

September 30, 2005  
9704-PFS-123

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

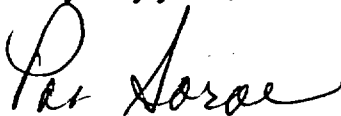
Dear Sir or Madam:

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

Reactor Controls, Inc  
Echo Energy Consultants  
Nuclear Applications and Systems Analysis Company (Japan)  
Nuclear Power Services  
GPU Nuclear Corporation  
Tenera, Inc.  
Stone & Webster Engineering  
Raytheon Engineers & Constructors  
Gilbert Associates, Inc.

Error notices have been sent to our other former customers.

Very truly yours,



Pat Soroe  
Nuclear Administrator  
(425) 865-5386  
[patricia.f.soroe@boeing.com](mailto:patricia.f.soroe@boeing.com)

Enclosures: GT STRUDL Program Report Forms 2004.05 - 2005.07

IE20



# GTSTRUDL Program Report Form

GPRF No.: 2005.05

DATE: 8/19/05

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 August 11, 2005

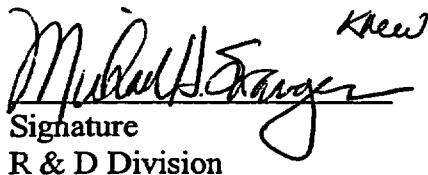
Date Notification Sent 8/19/05

Computers PC

Operating System All

Version 28

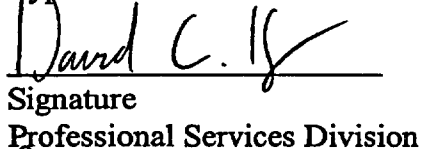
Target Release for Correction Version 28.1

*Knew*  
  
Signature  
R & D Division

Sr. RE  
Title

Michael H. Swanger  
Typed or Printed Name

8/19/05  
Date of Signature

  
Signature  
Professional Services Division

Configuration Control Manager  
Title

David C. Key  
Typed or Printed Name

8/19/05  
Date of Signature

**GTSTRUDL Program Report Form**  
(Continued)

GPRF No.: 2005.05

DATE: 8/19/05

**DESCRIPTION:**

As of Version 28, the INERTIA OF JOINTS FROM LOADS command converts member loads and 2-D and 3-D finite element loads to joint inertias. The execution of this command will abort if member/finite element loads are present in any of the loading conditions specified in the command and any member/finite element in the model has undefined member properties. The work-around is to define member/element properties for those members/finite elements for which properties are not defined.

**GTSTRUDL Reference Manual Sections**

Inertia Specification Command

Section 2.4.3.1, Volume 3

# GTSTRUDL Program Report Form

GPRF No.: 2005.06

DATE: 8/14/05

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 August 19, 2005

Date Notification Sent 8/19/05

Computers PC

Operating System All

Version All

Target Release for Correction Version 28.1

*Michael H. Swanger* <sup>KWW</sup>  
Signature  
R & D Division

Sr. RE  
Title

Michael H. Swanger  
Typed or Printed Name

8/19/05  
Date of Signature

*David C. Key*  
Signature  
Professional Services Division

Configuration Control Manager  
Title

David C. Key  
Typed or Printed Name

8/19/05  
Date of Signature

**GTSTRUDL Program Report Form**  
(Continued)

GPRF No.: 2005.06

DATE: 8/19/05

**DESCRIPTION:**

While the application of global member loads to the IPCABLE element is permitted, the FORM LOAD command will flag the presence of such loads as incompatible with the element, will issue an error message of the following type, and will not copy the member load data into the new loading condition:

```
***** STRUDL ERROR IO.      -- ERROR IN FORMING LOADING NL
      A LOAD TYPE IN LOAD 1      IS INCONSISTENT WITH TYPE OF MEMBER IPC1
      SCANNING MODE ENTERED. *****
```

The work-around is to use the MEMBER LOAD command when adding member loads applied to IPCABLE elements into an independent loading condition, regardless of how that loading condition is created: by the FORM LOAD command, by GTMenu, etc.

**GTSTRUDL Reference Manual Sections**

Independent FORM LOADING Command

Section 2.1.11.3.2, Volume  
1,GTStrudl Reference Manual

**GTSTRUDL Program Report Form**  
(Continued)

GPRF No.: 2005.07

DATE: 9/2/05

**DESCRIPTION:**

The STIFFNESS ANALYSIS command will abort in the following sequence of operations:

1. A job containing the SELF WEIGHT command and/or SELF WEIGHT loading data created by GTMenu is SAVED under a version previous to 28.
2. The SAVED job is RESTORED under Version 28 and the STIFFNESS ANALYSIS command is subsequently executed.

The most simple work-around is to delete and redefine all self-weight loadings following the RESTORE and prior to giving the STIFFNESS ANALYSIS command.

**GTSTRUDL Reference Manual Sections**

SELF WEIGHT Loading Commands

Section 2.1.11.3.1.1, Volume 1,  
GTStrudl Reference Manual