



NOAA's Beacon Registration Database (RGDB)

SARSAT Beacon Manufacturers Workshop

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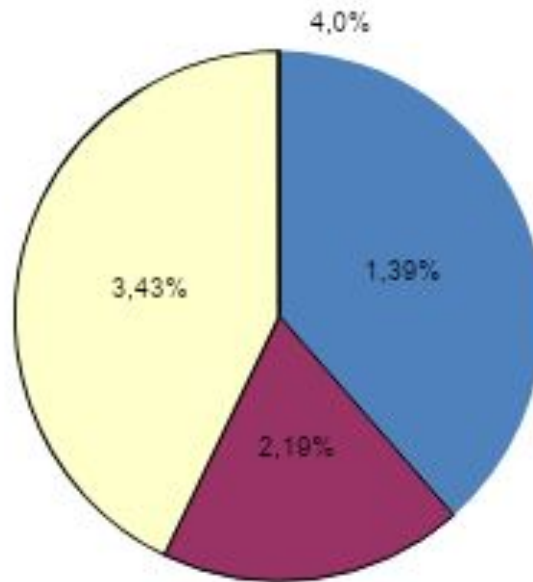
Topics That Will Be Covered

- RGDB Statistics
- Registration Forms and Beacon Labeling
- Beacon Servicing
- UIN Errors and Beacon Recalls
- Beacon Disposal
- New RGDB Website Features

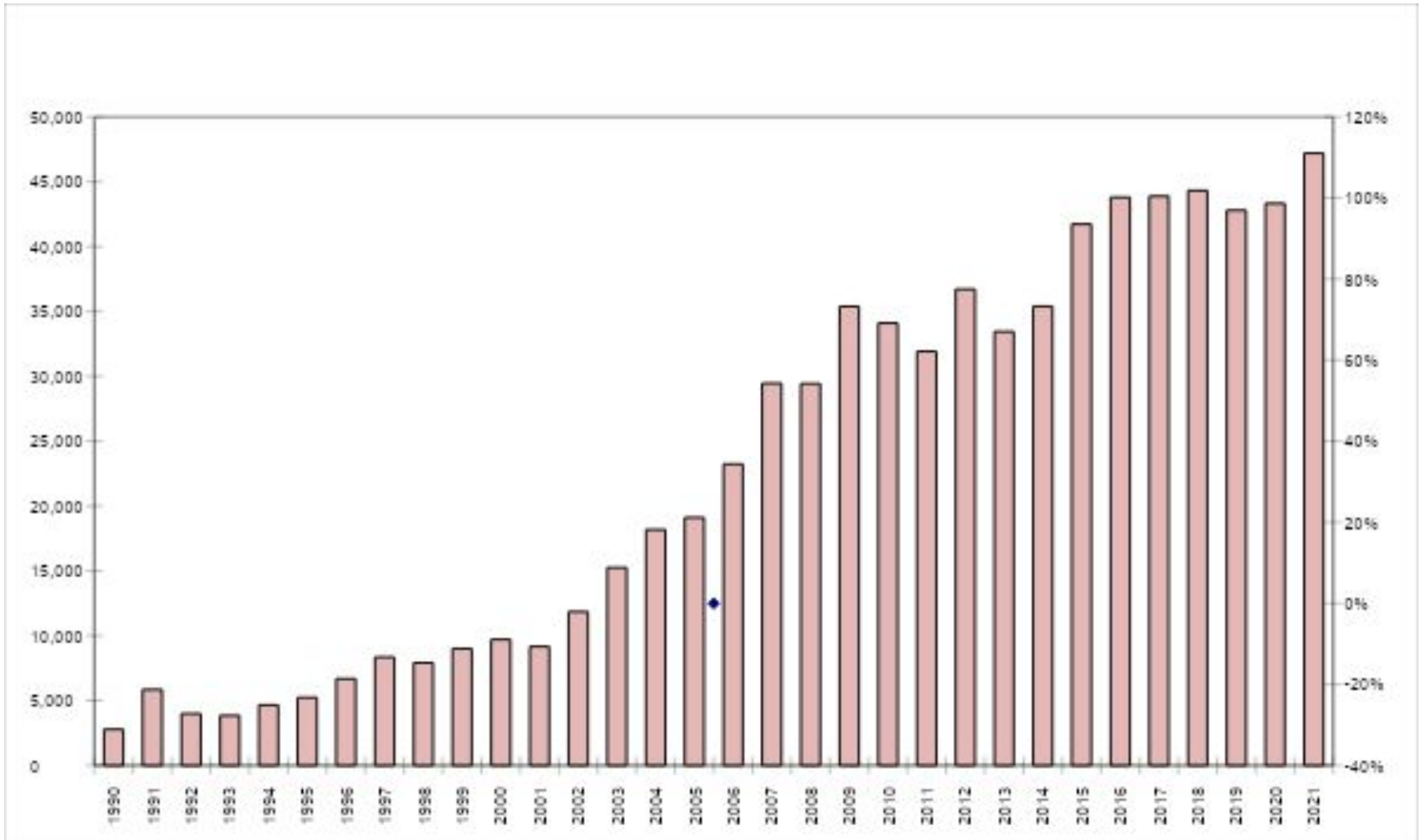
Registered Beacons by Beacon Type (Current to March 2022)



