



# **NOAA's 406 MHz Beacon Registration Database (RGDB)**

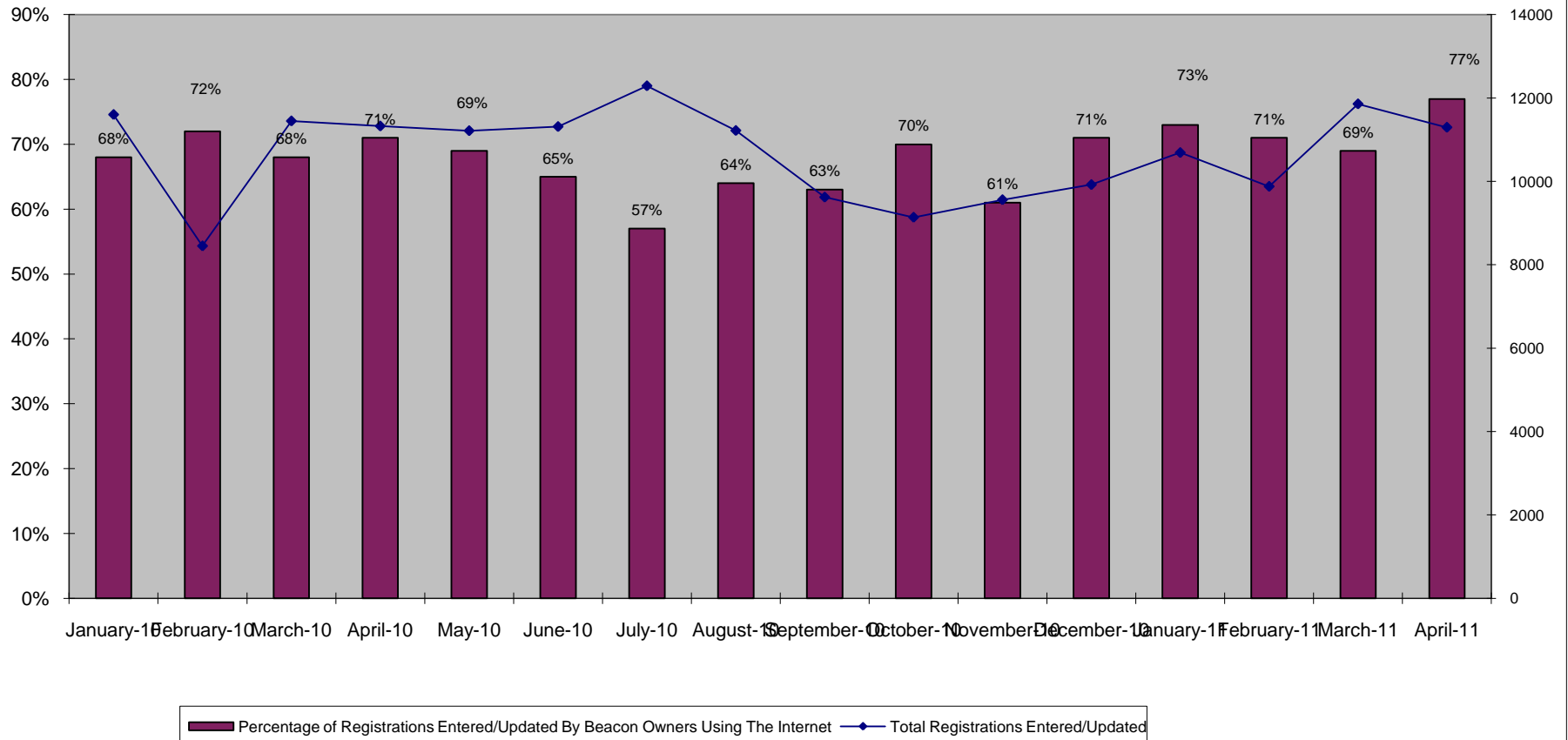
**[www.beaconregistration.noaa.gov](http://www.beaconregistration.noaa.gov)**

