

BRUCE HOWE FIELD WORK

47 cruises. 547 days spent in the field, either at sea or on land supporting an experiment. Chief scientist on 25 occasions. Use of DSV *SeaCliff*, ROV-ATV, ROV-*Jason-2*, ROV-*Lu'ukai* and R/P *Flip*; cable laying using USNS *Albert J. Myer* and M/V *Independence* for ATOC source installations.

Acronyms

ACO	ALOHA Cabled Observatory
AMM	ALOHA-MARS Mooring
ASG	Acoustic Seaglider
ATOC	Acoustic Thermometry of Ocean Climate
HWCP	Hadal Water Column Profiler
MB	Monterey Bay
MST	Moving Ship Tomography
NPAL	North Pacific Laboratory
PLUS	Persistent Littoral Undersea Surveillance
RTE	Reciprocal Transmission Experiment

	Project	Task/ Location	Date/ Duration	Vessel/ Role
47	HWCP	Hadal Water Column Profiler Testing	December 2021 2 days	<i>Kilo Moana</i> Scientist
46	ACO	ACO Maintenance	May-June 2021 5 days	<i>Kilo Moana, Lu'ukai</i> Chief Scientist
45	ACO	ACO Maintenance Kauai Cable	June 2019 8 days	<i>Kilo Moana, Lu'ukai</i> Chief Scientist
44	RAP	RAP Tomography	October 2018 5 days	<i>Kilo Moana, Lu'ukai</i> Chief Scientist
43	ACO RAP	ACO Maintenance RAP Tomography	June 2018 5 days	<i>Kilo Moana, Lu'ukai</i> Chief Scientist
42	ACO RAP	ACO Maintenance RAP Tomography	September 2017 6 days	<i>Kilo Moana, Lu'ukai</i> Chief Scientist
41	ACO	ACO Maintenance	September 2015 5 days	<i>Kilo Moana, Lu'ukai</i> Chief Scientist
40	ACO	ACO Maintenance	November 2014 5 days	<i>Thompson, Jason-2</i> Chief Scientist
39	ACO	ACO Installation	May-June 2011 18 days	<i>Thompson, Jason-2</i> Chief Scientist
38	AMM/ACO	Deploy ACO node, moorings	October 2008	<i>Thompson, Jason-2</i>

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		ALOHA Station, Oahu	14 days	Scientist
37	AMM	ALOHA/MARS mooring deployment	April 2008	<i>Thompson</i>
		Seahurst, Puget Sound	3 days	Chief Scientist
36	ASG2	Acoustic Seagliders, PLUSNet07	September 2007	<i>Alomar</i> , shore
		Dabob Bay, Puget Sound	24 days	Chief Scientist
35	AMM	ALOHA/MARS mooring deployment	June 2007	<i>Miller</i>
		Seahurst, Puget Sound	1 day	Scientist
34	ASG	Kauai Acoustic SeaGlider	August 2006	<i>Napoli Explorer</i>
		Kauai	2 days	Scientist
33	ASG	MB06 Acoustic SeaGlider	August 2006	<i>John Martin Montague</i> , shore
		MBARI/Monterey	16 days	Scientist
32	ASG	LWAD 06-1 Acoustic SeaGlider	July 2006	<i>Koyo Maru</i>
		Philippine Sea	14 days	Scientist
31	NPAL	LOAPEX	September 2004	<i>Melville</i>
		North Pacific	30 day	Scientist
30	ALOHA	Hawaii Ocean Timeseries (HOT)	March 2004	<i>Kilo Moana</i>
		Oahu	4 days	Scientist
29	ATOC	Bathymetry Survey	October 1999	<i>Franklin</i>
		Cocos Island	25 days	Scientist
28	NPAL	Environmental data	July 1999	<i>Melville</i>
		Kauai to California	15 days	Scientist
27	NPAL	Environmental data	August 1998	<i>Moana Wave</i>
		Kauai to California	15 days	Chief Scientist
26	NPAL	Billboard Array Installation	July 1998	<i>Melville</i>
		California	12 days	Scientist
25	ATOC	Source Installation - 3	July 1997	<i>Cory Chouest</i>
		Kauai	5 days	Chief Scientist
24	ATOC	Alternate Source Test	July 1996	<i>Independence</i>
		California	14 days	Chief Scientist
23	ATOC	Source Installation	November 1995	<i>Independence</i>
		California	10 days	Chief Scientist
22	ATOC	Shore Cable Installation	October 1995	<i>McGaw</i>
		California	2 days	Chief Scientist
21	ATOC	Source Site Survey	September 1995	<i>Cory Choust</i>
		California	5 days	Chief Scientist
20	ATOC	Source Installation - 2	March 1996	<i>Ka'imikai-o-Kanaloa</i>
		Kauai	10 days	Chief Scientist
19	ATOC	Acoustic Engineering Test	November 1994	<i>FLIP</i>
		California	20 days	Chief Scientist
18	ATOC	Source Installation - 1	March 1994	<i>Thompson</i>
		Kauai	7 days	Chief Scientist
17	ATOC	Cable Laying	January 1994	<i>Myer</i>
		California	4 days	Chief Scientist
16	ATOC	Cable Laying	October 1993	<i>Myer</i>
		Kauai	4 days	Chief Scientist
15	ATOC	Bathymetry Survey	August 1993	<i>McGaw</i>

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14	ATOC	California Bathymetry Survey	8 days June 1993	Project Representative <i>McGaw</i>
13	ATOC	California Bathymetry Survey	5 days March 1993	Project Representative <i>Naima</i>
12	ATE90	Kauai Shore Station Monitoring	5 days July 1990	Project Representative shore
11	MST	Bermuda Main Cruise	7 days June - July 1991	Scientist <i>Endeavor</i>
10	AMODE	Bermuda/Puerto Rico Mooring Deployment	51 days March 1991	Chief Scientist <i>Oceanus</i>
9	MST/GSP	Bermuda/Puerto Rico Engineering Test	26 days August 1989	Scientist <i>Endeavor</i>
8	MST/GSP	Greenland Sea Engineering Test	14 days September 1988	Chief Scientist <i>Knorr</i>
7	MST	Greenland Sea Engineering Test	28 days May 1988	Co-Chief Scientist <i>Melville</i>
6	RTE86	California Mooring Recovery	3 days March 1987	Scientist <i>Surveyor</i>
5	RTE86	North Pacific Mooring Recovery	14 days November 1986	Chief Scientist <i>Surveyor</i>
4	RTE86	North Pacific Mooring Deployment	14 days May 1986	Scientist <i>New Horizon</i>
3	RTE83	North Pacific Mooring Recovery	27 days October 1983	Scientist <i>Oceanus</i>
2	RTE83	Sargasso Sea Mooring Deployment	10 days August 1983	Student <i>Oceanus</i>
1	RTE82	Sargasso Sea Mooring Recovery	10 days December 1982	Student <i>Oceanus</i>