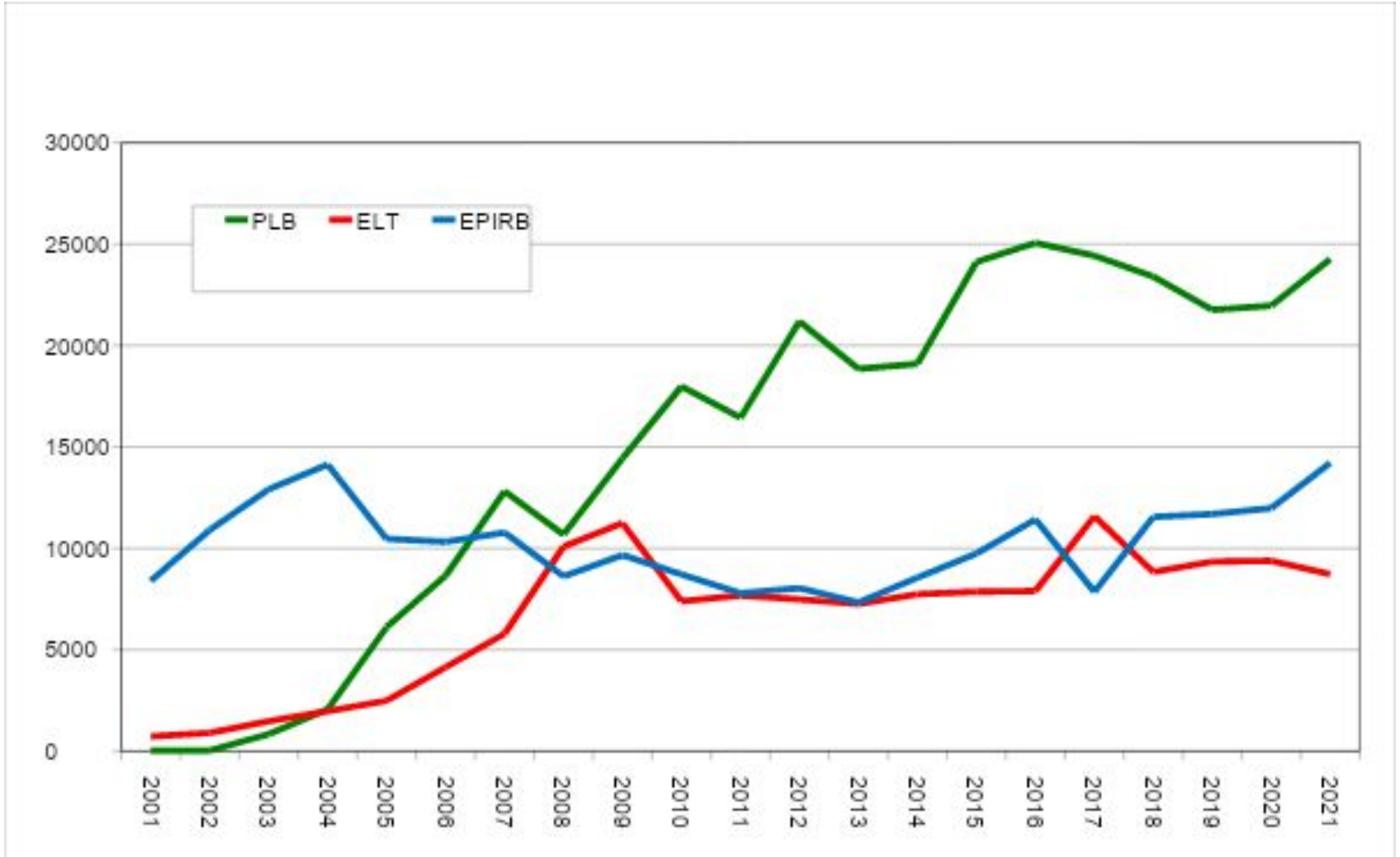
745,826 Beacons



New Registrations by Year (1990 - 2021)