**NOAA SARSAT PROGRAM**

# Online Usage Statistics



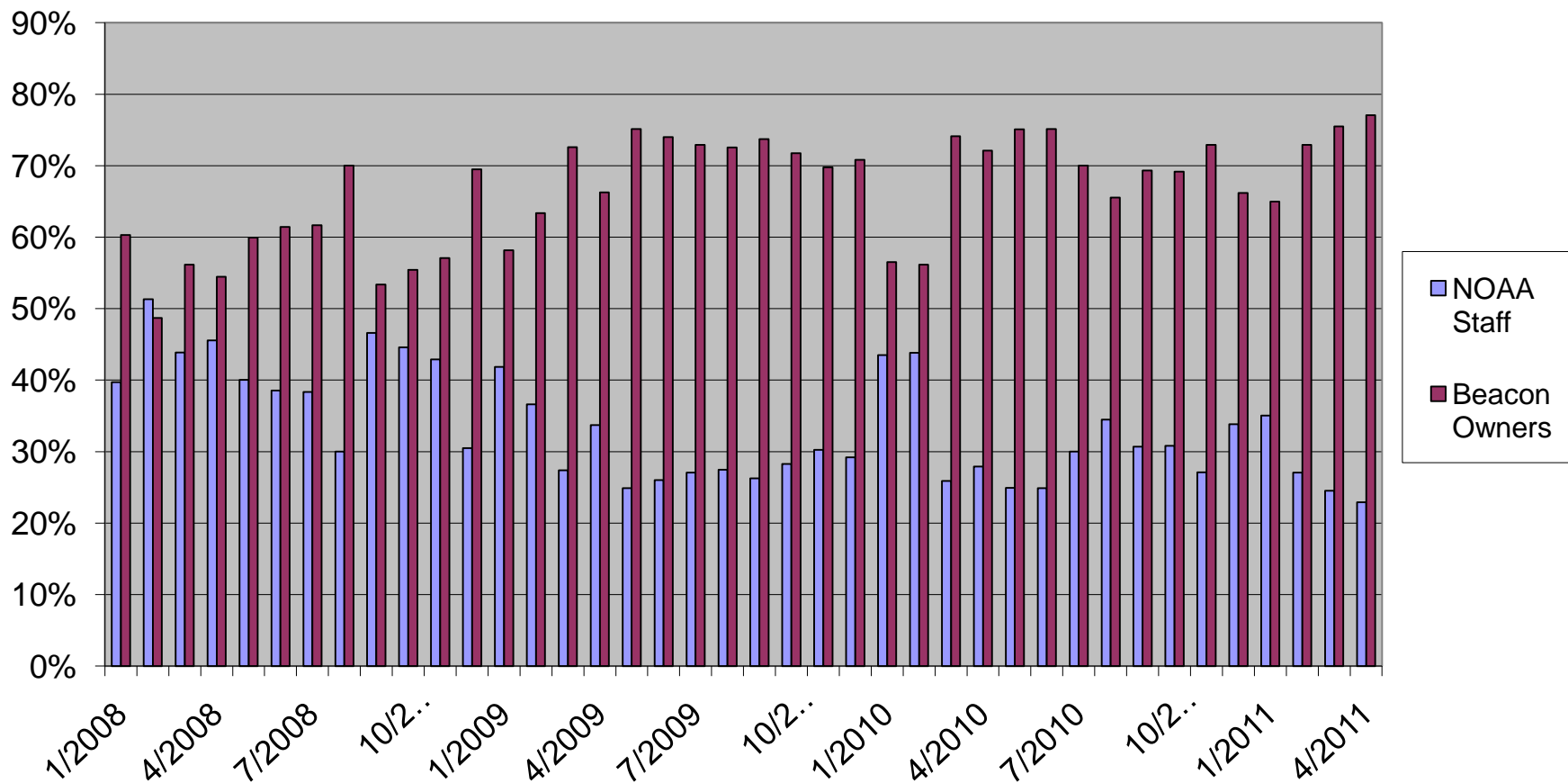
Registrations Entered/Updated  
For Period January '10 to April '11





