Comparison Composite Hull vs Aluminum Construction

1000 ISLAND AIRBOATS COMPOSITE HULL	ALUMINUM CONSTRUCTION
STRESS Composite hulls are more flexible and much less susceptible to damage caused by battering of uneven ice. As the airboat travels at high speed over uneven ice, the hull will give rather than crack or break. Also because there is no seam, the composite hull does not have any weak joints that may come apart.	**STRESS** Aluminum hulls do not handle stress nearly as well as composite in cold weather. In cold weather, the constant battering of the aluminum hull creates cracks. These cracks can be repaired by welding. The problem is the weld is stronger than the aluminum so there is a variance in hull strength. As the boat is then driven over ice and again subjected to battering, the weaker aluminum flexes with the super strong weld and the hull integrity is compromised.
REPAIR Composite hulls from 1000 Island Airboats are very easily repairable. In fact, any person with a limited skillset can repair damage with a repair kit and a few simple tools. A more important feature, however, is that after repair, the hull is returned to 100% structural strength.	**REPAIR** While often having to repair an aluminum hull you have to have power, welders, a good environment and a skilled wielder.
MANEUVERABILITY The V shape hull creates a "pivot point" that allows turning under much less power and allows the boat to easily turn out of the channel and climb back on the ice	**MANEUVERABILITY** Square hull on aluminum boat does not turn easily. This is an even bigger problem if the boat happens to break through the ice and a "channel" is created with water under the hull and ice on both sides. The aluminum hull, because of its flat design, becomes "stuck" in the channel, whereas the V shape composite hull can easily turn out of the channel and climb back on the ice.
DRAG V hull design means less drag, easier handling and less power required for more speed	**DRAG** The drag created by flat hull design means less speed and sluggish handling
V BOW DESIGN The unique hull design allows it to easily travel through any water, ice, snow and slush. The V bow “cuts” through even the most difficult icewater conditions.	**PUNT NOSE DESIGN** The design of the bow of aluminum airboats creates a "snow plow" effect over ice that is even more pronounced when travelling over slush and snow. There have been occasions where, because of the punt nose design, aluminum airboats operating in heavy snow and slush become bogged down and totally inoperable.
TOTALLY ENCLOSED Composite design with full enclosed cockpit and stern prevents any water from collecting in the hull.	**OPEN STERN** Aluminum airboats are either completely open or have an enclosed cockpit only. One of the real dangers of this design is that there have been cases where airboats in very uneven ice terrain have "slid back" and actually filled with water.

1000 Island Airboats Composite Hull	Aluminum Construction
STRUCTURAL INTEGRITY 1000 Island Airboats are constructed using unique molds. That means they do not have seams, they are one piece with 100% structural integrity from bow to stern. Also they are designed with 6 stringers for increased strength.	**STRUCTURAL INTEGRITY** Aluminum airboats are designed using several pieces of material welded together and there could be weaknesses in seams.
POLYMER PANELS There is a vast difference in the way the polymer panels are added to aluminum hulls and 1000 Island Airboat hulls: 1000 Island Airboats has "steps" built into the design to accommodate "recessing" of the polymer panels on both the sides and bottom of each boat. This means that there is no "edge drag" on the polymer panel.	**POLYMER PANELS** Polymer panels on aluminum airboats are simply "add ons", with no step or recess in the hull to accommodate the panel. The result is that there is tremendous friction built up on the panel and it can become distressed or even "peel away" from the hull.
FLOATATION 1000 Island Airboats have floatation built into the hull and the floatation cannot be dislodged. It is married to the hull.	**FLOATATION** Aluminum airboats have floatation "strapped onto" the hull and there have been documented cases of the floatation apparatus becoming dislodged.

Telephone: 1-920-202-2446 Facsimile: (715) 754-2582
Address: 222 South Parkview Ave, Marion WI 54950
Website: www.1000islandairboats.com
E-mail: info@1000islandairboats.com