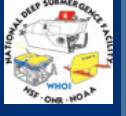
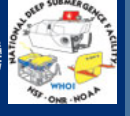




# Scheduling Agenda



- Schedule Process/ Development
- 2017-2019 Vehicle Statistics
- 2017 Vehicle Map
- Summary: *Looking Forward!*



# Scheduling Process

UNOLS search for STR's with vehicle requests



Upload funded, pending and submitted STR's into draft schedule



After ship schedules are made, then "funded and pending" vehicle requests get matched to the scheduled vessels in that vicinity



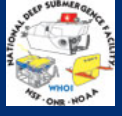
Eventually only the funded work gets scheduled



If there's too much funded work, the funding agencies decide which work gets done now and what gets scheduled the following year



# Ship Time Requests "STR"



- Submit Early
- Accuracy
  - Start date window
  - Time Estimates
  - Coordinates
- Update

[Duplicate Request](#)
[Schedule Request](#)

 North Pond 2016 - 2017 - [Atlantis](#)

## Project Information

[View STR](#)

**Project Title:** Collaborative Research: Completing North Pond Borehole Experiments to Elucidate the Hydrology of Young, Slow-Spread Crust

**Project Status:** Submitted

**Principal Investigator:** [Charles G. Wheat, UAF\\_SFOS](#)

**Project Institution:** [Ole Miss](#)

**Project ID:** 104738

**Version #:** 2

**Date Submitted:** 2/10/2015 12:08:00 AM

**Created By:** [Charles G. Wheat](#)

**Date Last Modified:** 3/31/2016 12:35:00 PM

**URI Serial #:** None

**Funding Agencies:** NSF/OCE/MGG - [1536623](#) - Funded

**Summary of Field Work:** We propose to study a ridge flank hydrothermal site on slow spreading crust that has been the focus of multi-national, interdisciplinary, and multi-decadal effort to study ridge flank hydrothermal processes - North Pond, a northeast-trending, 8-km-wide by 15-km-long sediment pond located on the western flank of the Mid-Atlantic Ridge (MAR) at 22°45'N and 46°05'W. We request 13 days on site with the ROV Jason II in 2016 (or 2017) to accomplish the operations listed in Table 3 of the proposal in eight dives, each lasting about 20-24 hours with a 12-hour turnaround to account for crew logistics, "basket" changes, and line rigging. We have included 1.5 days for weather contingencies and 1 day for mechanical issues. Mechanical issues often arise due to the depth at which we will work (4480 m), which is deeper than normal operations.

**Summary of Facility Requirements:** Ocean going ship and the ROV Jason II

**Summary of other requirements and comments:** [ROV Jason II](#)

## Ship Request Identification

**Type of Request:** Primary Ship Use

**Request Status:** Submitted

**Request ID:** 1007575

**Created By:** [Charles G. Wheat](#)

**Date Last Modified:** 3/31/2016 12:35:00 PM

**Date Submitted:** 2/10/2015 12:08:00 AM

## Requested Ship, Operating Days and Dates

**YEAR:** 2017

**SHIP/FACILITY:** [Atlantis](#)

**OPTIMUM START DATE:** 3/1/2017

**Dates to Avoid:** not sure but probable hurricane season

**Earliest Start Date:** 3/1/2017

**Multi-Ship Op:** No

**Latest Start Date:** 8/1/2017

**Other Ship(s):** .

Operating Days Needed:	Science Days	Mob Days	De-Mob Days	Estimated Transit Days	Total Days
	13	3	1	10	27
<b>Repeating Cruise?</b> (within same year) No	<b>Interval:</b>			<b># of Cruises:</b>	

**Description of Repeating cruise requirements:** .

**Justification/Explanation for ship choice, dates,** We need to use Jason II to recover downhole packages, thus we need an ocean going ship. **conflicts, number of days & multi-ship operations:**

## Work Area for Cruise

**Short Description of Op Area for use in schedules:** North Pond MAR

**Description of Op Area:** western flank of the Mid Atlantic Ridge

**Op Area Size/Dia.:** 10

	Lat/Long	Marsden Grid	Navy Op Area
<b>Beginning</b>	22° N / 46° W <a href="#">map</a>	77 <a href="#">map</a>	NA10 <a href="#">map</a>
<b>Ending</b>	22° N / 46° W <a href="#">map</a>	77 <a href="#">map</a>	NA10 <a href="#">map</a>
	<a href="#">Show Degrees Minutes</a>		

