

December 20, 2000

G9000-SSG-017

Document Control Desk  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555

- Reference: a) Boeing Letter G-1151-RSO-92-365 dated August 31, 1992; R. S. Orr to the NRC Operations Center
- b) NRC Letter Docket No. 99901227 dated August 12, 1992; L. J. Norrholm to R. S. Orr; Subject: Response to 10 CFR 21 Inquiry

Dear Sir or Madam:

In accordance with the reference correspondence and 10 CFR 21, Boeing is sending the NRC the attached error notice(s) received from our former software suppliers. Because of unknown current addresses, the following former customers were not notified:

Reactor Controls, Inc.

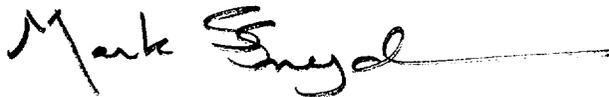
Echo Energy Consultants, Inc.

Nuclear Applications and Systems Analysis Company (Japan)

Nuclear Power Services

Error notices have been sent to our other former customers.

Very truly yours,



Mark S. Snyder  
Nuclear Administrator  
Phone: (425) 865-4785  
FAX: (425) 865-2957  
Mail Code: 7A-33  
e-mail: mark.s.snyder@boeing.com

IE20



Enclosure(s): GTSTRUDL Program Report Form 2000.12

GTSTRUDL Program Report Form 2000.14

# GTSTRUDL Program Report Form

GPRF No.: 2000.12

DATE: 6/2/00

FROM: Computer-Aided Structural Engineering Center  
Georgia Institute of Technology  
Atlanta, Georgia 30332-0355

### SEVERITY LEVEL:

- URGENT** Problem results in incorrect answers which may not be apparent or job aborts and cannot be recovered within the session or job.
- SERIOUS** Problem results in incorrect answers which are obvious or problem prevents completion of a particular user's task.
- MINOR** Problem can be worked around or problem poses high frustration factor.
- INFORMATIVE** Documentation error, program usage tip, user inconveniences.

Date Problem Confirmed June 1, 2000

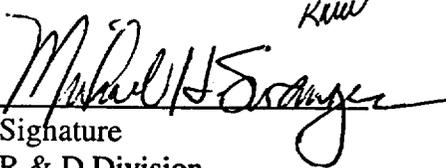
Date Notification Sent 6/2/00

Computers PC

Operating System Windows NT/95/98

Version 99.01 only

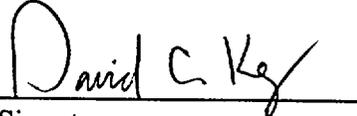
Target Release for Correction Version 25.0

*MSW*  
  
Signature  
R & D Division

Mgr. ASD  
Title

Michael H. Swanger  
Typed or Printed Name

6/5/2000  
Date of Signature

  
Signature  
Professional Services Division

Configuration Control Manager  
Title

David C. Key  
Typed or Printed Name

6/2/00  
Date of Signature

**GTSTRUDL Program Report Form**  
(Continued)

GPRF No.: 2000.12

DATE: 6/2/00

**DESCRIPTION:**

Any dynamic analysis command (PRINT DYNAMIC, ASSEMBLE FOR DYNAMICS, DYNAMIC ANALYSIS, etc.) will abort if a previous INERTIA OF JOINTS FROM LOADING command names loading conditions that contain applied member moments. The work-around for this problem is to remove applied member moments from any such loading conditions and place them in separate loading conditions. It may be necessary to redefine loading combinations, form loads, etc. in order to reflect the addition of any new loading conditions that contain the applied member moments.

**GTSTRUDL User Reference Manual Sections:**

Inertia Specification Command

Section 2.4.3.1, Volume 3, GTSTRUDL  
Reference Manual

The Member Loads Command

Section 2.1.11.4.3, Volume 1, GTSTRUDL  
Reference Manual

# GTSTRUDL Program Report Form

GPRF No.: 2000.14

DATE: 10/19/00

FROM: Computer-Aided Structural Engineering Center  
Georgia Institute of Technology  
Atlanta, Georgia 30332-0355

## SEVERITY LEVEL:

- URGENT** Problem results in incorrect answers which may not be apparent or job aborts and cannot be recovered within the session or job.
- SERIOUS** Problem results in incorrect answers which are obvious or problem prevents completion of a particular user's task.
- MINOR** Problem can be worked around or problem poses high frustration factor.
- INFORMATIVE** Documentation error, program usage tip, user inconveniences.

Date Problem Confirmed October 11, 2000

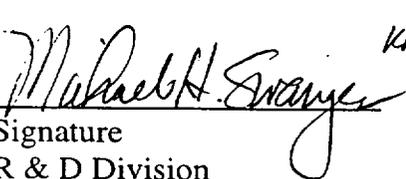
Date Notification Sent 10/19/00

Computers All

Operating System All

Version 97.01 and later

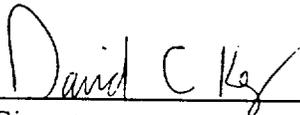
Target Release for Correction Version 26.0

  
Signature  
R & D Division

Mgr. ASD  
Title

Michael H. Swanger  
Typed or Printed Name

10/16/2000  
Date of Signature

  
Signature  
Professional Services Division

Configuration Control Manager  
Title

David C. Key  
Typed or Printed Name

10/19/00  
Date of Signature

**GTSTRUDL Program Report Form**  
(Continued)

GPRF No.: 2000.14

DATE: 10/19/00

**DESCRIPTION:**

Member/element loads applied to rigid body elements will cause any subsequent stiffness analysis to abort. This problem will occur if the rigid body element(s) are explicitly named in the member/element list of the MEMBER LOADS and ELEMENT LOADS commands. The problem will also occur – and its source much less apparent – if the EXISTING option is used in the member/element list of the MEMBER LOADS and ELEMENT LOADS commands as follows:

LOADING 1  
MEMBER LOADS  
EXISTING FORCE Y GLOBAL UNIFORM W -1.0

The EXISTING option forces the specified member loads to be applied to all members, including rigid body elements, which exist when the command is given. This will eventually cause the stiffness analysis abort.

The workaround to avoid this abort is to use an explicit member list which does not include the rigid body elements. If the EXISTING option is used, use the “EXISTING BUT list” form, where list explicitly names the rigid body elements.

**GTSTRUDL User Reference Manual Sections:**

The MEMBER LOADS Command	Section 2.1.11.4.3, Volume 1, Reference Manual
The ELEMENT LOAD Command	Section 2.3.5.4, Volume 3, Reference Manual
Joint Constraints – Rigid Bodies and Joint Ties	Section 2.6.4, Volume 3, Reference Manual