

# SENATE BILL REPORT

## SB 5939

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As Reported By Senate Committee On:  
Transportation, February 9, 1998

**Title:** An act relating to a study of wing-in-ground effect vehicles.

**Brief Description:** Directing a study of wing-in-ground effect vehicles.

**Sponsors:** Senators Strannigan, Rossi, Finkbeiner, Bauer, Hochstatter, Benton, Wood, Snyder, Hargrove, Heavey and McDonald.

**Brief History:**

**Committee Activity:** Transportation: 1/29/98, 2/9/98 [DPS].

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### SENATE COMMITTEE ON TRANSPORTATION

**Majority Report:** That Substitute Senate Bill No. 5939 be substituted therefor, and the substitute bill do pass.

Signed by Senators Prince, Chair; Benton, Vice Chair; Wood, Vice Chair; Goings, Horn, Jacobsen, Morton, Oke and Sellar.

**Staff:** Ashley Probart (786-7319)

**Background:** The wing-in-ground effect (WIG) technology is based upon the observed gain in lift obtained by a craft flying in close proximity to the ground or water surface. Most WIG vehicles are watercraft, and at cruising speed these craft trap a cushion of air between their wings and the water surface. Once a WIG watercraft obtains cruising speed and lifts out of the water, it gains a considerable improvement in efficiency because water drag is eliminated. Cruising speeds have been documented at 50 to 200 knots. Finland, Russia, Germany, Japan, and China have all constructed these vehicles.

One type of ground-effect craft is the hovercraft. The difference between a hovercraft and a WIG craft is that a hovercraft uses a static air cushion which pushes air down, while a WIG craft uses a dynamic air cushion, which pushes the vehicle forward and is more fuel efficient.

**Summary of Substitute Bill:** The Legislative Transportation Committee is required to commission a study that is conducted by the appropriate engineering departments of any Washington State university in conjunction with the Department of Transportation. The study must produce a state-of-the-art review and assessment of the application of wing-in-ground effect vehicles to passenger transportation across Puget Sound. The study must explore all relevant aspects of these vehicles, including fuel consumption, noise, and operating characteristics that are unique to the Puget Sound operational environment. The report must be delivered to the Legislative Transportation Committee no later than June 30, 1999.

**Substitute Bill Compared to Original Bill:** The \$50,000 appropriation and the emergency clause is removed in the substitute bill.

**Appropriation:** None.

**Fiscal Note:** Not requested.

**Effective Date:** Ninety days after adjournment of session in which bill is passed.

**Testimony For:** The wing-in-ground craft study on Puget Sound should determine this craft's feasibility as a cost effective alternative to existing passenger ferry service.

**Testimony Against:** None.

**Testified:** PRO: Senator Strannigan, prime sponsor; Peter Longwood, SeairCraft.