## Foreign Clearance and Permitting Requirements

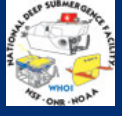
**Foreign Clearance Required?** No

**Coastal States:**

[Questions about Foreign Clearances?](#)



# Schedules: Drafts vs. Final



Dep	Arr	Start Port/End Port	PI/Purpose/Project #	Days/Agency/Status
07 Jan	13 Feb	<a href="#">Isla de Pascua/Iquique</a>	Cheadle, M/Pito Deep Gabbros/1459462 /JASON ENG DIVE/	39/NSF-OCE-MGG/F 1/NSF-OCE-IPS/F
01 Feb	16 Feb	<a href="#">Manzanillo/Manzanillo</a>	Sievert, S/in situ rates/1559198	20/NSF-OCE-BIO/F
18 Feb	27 Feb	<a href="#">Iquique/Iquique</a>	McGuire, J/Chile Geodesy/1459095 /RV ATLANTIS/	14/NSF-OCE-MGG/F 0/OTHER/P
01 Mar	14 Mar	<a href="#">Seward/Seward</a>	W Kelley, A/Resilience to Change/1635707	16/NSF-OCE-BIO/D
01 Mar	02 Mar	<a href="#">Woods Hole/Woods Hole</a>	W Lloyd, K/Methanogens/NNH15ZDA001N-EXO	2/NASA/W
01 May	04 May	<a href="#">Gulfport/Gulfport</a>	Di Iorio, D/Vertical upwelling/GOMRI2015-V-570	6/GOMRI/F
15 May	19 May	<a href="#">Honolulu/Honolulu</a>	Howe, B/ALOHA:RAP Tomography/	5/NAVY-ONR/F
01 Jun	07 Jun	<a href="#">Seattle/Seattle</a>	W Rogers, K/Under Pressure/1636112	9/NSF-OCE-BIO/D
01 Jul	12 Jul	<a href="#">Astoria/Astoria</a>	Nooner, S/Axial Geodesy 2013/1356216 W Butterfield, D/NeMO Time Series/ W Jackson, D/Temperature Fluc./1635621	10/NSF-OCE-MGG/F 6/NOAA/F 1/NSF-OCE-MGG/D
01 Jul	02 Jul	<a href="#">Gulfport/Gulfport</a>	Di Iorio, D/Vertical upwelling/GOMRI2015-V-570	4/GOMRI/F
01 Jul	01 Jul	<a href="#">Seattle/Seattle</a>	Chadwick, W/Enhance OOI at Axial/1634150	1/NSF-OCE-MGG/F
01 Jul	13 Jul	<a href="#">Victoria Harbor/Victoria Harbor</a>	Kulin, I/ONC 2017/	15/OTHER/F
03 Jul	06 Aug	<a href="#">Seattle/Seattle</a>	Kelley, D/OOI-Cabled Array/ /RV THOMPSON/	40/NSF-OOI-OOI/T 0/OTHER/P
07 Jul	10 Aug	<a href="#">Seattle/Seattle</a>	Kelley, D/OOI-Cabled Array/	40/NSF-OOI-OOI/T
15 Jul	03 Aug	<a href="#">St. George's/St. George's</a>	Lang, S/Lost City 2014/1536702	26/NSF-OCE-BIO/F
15 Jul	10 Aug	<a href="#">Apra Harbor/Apra Harbor</a>	W Moyer, C/Lithotrophic Drivers/1639042	31/NSF-OCE/D
01 Aug	08 Aug	<a href="#">Newport/Newport</a>	Wilcock, W/Oregon Profile ASCPR/1558477 Wilcock, W/Flipping Tilt/1634103 //	9/NSF-OCE-MGG/F 1/NSF-OCE-OTIC/F 0/OTHER/P
01 Aug	13 Aug	<a href="#">Newport/Newport</a>	W Solomon, E/Hydrate Ridge Flow/1634131	16/NSF-OCE-MGG/W
15 Aug	10 Sep	<a href="#">San Juan/St. George's</a>	Wheat, C/North Pond 2016/1536623 Steward, G/Viruses in Basement/1636402 /RV ATLANTIS/	28/NSF-OCE-MGG/F 3/NSF-OCE-BIO/F 0/OTHER/P
28 Aug	08 Sep	<a href="#">Victoria Harbor/Victoria Harbor</a>	Kulin, I/ONC 2017/	14/OTHER/P
05 Sep	24 Sep	<a href="#">Auckland/Auckland</a>	Humphris, S/Brothers Volcano/1558356 /USCG NB PALMER?/	26/NSF-OCE-MGG/NonOp 0/OTHER/NonOp

