Hoffer Flow Controls, Inc.

An Overview
November 8th, 2018
CONFERS – GSFF
Washington, DC
www.hofferflow.com
Robert D. Carrell – President/COO
Our Vision

Hoffer Flow Controls shall be the leading provider of high performance and engineered solutions for our clients flow measurement and control needs.
Major Markets Include...

- Cryogenics
- Oil & Gas – Subsea (Ultra Deepwater)
- Military – USN, USA, USAF, USMC
- Rocket Engine Development & Testing
- Food & Pharmaceuticals
- Power Generation
Brief History

- Company was founded in 1969 by Mr. Ken Hoffer in Monmouth, New Jersey.
- With increasing sales in the late 1980's Ken began looking for a site to build his own office and manufacturing plant.
- Relocated to Elizabeth City in the northeastern corner of North Carolina in 1992.
Facilities

- 40,000 square-foot combined office and manufacturing building.
- Vertically integrated manufacturing facilities including...
  - Machine Shop
  - Fabrication Shop
  - Hydrostatic & Dye Penetrant Shop
  - Electronic Assembly & Test Shops
  - Flow Meter Calibration Shop
Hoffer Flow Controls

- Our quality system and regulatory credentials include:
  - ASME/AWS and Military welding qualifications.
  - Various legal-for-trade certifications both in the USA and in multiple foreign countries and jurisdictions.
Anatomy of a Turbine Flow Meter

- Meter Body
- Pickup Coil
- Coil Riser
- Integral Flow Straighteners
- Thru-Shaft w/Locknuts
- Deflector Cones
- Flat-Bladed Turbine Rotor
The Path to Restore-L
Every main engine on every one of the 135 space shuttle launches was tested and flight-qualified using Hoffer flow meters.
Live Fire Test of One RS-25 First Stage Engine for the SLS Using Hoffer Flow Meter – Stennis Space Center - MS
Recently Built High Pressure Meter for SLS Upper Stage Engine Testing at NASA - Stennis Undergoing Hydrostatic Pressure Qualification Testing at Hoffer. 10,000 PSIG Test Pressure.
Additional Rocket Engine Clients

- Every major rocket engine builder and private launch company in the United States plus others in Canada, Singapore, New Zealand, Germany and Australia
- USAF
- Indian Space Agency
- Korean Aerospace Research Institute
NASA’s Restore-L

Demonstration mission to prove the viability of technology suites required to rendezvous, capture and refuel a satellite in low earth orbit. Target satellite is Landsat 7.
Hoffer & Restore-L

- In the summer of 2016, NASA issued a solicitation for information on, interest in and capabilities to develop on-orbit hydrazine fuel flowmeters (NNK 16ZMS007L) which Hoffer responded to in the affirmative.
- A formal requisition was issued in late 2016 by NASA for hydrazine fuel flowmeters to be qualified for space flight for the Restore-L vehicle.
- Hoffer received the contract to develop, test and manufacture qualification, flight and ETU flowmeters under contract NNK 17MA25C in March, 2017.
Restore-L Hydrazine Refueling Flowmeter

- Non-Intrusive, RF Pickup Coil with Integral Signal Amplifier. Pulse Output.
- Primary O-ring Sealing with Secondary Seal Weld.
- Upstream Flow Tube and Flow Diffuser Assembly.
- Central Body
- Rotor Assembly
- Downstream Flow Tube and Flow Diffuser Assembly
Current Status

- Qualification testing successfully completed late summer, 2018.
- Fabrication of flight units and ETU underway.
- NASA Goddard to include more details on the flowmeter at their Restore-L 3rd Industry Day event scheduled for December 6th. See the CONFERS website under EVENTS for link to the NASA web page.
Contact Information – Hoffer Flow Controls, Inc.

Bob Carrell
President/COO
bcarrell@hofferflow.com
800-628-4584
252-331-1997

Sandee Kelly
Vice President – N. Am. Sales
skelly@hofferflow.com
800-628-4584
252-331-1997
Thank You!