

**The Florida Senate**  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Environmental Preservation and Conservation Committee

BILL: SB 958

INTRODUCER: Senator Oelrich

SUBJECT: Airboats

DATE: February 2, 2012      REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Wiggins	Yeatman	EP	<b>Pre-meeting</b>
2.			CA	
3.			BC	
4.				
5.				
6.				

**I. Summary:**

This bill requires the Florida Fish and Wildlife Conservation Commission (FWC) to establish a voluntary sound testing program for airboats. It provides that persons submitting to the voluntary testing program, whose airboat registers below a certain sound level, will be permitted to operate their airboat on all navigable waterways of the state, even if local ordinances or other laws otherwise prohibit the airboat's operation. The bill provides that those passing the voluntary test will be provided a certificate and decal by the FWC. The bill also sets testing requirements and provides that airboat operators opting to have the test must pay a fee (the amount to be determined by the FWC) to the testing facility. All testing facilities would have to be certified by the FWC.

The bill amends ss. 327.60 and 327.65, F.S.

**II. Present Situation:**

According to the FWC, during the calendar year 2010, there were 6,851 registered airboats in the State. The 5 counties with the highest number of airboat registrations in 2010 were:

County	Number of Airboat Registrations
Polk	720
Brevard	548
Citrus	359
Marion	319
Palm Beach	305 <sup>1</sup>

Florida law requires that the exhaust of every airboat engine must be adequately muffled by use of automotive-style mufflers, underwater exhaust, or another device capable of adequately muffling exhaust sound.<sup>2</sup>

Section 327.60(2)(e), F.S., prohibits local governments from discriminating against airboats with any ordinances adopted after July 1, 2006, unless the ordinance is adopted by a two-thirds vote of the governing body.

Section 327.65(1), F.S., requires that the exhaust of every internal combustion engine used on any vessel must be effectively muffled, and further prohibits the use of exhaust cut-out devices (which would allow the operator to mechanically divert the exhaust gases in order to bypass a muffling device). Section 327.65(2)(a), F.S., provides that counties wishing to impose additional noise pollution and exhaust regulations on vessels may adopt (by ordinance) the following language:

No person shall operate or give permission for the operation of any vessel on the waters of any county or on a specified portion of the waters of any county, including the Florida Intracoastal Waterway, which has adopted the provisions of this section in such a manner as to exceed the following sound levels at a distance of 50 feet from the vessel: for all vessels, a maximum sound level of 90 dB A.

“Sound level” is defined as:

A-weighted<sup>3</sup> sound pressure level measured with fast response using an instrument complying with the specification for sound level meters of the American National Standards Institute, Inc., or its successor bodies, except that only a weighting and fast dynamic response need be provided.

“dB A” is defined as “the composite abbreviation for the A-weighted sound level and the unit of sound level, the decibel.”

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<sup>1</sup> Florida Fish and Wildlife Conservation Commission, Senate Bill 958 Analysis (Dec. 21, 2011) (on file with the Senate Committee on Environmental Preservation and Conservation).

<sup>2</sup> Section 327.391(1), F.S.

<sup>3</sup> A-Weighted Sound Level - A measure of sound pressure level designed to reflect the acuity of the human ear, which does not respond equally to all frequencies. The ear is less efficient at low and high frequencies than at medium or speech-range frequencies. Therefore, to describe a sound containing a wide range of frequencies in a manner representative of the ear's response, it is necessary to reduce the effects of the low and high frequencies with respect to the medium frequencies. The resultant sound level is said to be A-weighted, and the units are dB A. The A-weighted sound level is also called the noise level. Sound level meters have an A-weighting network for measuring A-weighted sound level.

According to the FWC, in 2005, a research team from Florida Atlantic University (FAU) was contracted by the Commission to perform research concerning airboat noise. The research revealed that, during airboat drive-by tests, the peak sound level measured at 50-feet from the path of the vessel always exceeded 90 dB A at maximum operating conditions and speed, and, in many cases, exceeded 100 dB A. It was also found that most airboats can operate with a peak sound level of 90 dB A or less, measured at 50-feet during drive-by tests, at the minimum speed required to maintain planing conditions.<sup>4</sup> The research also revealed that airboat sound levels vary greatly from one boat to the next and depend upon a host of variables. Vessel load, type, design of propeller, and the use of either a gear or belt-drive to reduce propeller speed are just a few.<sup>5</sup>

The FWC served as a co-host (together with the Florida Airboat Association) of a quiet airboat demonstration held in central Florida in May of 2006 which was intended to offer an opportunity for airboat owners to learn about the sound levels generated by their personal boats. The FAU research team was on-hand to take sound level readings as volunteers drove their airboats through a prescribed course at either maximum throttle or minimum planing speed. Of the ten airboats participating, the maximum throttle sound level readings taken at 50-feet from the vessel during drive-by testing ranged from 88.9 dB A to 106.8 dB A for boats equipped with mufflers. Minimum planing speed sound levels ranged from 77.4 dB A to 91.15 dB A for muffled boats.<sup>6</sup>

According to s. 327.60, F.S., local ordinances relating to the operation of a vessel on the water by airboats may not be “discriminated” against by local ordinances unless they are adopted after July 1, 2006, by a two thirds vote by the governing body. To address excessive noise on the water many counties have passed local ordinances imposing noise curfews.