Agency	Funded	Pending	Total
GOMRI	10	0	10
NAVY	5	0	5
NOAA	6	0	6
NSF	152	0	152
NSF-OOI	0	80	80
OTHER	15	14	29
<b>Total</b>	<b>188</b>	<b>94</b>	<b>282</b>

Jason 2017 “Draft”  
(May 2016)

- 25 Requests
- F, P, TBS, W, Declined
- Dates requested only
- Ships/ Ports not assigned



# Schedules: Drafts vs. Final



Dep	Arr	Start Port/End Port	PI/Purpose/Project #	Days/Agency/Status
15 Jan	21 Feb	Isla de Pascua/Rada de Arica	Cheadle, M/Pito Deep Gabbros/1459462 /ATL JASON ENG DIVE/	42/NSF-OCE-MGG/F 1/NSF-OCE-IPS/F
26 Feb	09 Mar	Rada de Arica/Rada de Arica	McGuire, J/Chile Geodesy/1459095 /RV ATLANTIS/	16/NSF-OCE-MGG/F 0/OTHER/P
12 Mar	02 Jun	Rada de Arica/Woods Hole	Maintenance/Van Re-Fit/	84/OTHER/NonOp
13 Jul	23 Jul	Newport/Newport	Nooner, S/Axial Geodesy 2013/1356216 Heintz, M/Jason Eng Dive/ Butterfield, D/NeMO Time Series/ Chadwick, W/RV REVELLE & Sentry/	14/NSF-OCE-MGG/F 1/NSF-OCE-IPS/P 1/NOAA/F 0/OTHER/P
27 Jul	27 Aug	Newport/Newport	Kelley, D/OOI-Cabled Array/ Chadwick, W/Enhance OOI at Axial/1634150 Wilcock, W/Flipping Tilt/1634103 /RV REVELLE/	35/NSF-OOI-OOI/T 1/NSF-OCE-MGG/F 0/NSF-OCE-OTIC/F 0/OTHER/P
01 Sep	07 Sep	Newport/Newport	Wilcock, W/Oregon Profile ASCPR/1558477 /RV REVELLE/	10/NSF-OCE-MGG/F 0/OTHER/P
02 Oct	01 Nov	Woods Hole/Bridgetown	Wheat, C/North Pond 2016/1536623 Steward, G/Viruses in Basement/1636402 /RV ATLANTIS/	30/NSF-OCE-MGG/F 3/NSF-OCE-BIO/F 0/OTHER/P
26 Dec	14 Jan	Auckland/Auckland	Humphris, S/Brothers Volcano/1558356 /Engineering Dive 1/ /RV THOMPSON/	8/NSF-OCE-MGG/F 1/NSF-OCE-IPS/F 0/OTHER/P

