



**Government Affairs**

880 South Pickett Street, Alexandria, VA 22304

147 Old Solomons Island Road, Suite 508  
Annapolis, MD 21401

Phone: (703) 461-2878 x8363 Fax: (410) 224-3807

Website: [www.BoatUS.com/gov](http://www.BoatUS.com/gov)

Email: [govtaffairs@BoatUS.com](mailto:govtaffairs@BoatUS.com)

**Statement of Margaret Podlich  
Vice President of Government Affairs  
Boat Owners Association of The United States**

**BoatU.S.  
880 S. Pickett Street  
Alexandria, VA 22304  
703-823-9550 x8355**

Before the

**Coast Guard and Maritime Transportation Subcommittee  
of the Committee on Transportation and Infrastructure**

**United States House of Representatives**

**- regarding Maritime Domain Awareness -**

December 9, 2009

Mr. Chairman and members of the Subcommittee, I am Margaret Podlich, Vice President of Government Affairs for the Boat Owners Association of The United States (BoatU.S.) I am pleased to be here today representing nearly 600,000 members who are recreational boat owners, including about 30,000 members each in Maryland and New Jersey.

Our members enjoy this family friendly activity on all types of water around the country, using a wide range of sizes and types of boats. For many, boating is the quintessential expression of the freedoms we enjoy in this Nation.

Types and sizes of boats:

While Hollywood has portrayed the average boat as a yacht owned by only the wealthy, nothing could be further from the truth. The average boat in this country is 16' and is parked in the owner's yard or driveway. Seventy-five percent of the nation's boat owners have an annual household income of less than \$100,000. There are an estimated 12.6 million registered boats in the U.S., a number that has only changed +/- 300,000 since 1997. (See attached charts.)

For the most part, boats less than 16' without engines do not have to be registered at the state level. As a result, these boats are not currently counted by, or even known to, state or federal agencies. Last year, California estimated more than 1.5 million unregistered craft are within its borders. Reaching these boats with any new federal requirement would be extremely difficult and expensive.

These smaller boats, for example canoes and kayaks, are one of the most resilient segments of boating, since both entering the sport and staying in it are relatively easy and inexpensive. However, that's not to imply that the boating industry is riding out the current economic storm. Coupled with the goods and services needed by every boat owner, the U.S. boating industry has historically supported 337,000 jobs, with a labor income of \$10.4 billion, selling more than 841,000 new boats and generating \$37.5 billion in retail sales (2007 annual numbers). The National Marine Manufacturers Association (NMMA) estimates that, during the recession, over 50% of the people employed in the U.S. marine manufacturing and sales sector have lost their jobs, or have been placed on lengthy furloughs.

### Background on Class B AIS:

Today's hearing is to discuss the small boat threat to maritime security, and the potential for Class B Automatic Identification Systems (AIS) to help reduce that threat.

About a year ago, the Federal Communications Commission (FCC) approved Class B AIS transponders for recreational boats. These units will tell nearby vessels your position, course, and speed, as well as give you similar information on other nearby vessels. Since AIS can help the boat operator know what ship may be around the next corner, and facilitate better communication with that ship, some coastal cruisers are voluntarily adding Class B AIS to their existing boat electronics. Chuck Husick, one of our technical editors for BoatU.S. Magazine, has written that AIS equipment is "one of the most important navigation safety improvements since the development of radar."

However, Class B AIS is not a foolproof method of identifying recreational boats and providing movement or ownership data to the U.S. Coast Guard.

### BoatU.S. Position:

BoatU.S. is strongly opposed to the idea of requiring millions of recreational boaters to equip their vessels with some form of electronic Automatic Identification System (AIS).

