

June 2006

NYSEARCH OBSERVES TECHNOLOGY FIRST IN PIPELINE SENSING

At its June 14th meeting in Toronto, Canada, NGA's NYSEARCH witnessed a live demonstration on location at the headquarters of one of its project contractors, Invodane Engineering. This demonstration marks a milestone in the NYSEARCH Robotics program and in the sensing arena.

In addition to a thorough technical presentation of the design specifics of this sensing achievement for the inspection of un-piggable pipelines, Invodane provided a hands-on demonstration to determine acceptance by the funders. This global sensor can perform a full circumferential inspection of the internal condition of 20" – 22" pipelines in one pass and can negotiate back-to-back 90 degree bends and, most importantly, highly-constraining plug valves. This accomplishment addresses an important need for members because of numerous miles of pipelines in High Consequence Areas (HCAs) that require inspection. Many of those pipelines contain large segments that are un-piggable and therefore the current alternatives are very costly and/or prohibitive.

Illustrated below are various members of NYSEARCH observing the global sensing module (to be integrated into the robotic platform) in the inspection position and then the overall view of the demonstration setup with 20" pipe (supplied by SoCal Gas) and plug valve (supplied by National Grid/NMPC) in place.

Funding for this project is provided by NYSEARCH, SoCal Gas, OTD, and the U.S. Department of Transportation's Office of Pipeline Safety.



Viewing the "Global Magnetic Flux Leakage (MFL) Sensor" at the recent NYSEARCH demonstration in Toronto were (l to r): Poul Laursen, President, Invodane; Roderick Lee, Invodane; Tom Picciott, National Grid; John Chrysler, Central Hudson Gas & Electric; Joe Vitelli, KeySpan; and Ed Ecock, Con Edison.



Another view of the technology observed by (l to r) Bill O'Brien, Invodane (with back to camera); Roderick Lee, Invodane; Poul Laursen, Invodane; George Ragula, PSE&G [NYSEARCH Chairman]; Joe Vitelli, KeySpan; and Joe Mallia, Rochester Gas & Electric.