

Ivan A. Svrcek
Mechanical Engineer
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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

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