

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - *POST BUMP ALIVENESS CHECK*

MEASUREMENT DATE: 14 Jul 2000 TIME: 14:04:16

TESTED BY:

J.C. Holt

APPROVED BY:

Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Decoded: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 0 0 1 0 1 1 1 1
Decoded: 0 0 0 1 0 1 1 1 1

*** FRAME SYNCHRONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 | 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

Should be: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1
Decoded: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1

*** BCH CODE OK ***

Intentionally Blank

ANNEX VI. SALT FOG TEST

POST SALT FOG ALIVENESS TEST

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - *POST SALT FOG ALIVENESS CHECK*

MEASUREMENT DATE: 19 Jul 2000 TIME: 12:35:24

TESTED BY:

APPROVED BY:

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 $\pm$.001	406.028108	MHz	passed
Short term frequency stability	< 2.0E-9	4.87E-10		passed
Medium term: mean slope	< 1.0E-9	-7.83E-11	/min	passed
residual deviation	< 3.0E-9	9.82E-10		passed

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - POST SALT FOG ALIVENESS CHECK

MEASUREMENT DATE: 19 Jul 2000 TIME: 12:17:27

TESTED BY:

[Signature]

APPROVED BY:

Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Tx ouput power level	3.15 TO 7.93	4.54	W	passed
Tx ouput power level	3.15 TO 7.93	4.51	W	passed
Tx ouput power level	3.15 TO 7.93	4.51	W	passed

36.5 dBm

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

MEASUREMENT DATE: 19 Jul 2000 TIME: 12:36:50

APPROVED BY:

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

*** BIT SYNCHRONIZATION OK ***

```
Should be:  0  0  0  1  0  1  1  1  1
Decoded:    0  0  0  1  0  1  1  1  1
```

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

-DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

*** BCH CODE OK ***

Intentionally Blank

ANNEX VII. DROP TEST

POST DROP ALIVENESS TEST (ON HARD SURFACE)

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
 MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 023 02906
 BEACON CERTIFICATION TEST RESULTS - POST - Drop ALIVENESS Check
 MEASUREMENT DATE: 11 Sep 2000 TIME: 11:43:53

TESTED BY: *J. C. [Signature]*

APPROVED BY: *Rosa Barrineau*

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COM
Nominal transmitted frequency	406.028 $\pm$.001	406.028085	MHz	pa
Short term frequency stability	< 2.0E-9	4.28E-10		pa
Medium term: mean slope	< 1.0E-9	-7.94E-10	/min	pa
residual deviation	< 3.0E-9	4.04E-10		pa

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 023 029 ~~CH~~
BEACON CERTIFICATION TEST RESULTS - POST-DROP ALIENNESS CHECK
MEASUREMENT DATE: 11 Sep 2000 TIME: 11:25:17

TESTED BY: J. C. [Signature]

APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Tx ouput power level	3.15 TO 7.93	4.74	W	pas
Tx ouput power level	3.15 TO 7.93	4.74	W	pas
Tx ouput power level	3.15 TO 7.93	4.74	W	pas

36.8 dBm

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 0289^{sch}

BEACON CERTIFICATION TEST RESULTS - *Post Drop Aliveness Check*

MEASUREMENT DATE: 11 Sep 2000 TIME: 11:44:16

TESTED BY: *[Signature]*

APPROVED BY: *Rosa Barrineau*

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Decoded: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 0 0 1 0 1 1 1 1

Decoded: 0 0 0 1 0 1 1 1 1

*** FRAME SYNCHRONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 0

Should be: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0

Decoded: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0

*** BCH CODE OK ***

POST DROP ALIVENESS TEST (IN WATER)

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - POST WATER DROP ALIVENESS CHECK

MEASUREMENT DATE: 11 Sep 2000 TIME: 13:22:14

TESTED BY:

APPROVED BY:

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 $\pm$.001	406.028059	MHz	passed
Short term frequency stability	< 2.0E-9	4.03E-10		passed
Medium term: mean slope	< 1.0E-9	+1.95E-09	/min	failed
residual deviation	< 3.0E-9	8.22E-09		failed

NA

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - *POST WATER DROP ALIVENESS CHECK*

MEASUREMENT DATE: 11 Sep 2000 TIME: 12:21:51

TESTED BY: *J. C. W.*

APPROVED BY: *Rosa Barrineau*

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Tx ouput power level	3.15 TO 7.93	4.57	W	passed
Tx ouput power level	3.15 TO 7.93	4.57	W	passed

36.6 dBm

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - *POST WATER DROP ALIENESS CHECK*

MEASUREMENT DATE: 11 Sep 2000 TIME: 13:05:30

TESTED BY: *J. C. [Signature]*

APPROVED BY: *Rosa Barrineau*

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Decoded: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 0 0 1 0 1 1 1 1
Decoded: 0 0 0 1 0 1 1 1 1

*** FRAME SYNCHRONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

Should be: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1
Decoded: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1

*** BCH CODE OK ***

ANNEX VIII. LEAKAGE AND IMMERSION

POST IMMERSION ALIVENESS TEST (FRESH WATER)

UUT AT 70°C -- WATER AT 27° C

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - *Water Temp 27°C Clear Water (Fresh)*
MEASUREMENT DATE: 10 Oct 2000 TIME: 11:44:48

TESTED BY: C. Bah APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 ±.001	406.027985	MHz	passed
Short term frequency stability	< 2.0E-9	3.59E-10		passed
Medium term: mean slope	< 1.0E-9	+3.44E-10	/min	passed
residual deviation	< 3.0E-9	2.28E-10		passed

ALiveness test

MANU: SEIMAC MODEL NO: PROVIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - Post Temp Shock (immersion) 70°C water temp
MEASUREMENT DATE: 10 Oct 2000 TIME: 11:52:11 70°C Fresh water.

TESTED BY:

C. Boh

APPROVED BY:

Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Tx output power level	3.15 TO 7.93	4.80	W	pas
Tx output power level	3.15 TO 7.93	4.80	W	pas
Tx output power level	3.15 TO 7.93	4.80	W	pas
Tx output power level	3.15 TO 7.93	4.80	W	pas

ALIVENESS TEST

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS -

MEASUREMENT DATE: 10 Oct 2000 TIME: 11:56:40 *Post Shock Test (70°C) Water Temp 27°C Fresh Water*

TESTED BY:

C. Boh

APPROVED BY:

Rosa Farrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Decoded: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 0 0 1 0 1 1 1 1
Decoded: 0 0 0 1 0 1 1 1 1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 0

Should be: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0
Decoded: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0

*** BCH CODE OK ***

POST IMMERSION ALIVENESS TEST (SALT WATER)

UUT AT 70° C – WATER AT 25.6° C

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406

SERIAL NO: 029 *Aliveness Test Temp Shock 70°C*

BEACON CERTIFICATION TEST RESULTS - *Water Temp 25.6 C Saltwater*

MEASUREMENT DATE: 10 Oct 2000 TIME: 16:19:22

TESTED BY:

C. Bah

APPROVED BY:

Rosa Barineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Nominal transmitted frequency	406.028 ±.001	406.027986	MHz	pas
Short term frequency stability	< 2.0E-9	3.76E-10		pas
Medium term: mean slope	< 1.0E-9	+3.17E-10	/min	pas
residual deviation	< 3.0E-9	1.93E-10		pas

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406

SERIAL NO: 029 *ALIVENESS TEST Temp Shock 70*

BEACON CERTIFICATION TEST RESULTS - *Water Temp 25.6°C SALT water.*

MEASUREMENT DATE: 10 Oct 2000 TIME: 15:56:56

TESTED BY:

C. Bal

APPROVED BY:

Rosa Barineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Tx output power level	3.15 TO 7.93	3.74	W	passed
Tx output power level	3.15 TO 7.93	3.81	W	passed
Tx output power level	3.15 TO 7.93	3.89	W	passed

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406

SERIAL NO: 029 *Aliveness Test Temp Shock*

BEACON CERTIFICATION TEST RESULTS -

Water Temp 95.6 SALTwater

MEASUREMENT DATE: 10 Oct 2000 TIME: 16:02:10

TESTED BY:

C Bal

APPROVED BY:

Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Decoded: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 0 0 1 0 1 1 1 1
Decoded: 0 0 0 1 0 1 1 1 1

*** FRAME SYNCHRONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

Should be: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1
Decoded: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1

*** BCH CODE OK ***

POST IMMERSION ALIVENESS TEST (FRESH WATER)

UUT AT -50° C -- WATER AT 2.3° C

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406

SERIAL NO: 029 Low Temp Shock -50° C

BEACON CERTIFICATION TEST RESULTS - Water Temp 2.3° C ALIVENESS TEST Fresh Water

MEASUREMENT DATE: 11 Oct 2000 TIME: 11:30:17

TESTED BY:

C. Buhl

APPROVED BY:

Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 ±.001	406.027995	MHz	passed
Short term frequency stability	< 2.0E-9	7.09E-10		passed
Medium term: mean slope	< 1.0E-9	-5.45E-10	/min	passed
residual deviation	< 3.0E-9	6.34E-10		passed

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 *Low Temp Shock -50*
BEACON CERTIFICATION TEST RESULTS - *Water Temp 2.3°C (Fresh Water) ALiveness 1/2 T,*
MEASUREMENT DATE: 11 Oct 2000 TIME: 11:31:26

TESTED BY: _____

APPROVED BY: _____

Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Tx ouput power level	3.15 TO 7.93	4.96	W	pas
Tx ouput power level	3.15 TO 7.93	4.96	W	pas
Tx ouput power level	3.15 TO 7.93	4.96	W	pas
Tx ouput power level	3.15 TO 7.93	4.96	W	pas

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406

SERIAL NO: 029 *Low Temp Shock - 50°C*

BEACON CERTIFICATION TEST RESULTS - *Water Temp 2.3°C Fresh Water Aliveness Test*

MEASUREMENT DATE: 11 Oct 2000 TIME: 11:37:46

TESTED BY:

C Bch

APPROVED BY:

Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Decoded: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 0 0 1 0 1 1 1 1

Decoded: 0 0 0 1 0 1 1 1 1

*** FRAME SYNCHRONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

Should be: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1

Decoded: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1

*** BCH CODE OK ***

POST IMMERSION ALIVENESS TEST (SALT WATER)

UUT AT -50° C -- WATER AT -1.5° C

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Low Temp Shock. -50°
BEACON CERTIFICATION TEST RESULTS - SALT WATER TEMP -1.5° C ALIVENESS TEST
MEASUREMENT DATE: 11 Oct 2000 TIME: 16:09:24