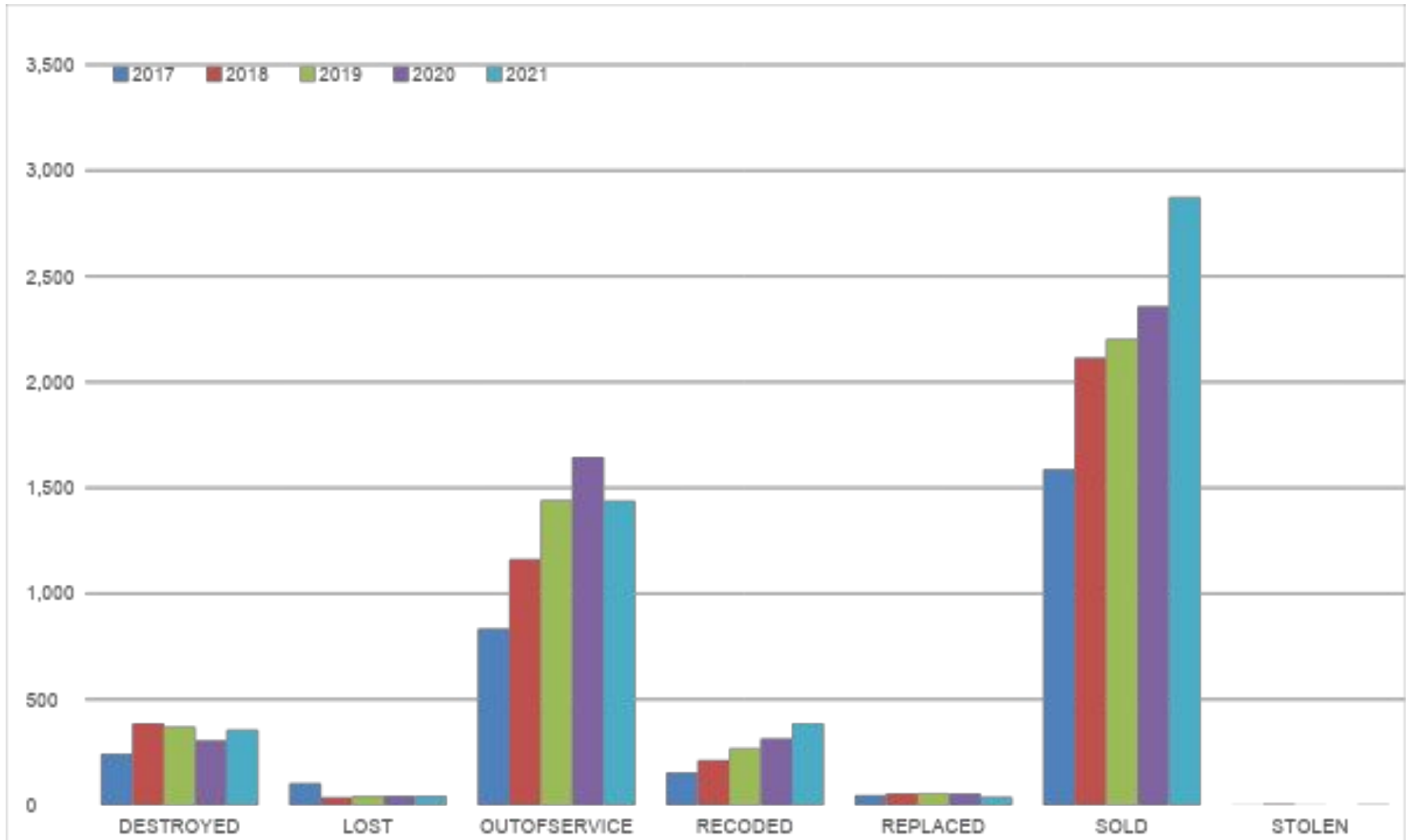


New Registrations by Type (2001 – 2021)



