

Ivan A. Svrcek

Mechanical Engineer

PROFESSIONAL HIGHLIGHTS

- 12 cruises over the past 5 years as a member of technical survey party conducting geotechnical operations
- Extensive experience developing innovative tools and acquisition systems. 17 New or modified designs for 17 systems over the past 5 years.
- Planned the technical outfitting of a newly acquired TDI-Brooks vessel and designed the ship specific acquisition systems.
- 2 years' experience in system testing and analysis for the U.S. Navy

EDUCATION

Texas A&M University, College Station, TX, Bachelor of Science, Mechanical Engineering, 2009

PROFESSIONAL EXPERIENCE

TDI-Brooks International, College Station, TX, Mechanical Engineer, 2011 - Present

- Designed a remote messenger release for gCPT operations
- Designed a next generation levelwind for coring winches
- Designed and installed a moving platform extension for the RV Proteus deployment track
- Designed a side deployment pole mount for survey gear on the RV GeoExplorer
- Created CPT Stinger Sampler deep core sampling concept then created by Lowell Babb
- Created an automated tbar system for on-deck box core testing
- Designed a shallow water hydraulic system and remote messenger release for shallow water CPT Stinger operation.
- Developed a release mechanism for 3" piston coring which eliminates trigger lines
- Planned outfitting of the R/V Proteus and designed survey gear for the vessel.
 - Analysis and retro-fit of the primary a-frame
 - Primary coring winch specification and overall design
 - Design of custom midships deployment crane and integral deck brace
 - Side mount transducer pole design
 - Working deck layout
- Designed a modular self-contained deployment track for piston core, box core and heat flow operations
- Designed custom 10,000lbf SWL a-frame for deployment and retrieval of exploration equipment
- Analyzed a piston core trigger mechanism for use with stubby JPC tool and redesigned for safe use in that capacity
- Improved safety, turnaround time and depth capability of TDI-Brooks' CPT stinger tool by automating reset functions and redesigning problem areas
- Implemented a JPC track extension for the RV Brooks McCall to allow 135ft CPT stinger pushes
- Planned re-fitting of RV Gyre working deck operations and overall layout
- Created launch system for deploying the Seabed CPT
- Developed a deployment and tool management system that allows rigging and deployment of multiple tools types without port call aboard vessels without a crane



Naval Air Warfare Center Weapons Division – Life Cycle and Environmental Engineering Branch,
China Lake, CA, Mechanical Engineer, 2009 - 2011

- Performed air qualification vibration tests for the LOGIR missile and designed all fixtures for tests
- Designed a test fixture to measure guidance canard movements during rate table and vibration testing of the LOGIR missile
- Conducted modal analysis of the all up LOGIR missile and various components
- Conducted shock testing of LOGIR components to verify assembly before test launches
- Analyzed high speed video for bullet impact testing of emergency crew oxygen bottles and designed test fixtures to capture fragments without damage
- Wrote shock test procedures, designed equipment, machined fixtures and performed tests of the SPIKE electronic safe arm device
- Created test equipment for the SPIKE electronic safe arm device to simulate launch acceleration in a centrifuge and tested the ESAD
- Consulted Millenniata Inc. on accelerated life cycle testing of their “M-Disc”, produced the light exposure stands and performed the revised test

Brazos Valley Driveline Inc, Bryan, TX, Shop Helper, 2008 - 2009

- Performed general machine shop maintenance, cleaning, and tear down / reassembly of used machines
- Installed shop improvements such as air plumbing, water lines, etc...
- Occasionally loaded machining centers or performed conventional machining operations

FIELD EXPERIENCE

Deckman, Geotechnical Investigation, Benthic Geotech Pty LTD, Esso Exploration and Production Guyana Limited, Atlantic Ocean, SABLE, 26 August – 16 September 2018

Lab Tech, Environmental Baseline Survey, Amec Foster Wheeler (AFW), BHP Billiton Petróleo Operaciones De México, Gulf of Mexico, Laguna Azul, 07 July – 10 July 2017

Lab Tech, Geotechnical Survey, Anadarko Petroleum Corporation (Anadarko), Caribbean Sea, R/V Proteus, 12 June – 14 June 2017

Tech, Geotechnical Survey, ENSCO, Gulf of Mexico, R/V Brooks McCall, 28 September – 29 September 2016

Party Chief, DOF Subsea, Port of Brownsville, Keppel Amfels Barge, 24 March 2016

CPT Technician, DOF subsea, Port of Brownsville, R/V Proteus, 05 March – 06 March 2016

Deckman, Geotechnical Survey, G3 Óleo e Gás Ltda. (G3OG), Atlantic Ocean, R/V Gyre, 20 January 2016 – 28 January 2016

Mechanical Engineer, Geotechnical Survey, Anadarko Petroleum Corporation, Gulf of Mexico, R/V Brooks McCall, 14 February – 20 February 2015

Senior Expert, Sea Trial, Gulf of Mexico, R/V Proteus, 07 June – 09 June 2014

Deckman, Geotechnical Survey, Conoco Phillips, Gulf of Mexico, R/V Brooks McCall, 04 December 2013



CPT Technician, Geotechnical Survey, Shell Offshore Inc., Gulf of Mexico, R/V Brooks McCall, 08 September – 12 October 2013 (Leg 1) & 26 November – 04 December 2013 (Leg 2)

Mechanical Engineer, Geotechnical Survey, Hess Corporation, Gulf of Mexico, R/V Brooks McCall, 12 December – 28 December 2012

Deckman, Geotechnical Survey, Indian Ocean, Anadarko Petroleum Corporation, OSV RylanT, 15 November – 20 November 2012

Deckman, Geotechnical Survey, ExxonMobil Development Company, Gulf of Mexico, R/V Brooks McCall, 22 February – 31 March 2012

Deckman, Geotechnical Survey, ExxonMobil Development Company, Gulf of Mexico, R/V Brooks McCall, 22 February – 31 March 2012

Deckman, Geotechnical Survey, BP America Production Company, Gulf of Mexico, R/V Brooks McCall, 04 November – 18 November 2011

PROFESSIONAL TRAINING & CERTIFICATIONS

- Transportation Worker Identification Credentials (TWIC)
- Basic Offshore Survival and Emergency Training – Falck Alford
- Rigging Gear Inspector Trainor – Texas A&M Engineering Extension Service

REPORTS

Svrcek, Ivan, 2009. Accelerated Life Cycle Comparison of Millenniata Archival DVD, Naval Air Warfare Center Weapons Division - Life Cycle and Environmental Engineering Branch