

Subject :

The Year 2000 and
GPS Rollover Problem
(Part 2)

NKTECHNICAL INFORMATION

No. : 278

Date : 31st August 1998

To all concerned;

Background information regarding the above subject has already been provided in Technical Information No. 277, dated 11 August 1998 as part one of this continuation. The aim of this second part of the Technical Information is to present information concerning the results of survey questionnaires of manufacturers conducted thus far concerning the year 2000 and GPS rollover problem as described in part one as well as information which is felt will be of use in helping to address these problems.

4. Survey of the Year 2000 and GPS Rollover Problem

Given that 1 January 2000 is already less than only 480 days away, it is essential for all users to have their systems checked and take appropriate action promptly with respect to the year 2000 and GPS rollover problem (hereunder referred to simply as the Y2K problem), if they have not already done so, in order to ensure that these systems will continue to function properly and smoothly through the new millennium. The majority of equipment and systems installed onboard ship contain computer related electrical and electronic devices. The computers and chips embedded in these various devices are used for the control, display, and warning functions for practically all systems onboard ship. It would be an overwhelming task to specify all the different types of chips and computing devices that are in fact installed onboard just one ship.

The following procedures are necessary in order to address the Y2K problem onboard ship.

- (1) All equipment and systems containing computer devices and/or embedded chips onboard ship need to be specified.
- (2) Each computing device and embedded chip needs to be tested to determine whether or not they can properly handle all dates, including day, month, and year.
- (3) Tests then need to be carried out to verify that all hardware and software which handle dates are Y2K compliant.
- (4) In those cases where it is anticipated that a problem may arise, suitable countermeasures are to be taken and the results of such measures verified as to their effectiveness.

ClassNK NIPPON KAIJI KYOKAI
4-7, KIOI-CHO, CHIYODA-KU,
TOKYO 102-8567, JAPAN.

TELEX: J22975 CLASSNK
2324280 CLASNKJ
CABLE: CLASSNK TOKYO

A considerable amount of time and effort will be required to implement the above steps. This will include listing all the applicable equipment and systems installed onboard and contacting each respective manufacturer one by one in order to determine whether the particular device or system is Y2K compliant and if not, what measures should be taken.

In order to reduce this work as much as possible, the Society has conducted a survey of related manufacturers regarding the Y2K problem with the aim of providing ship owners and operators with information that can be useful to them.

This survey has consisted of gathering information on various types of assumed problems and their causes, the effect these problems could have on the ship, and measures that can be taken. Further, 211 manufacturers of machinery and equipment for shipboard use were the target of the survey which also sought to determine the pros and cons of releasing such information to concerned members of the public. As of the end of August, replies have been received from 52 manufacturers regarding 382 items. While only a part of the total number surveyed, the results thus far would seem to indicate that some problems do occur with a number of GPS receivers, engine and machinery monitoring devices, and the like. This has highlighted the need for a prompt review and examination of the Y2K compliance of all shipboard systems and devices. You are kindly invited to review the results of this survey which are available on the "Year 2000" page of the ClassNK web site (<http://www.classnk.or.jp>) as a list in the form shown in Attachment 1. Further information based on the survey results received will be updated and released on a continuing basis until the year 2000 as it becomes available.

While the surveys seek to cover as broad a scope as possible, it will not be possible to cover all equipment or devices which may be affected. Information regarding difficulties with any equipment or device and measures for addressing them are a reflection of the views of each respective manufacturer. As such, some of the information included in the responses received are not available for release to the general public. Thus, you are kindly requested to contact each respective manufacturer directly regarding further details about specific devices or information not presented in the survey results. The name, address, telephone and fax numbers of all the manufacturers listed is included in the list.

5. Introduction to Other Y2K Related Web Sites

The addresses of other web sites concerned with the Y2K problem prepared by outside organizations (administrations, concerned organizations and agencies, computer related companies, etc.) are also provided on the "Year 2000" page of the ClassNK web site for your reference (see Attachment 2).

Further information can be obtained by contacting the following persons within the Society:

Year 2000 Problem Project Team, Nippon Kaiji Kyokai

(T. Tsunoda, Y. Murakami: Material and Equipment Department)

Tel: +81-3-5226-2020 Fax: +81-3-5226-2019

email: eqd@classnk.or.jp

VOID

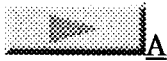
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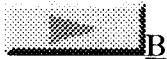
The Year 2000 and GPS Rollover Problem
Results of Manufacturer Questionnaires and Equipment Affected
(as of 31 August 1998)

Symbols : ① Model, ② Problem, ③ Cause, ④ Consequence, ⑤ Solution, ⑥ Publicity

Service Providers by Company Name



A



B

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S



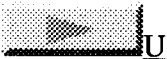
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Terasaki Electric Co., Ltd.

7-2-10 Hannancho, Abeno-ku, Osaka, Japan

TEL:+81-6-692-2245 FAX:+81-6-692-9852

Monitoring System	① WE5B, WE6, WE7, WE8, WE10, WE300, WE3, TERANET32	④-5 ⑤-9,
Generator Automatic Control System	① GAC-5 (TYPE A & B), GAC-16M ① GAC-5 (TYPE C)	④-5 ⑤-9, ②-7 ④-5 ⑤-9



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List of Year 2000 Home Page

Web Sites	
Year 2000 Facilities Guide	E
http://www.icl.co.uk/year2000/tech.html	
Welcome to the SCO Year 2000 Website	E
http://www.sco.com/year2000/	
Year 2000- Lloyds Register, Thomas Miller & Co. Ltd and is supported by the UK P&I Club, the Through Transport Club, BIMCO	E
http://www.ship2000.com/	
Year2000 General Information	E
http://www.ship2000.com/Ship2000.nsf/Y2Kinfo?OpenForm	
Service Providers Database	E
http://www.ship2000.com/Ship2000.nsf/Y2Kservices?OpenForm	
Marine Equipment Database	E
http://www.ship2000.com/Ship2000.nsf/WebMarineEquipment?OpenForm	
Halberstam Elias & Co.SOLICITORS	E
http://www.weblaw.co.uk/	
You're Not Working on the Year 2000 Date Problem Because...	E
http://www.fujitsu.co.nz/y2k_101.htm	
FUJITSU YEAR 2000 Server Product Status	E
http://www.fujitsu-computers.com/Year2000/yr2ksrv1.htm	
IBM Year 2000 Product Readiness	E
http://www.yr2k.raleigh.ibm.com/	
Year 2000 - Link to Year 2000 Web-Site of NEC Group World-Wide	E
http://www.nec.com/	
Sun's Year 2000 Operating Environment	E
http://www.sun.com/y2000/enhancements.html	
Microsoft-PressPass	E
http://www.microsoft.com/presspass/press/1998/apr98/y2000ma.htm	
Solve the Year 2000 Problem	E
http://premium.microsoft.com/msdn/library/books/advnrb5/html/ch06_35.htm	
Year2000 General Information	E
http://www.ship2000.com/Ship2000.nsf/Y2Kinfo?OpenForm	
Year 2000 Home Page(Information Technical Association of America)	E
http://www.ita.org/year2000.htm	