While we understand the Department of Homeland Security's goal of knowing who is on the water, we question the strategy involving the requirement for AIS on recreational boats. We have several concerns about whether this potential new requirement, specifically Class B AIS systems, can actually provide that information:

**Class B AIS systems would require constant and reliable electric power on the boat. The systems could be turned on and off by the boat operator or by intermittent power issues.**

- There are millions of small boats that do not have electrical systems at all and would be incapable of operating an AIS device. These include small motorboats, with up to a 40 hp outboard engine aboard. These engines are capable of pushing a runabout at least 25 mph.
- The installation of AIS on a recreational boat would not provide a high level of assurance that the equipment would be working at any time

after the installation was completed. A fault in the DC power or the antenna would take the unit off the air. A wire corroded by salt water could do the same. Even if a would-be terrorist would go to the trouble of complying with an AIS requirement, they would merely have to pull the AIS electrical plug moments before an attack. *Will a boat without operational AIS be presumed to be a terrorist?*

- The range of the 2 watt signal from a Class B AIS installed on a small power boat would not likely extend for more than about 5 miles for reception by another vessel.
- There is nothing to prevent the operator (boat owner or terrorist) from turning the unit on and off at will.

### **Data transmitted by the AIS unit could be wrong or deliberately “spoofed.”**

#### Stolen Boats:

- Many boat owners are lucky to visit their boat at the marina once every week or two during the boating season. Should a boat be stolen and used in a terrorist effort, the AIS unit would still transmit the owner’s information. If the boat is not yet reported as stolen there is no chance any authorities would understand the transmitted information is incorrect.
- If a stolen boat is reported to the state police, the U.S. Coast Guard does not necessarily receive that information in a timely manner. The current Vessel Identification System now shares registration data from 31 states with the U.S. Coast Guard. This data is only for half of all registered boats in the U.S. The ability for law enforcement to pull this data is inconsistent, and is dependent on onboard communications and computer equipment.
- It is unlikely that incorrect data could be resolved by enforcement authorities in the limited time available to deter a would-be terrorist activity.
- *If the boat is stolen but not yet reported, and used in a terrorist activity, how will the U.S. Coast Guard react thinking this boat was being operated by the owner?*

#### Spoofing:

- Terrorists intent on doing something bad on the waterfront would have no problem “spoofing” an AIS transponder, forcing it to report erroneous positions, speeds, or course over ground.
- Because AIS units rely on accurate data from their GPS (Global Positioning Service), jamming GPS signals would be a spectacular way to incapacitate an entire harbor’s AIS signals. A 2008 report from the

General Lighthouse Authorities of the United Kingdom and Ireland (“Impact of GPS Jamming on the Safety of Navigation”) shows that a 1.5 watt GPS spoofing transmitter (about the size of a shoebox including a battery) could make every AIS in the area report totally inaccurate data.

- In high traffic areas, the more AIS transponders there are, the less effective the tool can be. A BoatU.S. Member who is a merchant mariner has shared “I routinely see our chart plotter screen clogged up with AIS target names and/or MMSI numbers in or near port cities. This renders the tool nearly useless...” **We believe that adding millions of recreational boats to the nation’s AIS system would overwhelm the U.S. Coast Guard’s ability to effectively monitor the entire system.**

**Even with a Class B AIS unit onboard, terrorists on small craft could have plenty of time to successfully achieve an attack from watercraft.**

- Terrorists would be careful to operate in a manner that would not attract attention, until in range of their intended target. Class B AIS units transmit data every 30 seconds. A small boat capable of a modest speed of only 30 knots, and equipped with a Class B AIS would be able to traverse a distance of 1520 feet in the interval between AIS transmissions.
- If the signals from the AIS transponder were being tracked and the unit was intentionally turned off, the absence of the signal would not likely be noticed in a timely manner. In addition, the regular cyclic transmission of a Class B AIS can be inhibited by the presence of other AIS transmissions, something not at all unusual in a busy port area.

**Class B AIS systems and the necessary antenna cost \$600 for the equipment plus installation fees.**

- At an estimated cost of \$600 per device, for only half the registered boats (6,000,000) the economic impact could be \$3.6 billion – a significant amount for the recreational boating community to absorb given the unproven and likely negligible security impact of the requirement. In the current economic environment, substantial additional costs would push some boaters out of boating, with trickle down effects into the marine industry and related U.S. jobs.

