



NOAA's Beacon Registration Database (RGDB)

SARSAT Beacon Manufacturers Workshop 2018

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National Use Beacons

- When a US Government agency orders beacons, ask the buyer to contact NOAA to ensure that special coding and processing are considered.
- NOAA will educate the agency to ensure they:
 - Understand the C-S system and how alerts from their beacons will be distributed
 - Understand beacon operation, especially in the area of false alerts and how to prevent them
 - Are aware of **and follow** proper test policies and procedures
 - Are following appropriate procedures when getting beacons/batteries serviced; that the same beacon is returned to them



NOAA's Checksum Implementation

- The registration form (approved by OMB) contains a 5-digit checksum field, which is used by RGDB to verify the 15-hexadecimal beacon ID.
- The checksum is currently not provided by all manufacturers.
- Currently, a new registration is accepted in the RGDB regardless of whether the checksum value is correct, incorrect, or absent. The fact that the checksum field is not required in the RGDB minimizes owner confusion and frustration, hopefully ensuring the owner will complete registration.
- RGDB includes real-time checks during online entry to validate the beacon ID using the checksum value.
- When this validation fails, NOAA automatically contacts owners by email or postal letter, bringing possible incorrect beacon IDs to the owner's attention.



Manufacturers' Checksum Implementation

- EPIRB and PLB standards are being updated to mandate that checksum be provided for most new beacons.
- In preparation, NOAA requests that manufacturers start generating checksum values for their new beacons.
 - The checksum value should be printed on both the manufacturer decal that is affixed to the beacon and the decal affixed to the new registration form
- Refer questions on implementing the checksum to:
Jesse Reich, SARSAT Ground System Engineer
jesse.reich@noaa.gov
301-817-4509

Ways Beacon Manufacturers & Service Centers Can Help NOAA's RGDB (1 of 2)



- Provide owners with **the latest** NOAA registration form (with the revision date of 12/2017 at the bottom). Forms can be downloaded at <https://beaconregistration.noaa.gov/RGDB/forms>
- Contact NOAA immediately when an issue arises that has a direct impact on beacon owners, such as:
 - Duplicate beacon IDs encoded into beacons
 - Mislabeling of beacon IDs on forms or beacons
 - Recalls of beacons you have manufactured
- Ensure that the UIN label you provide is legible and affixed to the blank registration form.
- For ELT registrations where the UIN is re-programmed for aircraft tail number, pre-populate the UIN on the registration form and inform the owner **in writing** that the beacon will need to get reprogrammed if placed on an another aircraft.

Ways Beacon Manufacturers & Service Centers Can Help NOAA's RGDB (2 of 2)



- Consider using a font type such as Consolas (which is what RGDB currently uses), where the zero and the number 8 stand out. Owners often confuse 0 with the letter “O” and 8 with letter “B” when hand-writing or reading their beacon’s ID.
- Consider putting beacon ID bar codes (Code 128) on the beacon label and registration form. NOAA uses bar code readers for beacon ID entry accuracy and efficiency.
- Consider including the serial number on beacon labels.
- When servicing a beacon, verify the NOAA decal/registration expiration date and remind the owner to renew their registration with NOAA.
- If servicing results in providing a replacement beacon to an owner, ensure they are aware that the new beacon ID must be registered (by completing the Purpose section of the registration form to provide the beacon ID of the one being replaced).



RGDB Website Improvements (1 of 2)

- Owners of more than 1 beacon can link multiple registrations under one account username
- Challenge questions allow quick, secure access
- Real-time entry checks highlight data inconsistencies and errors
- The current registered owner can inform NOAA about beacon disposition (sold, out-of-service, stolen, etc.) with a 1-click option in registration reminder emails
- Scanned images of all received registration materials are now archived in the RGDB, allowing workflow monitoring from input to quality check, thereby improving overall accuracy and providing immediate electronic access to records

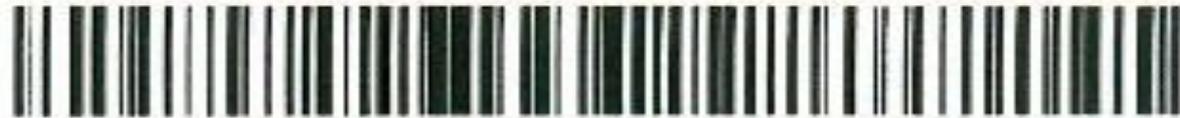


RGDB Website Improvements (2 of 2)