TESTED BY: C. Beh APPROVED BY: Rosa Barrincau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Nominal transmitted frequency	406.028 ±.001	406.027993	MHz	pas
Short term frequency stability	< 2.0E-9	6.90E-10		pas
Medium term: mean slope	< 1.0E-9	-5.26E-10	/min	pas
residual deviation	< 3.0E-9	3.84E-10		pas

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Temp Shock -50°C
BEACON CERTIFICATION TEST RESULTS - Water Temp -1.5°C (SALT WATER) - ALIVENESS TEST
MEASUREMENT DATE: 11 Oct 2000 TIME: 16:11:10

TESTED BY:

C. Bal

APPROVED BY:

Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Tx ouput power level	3.15 TO 7.93	4.94	W	pas
Tx ouput power level	3.15 TO 7.93	4.95	W	pas
Tx ouput power level	3.15 TO 7.93	4.95	W	pas

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406

SERIAL NO: 029 Low Temp Shock - 50°C

BEACON CERTIFICATION TEST RESULTS *Saltwater Temp -1.5°C* ALIVENESS TEST

MEASUREMENT DATE: 11 Oct 2000 TIME: 16:09:55

TESTED BY:

C. Bal

APPROVED BY:

Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 0

Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0

*** BCH CODE OK ***

ANNEX IX. SPURIOUS EMISSIONS

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
 MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
 BEACON CERTIFICATION TEST RESULTS - FULL PARAMETER AMBIENT
 MEASUREMENT DATE: 2 Oct 2000 TIME: 16:01:51

TESTED BY: *[Signature]*

APPROVED BY: *Rosa Barrineau*

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 ±.001	406.028022	MHz	passed
Short term frequency stability	< 2.0E-9	4.32E-10		passed
Medium term: mean slope	< 1.0E-9	-3.00E-11	/min	passed
residual deviation	< 3.0E-9	6.03E-10		passed
Tx output power level	3.15 TO 7.93	4.57	W	passed
Burst envelope: rise time	< 5	.52	ms	passed
fall time	< 5	< 0.01	ms	passed
Phase modulation: + AVG	+1.1 ±0.1	1.04	rad	passed
- AVG	-1.1 ±0.1	-1.05	rad	passed
Modulation: symmetry	< 0.05	0.0000		passed
Modulation: rise time	150 ±100	134.2	us	passed
fall time	150 ±100	129.8	us	passed
Repetition period minimum	47.5 TO 52.5	48.3	s	passed
Repetition period maximum	47.5 TO 52.5	52.2	s	passed
Repetition period (max - min)	>1	3.9	s	passed
Total transmission time minimum	435.6 TO 444.4	439.4	ms	passed
Total transmission time maximum	435.6 TO 444.4	439.4	ms	passed
Cw preamble minimum	158.4 TO 161.6	159.1	ms	passed
Cw preamble maximum	158.4 TO 161.6	159.3	ms	passed
Message bit rate minimum	396.0 TO 404.0	399.9	bps	passed
Message bit rate maximum	396.0 TO 404.0	400.1	bps	passed

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS
MEASUREMENT DATE: 2 Oct 2000 TIME: 16:18:00

TESTED BY: *[Signature]*

APPROVED BY: *Rosa Barrineau*

SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)
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*** SPURIOUS TEST OK ***

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS
MEASUREMENT DATE: 2 Oct 2000 TIME: 19:13:23

TESTED BY: CB

APPROVED BY: Rosa Barrineau

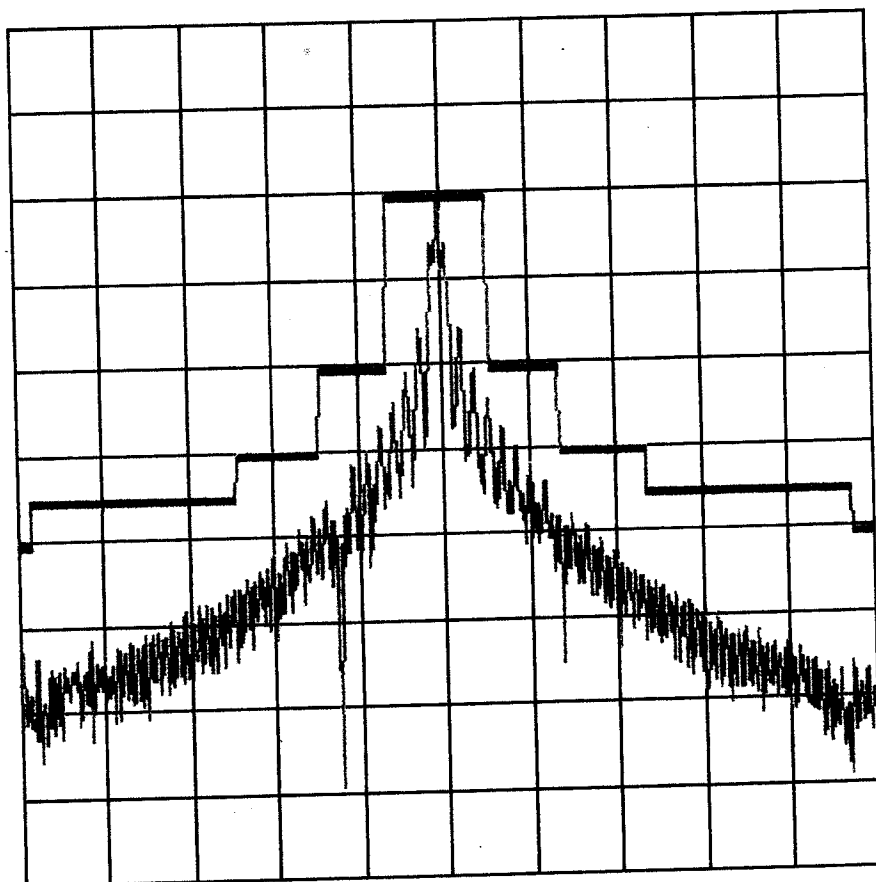
REF 20 dBm

2 Oct 2000

10 dB/

CENTER: 406.020MHz

SPAN: 50KHz



SPURIOUS EMISSIONS SPECTRUM

MINIMUM TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS AT MINIMUM TEMP

MEASUREMENT DATE: 4 Oct 2000 TIME: 09:29:08

TESTED BY:

C. Bal

APPROVED BY:

Rosa Barrineau

SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)
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*** SPURIOUS TEST OK ***

SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)
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*** SPURIOUS TEST OK ***