**BoatU.S. is concerned that potential requirements for Class B AIS on recreational boats are window dressing for a potential homeland security problem that will not be reduced, despite the outlay of billions of dollars by U.S. boaters.**

- In March, the GAO Report on “Vessel Tracking Systems Provide Key Information” summarized as follows:

“In studies GAO reviewed and discussions with maritime stakeholders, there was widespread agreement that vessel tracking systems and equipment will be challenged to provide a warning if a small vessel is moving in a threatening manner.”
- The U.S. Coast Guard already juggles dozens of jobs on the water. We are concerned about how they can inspect for a new equipment requirement and an operational requirement. *Who will be on the water to approach vessels considered suspicious because of the absence of an AIS signal?* (The U.S. Coast Guard Auxiliarists probably won't volunteer for that job.)
- It is already extremely difficult to get boaters to install and use VHF radios properly on their boats – and these are not required by federal law. *What would the consequences be if a vessel isn't transmitting their AIS signal because of an innocent malfunction - a broken wire, a failure in the device?*
- The FCC currently allows commercial aircraft to continue on their route even if a transponder fails. We are concerned how authorities would handle a boat with a broken transponder, whether this would be a federal violation, and if enforcement officials would be required to escort that boat immediately back to the dock.

**We continue to support the U.S. Coast Guard's America's Waterway Watch program, which relies on the “neighborhood watch” concept on our local waterfronts and waterways.**

BoatU.S. has been a strong supporter of the America's Waterway Watch (AWW) program, publicizing it, asking our members to participate, and asking Congress for additional funding for this program. Most recently, AWW funding was included in section 1101 of the U.S. Coast Guard Reauthorization Bill H.R. 3619.

In our opinion, this type of program is more likely to succeed for two reasons: it treats boaters as part of the solution, rather than part of the problem; and it relies on boaters to know what doesn't look right on the water. There are already several success stories affiliated with this program,

as recreational boaters have reported suspicious activity to enforcement agencies at the federal and state level.

We support giving AWW more sturdy legs, in terms of infrastructure and funding. We also recommend with any bolstering of this program, that an analysis be conducted to insure that AWW evolves to include the lessons learned through successful neighborhood and volunteer based watch groups. With all due respect, with an inconsistent budget, AWW is currently little more than a pamphlet campaign geared to getting boaters to call a phone number if they see something strange. Many boaters are still unaware of the program; do not know what they are supposed to look for, nor what number to call so they can report suspicious or unusual behavior.

### **Conclusion:**

On behalf of our 600,000 Members, owning more than a million boats, BoatU.S. opposes any future requirement for AIS on recreational boats.

BoatU.S. believes that requiring that AIS transponders be installed and operational on recreational vessels would not produce any significant benefit for maritime security. It would come at a substantial cost to the taxpayer, and to the marine industry as a whole.

BoatU.S. appreciates the opportunity to comment on Maritime Domain Awareness as it applies to recreational boats. We ask that our comments be placed into the record, and would be happy to answer any questions the Committee may have.