### III. Effect of Proposed Changes:

**Section 1** amends s. 327.391, F.S., and requires FWC to establish a voluntary sound testing program for airboats. Tests would be required to meet minimum requirements, including that a test would have to be conducted while an airboat is travelling on plane in water that is 1 foot deep or less and at a distance of 100 feet perpendicular to the fixed-in-place testing equipment (measured from the closest edge of the airboat). Additionally, all testing equipment would have to be calibrated to allow for ambient noise, weather, and other factors that could interfere with an accurate reading. The test would cost the airboat owner an unspecified fee, not to exceed administrative costs of the FWC, which would be paid to the testing facility. All testing facilities would have to be certified by the FWC.

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<sup>4</sup> Airboat hulls, like many boat hulls, are designed to be capable of skimming across the water once they reach an appropriate speed. This “skimming” on the water, as contrasted with plowing through the water, is called being on a “plane.” The research looked at the sound levels that were generated by boats when they got up on a plane (which takes more engine effort and generates more noise) then reduced their speed so they were going just fast enough to maintain a planing attitude. This is often the most efficient speed at which to run a boat and, for airboats, was the quietest the boat would be able to run at any appreciable speed.

<sup>5</sup> Florida Fish and Wildlife Conservation Commission, Senate Bill 958 Analysis (Dec. 21, 2011) (on file with the Senate Committee on Environmental Preservation and Conservation).

<sup>6</sup> *Id.*

The bill provides that persons submitting to the voluntary testing program and whose airboat tests at or below 107 dB A under the above specified conditions will be provided a certificate and numbered decal by the FWC. The certificate and decal will permit that specific airboat to be operated on all navigable waterways of the state, even on waterways otherwise prohibited for airboat operation by local ordinance or other law.

**Section 2** amends s. 327.60, F.S., to allow airboats bearing a decal to operate above sound levels that have been prohibited by local ordinances. Section 327.65(2)(a), F.S., currently allows local governments to adopt an ordinance preventing sound levels over a certain dB A. While this bill does not propose to strike that provision, the proposed changes to section 327.65(2)(a), F.S., create an exception to the provision that effectively eliminates it as it pertains to airboats which would have a decal.

The bill would also modify the prohibition of local government “discrimination” against airboats for ordinances adopted on or before July 1, 2006. According to FWC, it appears that the proposed change to section 327.60, F.S., would still allow local governments to discriminate against airboats that have received a decal pursuant to the new section 327.391(5) F.S., but would no longer allow ordinances discriminating against airboats not bearing such a decal.<sup>7</sup>

**Section 3** amends s. 327.65, F.S., to clarify that any person who refuses to submit to a sound level test when requested by a law enforcement officer commits a misdemeanor in the second degree.

**Section 4** establishes an effective date.

#### **IV. Constitutional Issues:**

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

#### **V. Fiscal Impact Statement:**

A. Tax/Fee Issues:

None.

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<sup>7</sup>Florida Fish and Wildlife Conservation Commission, Senate Bill 958 Analysis (Dec. 21, 2011) (on file with the Senate Committee on Environmental Preservation and Conservation).

**B. Private Sector Impact:**

If private testing companies are permitted to perform the sound tests on airboats, then those companies may see an increase in the demand for the tests on airboats.

**C. Government Sector Impact:**

FWC is unclear if the Commission or private entities are anticipated to be tasked with performing the actual sound testing as well as who will ultimately receive the testing fees paid by the airboat owner.

According to the FWC, the proposed language could be interpreted to eliminate the obligation of an airboat operator who has a certificate and decal, acquired as a result of voluntary sound level testing, to submit to a sound level test when requested to do so by a law enforcement officer.

**VI. Technical Deficiencies:**

According to the FWC, the proposed language could be interpreted to eliminate the obligation of an airboat operator who has a certificate and decal, acquired as a result of voluntary sound level testing, to submit to a sound level test when requested to do so by a law enforcement officer.

**VII. Related Issues:**

None.

**VIII. Additional Information:****A. Committee Substitute – Statement of Substantial Changes:**

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

**B. Amendments:**

None.