# Initial Registrations By Users

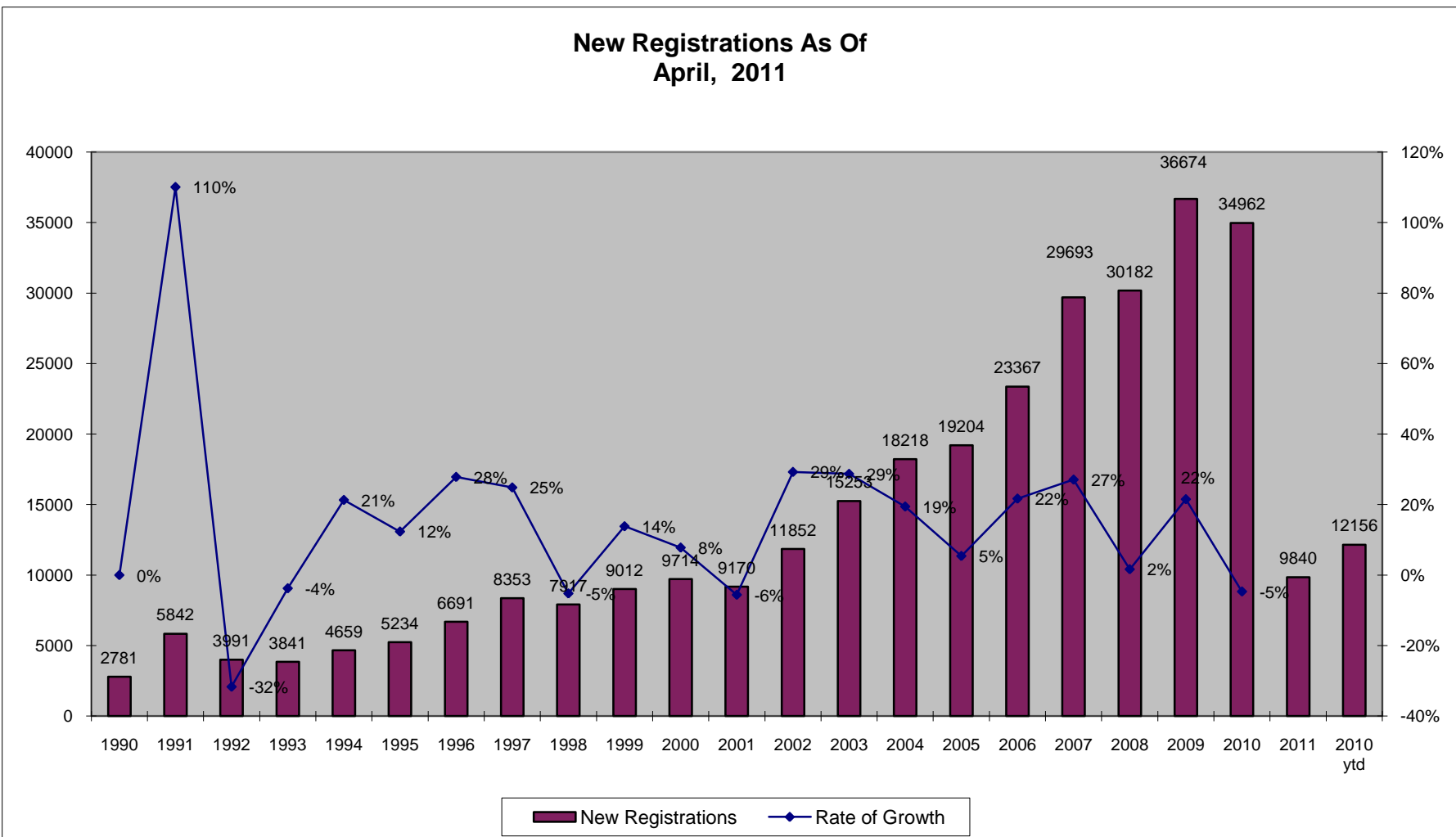
## New Registrations Entries