# RECREATIONAL BOATING STATISTICS 2008



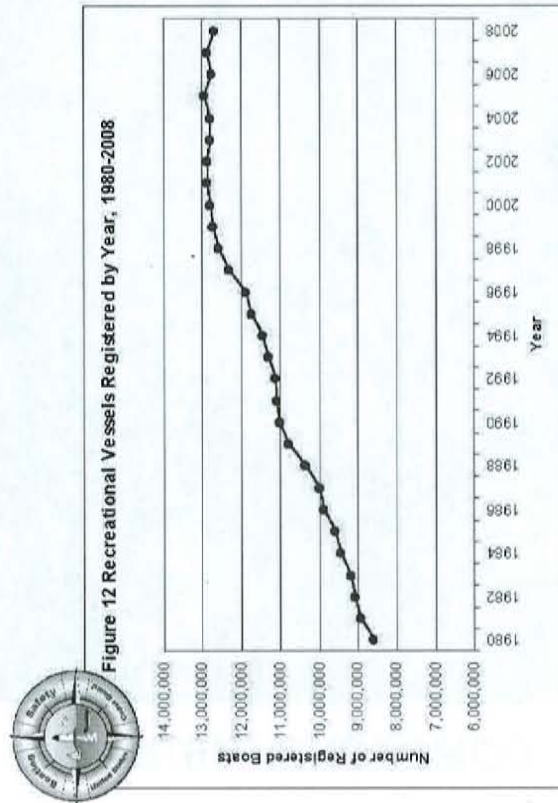
COMDTPUB P16754.21



U.S. Department of Homeland Security  
U.S. Coast Guard  
Office of Auxiliary and Boating Safety

**Table 36 • RECREATIONAL VESSELS REGISTERED BY YEAR, 1980-2008**

Year	Registered
1980	8,577,857
1981	8,905,097
1982	9,073,972
1983	9,165,094
1984	9,420,011
1985	9,589,483
1986	9,876,197
1987	9,963,686
1988	10,362,613
1989	10,777,370
1990	10,996,253
1991	11,068,440
1992	11,132,386
1993	11,282,736
1994	11,429,585
1995	11,734,710
1996	11,877,938
1997	12,312,962
1998	12,565,930
1999	12,738,271
2000	12,782,143
2001	12,876,346
2002	12,854,054
2003	12,794,616
2004	12,781,476
2005	12,942,414
2006	12,746,126
2007	12,873,081
2008	12,692,892





**Table 37 • RECREATIONAL VESSEL REGISTRATION BY LENGTH AND MEANS OF PROPULSION 2008**

Mechanically Propelled	Not Mechanically Propelled			Total		
11,841,281	851,611			12,692,892		
STATE REGISTERED BOATS THAT ARE MECHANICALLY PROPELLED						
	Means of Mechanical Propulsion			Auxiliary Sail		Total
	Inboard	Outboard	Stern Drive	Inboard	Outboard	
Under 16 feet	1,363,596	3,424,355	179,860	9,672	12,406	4,989,889
16 to less than 26 feet	734,433	4,197,363	1,278,980	16,190	40,514	6,267,480
26 to less than 40 feet	173,974	113,352	162,540	40,381	11,332	501,579
40 to 65 feet	43,898	7,368	12,958	5,804	791	70,819
Over 65 feet	6,037	2,458	2,897	99	23	11,514
<b>Total</b>	<b>2,321,938</b>	<b>7,744,896</b>	<b>1,637,235</b>	<b>72,146</b>	<b>65,066</b>	<b>11,841,281</b>
STATE REGISTERED BOATS NOT MECHANICALLY PROPELLED						
Rowboats	Sailboats	Canoes/Kayaks	Other Boats	Total		
105,790	127,869	384,770	233,182	851,611		

