September 1, 2006 - November 30, 2006

Contract # DTPH56-06-T-000007

Prepared for: U.S. DOT

Ultra-Low Frequency Pipe and Joint Imaging System

2nd Quarterly Report

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Public Page

This project started on 1 June 2006.

The Ultra-Low Frequency Pipe and Joint Imaging System is being developed and advanced based on a partnership between NYSEARCH/NGA (gas industry research consortium and user group), DOT and Harris Technologies. This program addresses developing and testing the Harris Technologies Ultra-Low Frequency Pipe and Joint Imaging System for use in the location of buried pipes and joints and is supported by industry sponsors through management by the NYSEARCH organization, cash co-funding, use of industry field sites for live field tests.

The Harris Technologies Ultra-Low Frequency Pipe and Joint Imaging System operates at narrow band low frequencies, using proprietary technology to produce resolution comparable to wideband GPR. The low frequency energy is able to penetrate soils that render conventional GPR ineffective. The Harris Technologies narrow band ferrite rod antenna approach represents a revolutionary departure from the much larger broadband antenna approach currently used in all commercial GPR.

During the Second Quarter, the project team continued and initiated several tasks as outlined below.

This report addresses project tasks:

Task #1 Identify, Evaluate and Secure Independent Consultant

- Start date: 1 June 2006
- Scheduled completion date: 28 February 2007
- Status: Ongoing

Task #2 Ferrite Rod Antenna Aperture

- Start Date: 1 June 2006
- Scheduled completion date: 30 November 2006
- Status: Completed

Task #3 Modulator/Correlator Communications Electronics

- Start date: 1 June 2006
- Scheduled completion date: 31 October 2006
- Status: Completed

Task #3 Modulator/Correlator Communications Firmware and Software

- Start Date: 1 June 2006
- Scheduled Completion Date: 30 November 2006
- Status: Completed

Task #3 PDA Communication/Interpretation Display Software

- Start Date: 1 June 2006
- Scheduled Completion Date: 31 December 2006
- Status: Ongoing

Task #4 Cart/Mechanical/Encoder

- Start Date: 1 June 2006
- Scheduled Completion Date: 28 February 2007
- Status: Ongoing

Task #5 Laboratory Testing

- Start Date: 1 June 2006
- Scheduled Completion Date: 28 February 2007
- Status: Ongoing

Task #M3 Planning and Preparation for Field Tests

- Start Date: 1 September 2006
- Scheduled Completion Date: 28 February 2007
- Status: Ongoing

Task #M5 2nd Quarterly Status Report

- Start Date: 1 September 2006
- Scheduled Completion Date: 30 November 2006
- Status: Completed