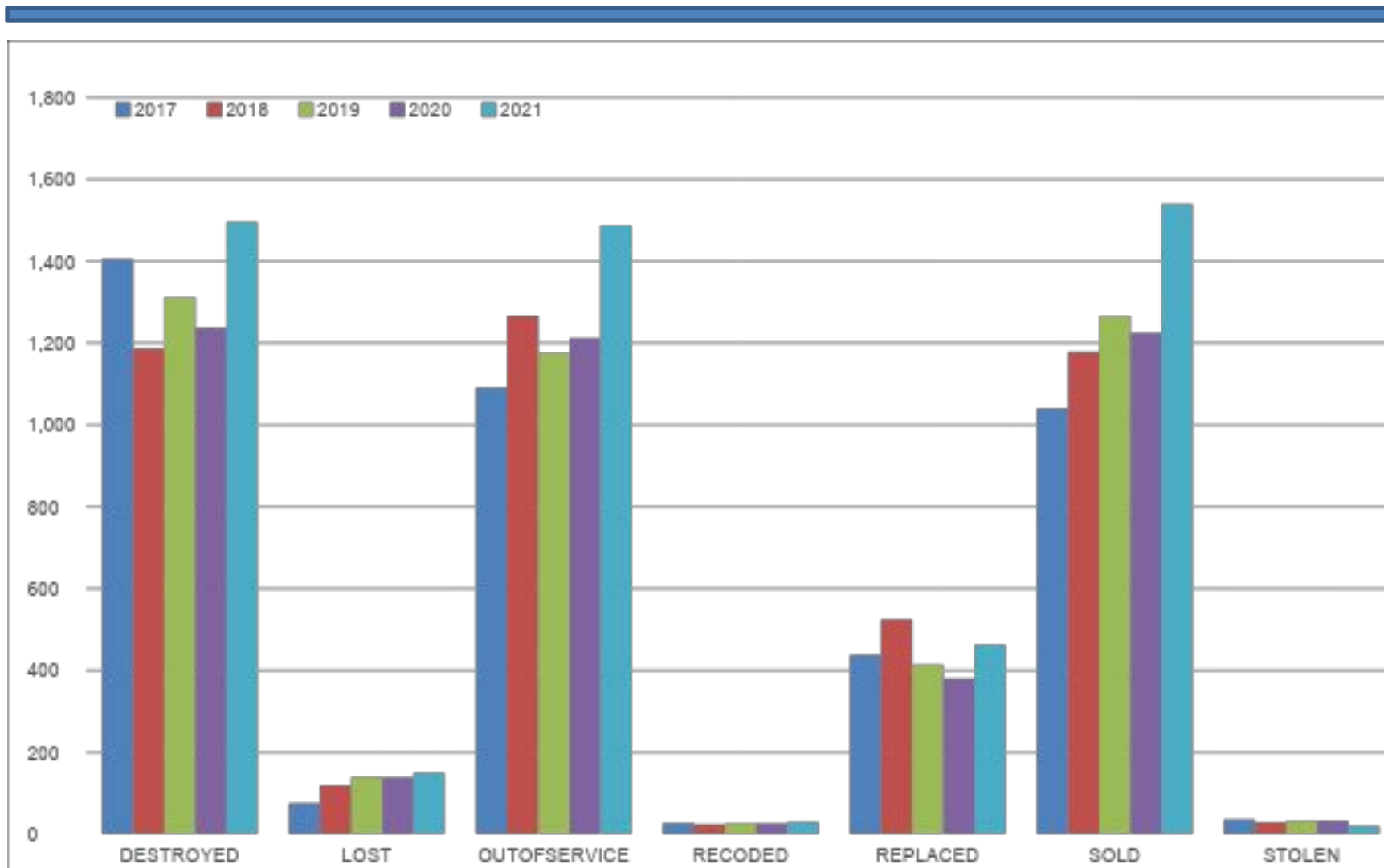


Special Status ELTs



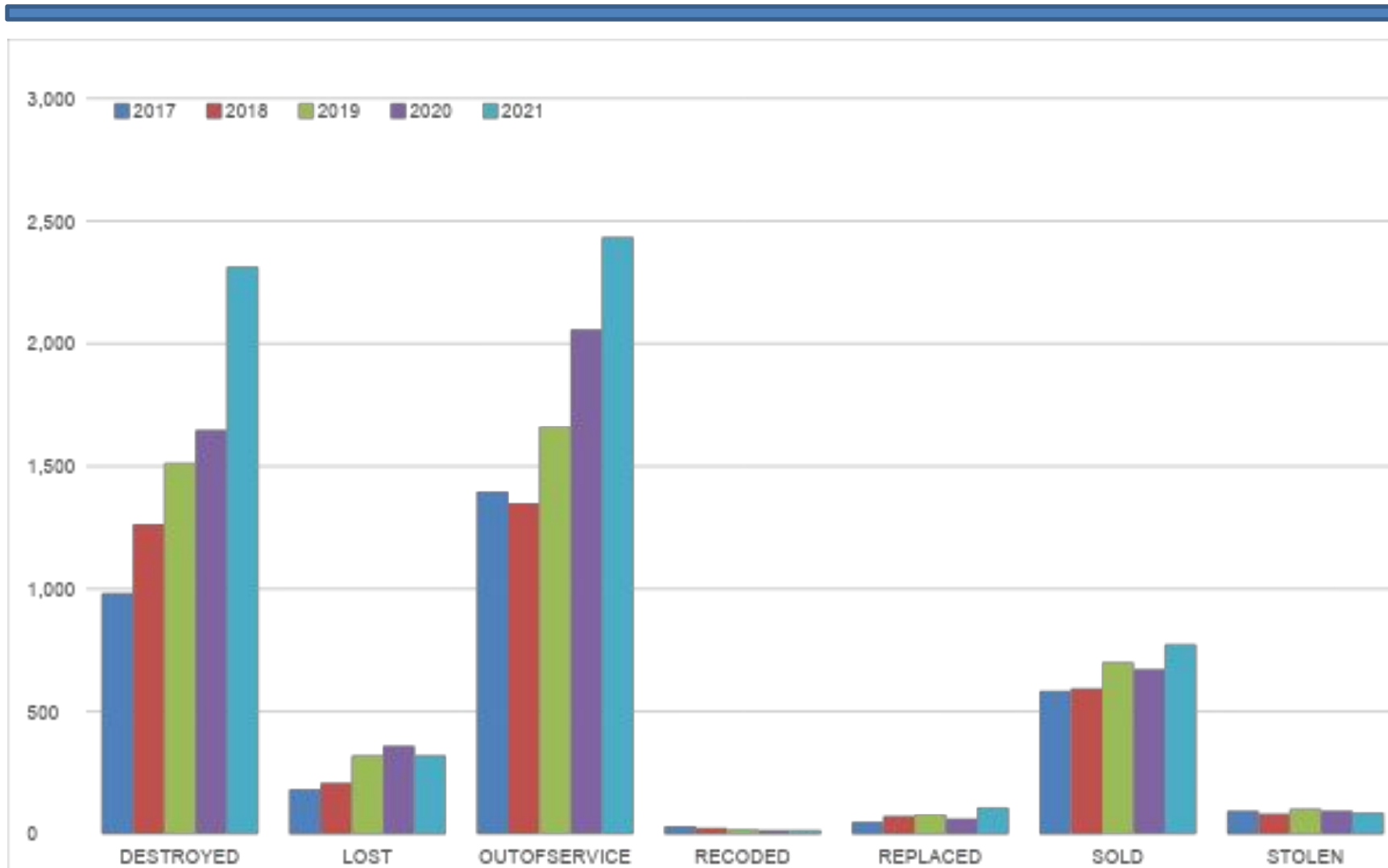


Special Status EPIRBs



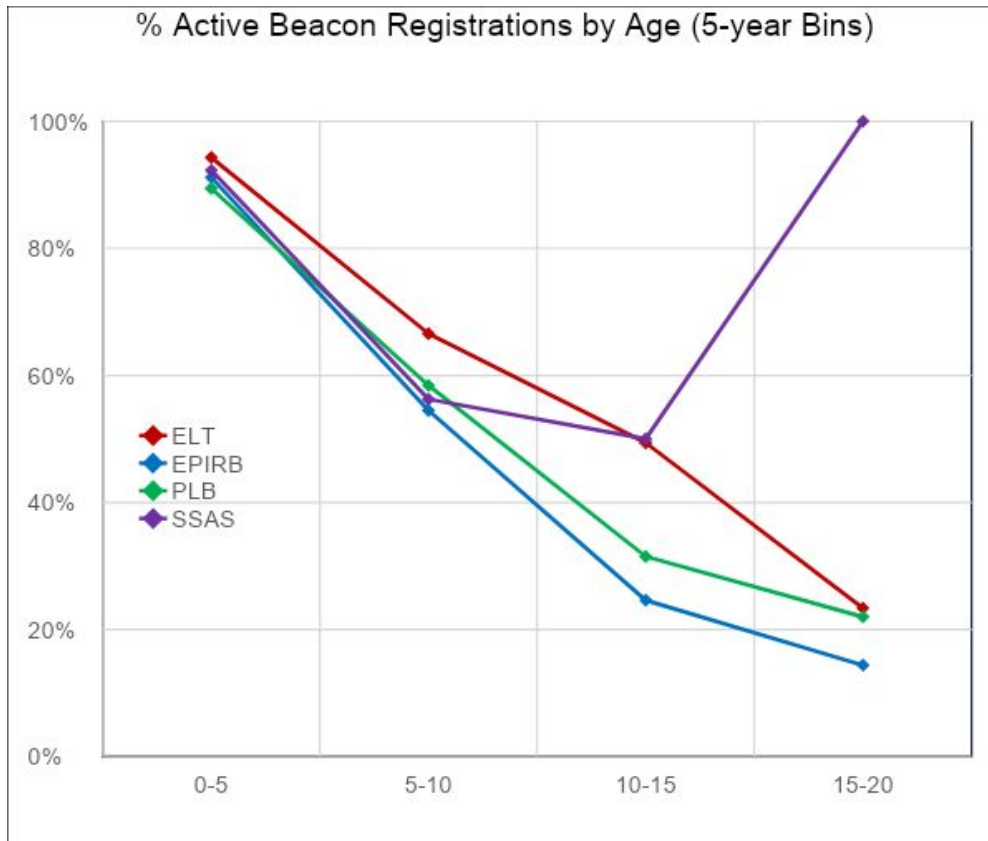


Special Status PLBs





Registration Renewal/Currency – by Beacon Type



Of beacons registered in the last 5 years:

94% of ELTs

90.8% of EPIRBs

88.9% of PLBs

have been updated/renewed within the past 2 years

Actual Number of Beacons by Years				
	0-5	5-10	10-15	15-20
ELT	50,365	15,011	8,936	572
EPIRB	72,695	17,412	8,296	4,122
PLB	129,230	46,326	14,239	1,306
SSAS	12	9	18	3



Access to RGDB Statistics

Registration statistics are updated on a monthly basis on the NOAA SARSAT website at:

www.sarsat.noaa.gov/statistics.html

This file shows

- First-time registrations by beacon type for each month from April 2016 through the most recent month
- Cumulative registered beacon counts by type of beacon



Registration Forms and Beacon Labeling

Provide owners with **the latest** NOAA registration form, found at:

<https://beaconregistration.noaa.gov/RGDB/forms>

Affix a legible UIN label to the blank registration form and ensure that it matches the UIN on the enclosed beacon. Follow these guidelines when creating your UIN labels:

- Use a large font size so owners can read the UIN correctly. Small fonts promote errors, particularly when an owner submits their registration by fax to NOAA.
- Use a font such as Consolas for all UIN labels to help owners distinguish between “0” and “D” and “8” and “B”:

0 1 2 3 4 5 6 7 8 9 A B C D E F

- Print UINs in appropriate groupings (5-5-5 for 15-hex; 6-6-6-5 for 23-hex), with a space separating each group of numbers; this improves owner accuracy when completing a paper form or registering online; see the form sample on page 12.
- Include the model number, serial number, and checksum on the label.



