

**DEPARTMENT OF TRANSPORTATION****Research and Special Programs Administration**

[Cooperative Agreement DTRS656-00-H-0004]

**Quarterly Performance Review Meeting on The Cooperative Agreement "Better Understanding of Mechanical Damage in Pipelines"**

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Notice.

**SUMMARY:** RSPA has entered into a cooperative agreement with the Gas Technology Institute (GTI) to co-fund a two year research program to identify and characterize mechanical damage, a leading cause of reportable accidents in both gas and hazardous liquid pipelines, using the technology of magnetic flux leakage (MFL) oriented in the circumferential direction on an in-line inspection tool. RSPA, along with GTI, invite the pipeline industry, in-line inspection ("smart pig") vendors, and the general public to a quarterly performance review meeting to report on progress with this research titled "Better Understanding of Mechanical Damage in Pipelines." The meeting is open to anyone, and no registration is required. This work is being managed by GTI and performed by Battelle Memorial Institute (Battelle), along with the Southwest Research Institute (SwRI). The meeting will cover a review of the overall project plan, the status of the contract tasks, progress made during the past quarter, and projected activity for the next quarter.

**DATES:** The quarterly performance review meeting will be held on Thursday, September 27, 2001, beginning at 9 a.m. and ending around noon.

**ADDRESSES:** The quarterly review meeting will be held at the Sheraton Buckhead Hotel, 3405 Lenox Road, NE., Atlanta, GA.

**FOR FURTHER INFORMATION CONTACT:** Lloyd W. Ulrich, Agreement Officer's Technical Representative, Office of Pipeline Safety, telephone: (202) 366-4556, FAX: (202) 366-4566, e-mail: lloyd.ulrich@rspa.dot.gov. You may also contact Harvey Haines, Principal Investigator, GTI, telephone: (847) 768-0891, FAX: (847) 768-0501, e-mail: harvey.haines@gastechnology.org.

**SUPPLEMENTARY INFORMATION:****I. Background**

RSPA has entered into a Cooperative Agreement (Cooperative Agreement

DTRS656-00-H-0004) with the Gas Technology Institute (GTI) to co-fund a two-year research program to identify and characterize mechanical damage, a leading cause of reportable accidents in both gas and hazardous liquid pipelines, using the technology of magnetic flux leakage (MFL) oriented in the circumferential direction on an in-line inspection tool.

We plan to conduct public performance review meetings approximately semi-annually for the duration of this research. This meeting is the third semi-annual one to provide an update on the research to the public, pipeline operators, vendors and interested governmental parties, such as RSPA technical and regional staff and the National Transportation Safety Board. This meeting is being conducted during Code Week of the American Society of Mechanical Engineers' (ASME) B31 Pressure Piping Committee in order to allow attendance by members of the hazardous liquids pipeline industry code subcommittee (ASME B31.4/11) and the gas pipeline industry code subcommittee (ASME B31.8) who are attending Code Week. Semi-annual meetings in the future will be held in conjunction with industry meetings, such as ones with the Association of Oil Pipelines, Interstate Natural Gas Association of America, and the American Gas Association, in order to reach a broad audience. We want the pipeline industry and especially that segment of the pipeline industry involved with in-line inspection to be aware of the status of this research. The meetings allow disclosure of the results to interested parties and provide an opportunity for interested parties to ask questions concerning the research. Attendance at this meeting is open to all and does not require advance registration or advance notice to RSPA. Each of the semi-annual meetings will be announced in the **Federal Register** at least two weeks prior to the meeting.

The quarterly performance review meetings held between the semi-annual meetings described above will be held in conjunction with GTI/PRCI Technical Committee meetings.

**II. The Research**

This research continues work that DOT supported at Battelle to improve in-line inspection of mechanical damage and more closely coordinates work that GTI is supporting at Southwest Research Institute to develop critical assessment criteria based on these NDE measurements. This program extends the work conducted under the RSPA-funded contract "Detection of Mechanical Damage in Pipelines"

(Contract DTRS-56-96-C-0010)<sup>1</sup> by looking at the circumferential magnetic flux leakage field instead of the traditional axial field and extends the critical assessment criteria research to work with full scale samples that are being used for MFL measurements. The goal of the research is to evaluate and develop techniques for assessing pipeline metal loss, mechanical damage, and cracks using circumferential MFL. These techniques are expected to complement the techniques used for axial MFL systems.

The research will extend the failure assessment methodology for mechanically damaged pipes to include the influence of local cold working due to the gouging/denting process on the pipe's remaining life. The program will combine full scale tests and MFL monitoring of pipes, laboratory tests and elastic-plastic finite element analyses to develop a validated methodology for determining the remaining life of a damaged pipe. The SwRI research will complement the work at Battelle in developing criteria for characterizing mechanical damage found through in-line inspection.

**III. Agenda for the Meeting**

The following is the agenda for the meeting:

"Overview Project History and Impact of the DOT/GTI Projects for Using In-Line Inspection for Mechanical Damage"

Harvey Haines—GTI (15 min)

"Defect Manufacture and Installation"

Tom Bubenik—Battelle (30 min)

"Damage Severity Criteria Program Overview and Elastic Plastic Finite Element Analysis"

Graham Chell—SwRI (30 min)

Break

"Circumferential Magnetizer Design and Data"

Bruce Nestleroth—Battelle (30 min)

"Non-Linear Harmonics Measurement"

Al Crouch—SwRI (30 min)

"Wrap up and comments"

Lloyd Ulrich—DOT (10-15 min)

Issued in Washington, DC on July 24, 2001.

**Stacey L. Gerard,**

*Associate Administrator for Pipeline Safety.*  
[FR Doc. 01-18848 Filed 7-27-01; 8:45 am]

**BILLING CODE 4910-60-P**

<sup>1</sup> The final report on this research dated June 2000 is available on the OPS web site, <http://ops.dot.gov>.