# Analysis of Current RGDB

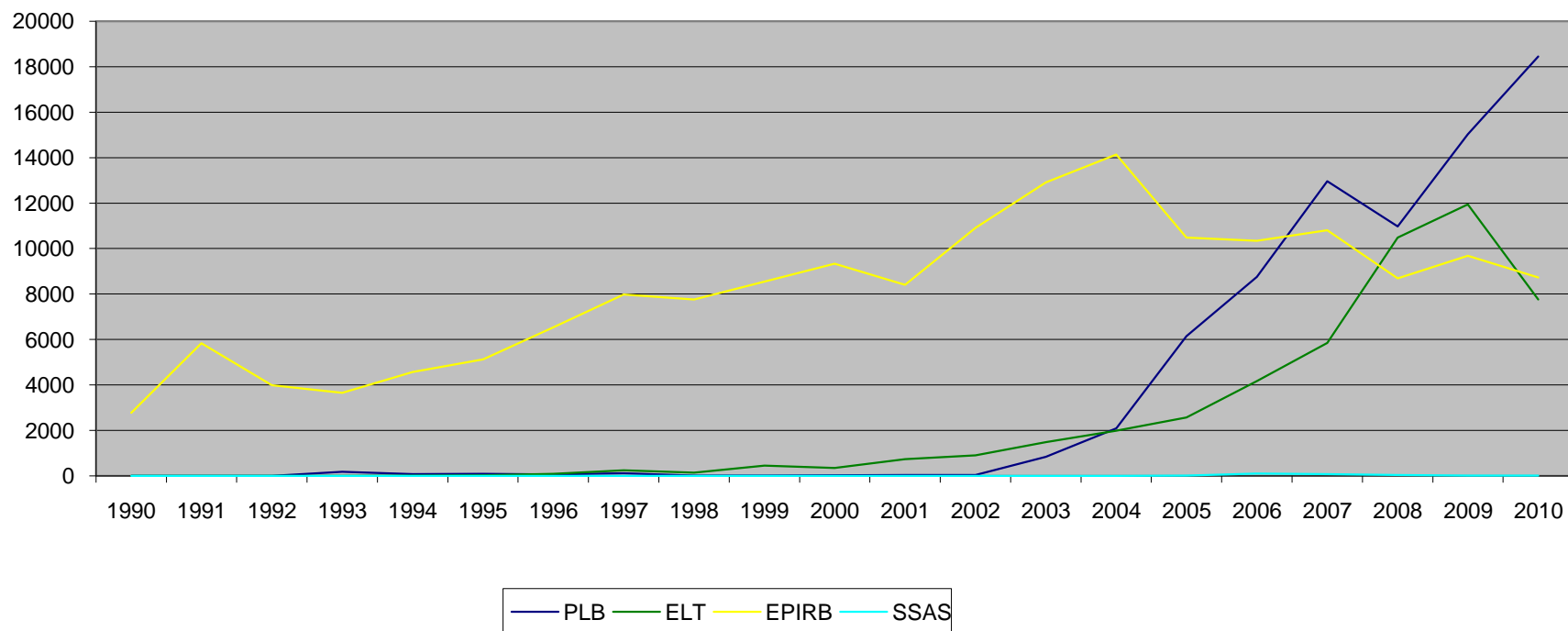
New Registrations As Of April, 2011