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS -

MEASUREMENT DATE: 2 Oct 2000 TIME: 20:24:47

TESTED BY: CBah

APPROVED BY: Rosa Barrineau

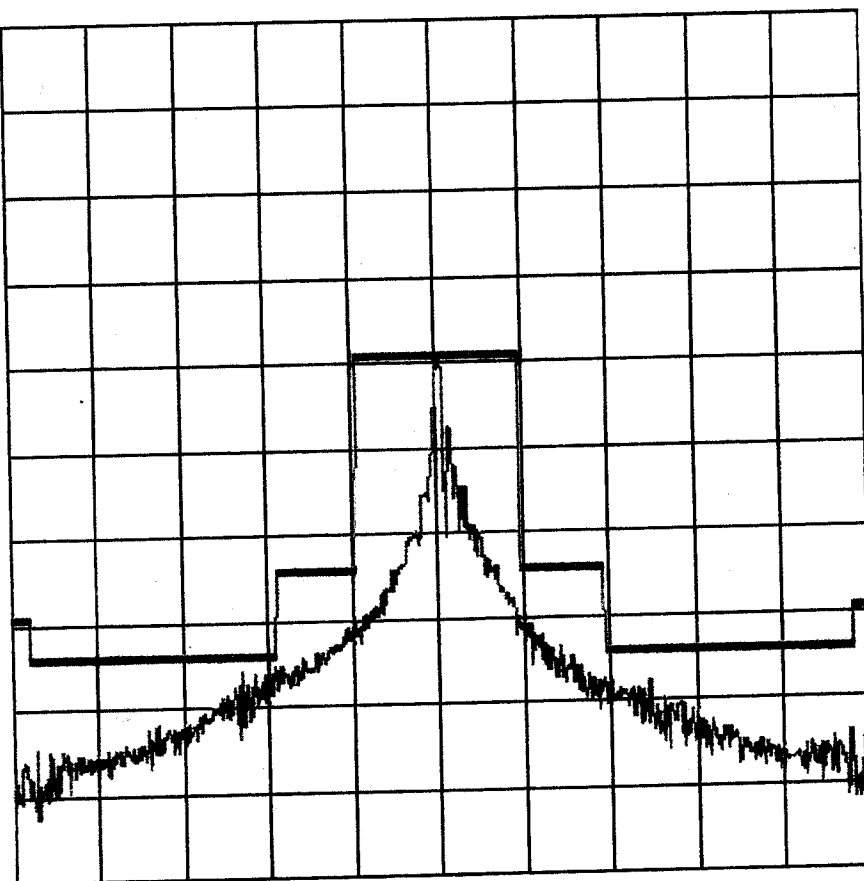
REF 20 dBm

2 Oct 2000

10 dB/

CENTER: 121.5MHz

SPAN: 130KHz



SPURIOUS EMISSIONS SPECTRUM

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS AT MINIMUM TEMP

MEASUREMENT DATE: 4 Oct 2000 TIME: 13:21:26

TESTED BY: C. Baker

APPROVED BY: Rosa Parrineau

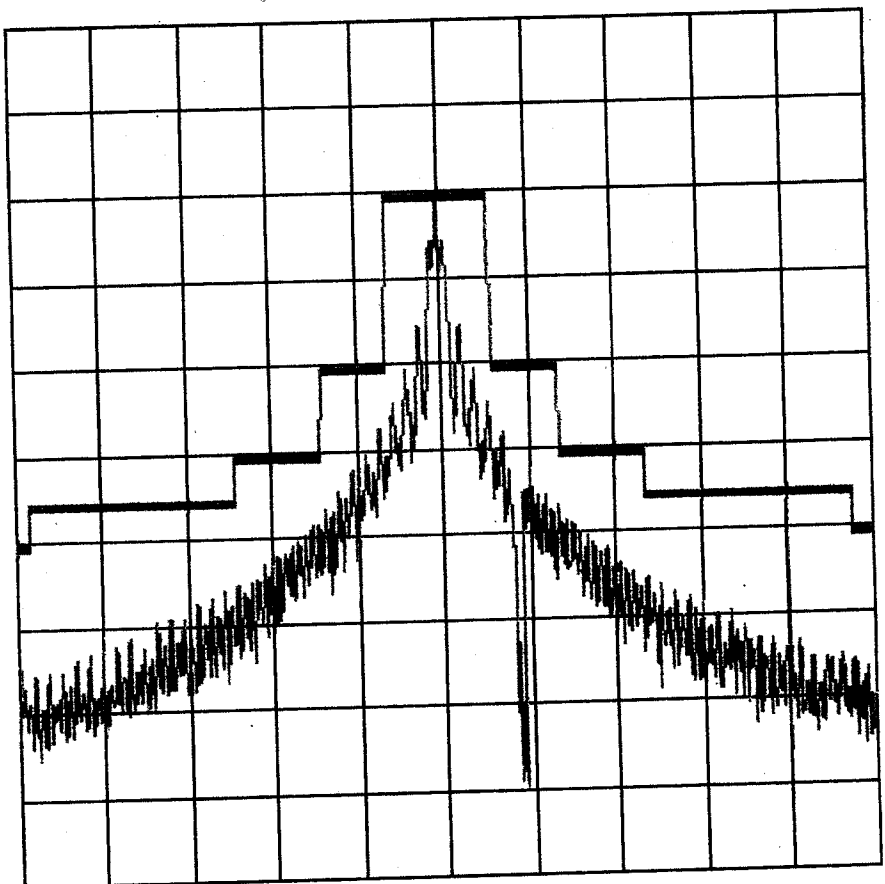
REF 20 dBm

4 Oct 2000

10 dB/

CENTER: 406.020MHz

SPAN: 50KHz



SPURIOUS EMISSIONS SPECTRUM

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION

MEASUREMENT DATE: 4 Oct 2000 TIME: 14:54:22 121.5 spurious

TESTED BY: C. B. [Signature]

APPROVED BY: Rosa Barrineau [Signature]

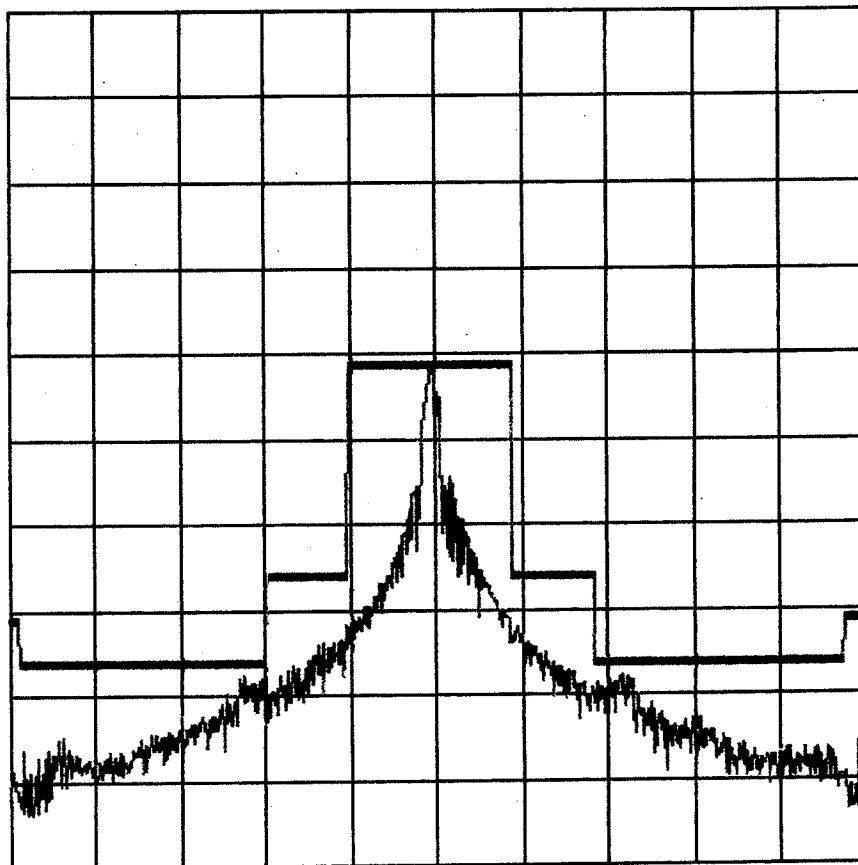
REF 20 dBm

4 Oct 2000

10 dB/

CENTER: 121.5MHz

SPAN: 130KHz



SPURIOUS EMISSIONS SPECTRUM

MAXIMUM TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS AT MAXIMUM TEMP

MEASUREMENT DATE: 3 Oct 2000 TIME: 11:01:24

TESTED BY:

C. Bahr

APPROVED BY:

Rosa Barrineau

SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)
--------------------	------------------	-----------------

*** SPURIOUS TEST OK ***

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC

MODEL NO: PROFIND 406

SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS AT MAXIMUM TEMP

MEASUREMENT DATE: 3 Oct 2000 TIME: 13:34:10

TESTED BY:

C. Bah

APPROVED BY:

Rosa Barrinsan

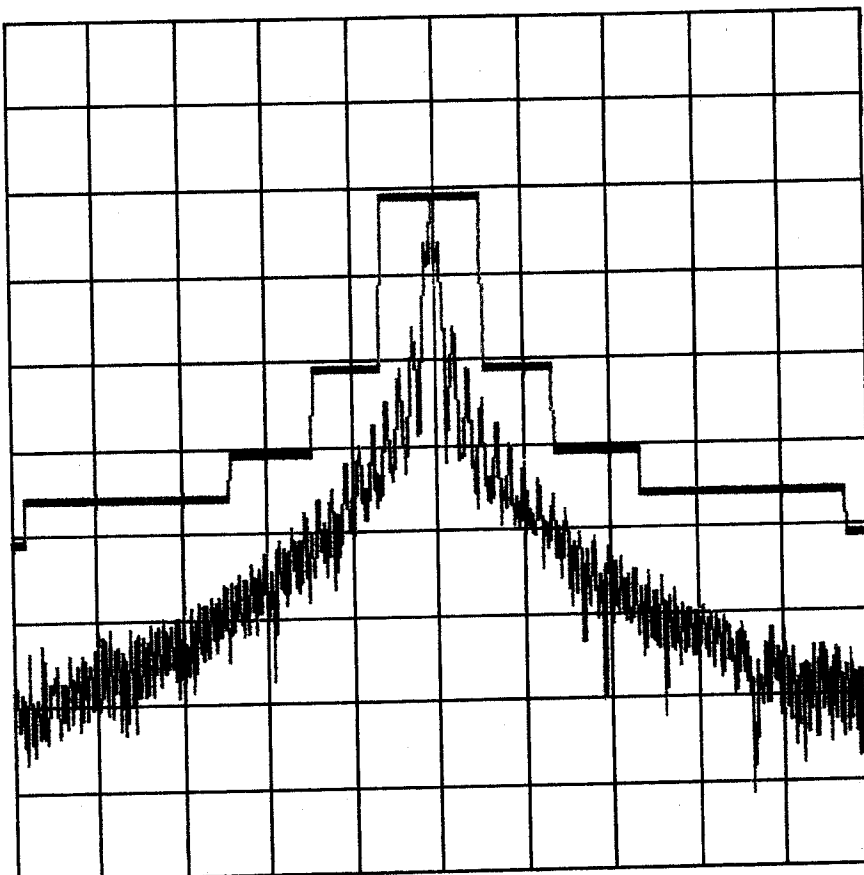
REF 20 dBm

3 Oct 2000

10 dB/

CENTER: 406.028MHz

SPAN: 50KHz



SPURIOUS EMISSIONS SPECTRUM

SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)
--------------------	------------------	-----------------

*** SPURIOUS TEST OK ***

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
 MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
 BEACON CERTIFICATION TEST RESULTS -
 MEASUREMENT DATE: 3 Oct 2000 TIME: 14:52:46

