

U.S. Department  
of Transportation

**United States  
Coast Guard**



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# Load Line Technical Manual

This copy of the "Load Line Technical Manual" has been annotated to reflect the 2005 revisions to the International Convention on Load Lines (ICLL). Except where stated otherwise, all ICLL revisions apply to new U.S. vessels (i.e., keels laid on/after 1 January 2005) that are seeking either an international (ICLL) or unrestricted domestic (US) load line certificate.

**American Bureau of Shipping**

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Final Report

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16. Abstract  <p>This manual describes the interpretations of the International Convention on Load Lines, 1966 as applied in regulation and policy by the American Bureau of Shipping and the United States Coast Guard to U. S. flag vessels on foreign voyages and foreign flag vessels under U.S. jurisdiction. The definitions and application statements in this manual apply only to vessels on foreign voyages by sea. Domestic Voyages are not considered.</p>			
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## **Preface to the electronic version**

*November 6, 2003*

In 1990, the U.S. Coast Guard commissioned the American Bureau of Shipping (ABS) to prepare a report that integrated U.S. load line regulations & policies, ABS and IACS interpretations, IMO circulars, and the International Convention on Load Lines (ICLL) into a single reference document.

This “*Load Line Technical Manual*” is the result of that effort. It sets forth the technical procedures for evaluating, calculating and assigning ICLL load lines, using USCG and ABS policies where the Convention leaves certain requirements “to the satisfaction of the Administration” or is open to interpretation. This manual applies to U.S. vessels seeking an international ICLL assignment or a domestic U.S. load line assignment for unrestricted voyages by sea; it does not cover U.S. load line regulations for other types of domestic voyages (such as coastwise or Great Lakes).

This electronic version of the manual has been divided into five *Adobe .pdf* files:

<i>LL Tech Manual-ToC.pdf</i>	Table of Contents
<i>LL Tech Manual-Ch1.pdf</i>	Chapter I, General Items
<i>LL Tech Manual-Ch2.pdf</i>	Chapter II, Load Line Calculation
<i>LL Tech Manual-Ch3.pdf</i>	Chapter III, Cond of Assignment-Minimum Freebrd
<i>LL Tech Manual-Ch4.pdf</i>	Chapter IV, Cond of Assignment-Increased Freebrd

This Technical Manual was originally prepared in 1990; therefore, it only incorporates material up to that time. Since then, there has been further evolution of load line policies, additional IACS interpretations, new IMO Circulars, etc. The ICLL itself has been amended by the 1988 Protocol (which entered into force on February 3, 2000) as well as subsequent amendments that were adopted in 2003 (and will enter into force on 1 January 2005). There are no immediate plans to incorporate these into this manual.

## **Preface to the annotated version**

*February 3, 2006*

On January 1, 2005, numerous new and revised ICLL regulations entered into force, adding new technical requirements or expanding existing requirements to encompass shipboard arrangements not previously addressed. The amendments also incorporate (wholly or partially) more than 35 IACS Unified Interpretations on the Load Line Convention.

In response to these revisions, this annotated version of the *Load Line Technical Manual* has been corrected, but not updated. Annotations have been inserted only where the ICLL revisions have affected the original *LLTM* discussion or policy (*the affected text is boxed*). However, there are many other ICLL revisions that are not indicated in this annotated version. Readers are advised to consult an officially-published copy of the ICLL in conjunction with this annotated version. IMO publications can be ordered via the IMO website at [www.imo.org](http://www.imo.org).

Unless stated otherwise in this annotated version, all revisions apply to new U.S. vessels (the keels of which were laid on/after January 1, 2005) seeking an international (ICLL) or unrestricted domestic (US) load line certificate.

Future annotations will be added whenever revised ICLL regulations affect the technical content of this *Manual*.

# **Load Line Technical Manual**

*Each chapter includes a Preface, detailed Table of Contents; List of Figures; list of Abbreviations and Variables; an explanation of the Reference System; and list of Reference Materials*

The Table of Contents for each chapter have been annotated to indicate sections that are affected by the 2005 ICLL revisions.

## **Chapter I: GENERAL ITEMS**

- Definition of Terms
- Application & Exceptions
- General Requirements
- General Particulars
- Types of Ships

## **Chapter II: LOAD LINE CALCULATION**

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## **Chapter III: CONDITIONS OF ASSIGNMENT—Minimum Freeboard**

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- Special Conditions

## **Chapter IV: CONDITIONS OF ASSIGNMENT—Increased Freeboard**

- General Guidelines
- Report to the Commandant