Beacon Manufacturer's Workshop 2010

NOAA Report

LT Shawn Maddock

May 21, 2010

NOAA-SARSAT Status

Status of Operational Spacecraft

S7 (NOAA-15)	FOC
S8 (NOAA-16)	FOC
S9 (NOAA-17)	FOC
S10 (NOAA-18)	FOC
S11 (MetOp A)	FOC
S12 (NOAA-19)	FOC

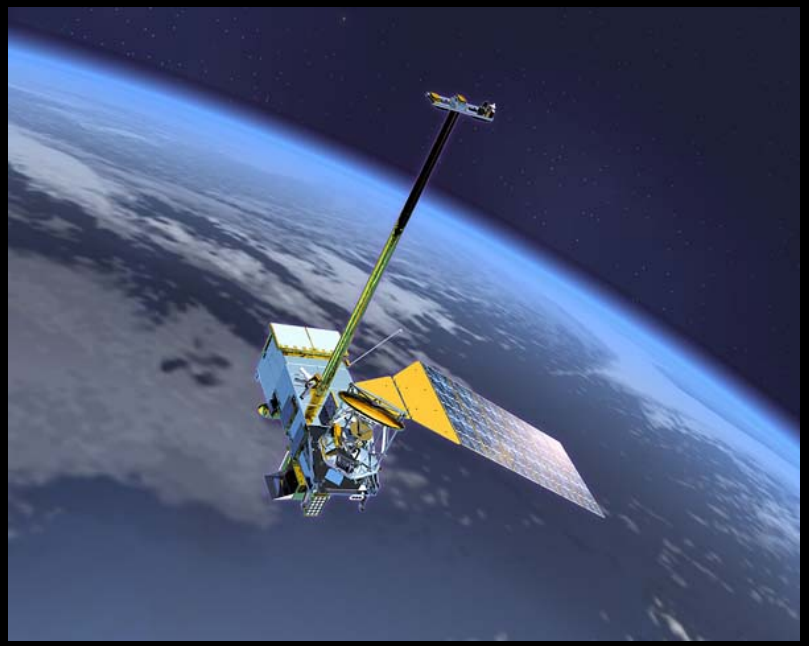
GOES-10:	De-orbited December 2009
GOES-11 (West):	Positioned at 135W and operating as GOES-West.
GOES-12:	April 26, 2010, transitioned to 60W, to support Brazil
GOES-13 (East):	Positioned at 75W (arrived there April 26, 2010) and is operating as GOES-East.
GOES-14:	In storage at 105W

NOAA-SARSAT Status

Future SARSAT spacecraft launches (approx.)

LEOSAR
MetOp B: April 2012

GEOSAR
GOES R: Sep 2012



Joint Polar Satellite System (JPSS)

NOAA-SARSAT Status

Status of Ground Segment

LEOLUTs

AK 1 & 2 (NOAA CDA Station - Fairbanks, Alaska) - operational

CA 1 & 2 (Vandenberg AFB, California) - operational

FL 1 & 2 (USCG Commsta Miami, Florida) - operational

GU 1 & 2 (Anderson AFB, Guam) - operational

HI 1 & 2 (USCG Commsta, Wahiawa,Hawaii) - operational

LSE (NSOF – Suitland, Maryland)

GEOLUT

MD 1 & 2 (NSOF – Suitland, Maryland) – operational

GSE (NSOF – Suitland, Maryland)

MEOLUT

NOAA began development activities in 2008 for a MEOLUT capability to be installed in Hawaii in January 2011

NOAA-SARSAT Status

Status of U.S. Mission Control Center

USMCC system availability: 99.981% available for 2009 (1.7 hours downtime)
100.0% available for 1Q10

NOAA-SARSAT Status

Status of U.S. Mission Control Center (USMCC)

USMCC has a backup location at Wallops Island, VA (established in 2008)

NOAA-SARSAT Status

Status of U.S. Mission Control Center

Number of 406 MHz beacon activations reported to RCCs/SPOCs within the USMCC service area

2009 False alert rate: 93.5% In 2008 it was 93.3%, so very similar

ALERT CLASSIFICATIONS	EPIRB	ELT	PLB	Sub-Total	Total
Distress alerts	99	32	43		**174**
False alerts					**1453**
Unfiltered processing anomalies				0	
Operational false alerts [1] (beacon activations)					
Beacon mishandling	239	358	75	672	
Beacon malfunction	82	48	9	139	
Mounting failure	48	6	1	55	
Environmental conditions	46	14	0	60	
Voluntary activation [2]	0	0	0	0	
Unknown	233	263	31	527	
Undetermined	516	432	87		**1035**
TOTAL	**1263**	**1153**	**246**		**2662**

SARSAT Saves

In 2009 a total of 195 lives were rescued in the U.S. SRR as a result of the Cospas-Sarsat System:

- **154 lives rescued via EPIRBs**
- **8 lives rescued via ELTs**
- **33 lives rescued via PLB**

On a recent downward trend in the number of lives saved after years of upward trends:

2009: 195

2008: 282

2007: 353

2006: 272

2005: 222

2004: 260

2003: 224

<u>2009 Breakdown by top 3 States:</u>

Alaska – 49 lives rescued in 29 cases

Florida – 39 lives rescued in 13 cases

Texas – 32 lives rescued in 8 cases

SARSAT Saves

Rescues in the US SRR:

January 1 - May 14, 2010

Total: 106 lives saved in 35 events

EPIRB – 53 lives saved in 19 events

ELT – 22 lives saved in 4 events

PLB – 31 lives saved in 12 events

There were 52 people rescued in 39 events at this time last year (117 the year before).