TESTED BY: CTBh

APPROVED BY: Rosa Barrineau

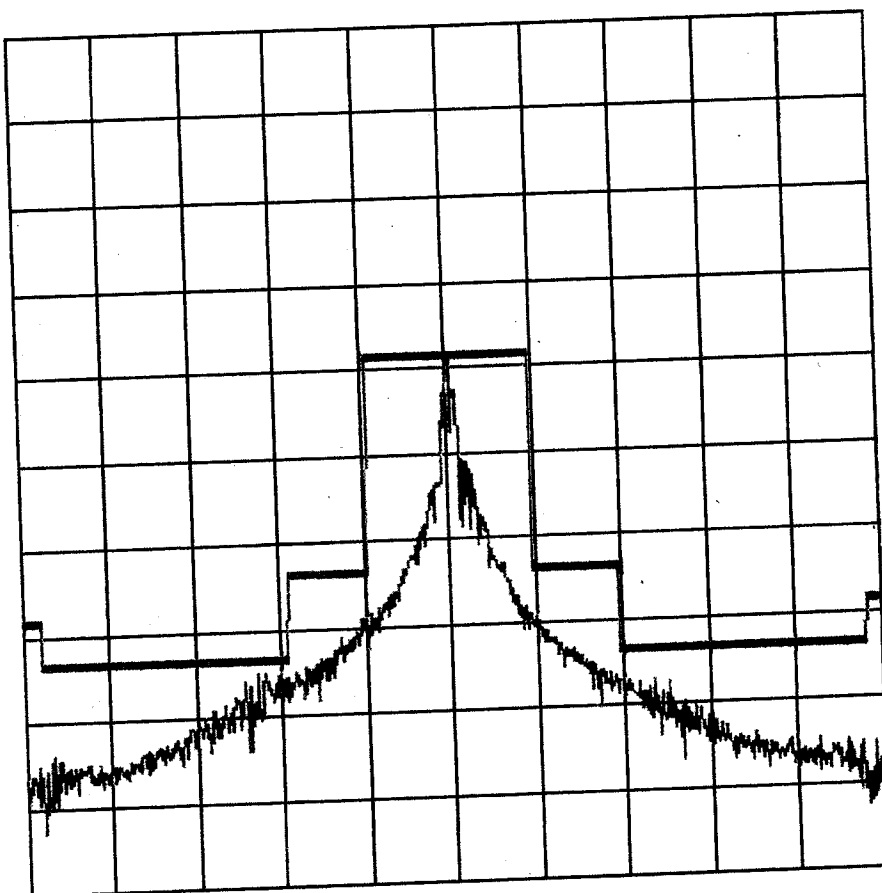
REF 20 dBm

3 Oct 2000

10 dB/

CENTER: 121.5MHz

SPAN: 130KHz



SPURIOUS EMISSIONS SPECTRUM

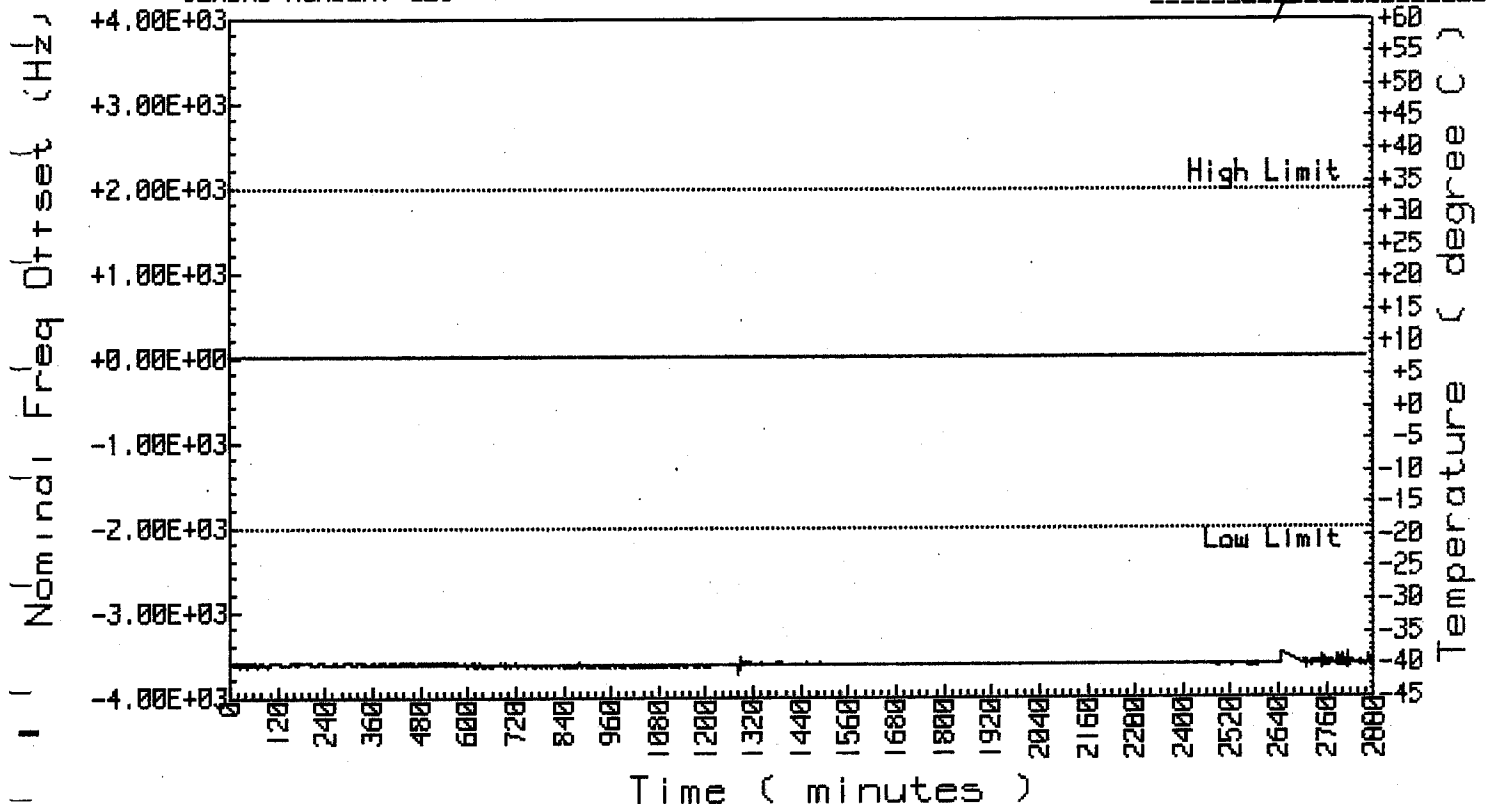
ANNEX X. OPERATIONAL LIFE AND STROBE LIGHT