- The “Pending” registration process when transferring ownership of a beacon has been improved:
 - The new owner’s registration information is stored in the RGDB until NOAA confirms the transfer of ownership
 - RGDB automatically notifies the current registered owner by email after the pending registration is submitted and provides a 1-click option to release the registration to the pending owner
 - RGDB automatically contacts the new owner of the beacon when their email or postal address is provided by the current registered owner to encourage complete registration



RGDB Decal



2DCC5 55555 FFBFF



www.beaconregistration.noaa.gov

Exp. : 03/23/2019

2DCC5 55555 FFBFF

Vessel:

SARSAT BEACON2



RGDB STATISTICS

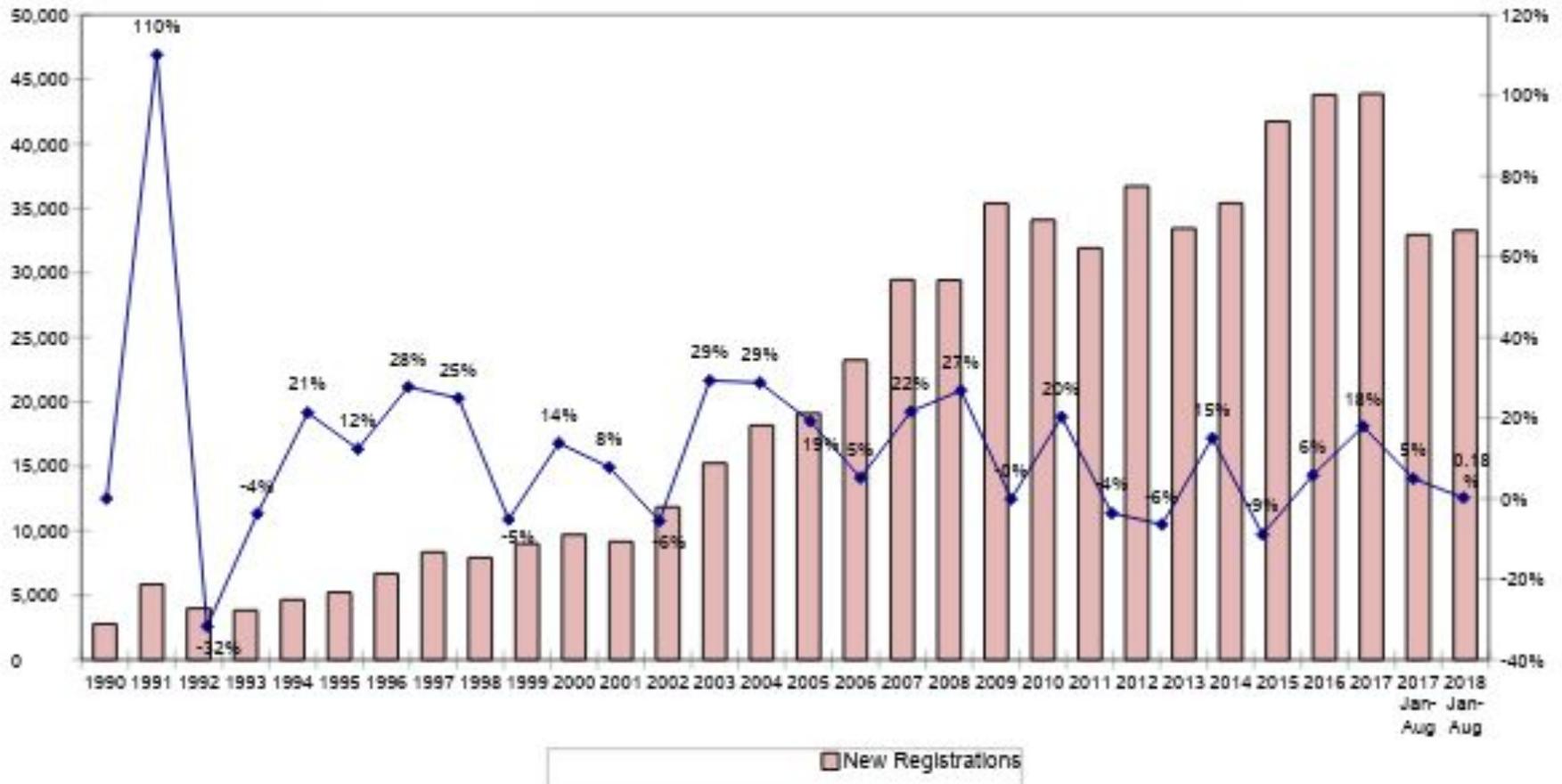
Renewal Registrations by Month

August 2017 to August 2018



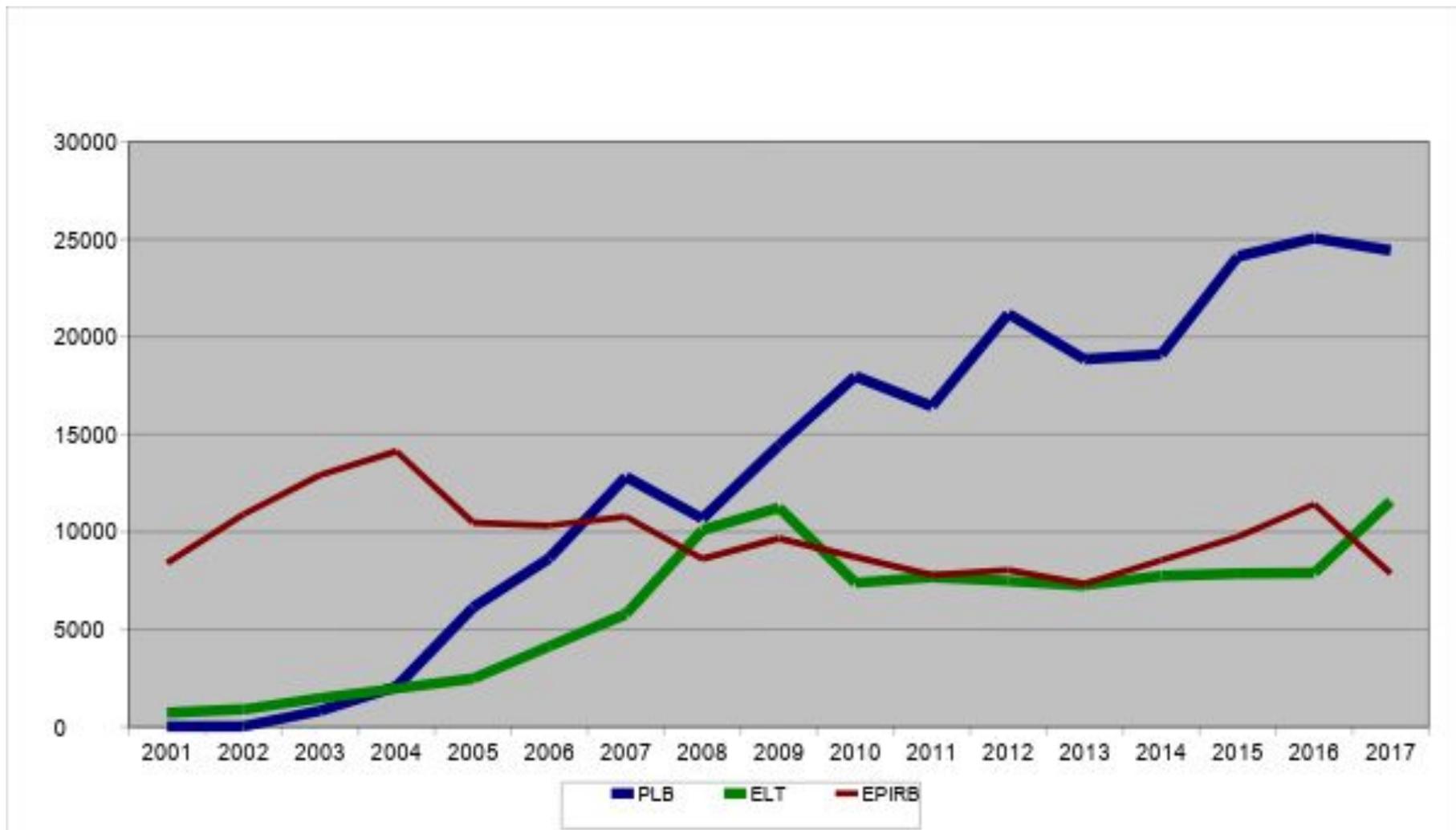
Mon-Yr	Updated by Owners Through Website	Updated by NOAA	Total Registration Renewals	Percentage Updated by Owners Through Website	Percentage Updated by NOAA
Aug-17	40,534	10,098	50,632	80%	20%
Sep-17	23,369	4,527	27,896	84%	16%
Oct-17	22,110	4,833	26,943	82%	18%
Nov-17	22,679	7,079	29,758	76%	24%
Dec-17	24,701	6,109	30,810	80%	20%
Jan-18	28,780	7,023	35,803	80%	20%
Feb-18	27,192	5,527	32,719	83%	17%
Mar-18	35,742	10,175	45,917	78%	22%
Apr-18	38,357	11,331	49,688	77%	23%
May-18	39,229	10,639	49,868	79%	21%
Jun-18	42,415	11,467	53,882	79%	21%
Jul-18	38,361	11,526	49,887	77%	23%
Aug-18	40,041	11,467	51,508	78%	22%