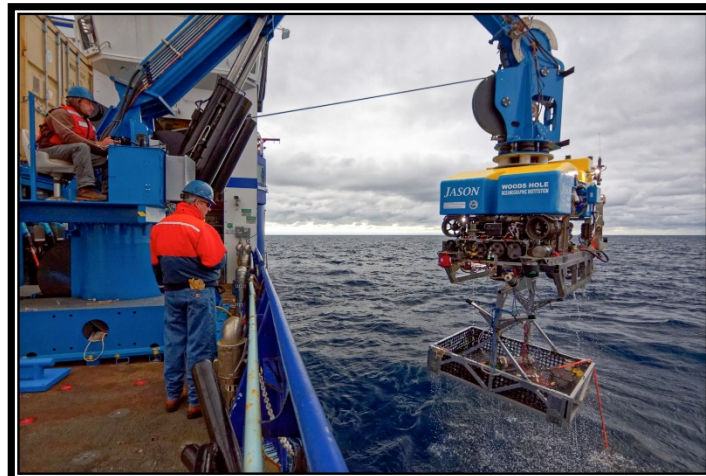
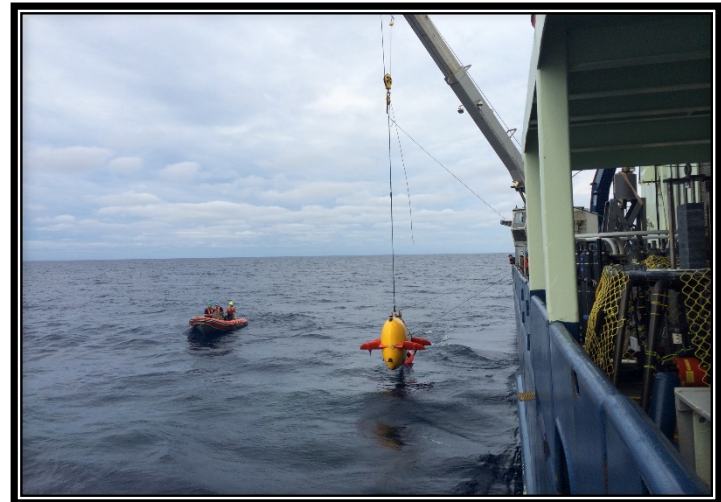
Agency	Funded	Pending	Total
NOAA	1	0	1
NSF	126	1	127
NSF-OOI	0	35	35
OTHER	0	0	0
<b>Total</b>	<b>127</b>	<b>36</b>	<b>163</b>

- Jason 2017 “Secure”  
(Sept. 2016)
- 13 scheduled
- Funded
- Dates are determined
- Ships/ports assigned





# *And now STATS...*





# Deep Submergence Vehicle Scheduling *Alvin* 2017 - 2019



ALVIN	2017	2018	2019
Funded	72	69	0
Pending	12	88	29
To be submitted	0	25	0
Total Requests	84 (87 actual)	182	29
Year to Year	51% Decrease	216% Increase	Too early to say...
Agencies	NSF & Navy	NSF & Other (Nor)	NSF
Take away...	~11 mo. gap between 2017-18	26 days are Jason OR Alvin	20 days are Jason OR Alvin



# Deep Submergence Vehicle Scheduling Jason 2017 - 2019

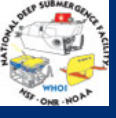


JASON	2017	2018	2019
Funded	158	30	17
Pending	15	191	110
To be Submitted	40	3	0
Total Requests	213 (163 actual)	224	127
Year to Year	148% Increase	105% Increase	Too early to say...
Agencies	NSF & NOAA	NSF, Navy, NASA, NOAA & Other (ONC)	NSF, Navy & NOAA
Take away...	Kulin's/ ONC 14 days- De-Funded	26 days are Jason OR Alvin	20 days are Jason OR Alvin