ETERN BATTERY

BEACON NOMINAL FREQUENCY *ETERN BATTERY*

MANUFACTURER: SEIMAC
MODEL NUMBER: PROFIND 406
SERIAL NUMBER: 029

DATE: 11 Oct 2000
TESTED BY: *SCJH*
APPROVED: *Rosa Parineau*

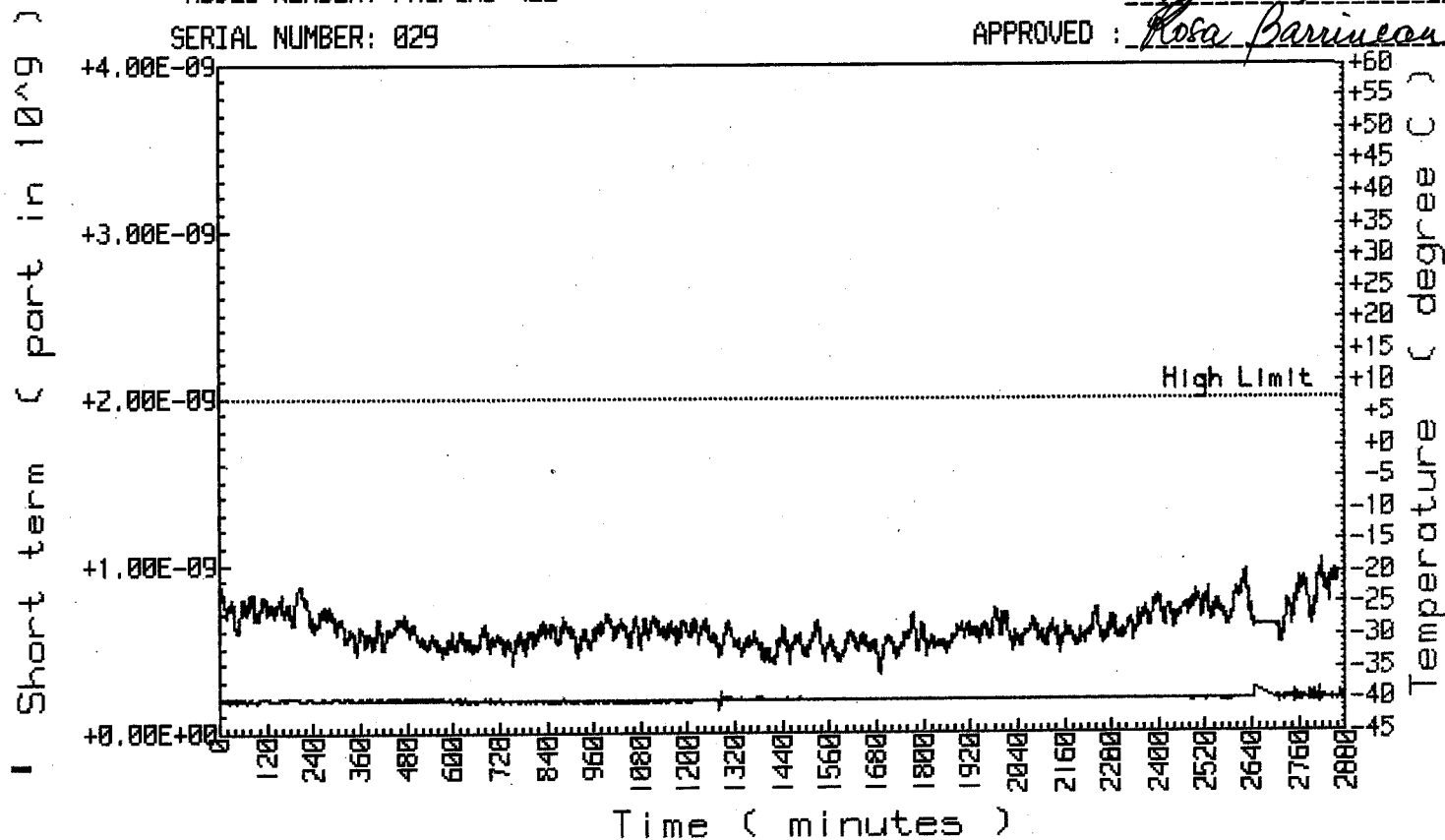


BEACON SHORT TERM STABILITY

ETERN BATTERY

MANUFACTURER: SEIMAC
MODEL NUMBER: PROFIND 406
SERIAL NUMBER: 029

DATE: 11 Oct 2000
TESTED BY: *J. C. H.*
APPROVED: *Rosa Barineon*

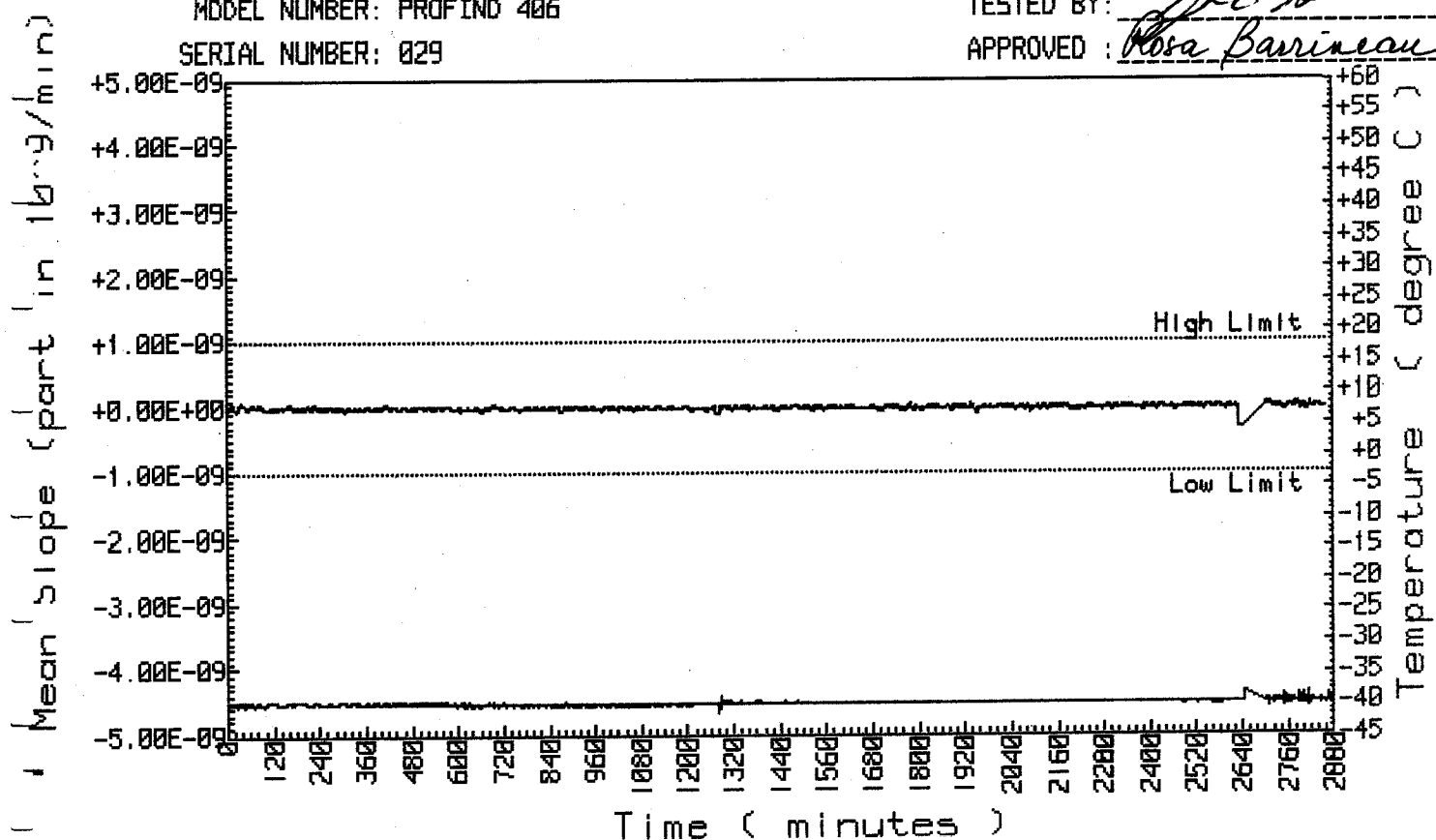


BEACON MEDIUM TERM STABILITY

ETERN BATTERY

MANUFACTURER: SEIMAC
MODEL NUMBER: PROFIND 406
SERIAL NUMBER: 029

DATE: 11 Oct 2000
TESTED BY: *[Signature]*
APPROVED: *Rosa Barineau*

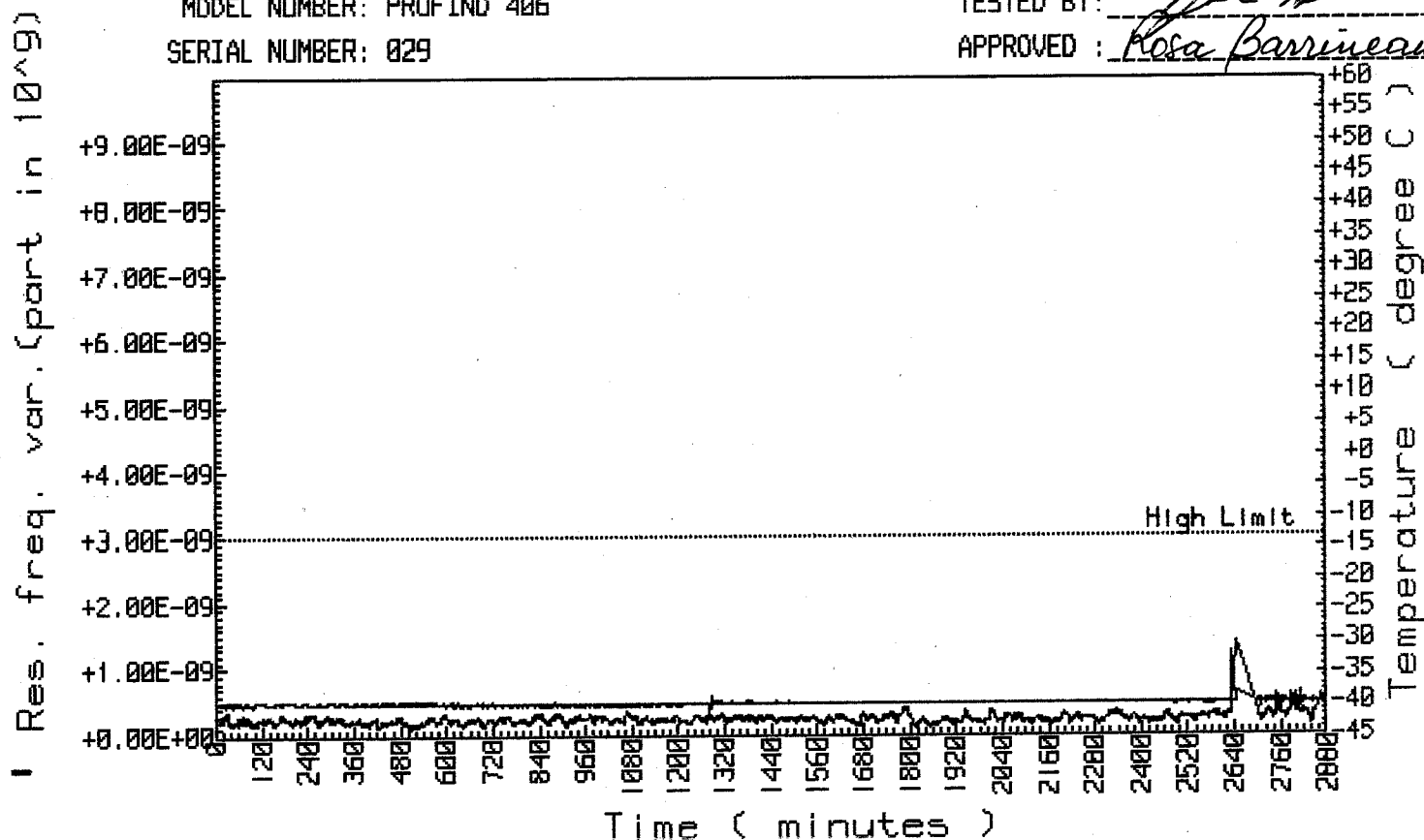


BEACON MEDIUM TERM STABILITY

ETERN BATTERY

MANUFACTURER: SEIMAC
 MODEL NUMBER: PROFIND 406
 SERIAL NUMBER: 029

DATE: 11 Oct 2000
 TESTED BY: *[Signature]*
 APPROVED: *Rosa Barrineau*



406 SIGNAL OUTPUT POWER

ETERN BATTERY

MANUFACTURER: SEIMAC

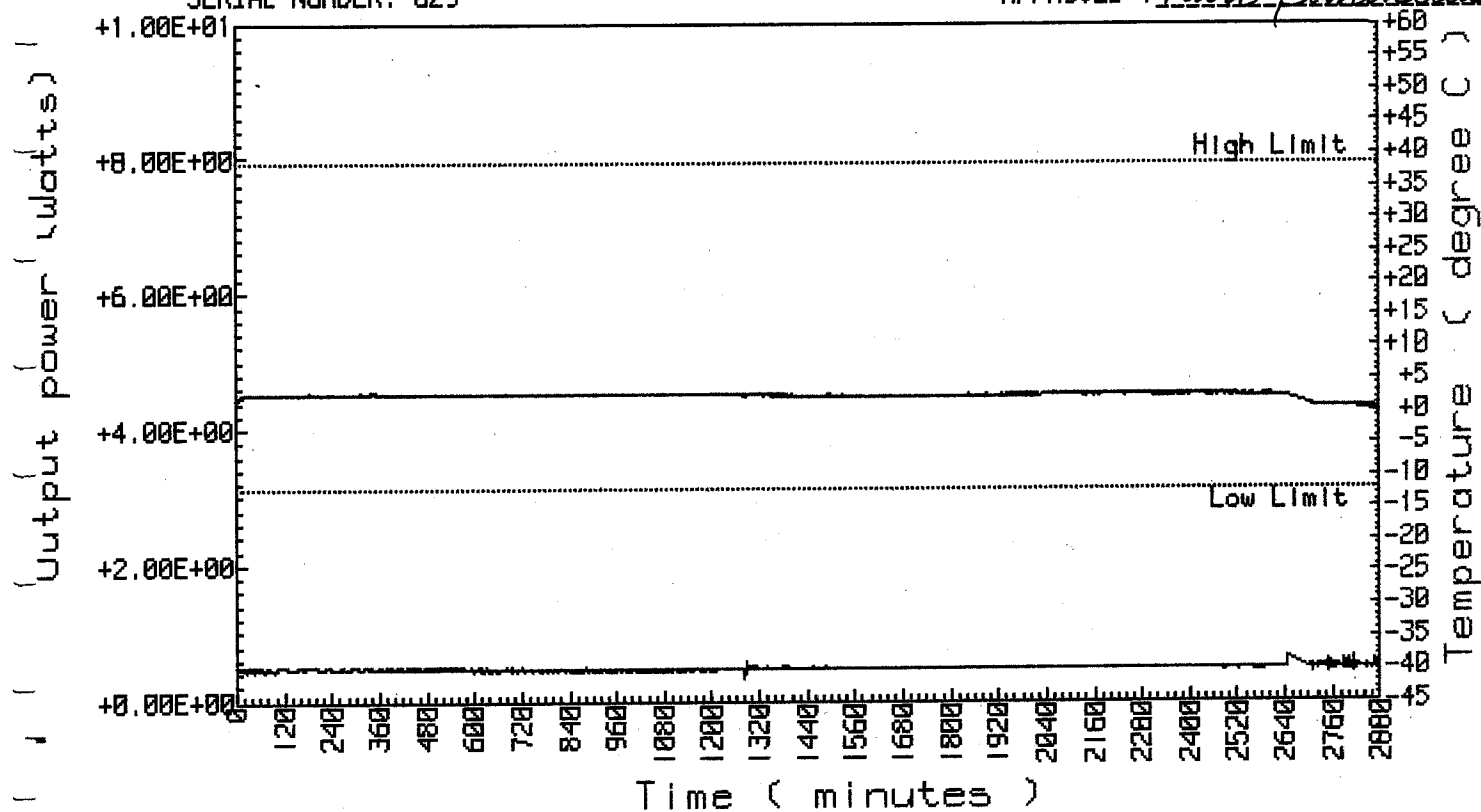
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: 029