# Analysis of Current RGDB

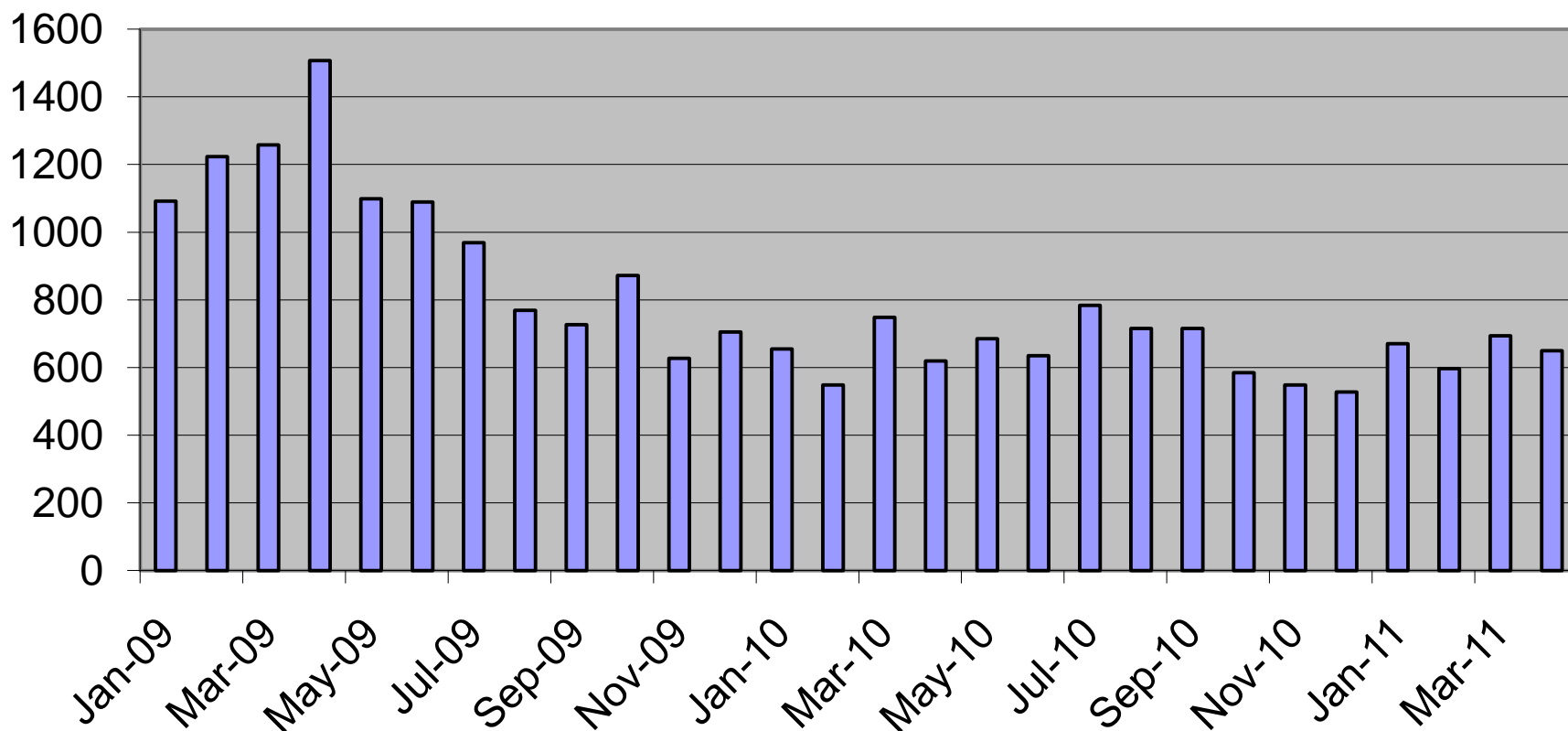
## Beacon Registrations Entered 1990 to 2010