New Registrations by Year 1990 through August 2018

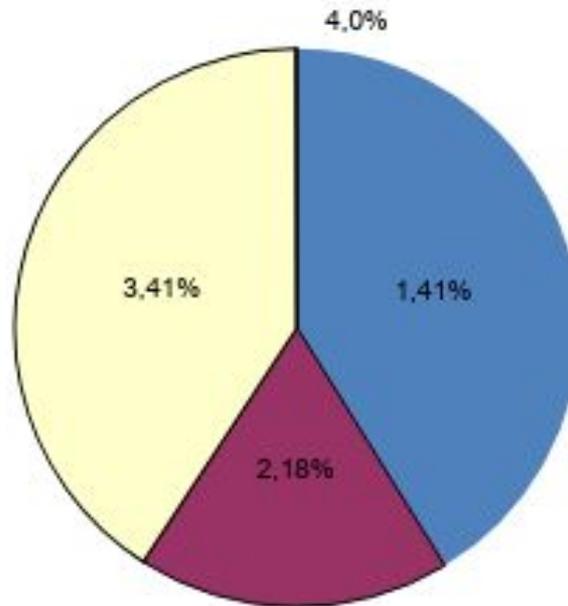




New Beacon Registrations 2001-2017

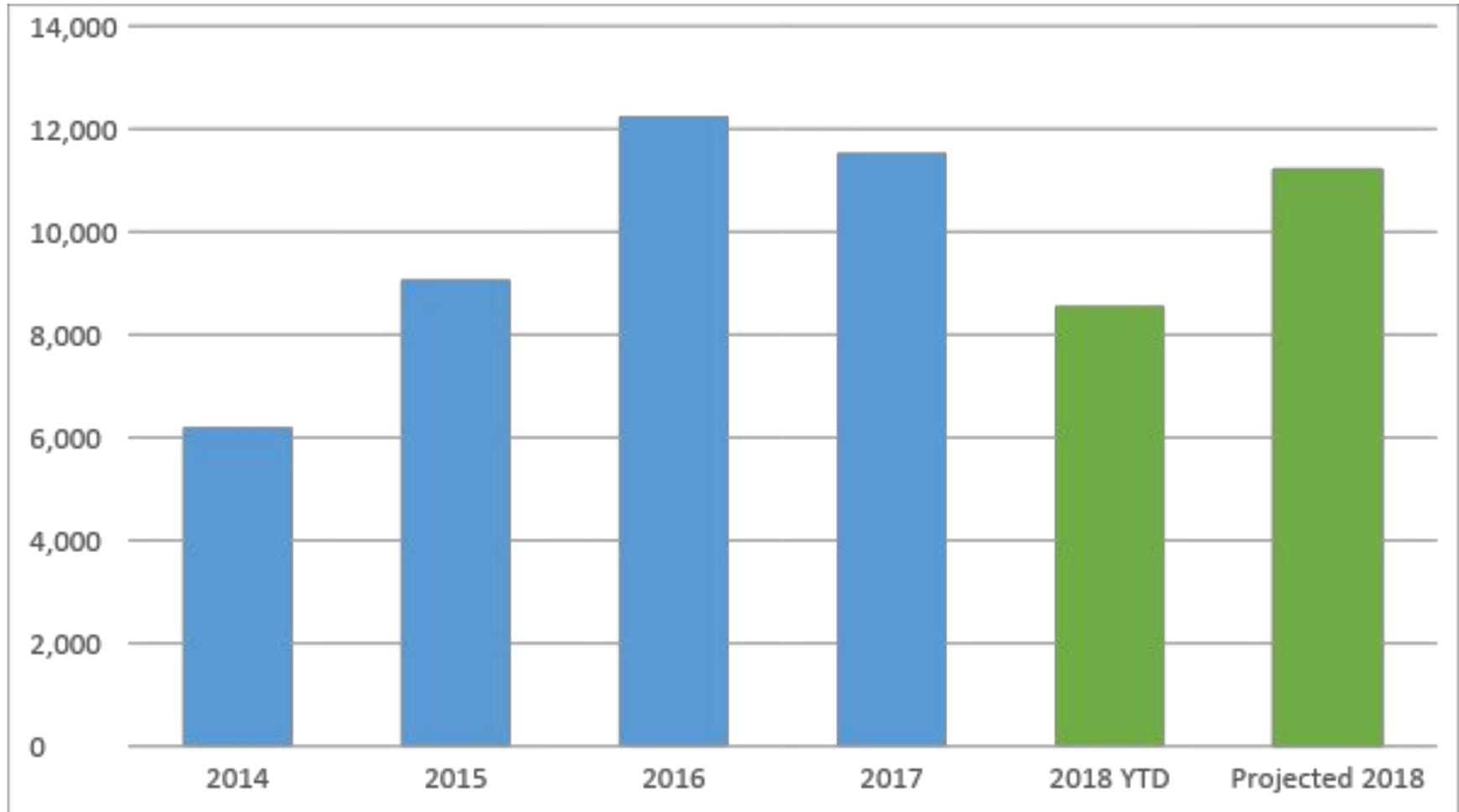


Registered Beacons by Beacon Type as of August 2018





Florida EPIRB & PLB Counts



Teen boating accident occurred in July 2015

FL legislation reducing vessel registration fees took effect in July 2016



Registration Expirations by Initial Registration Year

Registered Year	Expiration Year																										
	1990-1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1990	373	76	298	117	239	120	194	135	175	115	102	63	84	64	38	36	22	253	107	32	10	10	14	24	11	16	5
1991	855	159	639	248	550	218	440	281	411	230	230	120	154	105	104	70	65	463	193	60	24	36	15	26	9	40	6
1992	497	177	352	193	347	226	262	195	203	157	130	107	105	85	77	51	61	342	140	29	17	31	23	18	15	28	9
1993	413	141	276	137	276	182	283	201	200	142	120	97	131	126	86	60	66	324	137	35	17	22	16	36	59	62	34
1994			578	33	417	96	498	152	330	91	203	115	222	161	170	135	137	360	189	76	42	59	36	69	32	81	25
1995				651	57	422	136	431	148	282	135	197	150	233	180	196	166	480	206	86	69	64	72	95	72	107	50
1996					729	29	557	115	408	140	305	160	347	235	318	314	269	574	289	183	95	131	103	102	66	147	68
1997						791	57	558	141	444	183	318	271	509	305	565	347	712	335	246	174	204	153	137	139	202	135
1998							865	45	548	127	467	202	434	294	397	336	403	690	338	229	167	190	148	172	105	227	112
1999								1,009	56	596	166	498	291	570	264	433	351	1,003	399	227	193	216	210	222	160	267	161
2000									988	53	643	162	677	273	547	304	459	885	403	267	188	248	197	278	211	554	242
2001										1,040	74	684	226	673	246	475	318	801	315	283	208	223	195	253	274	511	323