DATE: 11 Oct 2000

TESTED BY: *H.C. 2H*

APPROVED: *Rosa Pamineau*



SAFT BATTERY

BEACON NOMINAL FREQUENCY SAFT BATTERY

MANUFACTURER: SEIMAC

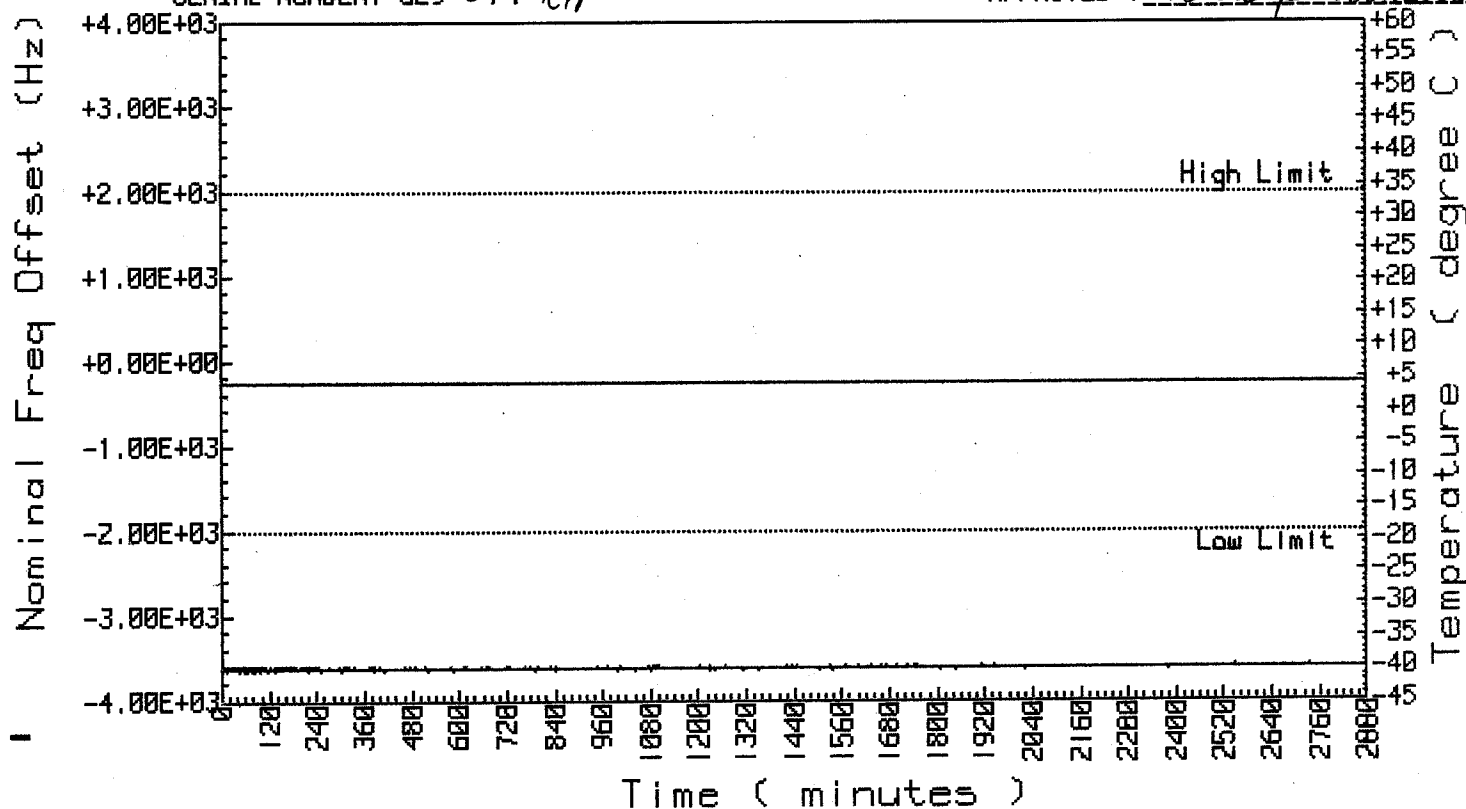
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~029~~ 017 RA

DATE: 14 Oct 2000

TESTED BY: *SLC JH*

APPROVED: *Rosa Barrineau*



BEACON SHORT TERM STABILITY

SAFT BATTERY

MANUFACTURER: SEIMAC

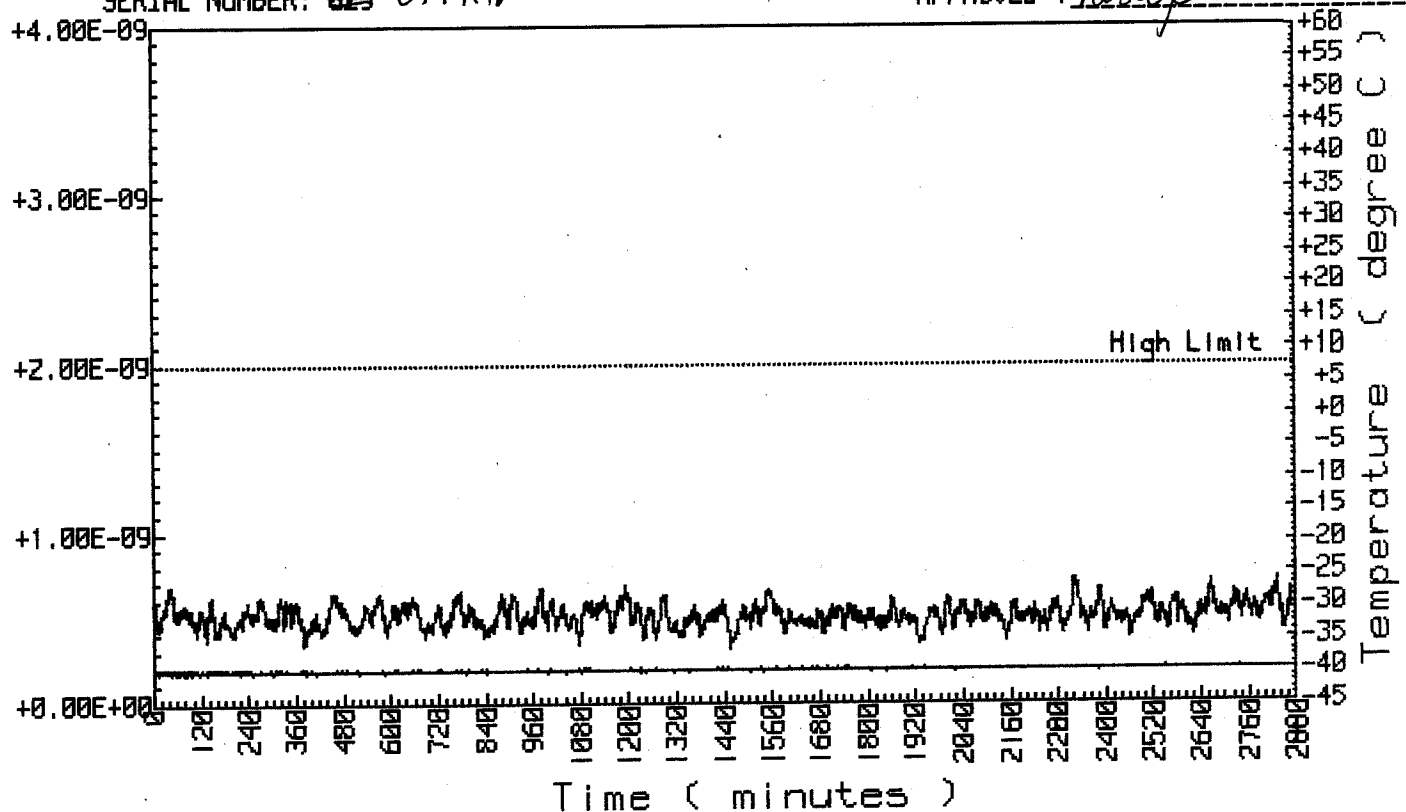
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~029~~ 017RB

DATE: 14 Oct 2000

TESTED BY: *[Signature]*

APPROVED: *Rosa Barrineau*



BEACON MEDIUM TERM STABILITY SAFT BATTERY

MANUFACTURER: SEIMAC

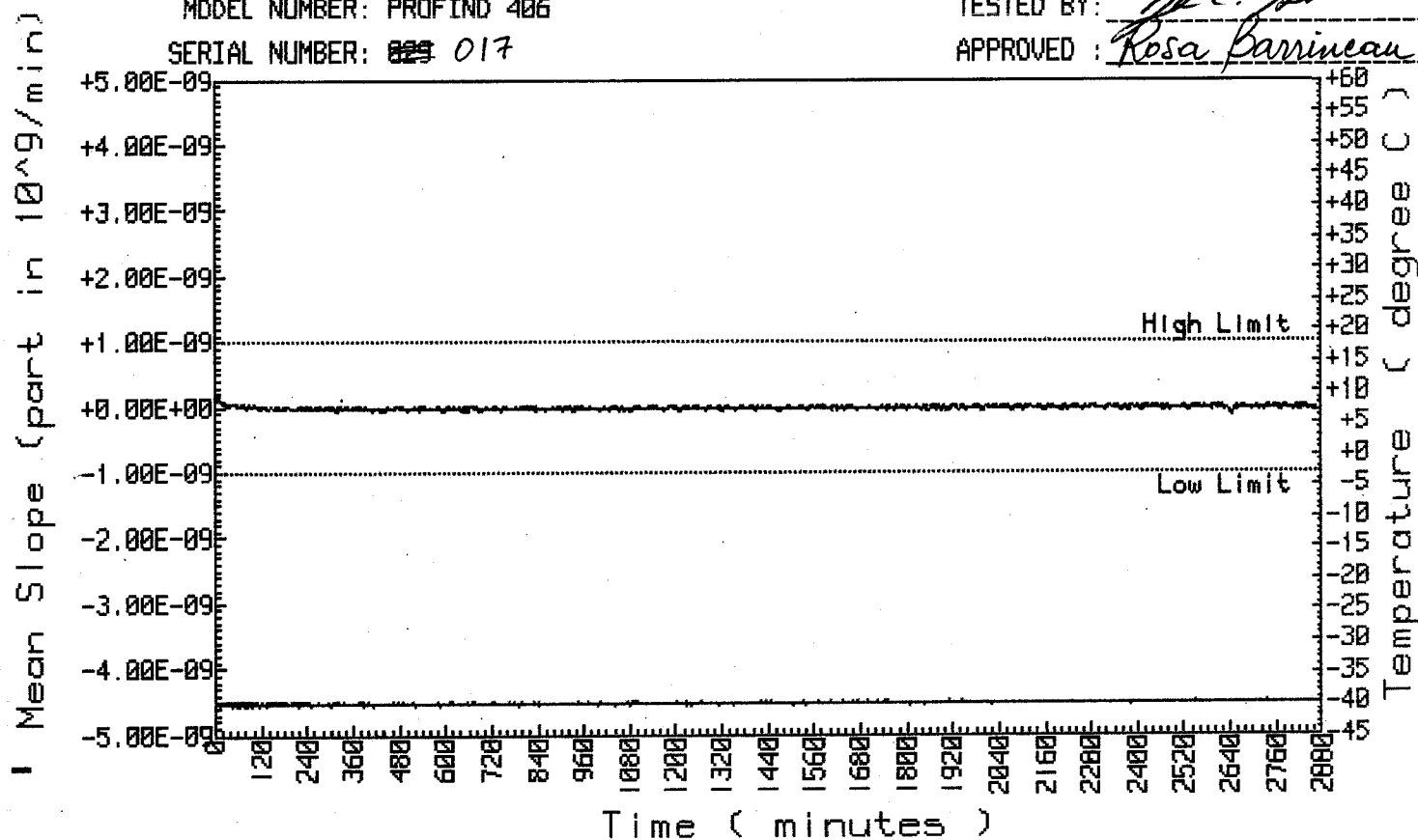
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~023~~ 017