# Analysis of Current RGDB

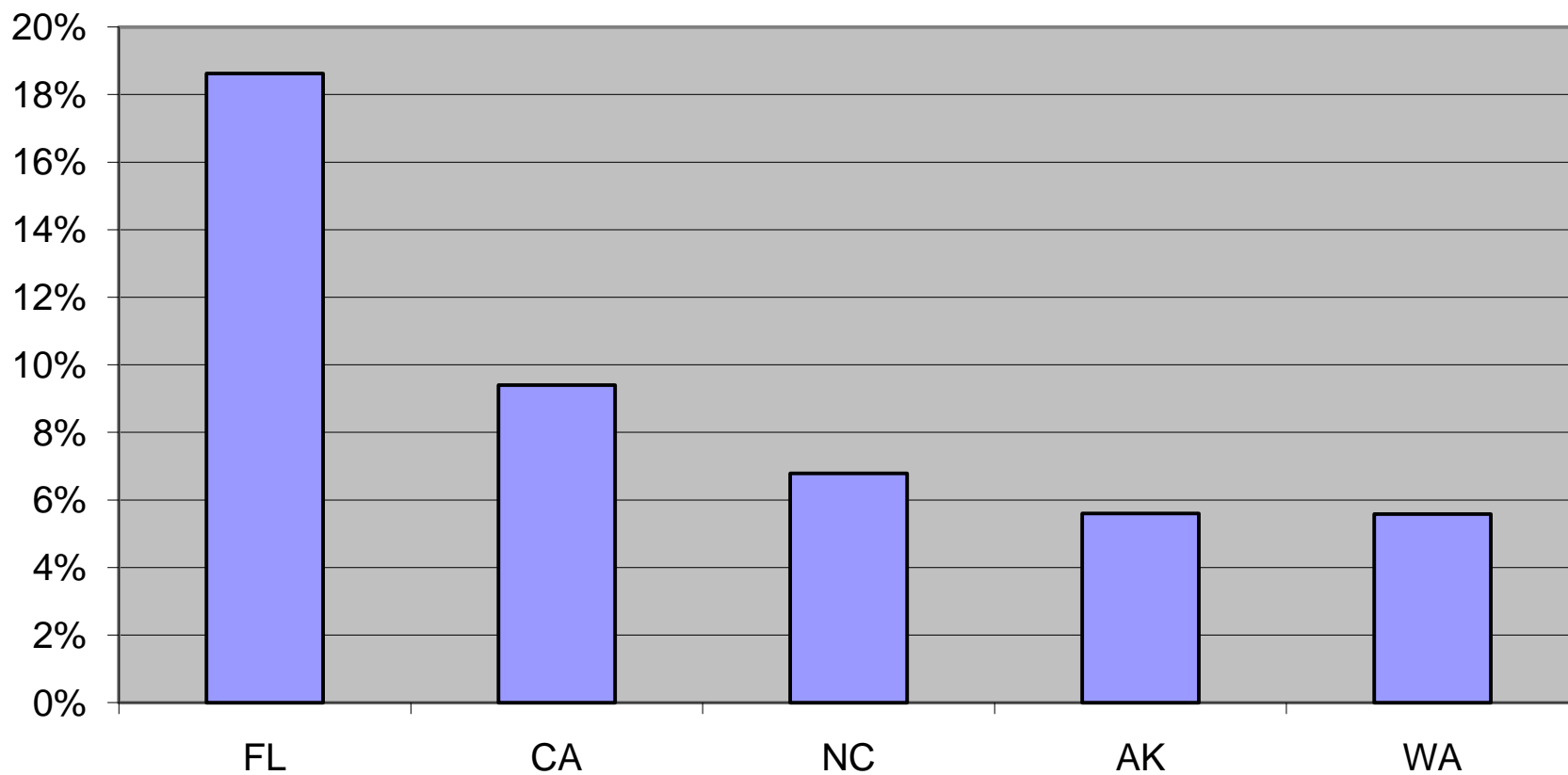
ELT Initial Registrations By Month





## Top 5 States for PLBs By Home Address

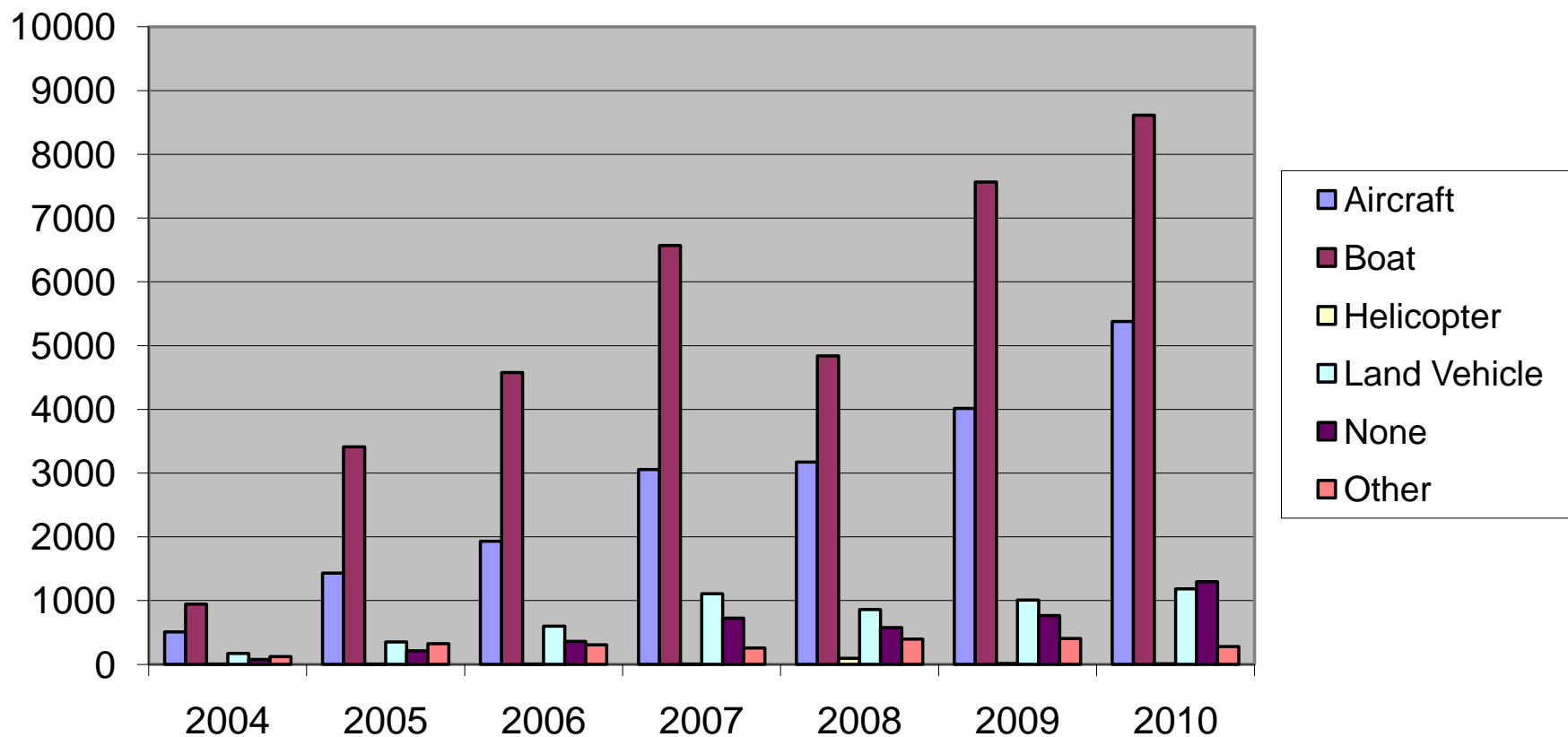
**Top 5 States for PLBs**





# PLB Usage

## Specific Usage For PLBs

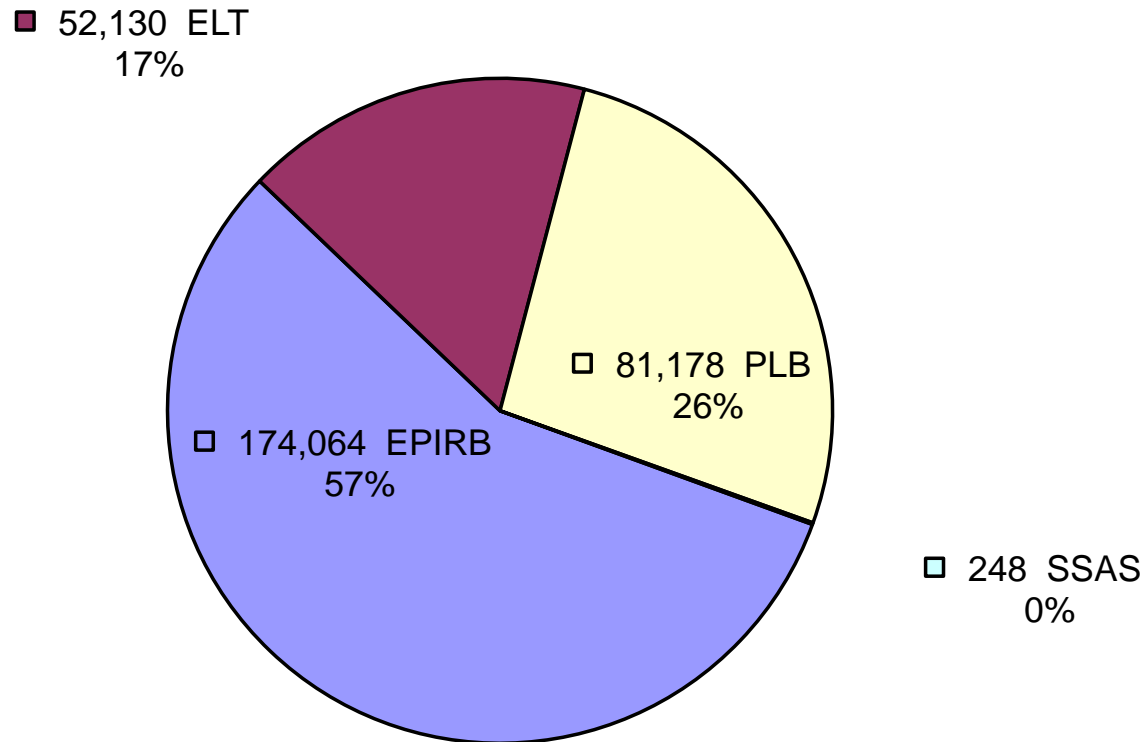






# Analysis of Current RGDB

Registration Database Beacon Population Breakdown As of May 13, 2011





**For Registration Correspondence**  
*(Internal Mail Code within NOAA has changed)*

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SARSAT Beacon Registration  
National Oceanic and Atmospheric Administration  
NSOF, **E/SP053**  
4231 Suitland Road  
Suitland, MD 20746