2002											1,170	89	974	302	893	365	708	793	572	403	478	403	363	401	353	790	422
2003												1,574	128	1,366	348	1,103	534	1,406	647	700	814	744	653	634	602	990	632
2004													2,770	218	1,870	609	1,493	1,393	1,121	705	681	890	795	845	804	1,570	805
2005														4,040	267	1,944	794	2,210	912	945	733	849	753	809	1,048	1,862	1,402
2006															4,806	505	2,707	1,462	1,980	820	1,118	923	982	1,147	2,008	2,734	1,995
2007																7,002	515	3,785	1,123	1,916	1,062	1,831	1,130	1,482	2,462	4,230	2,683
2008																	7,891	629	3,263	914	1,986	1,259	1,626	1,379	2,616	4,623	3,052
2009																		10,072	534	2,857	1,289	3,164	1,593	2,598	2,886	7,201	3,294
2010																			9,395	412	2,609	1,272	3,003	1,873	3,335	7,373	5,878
2011																				7,023	508	4,049	1,209	3,689	3,058	10,874	3,074
2012																					8,800	557	4,543	1,534	5,946	7,329	10,237
2013																						8,336	538	4,368	3,414	16,232	3,439
2014																							9,122	619	7,396	6,387	15,423
2015																								10,566	2,311	29,948	2,941
2016																									20,712	3,043	30,024
2017																										52,929	682
2018																											41,714



On the SARSAT Website

- Registration statistics are updated on a monthly basis on the NOAA SARSAT website (www.sarsat.noaa.gov) under “Other Resources”/“SARSAT Statistics” (www.sarsat.noaa.gov/statistics.html)
 - New Beacon Registrations by Type
 - Shows first-time registrations of beacons, by type, for each month from April 2016 through the most recent month
 - Also shows cumulative registered beacon counts by type of beacon



Contact Information

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