DATE: 14 Oct 2000

TESTED BY: *J.C. Holt*

APPROVED: *Rosa Barrineau*



BEACON MEDIUM TERM STABILITY SAFT BATTERY

MANUFACTURER: SEIMAC

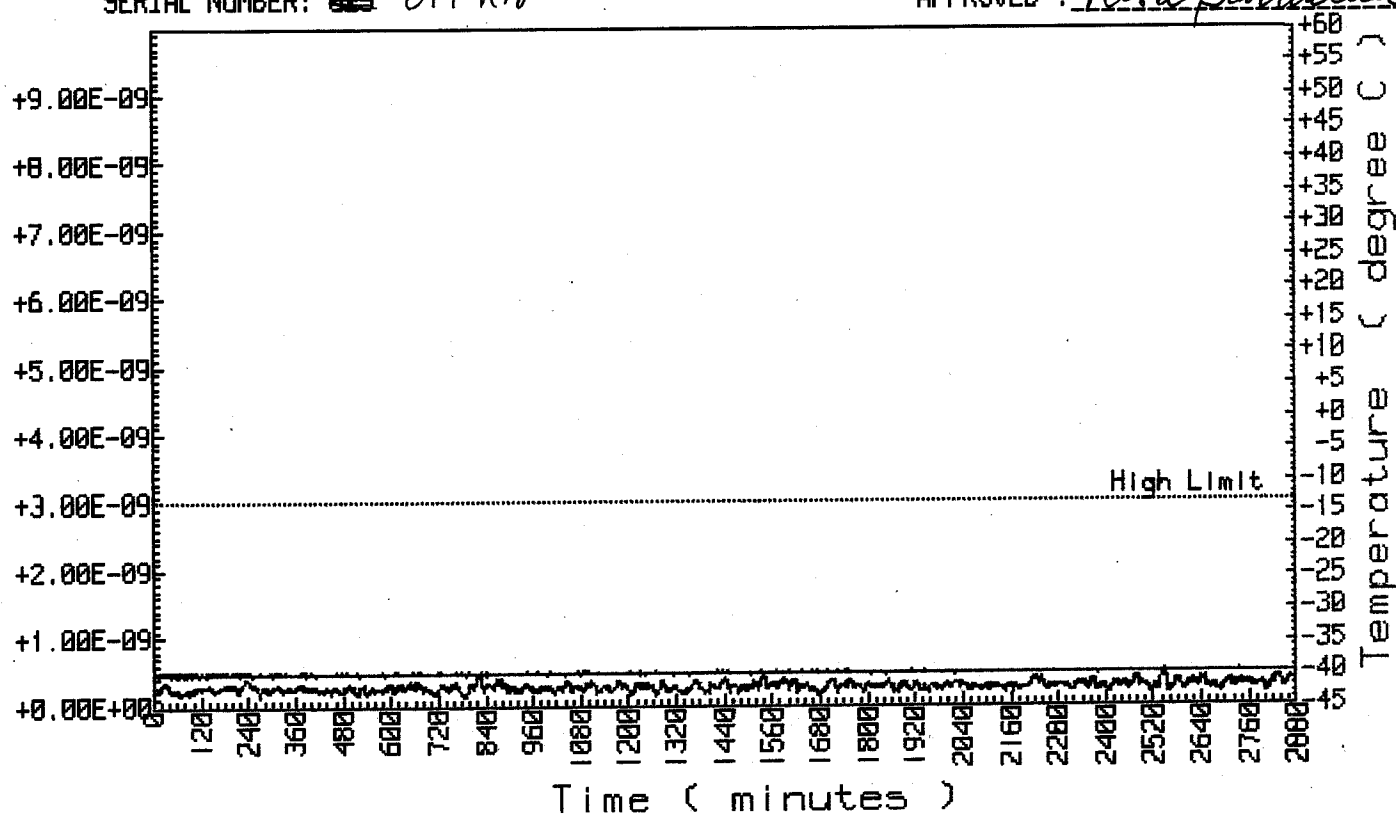
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~029~~ 017RB

DATE: 14 Oct 2000

TESTED BY: *J. C. H.*

APPROVED: *Rosa Barrineau*



406 SIGNAL OUTPUT POWER

SAFT BATTERY

MANUFACTURER: SEIMAC

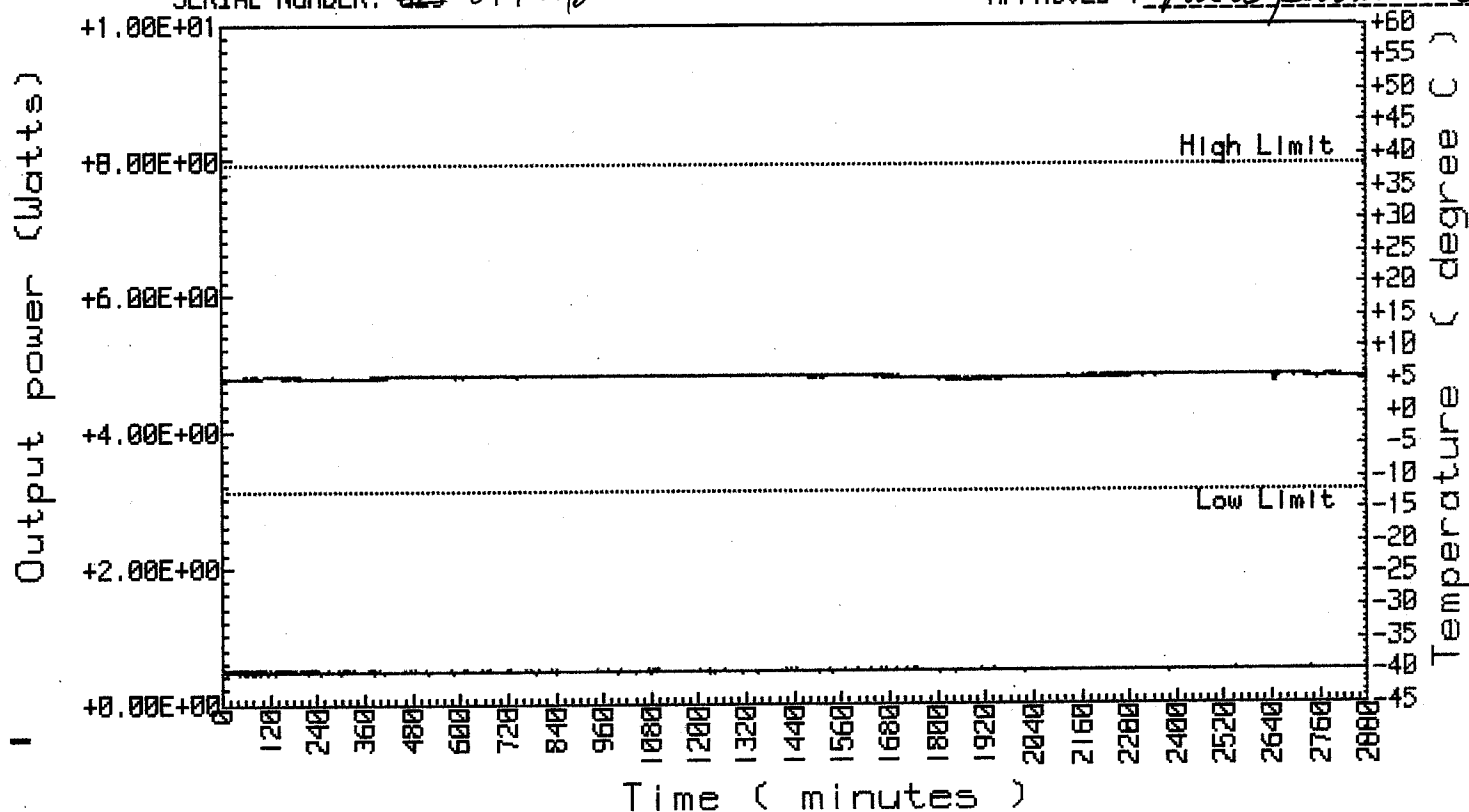
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~029~~ 017RB

DATE: 14 Oct 2000

TESTED BY: *[Signature]*

APPROVED: *Rosa Farrineau*



ETERN BATTERY**Manual Data Collection / Observation Record**Date: 10 - 11 OCT 98

Time: _____

Tested by: CBelApproved by: Rosa BarrineauTest Description: A13.1 OPERATIONAL LIFE TEST -BATTERY PRECONDITIONING FACTOR (F)ETERN BATTERYSpecification Reference: RCTM 22-2000/SC 110-CD 2
A13.1 PARA A13.1

Test Results: the battery was subjected to a
constant discharge over a 100- Ω load for
a period of ^{11 hours 39 min.} 11:39. ~~period of time.~~ This
simulates a 5 year period of self testing
and 5 years of storage. 2000 HRS - 0739 HRS

POST TEST Voltage 8.51V LOADEDAFTER 2 MIN 8.75V UNLOADED

Manual Data Collection / Observation Record

Date: 10/2/00

Time: 1500

Tested by: J.C. Holt

Approved by: Rosa Barrinera

Test Description: Operational Life - Beacon Strobe
rate, checked within 1st 24 hour
period AND 121.5 Beacon Power
EXTERNAL BATTERY

Specification Reference: RTCM 32-2000/SC110-C02
para. A13.1

Test Results: 21/minute
121.5 - 15.2 dbm +30 = +14.8

Manual Data Collection / Observation Record

Date: 13 Oct 00

Time: 0743

Tested by: C Boh

Approved by: Rosa Parmanan

Test Description: Operational Life - Beacon STROBE RATE
- 121.5 Beacon Peak Power
ETERN BATTERY

Specification Reference: RC TM 32-2000/SC 110-CD2
Para A 13.1

Test Results: 16.8
~~22.8~~ dbm 121.5 OFFSET 58dbm.
20/min Strobe.