(Last year's meeting was 2 weeks earlier)

6,340 people have been rescued in the United States since 1982

406 MHz Beacon Population

U.S. Beacon Population Forecast

Year / Beacons	2015	2020
ELTs	232,000	373,000
EPIRBs	285,000	330,000
PLBs	449,000	630,000
SSAS beacons	450	700

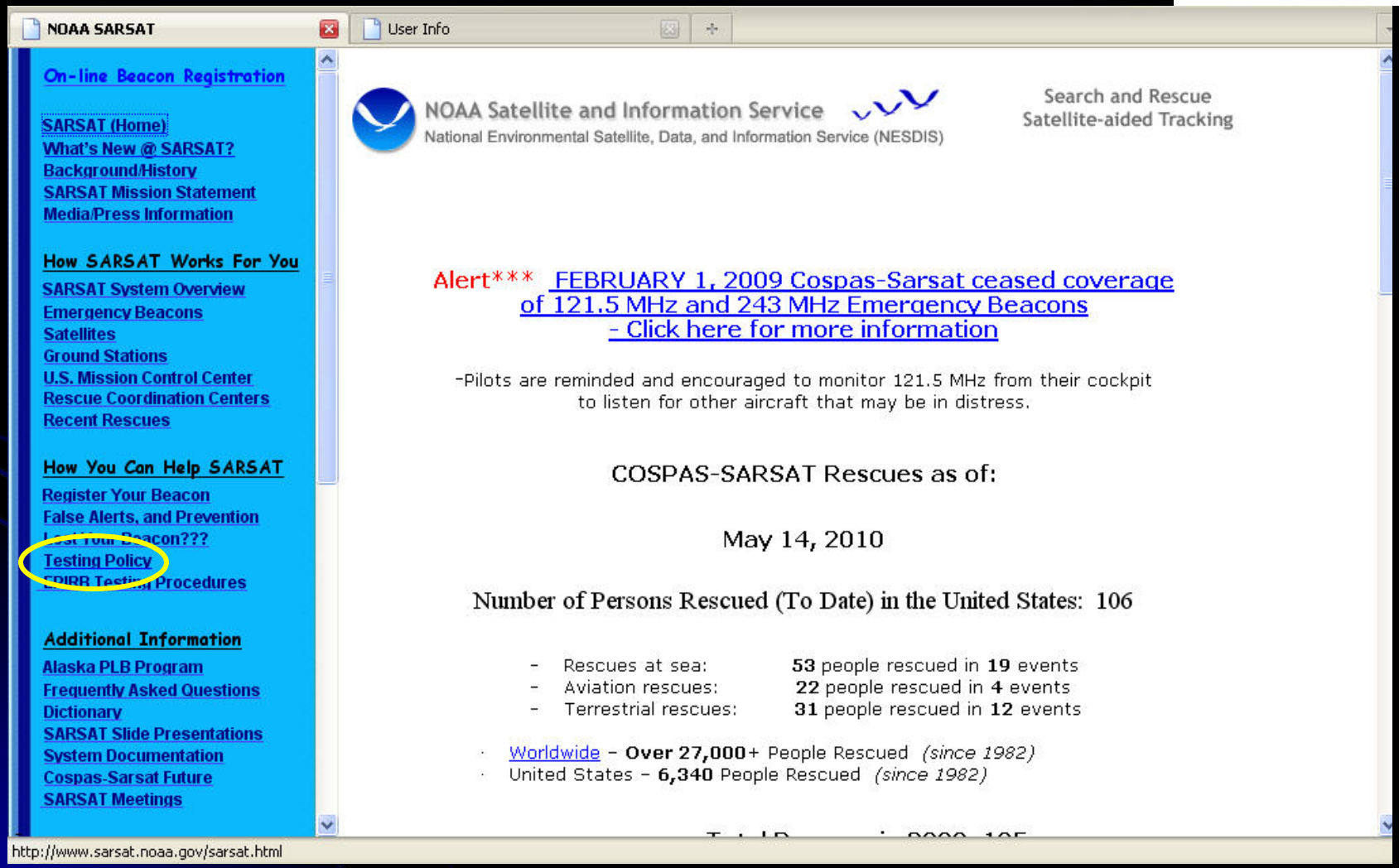
Live Testing of Beacons

The COSPAS-SARSAT (C/S) System is an operational entity, and is not designed for "live" testing. This is what the inverted frame synch is for.

A draft policy on beacon testing has been posted on the SARSAT web site. This is to remind readers that "live" testing of their beacons is not allowed by the Cospas-Sarsat system.

To read the draft policy, go to the left column of the NOAA web site, www.sarsat.noaa.gov and click the link under the section titled "How You Can Help "SARSAT." The link for EPIRB testing procedures will still be right below it, which discusses proper "self testing" of the EPIRB, not "live" testing.

Live Testing of Beacons



Questions and Contact Information

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