

CURRICULUM VITAE

Timothy V. Kane

Sr. Engineering Assistant II

Geology & Geophysics Department

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EDUCATION:

Associate Degree in Applied Science of Electronics Technology

- Pascal Instrument Center New Mexico: Guralp 3T seismometer repair
- Guralp factory, England: Guralp seismometer repair. These are the most widely used seismometers in WHOI seismograph instruments

PROFESSIONAL EXPERIENCE:

Currently working as a Sr. Engineering Assistant I in the OBS (Ocean Bottom Seismograph) group in G&G.

04/24/2018 Sr. Engineering Assistant II – Promotion

11/7/2011- Sr. Engineering Assistant I – Promotion

3/31/2009 - Engineering Assistant III - Promotion

12/1/2008 - Engineering Assistant II - Hire date

PROFESSIONAL ACTIVITIES:

- Deploy and recover both short period and broadband ocean bottom seismographs at sea.
- Build, test, troubleshoot and maintain the electronic and mechanical assemblies used in these instruments, and all manner of technician support.
- Extensive use of Arduino Mega 2560 series and programming in the Arduino Integrated Development Environment using C programming.
- Design of test fixtures to support scientific instrumentation.
- Test, troubleshoot, and repair Guralp 3T seismometers and Geospace geophones.
- Proficient in OrCad schematic capture. Proficient in use of 3D mechanical design software (RS Mechanical and Cura) for use in 3D printing.
- Casual work with OOI and the REMUS group building, testing, and wiring.

- Presentation to the Board of Trustees in 2017. Highlighted technical challenges and successes of the WHOI work done in Yellowstone Lake in 2017.

OUTSIDE WHOI PROFESSIONAL ACTIVITIES:

Smiths Medical North America – Rockland, MA Sept. 2008–Dec. 2008

Contract Engineering Services

- Smiths Medical R&D Critical Care, Thermal Management group.

Haemonetics Corporation, Braintree, MA 1990 – 2008

Electrical Engineer ~ Surgical R&D 2003 – 2008

- Electrical Engineer in an R&D new products development group. Multiple blood apheresis projects.

Associate Engineer ~ Surgical R&D 1998 – 2003

- Design test fixtures, schematic capture. Testing of experimental devices in surgical theater. Extensive blood lab experience at the Naval Blood Research Lab in Boston

Technical Specialist ~ Blood Bank R&D 1990 – 1998

- Component level testing and troubleshooting of prototype devices.

Honeywell Information Systems 1979-1990

Associate Engineer

- Environmental & Safety Engineering - Radiated & conducted emissions testing of computers and peripherals to gain FCC certification.

Test Technician-A

- Component level troubleshooting of high speed disk controllers and peripherals for Honeywell's Level 6 mid-size computers. Held security clearance to work on General Purpose Interface boards for military use at Kennedy Space Center.

PROFESSIONAL AFFILIATIONS:

- Member of G&G Annual Review Committee 2015 and 2017
- Member of Graded Marine Personnel Committee 2014-2015

RESEARCH INTERESTS:

Providing electrical and mechanical engineering support for scientific experiments both at sea and on land.

CRUISE PARTICIPATION:

- 1) 2017 Aug: Yellowstone Lake, Yellowstone National Park. Deploy 10 OBS.
- 2) 2016 Aug: Yellowstone Lake, Yellowstone National Park. Recover 2 OBS.
- 3) 2016 Jul: Yellowstone Lake, Yellowstone National Park. Technical lead, deployment of 3 short period OBS, recover 1.
- 4) 2016 Nov – Dec: R/V Marcus Langseth; Piraeus, Greece to Heraklion, Greece. Deployment and recovery of 30 short period OBS.
- 5) 2015 Dec 29 – Feb 28, 2016: R/V Langseth (Columbia University)
- 6) 2015 Aug: R/V Oceanus; Newport, OR to Newport. Recover 24 OBS.
- 7) 2015 Apr - May: USCGC Oak; San Juan, PR to Charleston, SC. Deployment of 6 OBS.
- 8) 2015 Apr: R/V Endeavor; N Kingstown, RI to N Kingstown, RI. Recovery of 30 OBS.
- 9) 2014 Jul: R/V Oceanus; Newport, OR to Newport. Deployment of 24 OBS.
- 10) 2014 May: R/V Oceanus; Newport, OR to Newport. Recovery of 21 OBS.
- 11) 2014 Apr: R/V Endeavor; N Kingstown, RI to Narragansett, RI. Deployment of 30 OBS.
- 12) 2013 Sep: R/V Oceanus; Newport, OR to Newport. Recovery of 30 OBS.
- 13) 2013 May - Jun: R/V Oceanus; Newport, OR to Newport. Recovery of 23 OBS.
- 14) 2013 Jul - Aug: R/V Oceanus; Newport, OR to Newport, OR. Deployment of 23 OBS.
- 15) 2013 Dec: R/V Connecticut; Woods Hole to Woods Hole. Recovery of 12 and redeployment of 5 OBS.
- 16) 2013 Sep: R/V Tioga WHOI to WHOI. Recover 4 short period OBS instruments.

- 17) 2012 Jan – Feb: R/V Thompson (WU) Guam to Guam. Technical Lead, deploy 28 short period OBS instruments, 15 instruments were moored/tethered.
- 18) 2012 Nov – Dec: R/V Connecticut (UCONN) WHOI to WHOI. Technical Lead, recover 12 and deploy an additional 5 short period OBS instruments.
- 19) 2012 Sep - Oct: R/V Melville; San Diego to San Diego. Deployment of 30 OBS.
- 20) 2012 Aug - Sep: R/V Oceanus; Newport, OR to Newport. Deployment of 25 OBS.
- 21) 2012 May: R/V Oceanus; Newport to Newport. Recovery of 25 OBS.
- 22) 2011 Nov: R/V Wecoma; Newport to Newport. Deployment of 25 OBS.
- 23) 2011 Jul – Aug: R/V Kilo Moana (UHMC) Oahu Hawaii to Oahu Hawaii. Recover 12 short period OBS instruments.
- 24) 2011 Jul: Norsemen II, Kodiak Alaska to Kodiak Alaska. Technical lead, deployment of 12 short period OBS
- 25) 2011 Jun – Jul: R/V Wecoma (OSU). Newport to Newport. Recover 10 broadband OBS instruments.
- 26) 2011 Jun: R/V Wecoma; Newport to Newport. Recovery of 10 OBS.
- 27) 2010 Nov – Dec: R/V Kilo Moana (UHMC), Oahu, Hawaii to Oahu, Hawaii. Recover 30 broadband OBS instruments.
- 28) 2010 Sep: R/V Kilo Moana (UHMC) Technical Lead. Oahu, Hawaii to Oahu, Hawaii. Deploy 12 short period OBS instruments.
- 29) 2009 Oct – Nov: R/V Roger Revelle; Tonga to Fiji. Deploy 31 OBS.
- 30) 2009 Jan – Mar: R/V Marcus Langseth; Fiji to Tonga. Deployment and recovery of 60 short period OBS