Additional Registration Form Updates

- The manufacturer's label box was moved to allow space for the new SGB 23-hex ID entry lines
- PLB forms will add fields for radio call sign, vessel MMSI #, AIS MMSI #, and aircraft tail #
- EPIRB forms will add an AIS MMSI # field
- SSAS forms will be updated to match formatting and spacing changes, but no new fields will be added to them
- A single page of instructions, which includes explanations of terms used in registration, will be posted with the revised forms to help owners complete their registration (noted in top right corner)
- New forms will be launched after OMB approval



Beacon Servicing

- When servicing a beacon, check the NOAA decal registration expiration date and remind the owner to properly update/renew with NOAA if expired.
- When replacing a beacon, ensure the owner is aware that the new ID must be registered with NOAA and the old ID registration must be updated with the correct information about the disposition of the old beacon.
- Include a registration form with the new ID whenever a beacon is reprogrammed.
- Inform the owner **in writing** that an ELT programmed with a 24-bit address or tail number ID must be reprogrammed if installed in a different aircraft.



Authorized Service Centers

We have noticed more issues with secondary beacon service providers and resellers in the last few years. Some of these issues have resulted in duplicate and incorrect IDs. You can help by:

- Communicating currently allowed beacon programming protocols for each generation of beacon (e.g., MMSI protocol is not allowed for 1st generation US-coded beacons, but will be included in the protocol for 2nd generation EPIRBs).
- Ensuring that centers have the most updated coding software.
- Implementing refresher training programs on reprogramming beacons.
- Developing a quality control program that includes the ability to monitor service center performance.



UIN Errors and Beacon Recalls

- To mitigate potentially serious problems, notify NOAA **immediately** of any of the following situations:
 1. Duplicate UIN encoded into any beacons
 2. UIN errors on forms or beacons
 3. Beacon recalls
- NOAA may be able to help investigate or communicate any potential issues to beacon owners. ***The goal is to save lives.***



Beacon Disposal (NOAA)

Landfill/dumpster activations are an increasing problem for SAR forces. They occur when beacons are not disabled and are thrown away with their batteries still installed.

- The RGDB website provides information on beacon disposal guidelines (<https://www.sarsat.noaa.gov/preventing-false-alerts>).
- NOAA communications highlight the importance of disposing a beacon according manufacturer guidelines and include a reference to the online SARSAT disposal guidelines.
- NOAA is considering adding disposal guidelines that would appear when an owner selects the “destroyed” status in their online registration.



Beacon Disposal (Manufacturers)

Beacon manufacturers play an important role in helping NOAA inform beacon owners about proper beacon disposal. Please consider:

- Sending us a list of the IDs for beacons you have received from owners and destroyed. One manufacturer is periodically providing a list to us, which allows us to reach out to beacon owners to ensure our database accurately reflects the beacon's status.
- Implementing a “buy-back” or “core-charge” incentive program for current owners to turn in their old, unserviceable beacons.
- Partnering with sellers or establishing service centers in high-use areas (e.g., Miami, Cape Cod, The Hamptons) to help increase proper servicing and/or disposal of old beacons.
- Increasing the distribution of beacon registration forms and information to second-hand buyers.



New RGDB Website Features

- The “[Frequently Asked Questions](#)” page was significantly updated to provide useful information on beacons, registration, SAR response, and the COSPAS-SARSAT system.
- A mechanism was added to help owners link registrations to a user account based on their email address.
- A validation was added requiring location protocol beacon IDs to end in FFBFF or 81FE0.
- Encoded tail number/24-bit address is now compared in real time to the tail number entered in the registration, highlighting mismatches that could be beacon ID errors (and therefore could affect distress response).
- A real-time check of the encoded TAC against valid TAC numbers was implemented to identify certain errors in beacon programming.



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