



**Extract from United States Coast Guard  
Marine Technical Note Number 02-96:**

*Section: 3 – Action*

*Paragraph: i (3)*

*Structural fatigue of marine vessels constructed of aluminium is an industry-wide concern, especially for high speed craft. Hovercraft, by the nature of their "flight" operations, must be built as light as possible. Thus, designers prefer to use high strength aluminium alloys and tend to create designs with narrower margins of structural safety than conventional displacement craft. The result is often a structure that is highly susceptible to fatigue cracking. The increased risk of fatigue is usually countered by frequent and strict inspections of the hull structure. The MSC recommends that a fatigue-life analysis be completed for all hovercraft constructed of aluminium. The analysis should include the projected service life of the vessel, identification of critical and susceptible components, and an owner's inspection schedule detailing inspection frequency and procedures.*

- The full text of the above Marine Technical Note can be found on the United States Coast Guard website at the following address:  
[www.uscg.mil/hq/msc/mtns/mtn96\\_02.txt](http://www.uscg.mil/hq/msc/mtns/mtn96_02.txt)
- A full list of all available Marine Technical Notes can be found on the United States Coast Guard website at the following address:  
[www.uscg.mil/hq/msc/mtns.htm](http://www.uscg.mil/hq/msc/mtns.htm)