻⁹ /100 ms	3.3 x 10 ⁻¹⁰

* See graphs page PLB200-17 of C/S Test report chapter 9

** See graph page PLB200-9 of Test report chapter 9