

List of Papers and Presentations

The Calibration, Proving and Validation of Ultrasonic Flow Meters, International Symposium on Fluid Flow Measurement, 2006.

Review of Differential (dP) Devices, Canadian School of Hydrocarbon Measurement, 2006.

Different Meter Tube Requirements for Orifice Plates and Ultrasonic Meters, Flomeko, 2005.

Flow Conditioners for Natural Gas Measurement, Internationals School of Hydrocarbon Measurement, 2005.

The Effects of Upstream Recesses on the Discharge Coefficient of Flange Tapped Orifice Meters, 2004 American Gas Association Operations Conference (with Dale Goodson).

Effects of Flow Conditioning on Liquid Measurement, International School of Hydrocarbon Measurement, 2004.

The Performance of Ultrasonic Meters with Wet Gas, Wet Gas Seminar, 30 September 2004.

A Powerful New Diagnostic Tool for Transit Time Ultrasonic Meters, North Sea Flow Measurement Workshop, 2004, (with W. R. Freund, Jr.).

The Transit Time Difference Ultrasonic Multipath Gas Meter – A Reassessment, North Sea Flow Measurement Workshop, 2003.

Diagnostic Ability of the Daniel Four-Path Ultrasonic Flow Meter, S E Asia Hydrocarbon Flow Measurement Workshop, March 2003.

The Influence of Speed of Sound Changes on Ultrasonic Flow Meter Calibrations, International Symposium on Fluid Flow Measurement, 2002 (with Dale Goodson & Jim Hall).

Operation of Ultrasonic Flow Meters Under Conditions Different than their Calibration, North Sea Flow Measurement Workshop, 2002 (with Dale Goodson & Jim Hall).

An Ultrasonic Meter for Stratified Wet Gas Service, North Sea Flow Measurement Workshop, 2001.

Flow Testing an Ultrasonic Meter Outside Its Performance Envelope, North Sea Flow Measurement Workshop, 2001, (with Gordon Stobie).

Installation Effects on Single- and Multi-path Ultrasonic Meters, Flomeko, June 2000.

The Performance of a Multipath Ultrasonic Meter with Wet Gas, North Sea Flow Measurement Workshop, 2000.

Qualification of a Flow Conditioning Device According to the New API 14.3 Procedure, Flomeko, June 2000 (with Dale Goodson).

Noise Reduction in Ultrasonic Gas Flow Measurement, International Symposium on Fluid Flow Measurement, 1999, (with Kevin Warner).

The Effects of Reynolds Number, Wall Roughness and Profile Asymmetry on Single- and Multi-path Ultrasonic Meters, North Sea Flow Measurement Workshop, 1999.

Ultrasonic Wet Gas Measurement Dawn Gas Metering, North Sea Flow Measurement Workshop, 1998, (with Gordon Stobie).

Practical Experience with Gas Ultrasonic Flow Meters. North Sea Flow Measurement Workshop, 1996, (with W. R. Freund, Jr.).