Manual Data Collection / Observation Record

Date: 13 Oct 00

Time: 1914

Tested by: C. Bah

Approved by: Rosa Barrineau

Test Description: Operational Life Beacon Stroke Rate
and 121.5 Beacon Power

Etern Battery

Specification Reference: RCTM 32-2000/SC110-CD2

Pora A13.1

Test Results: 20/minute

121.5 - 15.2 dbm. +30 = +14.8

Manual Data Collection / Observation Record

Date: 13 Oct 00

Time: 22:30

Tested by: CTB

Approved by: Rosa Barrineau

Test Description: Operational Lite Beacon Stroke Rate
and 121.5 Beacon Power

Etern Battery

Specification Reference: RCTM 32-2000 / SC110-CD2

Para A13.1

Test Results: STROBE 20/MIN

121.5 Beacon -15.3 +30 = 14.7

Manual Data Collection / Observation Record

Date: 10/12/00

Time: 2006

Tested by: C Boh

Approved by: Rosa Panineau

Test Description: Operational life - Beacon Strobe
rate, checked within 30 hours - AND 121.5
beacon Power ETERN BATTERY

Specification Reference: RCTM 32-2000/SC110-C2
Para A13.1

Test Results: 17.2
23.2 dbm. 121.5
20/min. Strobe.

Manual Data Collection / Observation Record

Date: 13 OCT 00

Time: _____

Tested by: C Beh

Approved by: Rosa Barrineau

Test Description: OPERATIONAL Life Beacon Strobe
rate and 121.5 BEACON Power

Specification Reference: RCTM 32-2000/SC110-CD2
PARA A13.1

Test Results: Strobe rate 20/min.
121.5 Power 23.0 17.0

Manual Data Collection / Observation Record

Date: 14 Oct 00

Time: 0645

Tested by: C. Bolin

Approved by: Rosa Barineau

Test Description: _____

Specification Reference: _____

Test Results: Beacon Strobe 20/min.

Power 121.5 - 15.3 (50) + 30 = ^{+14.7} ~~212.2~~

operated approx 5 min and power dropped
to - 30.0

406 Beacon was lower as well.

SAFT BATTERY

Manual Data Collection / Observation Record

Date: 12-13 OCT 00

Time: _____

Tested by: C Bah

Approved by: Rosa Barrineau

Test Description: A13.1 Operational life Test

Battery Preconditioning Factor (K)

SAFT BATTERY

Specification Reference: 322010/SC110-CD2
RCTM A13.1 PAR A13.1

Test Results: The battery was subjected to a
constant Discharge over a 100- Ω Load for
a period of 11 hours 39 min this simulates
a 5 year period of self testing and 5 years
of storage. 2026^{HRS} - 0805 HRS.

Pre ^{Condition} Test Voltage 8.95 V UNLOADED

AFTER 2min 8.43 V LOADED

END of Conditioning 8.57 V LOADED

AFTER 2min 8.71 V unloaded

Manual Data Collection / Observation Record

Date: 10/15/00

Time: 1155

Tested by: C. Bah Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe rate
checked 121.5 Power output
SAFT SN 11

Specification Reference: RCTM 32-2000/SC110-CD2
PARA A13.1

Test Results: 90/min
121 Power Out -15.6 +30 = 14.4

Manual Data Collection / Observation Record

Date: 10/15/00

Time: 1758

Tested by: C. Bal Approved by: Rosa Barineau

Test Description: operational Life - Beacon Strobe Rate
and 121.5 Power output.

SAFT Battery
Specification Reference: RCTM 32-2000 / SC110-CD2
Rosa A13.1

Test Results: Strobe 20/min.
121.5 - 15.6 + 30 = 14.4

Manual Data Collection / Observation Record

Date: 15 Oct 00

Time: 2216

Tested by: C Boh

Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe Rate
and 121.5 Power

SAFT Battery

Specification Reference: RCTM 32-2000 / SC110-CD2
Para. A 13.1

Test Results: Beacon Strobe Rate 20/min
121.5 Power -15.5 +30 = 14.5

Manual Data Collection / Observation Record

Date: 16 OCT

Time: 0545

Tested by: C Bah

Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe
rate and 121.5 Beacon Power

SAFT Battery

Specification Reference: RCTM 32-2000/SC110-CD2

Para A13.1

Test Results: Strobe rate /min

121.5 - 15.5 dbm + 30 = 14.5

Manual Data Collection / Observation Record

Date: 16 Oct 00

Time: 1003

Tested by: C. Bah

Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Stroke
Rate, Checked

SAFT Battery
Specification Reference: RTM 32-2000/SC10-CD2
Para A13.1

Test Results: 90/min.
121.5 - 15.6 dbm. + 30 = 14.4

Manual Data Collection / Observation Record

Date: 16 Oct 00

Time: 1145

Tested by: C Bahr

Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Stroke
Rate and 121.5 Avg XMITR. Power.

SAFT Battery.

Specification Reference: RTCM 32-2000/SC110-CD2
Para A13.1

Test Results: 20/min Stroke Rate
121.5 -15.6 dbm +30 = +14.4

STROBE LIGHT

Manual Data Collection / Observation Record

Date: 10/16/00 Time: 1500

Tested by: JLC HLT Approved by: Rosa Barrineau

Test Description: Strobe test - ambient

Specification Reference: RTCM para. A13.2

Test Results: RATE: 21 /min

INTENSITY: 0.8375 candela

duration: 85 msec.

Manual Data Collection / Observation Record

Date: 10/16/00

Time: 1743

Tested by: C. Bal

Approved by: Rosa Parineau

Test Description: Strobe test - Low temp

Specification Reference: RTCM Para A13.2

Test Results: Rate 20/min

Intensity: 0.85 candle

duration 108 μ sec

Manual Data Collection / Observation Record

Date: 10/16/00

Time: _____

Tested by: C. Bal

Approved by: Rosa Barrineau

Test Description: Hi Temp Strobe Test

Specification Reference: RTCM 32-2000 SC 110-CD2
Para 17.2

Test Results: Rate 20/min

Intensity: .89 Candella.

Duration 148 msec.

ANNEX XI. SELF-TEST

AMBIENT TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - AMBIENT TEMP

MEASUREMENT DATE: 2 Oct 2000 TIME: 20:08:54

TESTED BY:

C. Bal

APPROVED BY:

Rosa Barrineau

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 1 1 0 1 0 0 0 0
Decoded: 0 1 1 0 1 0 0 0 0

NUMBER OF BURST DURING SELF TEST CYCLE: 1

Duration 440.3 ms.

First Burst Delay 52 Sec

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - *AMBIENT TEMP*

MEASUREMENT DATE: 2 Oct 2000 TIME: 20:10:25

TESTED BY:

C. Bahr

APPROVED BY:

Rosa Barineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Decoded: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 0 0 1 0 1 1 1 1
Decoded: 0 1 1 0 1 0 0 0 0

*** ERROR IN FRAME SYNCHRONIZATION ***

SELF TEST Verification

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

Should be: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1
Decoded: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1

*** BCH CODE OK ***

MAXIMUM TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - *HIGH TEMP*
MEASUREMENT DATE: 3 Oct 2000 TIME: 14:36:23

TESTED BY: *C. Bob* APPROVED BY: *Rosa Carrineau*

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24

Should be:	0	1	1	0	1	0	0	0	0
Decoded:	0	1	1	0	1	0	0	0	0

NUMBER OF BURST DURING SELF TEST CYCLE: 1

*440.3 ms pulse.
1st Burst Delay 53 Sec
Strobe rate 21.*

SMB ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
 ANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
 BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - HIGH TEMP
 MEASUREMENT DATE: 3 Oct 2000 TIME: 14:38:17

TESTED BY: C. Boh

APPROVED BY: Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24

Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	1	1	0	1	0	0	0	0

*** ERROR IN FRAME SYNCHRONIZATION *** SELF TEST Verification

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06

Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

MINIMUM TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - *LOW TEMP*

MEASUREMENT DATE: 4 Oct 2000 TIME: 14:43:21

TESTED BY:

C. Bel

APPROVED BY:

Rosa Barinera

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 1 1 0 1 0 0 0 0

Decoded: 0 1 1 0 1 0 0 0 0

NUMBER OF BURST DURING SELF TEST CYCLE: 1

440.3 ms

53 Sec Burst delay.

Flash rate 20 p/min.

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029

BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - LOW RMP

MEASUREMENT DATE: 4 Oct 2000 TIME: 14:45:09

TESTED BY:

[Signature]

APPROVED BY:

Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Should be: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Decoded: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be: 0 0 0 1 0 1 1 1 1

Decoded: 0 1 1 0 1 0 0 0 0

*** ERROR IN FRAME SYNCHRONIZATION ***

Self test verification

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #: 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

Should be: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1

Decoded: 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 1 1

*** BCH CODE OK ***

ANNEX XII. AUTOMATIC RELEASE MECHANISM
AND AUTOMATIC ACTIVATION

P/N 57500

Manual Data Collection / Observation Record

Date: 13 Sept 00

Time: _____

Tested by: Pat DUGIE

Approved by: Rosa Parineau

Test Description: Automatic release and activation
using release mechanism p/n 57500

Specification Reference: RTCM 32-2000/SC110-CD2
per A14.0

Test Results: _____

normal (amb)	-	1.8 m
normal (cold)	-	2.1 m
normal (hot)	-	1.5 m
starboard	-	2.1 m
port	-	1.5 m
bow down	-	1.6 m
stern down	-	1.5 m
upside down	-	1.7 m

P/N: HAMMAR #20

Manual Data Collection / Observation Record

Date: 18 Sept 00

Time: _____

Tested by: Pct Dugie

Approved by: Rosa Barrineau

Test Description: Automatic release and activation
using release mechanism pln Hammar
#20

Specification Reference: RTCM 32-2000/SC110-CD2
per A14.0

Test Results: _____

normal (amb)	-	3.1 m
normal (cold)	-	3.94 m
normal (hot)	-	2.72 m
starboard	-	3.2 m
port	-	3.3 m
bow down	-	2.9 m
stern down	-	3.0 m
upside down	-	3.3 m