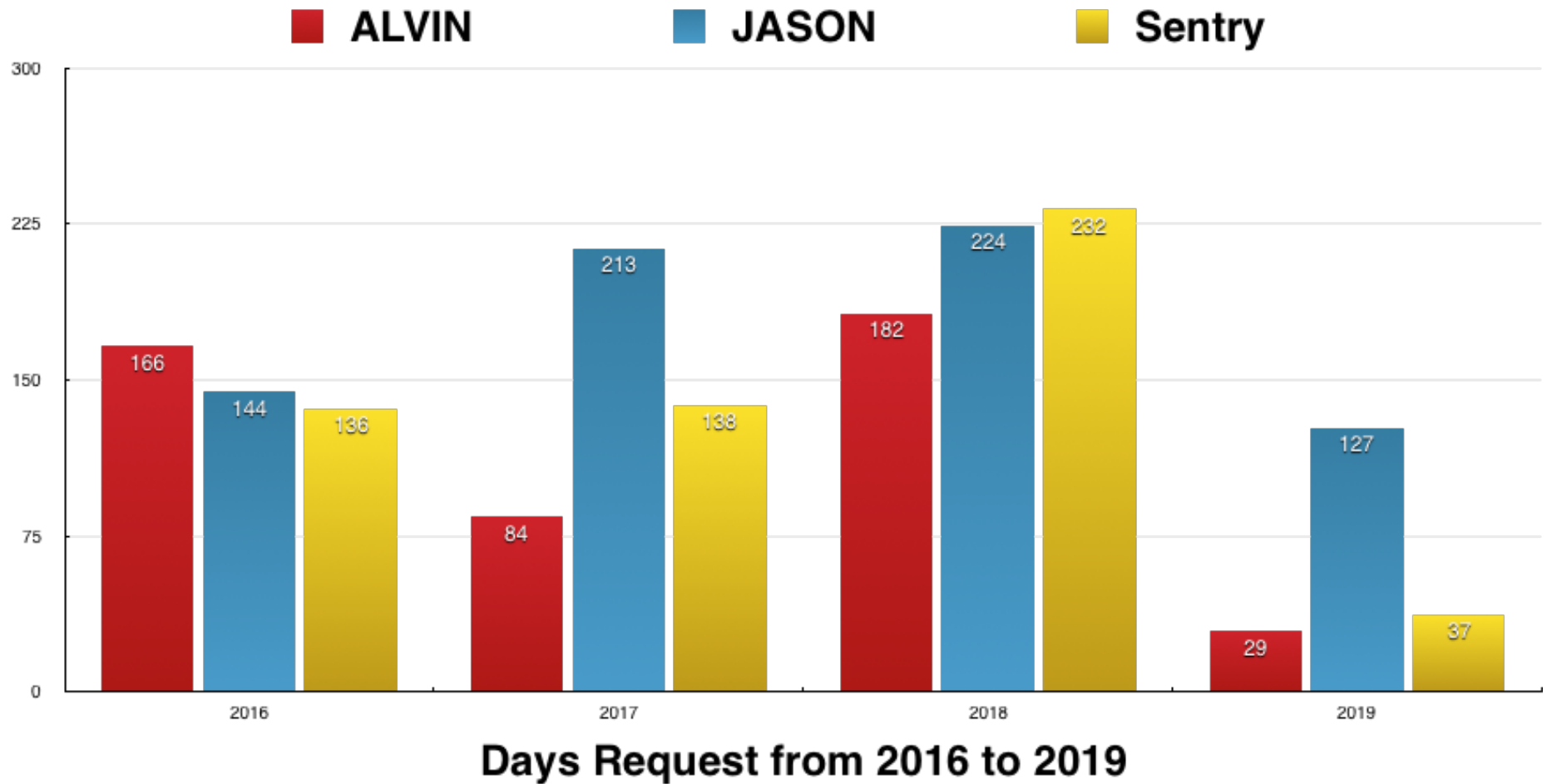
# Deep Submergence Vehicle Scheduling Sentry 2017 - 2019



Sentry	2017	2018	2019
Funded	101	85	0
Pending	37	112	37
To be Submitted	0	35	0
Total Requests	138 (132 actual)	232	37
Year to Year	101% Decrease	168% Increase	Too early to say...
Agencies	NSF, NOAA & Other	NSF & Other (Nor)	NSF
Take away...	Diverse funding	Increased requests	All STR's not in yet



# 4 Year Vehicle Overview





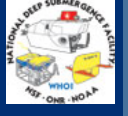
# 2017 Alvin, Jason & Sentry Operation Areas



★	132 Sentry days	7 Voyages
★	163 Jason days	7 Voyages
★	87 Alvin days	3 Voyages



# Looking Forward



- Good mix of funding sources: NSF, NAVY, NOAA & NASA
- Utilization rates are stable for *Jason* but fluctuate for *Alvin* & *Sentry*
- Regular & additional engineering dives greatly appreciated!
- AGOR 23 Class Mid-Life:
  - *Thompson* back on line late 2017
  - *Revelle* is late ~2018
  - *Atlantis* 2020, coordinate w/ *Alvin* overhaul
  - 2021 all vessels back online
- Schedulers meeting June 8<sup>th</sup> ...Stay tuned!



# Questions?



*Thank you*