Registration Data

Table 38 • RECREATIONAL VESSEL REGISTRATION DATA BY STATE 2007-2008				
	Rank	2006	2007	Scope of Current Boat Registration System
<b>Nationally</b>		<b>12,692,892</b>	<b>12,875,568</b>	
AL	16	272,558	274,176	All motorboats, sailboats and rental boats
AK	45	47,534	47,548	All undocumented powerboats
AS	56	27	106	All watercraft
AZ	30	140,291	144,570	All watercraft, except inflatables 12 feet in length or less
AR	22	199,104	206,195	All motorboats and sailboats
CA	3	858,853	964,881	All motorboats; sailboats over 8 feet in length
CO	34	95,330	98,055	All watercraft powered by motor or sail - sailboards exempt
CT**	31	110,650	108,539	All motorboats; sailboats 19.5 feet or more in length
DE	42	56,669	61,569	All motorboats
DC	54	2,922	2,866	All watercraft
FL	1	974,553	991,680	All motorboats
GA	12	350,479	344,597	All motorboats; sailboats 12 feet or more in length
GU	53	3,277	3,278	All watercraft (estimated)
HI	51	15,404	15,094	All motorboats; sailboats over 8 feet in length
ID	36	89,026	91,612	All motorboats and sailboats
IL	10	378,208	379,454	All watercraft, except non-profit org. owned canoes and kayaks
IN	17	271,532	241,474	All motorboats
IA	21	231,333	213,767	All watercraft with exceptions (a)
KS	35	91,067	93,900	All motorboats and sailboats
KY	28	173,981	176,716	All motorboats, except electric motors 1 hp or less
LA	15	302,753	301,249	All motorboats; sailboats more than 12 feet in length
ME	32	109,657	112,818	All motorboats
MD	23	199,087	202,892	All motorboats
MA	29	145,113	145,496	All motorboats
MI	4	816,752	830,743	All watercraft with exceptions (b)
MN	2	867,446	866,496	All motorboats with exceptions (c)
MS	25	191,312	180,356	All motorboats and sailboats
MO	14	322,253	321,782	All motorboats; sailboats over 12 feet in length
MT	37	84,988	79,651	All motorboats; sailboats 12 feet or more in length
NE	38	83,280	83,722	All motorboats
NV	41	57,519	59,895	All motorboats, sailboats, rowboats
NH	33	96,205	100,261	All motorboats; sailboats 20 feet or more in length
NJ	26	185,359	183,147	All watercraft with exceptions (d)
NM	48	33,304	38,100	All motorboats and sailboats
NY	7	485,541	494,020	All motorboats
NC	11	371,879	375,815	All motorboats; sailboats more than 14 feet in length
ND	46	46,067	53,519	All watercraft
CNMI	55	330	380	All motorboats
OH*	9	416,586	415,228	All watercraft. *5576 livery vessels included in '08; 5522 livery vessels not included in '07
OK	24	196,052	223,758	All watercraft
OR	27	180,063	184,147	All motorboats; sailboats 12 feet or more in length
PA	13	338,316	342,427	All motorboats and certain non-powered craft (e)
PR	40	59,580	62,360	All motorboats; vessels adapted to hold a motor
RI	47	42,524	43,665	All watercraft except canoes, kayaks & rowboats < 12 feet
SC	8	436,844	442,040	All watercraft
SD	43	56,604	53,570	All motorboats; all other boats over 12 feet in length
TN	18	271,475	274,914	All motorboats and sailboats
TX	6	597,428	599,567	All motorboats and sailboats 14 feet or more in length
UT	39	73,009	76,921	All motorboats and sailboats
VT	49	30,429	31,482	All motorboats
VI	52	6,915	5,455	All watercraft
VA	20	249,312	251,440	All motorboats
WA	19	264,393	270,789	All motorboats with exceptions (f); sailboats >16 ft in length
WV	44	49,930	63,064	All motorboats
WI	5	634,546	617,366	All motorboats; sailboats over 12 feet in length
WY	50	27,243	26,956	All motorboats and sailboats

(a) Iowa excludes inflatables under 7 feet in length and canoes/kayaks under 13 feet in length. (b) Michigan excludes manually propelled boats 16 feet or less in length, and nonmotorized rafts, canoes, and kayaks. (c) Minnesota excludes nonmotorized boats nine feet or less in length, duckboats during duckhunting season, and riceboats during harvest season and seaplanes. (d) New Jersey excludes non-motorized boats 12 feet or less in length and canoes, kayaks, racing shells and rowing sculls. (e) Pennsylvania registers non-powered craft using lakes or access areas owned by the State Fish & Boat Commission. (f) Washington excludes motorboats < 16 feet with motors 10 horsepower or less used solely on exclusive state waters. \*OH included 5576 livery vessels in their 2008 figures; they did not include 5522 livery vessels in their 2007 figure; \*\*CT reported that their 2007 number should have been 112,163. Totals for 2007 have not been updated to reflect this revision.