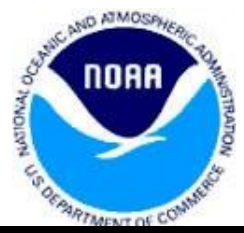
Phone: 301-817-4515

Toll free: 888-212-7283

Fax: 301-817-4565

Email: [beacon.registration@noaa.gov](mailto:beacon.registration@noaa.gov)

## Measures NOAA Has Taken To Improve Accuracy



- Operational letters updated to emphasize importance of checking the beacon ID registered with NOAA is identical to the manufacturer/installed programmed UIN
- New registrations and change of ownership registrations entered by NOAA data entry personnel are checked by other operational personnel
- Owners of beacon IDs that are questionable (i.e., not readable, incomplete, different from the manufacturer sticker) are called to verify the ID.
- Changed RGDB owner interface to separate the 15 character beacon ID into 3 blocks of 5 to make it more readable (31 May 2011)
- RGDB staff attempts to get an acknowledgement from the previous owner prior to allowing the latest beacon owner to register



## Proposed Actions for Beacon Manufacturers

- Add a checksum
  - When a beacon is registered a check sum value is entered along with the 15 hexadecimal characters of the beacon ID. Using same algorithm as the beacon manufacturer, the RGDB calculates the check sum of the entered 15 Hex ID and compares the result to the entered checksum. If values disagree, it is assumed the user had made an error (either in the beacon identification code and/or the checksum) and re-entry continues until the two checksums agree
- Display all beacon IDs in 3 groups of 5
  - printed products
  - all manufacturer labels
- Pre-print UINs on registration forms



# How Beacon Manufacturers Can Help



- To assist with the validation of beacon Ids:
  - For National Use Serialized beacons (bit 43 = 0), provide NOAA with the Model Name and its associated bit value
  - Where the Serial number printed on the beacon label is part of the Beacon ID, provide NOAA with the bit range and format (Decimal or Hexadecimal)
  
- Provide NOAA with a list of beacons received that will not be returned to the same owner:
  - beacons serviced
  - beacons exchanged



## NOAA's Business Reply Permit



- NOAA has allowed the use of SARSAT's business reply permit by manufacturers for printing envelopes for owners to return beacon registration forms to NOAA
- Manufacturers need to print envelopes that replicate the following image (**keep in mind the mail code has changed as will be shown on next slide**)
- NOAA is bearing the mailing cost of envelopes sent to NOAA
- Any questions prior to use, please call Stephen Roark at 301-817-3896

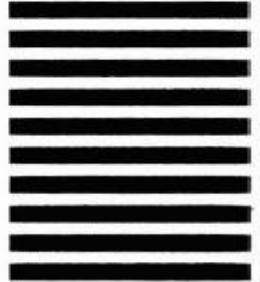


# NOAA's Business Reply Envelope

## Sample (Please change the E/SP3 To E/SP053)



**NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES**



**BUSINESS REPLY MAIL**  
FIRST-CLASS MAIL    PERMIT NO. 7411    SUTLAND, MD

POSTAGE WILL BE PAID BY ADDRESSEE

**SARSAT BEACON REGISTRATION**  
**NOAA**  
**NSOF, E/SP3**  
4231 SUTLAND RD  
SUTLAND, MD 20746-9900







## Suggestions On How Beacon Manufacturers Can Help



- Contact NOAA immediately when an issue arises which has a direct impact on beacon owners
  - Duplicate beacon ID encoded into beacons
  - Mislabeling of beacon IDs on forms or beacons
  - Any recalls you may have for beacons you have manufactured
  
- Manufacturers and Service Centers verify NOAA decal currency and remind the owner, if appropriate, to update the beacon's registration with NOAA
  
- Inform owners who have vessel information, tail number, MMSI, and radio call sign, encoded into beacon of the importance of recoding the beacon and updating the registration when the beacon is swapped from one vessel to another vessel or swapped from one aircraft to another