UNOLS Ship Schedule - 2018 - Kilo Moana

KM 2018 - FINAL
Final - ID #13581 Version #7 - 12/20/2018

Scheduling Contact(s)
Anita Lopez alopez8@hawaii.edu (808) 224-2680

Notes: 12 DEC 2018 - Remove 2 days from December HOT due to weather and safety of vessel equipment.
01 OCT 2018 - Addition of 2nd cruise for PMRF survey (w/ ROV) in early Dec.
18 JUL 2018 - Transfer of one HOT day to KOK, augmenting the Kilauea RAPID investigation (D. Karl).
29 MAY 2018 - Adjustments for KM-18-08 delay/extension; ACO & RAP split for two cruises.
27 APR 2018 - Update/add cruise # for PMRF charter, adjust/correct data for cruises following in Oct-Dec.
24 APR 2018 - Shortened DORD charter, add pending PMRF charter, adjust KM-18-11 for transit share.
27 FEB 2018 - adjusted sailing dates for KM-18-08 (NOAA/Moore Fdn.)
23 FEB 2018 - updated cruise numbers for additional Lu'ukai test in Feb; removed TBDs
09 FEB 2018 - added JASON engineering dive to follow Tivey mobe.
29 JAN 2018 - added KM cruise numbers for 2018.
24 JAN 2018 - Shift KIOST cruise dates.
31 OCT 2017 - Swap Haddock for pending SCOPE charter.
27 OCT 2017 - minor adjustments to June HOT, REU, & ECS dates.
05 OCT 2017 - revisions to swap sequences ROV trials/HOT & KIOST/Smith-Howe.
13 SEP 2017 - Initial schedule for 2018 published.

<table>
<thead>
<tr>
<th>PI/Institution</th>
<th>Project</th>
<th>Project #</th>
<th>Days/Agency/Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cruise Dates</td>
<td>Start Port</td>
<td>Area/Chief Activity/</td>
<td></td>
</tr>
<tr>
<td>End Port</td>
<td>Navy Op Lat/Lon Scientist Total Days</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Load: 01 Jan 18  UHMC Pier 35
Dep: 01 Jan 18 Honolulu  NP12  21N/158W  Alexander Shor  7/7
Arr: 07 Jan 18 Honolulu  NP12  21N/158W  Maintenance
Unld: 07 Jan 18

Clearances: NONE(T)

Notes: T/E overhaul completion, wire spooling (0.681"), Dynacon 0.322" winch installation, and general maintenance.

Load: 08 Jan 18  NP-12
Dep: 08 Jan 18 Honolulu  NP12  21N/158W  Alexander Shor  4/4
Arr: 11 Jan 18 Honolulu  NP12  21N/158W  Inspection
Unld: 11 Jan 18

Clearances: NONE(T)

Notes: KM-18-01: INSURV Inspection. Underway day on 09-JAN-2018

Load: 12 Jan 18  Station ALOHA
Dep: 16 Jan 18 Honolulu  NP12  23N/158W  David Karl  4/9
Arr: 19 Jan 18 Honolulu  NP12  23N/158W
Unld: 20 Jan 18

Clearances: NONE(T)

Notes: KM-18-02: Sailed Tue-Fri (returned 1 day early due to weather).
    Included 1 mobe day and 3 lay days, prior to departure, and 1 de-mobe day after arrival.

Load: 21 Jan 18  S. Oahu
Dep: 25 Jan 18 Honolulu  NP12  21N/158W  Alexander Shor  6/11
Arr: 30 Jan 18 Honolulu  NP12  21N/158W
Unld: 31 Jan 18

Clearances: NONE(T)

Notes: KM-18-03: Lu'ukai ROV trials

Load: 01 Feb 18  UHMC Pier 35
Dep: 01 Feb 18 Honolulu  NP12  21N/158W  Alexander Shor  18/18
Arr: 18 Feb 18 Honolulu  NP12  21N/158W  Maintenance
Unld: 18 Feb 18

Clearances: NONE(T)

Notes: Re-cert life rafts, install/test 0.322 winch & wire swap, replace hydraulic motors on 0.68x Traction Winch, install 2nd FBB mast & antenna, misc. preservation and general maintenance.

Shor, A/UH_SOEST  LU'UKAI ROV Tests  5/INST-UH/F

Load: 19 Feb 18  S. Oahu
Dep: 19 Feb 18 Honolulu  NP12  21N/158W  Alexander Shor  5/5
Arr: 23 Feb 18 Honolulu  NP12  21N/158W
Unld: 23 Feb 18

Clearances: NONE(T)

Notes: KM-18-04: Lu'ukai ROV additional trials

Karl, D/UH_SOEST  HOT  OCE 1260164  5/NSF-OCE-CO/F
Brandes, J/Skidaway  Marine DIC photochem 1635618  0/NSF-OCE-CO/F

Load: 24 Feb 18  Station ALOHA
Dep: 24 Feb 18 Honolulu  NP12  23N/158W  David Karl  5/5
Arr: 28 Feb 18 Honolulu  NP12  23N/158W
Unld: 28 Feb 18

Clearances: NONE(T)
Notes: KM-18-05: HOT-300. Auxiliary add-on for Brandes, needs coordination with HOT. Sailing Sat-Wed.

Load: 01 Mar 18 UHMC Pier 35
Dep: 01 Mar 18 Honolulu NP12 21N/158W Alexander Shor 2/2
Arr: 02 Mar 18 Honolulu NP12 21N/158W Standby Days
Unld: 02 Mar 18

Clearances: NONE(T)

Notes: Lay days in port awaiting KIOST mobilization. Provisions and general maintenance.

Load: 03 Mar 18 ROK ISA Claims
Dep: 05 Mar 18 Honolulu NP12 17N/125W Seafloor LLC 30/33
Arr: 03 Apr 18 San Diego NP12 9N/136W
Unld: 04 Apr 18

Clearances: NONE(T)

Notes: KM-18-06: Charter for KIOST to survey ROK ISA claims

Load: 05 Apr 18 Marquesas
Dep: 07 Apr 18 San Diego SP02 7S/136W James B. Gaherty 31/34
Arr: 07 May 18 Honolulu SP02 5S/130W
Unld: 08 May 18

Clearances: NONE(T)

Ancillary Facilities: Ocean Bottom Seismograph Instrument Pool (OBSIP)

Notes: KM-18-07: 2-day mobilization includes 1 day for fuel/provisions and 1 day to load/secure mission gear for sea.

Load: 05 Apr 18 Deep CCZ
Dep: 07 Apr 18 San Diego SP02 7S/136W James B. Gaherty 31/34
Arr: 07 May 18 Honolulu SP02 5S/130W
Unld: 08 May 18

Clearances: NONE(T)
Smith, C/UH_SOEST  Deep CCZ  NA17OAR0110209  12/NOAA-OE/F
Smith, C/UH_SOEST  Deep CCZ  4/INST-UH/F

Load: 09 May 18  TBD
Dep: 14 May 18 Honolulu  NP12  23N/158W  Craig R. Smith  34/39
Arr: 16 Jun 18 Honolulu  NP12  23N/158W
Unld: 16 Jun 18

Clearances: NONE(T)

Ancillary Facilities: Other ROV

Notes: KM-18-08: NOAA + Moore Foundation project. Mobe included 2.5-day delay for USCG COI.

Howe, B/UH_SOEST  ACO Continuing O&M  1738054  5/NSF-OCE-OTIC/F

Load: 17 Jun 18  Station ALOHA
Dep: 18 Jun 18 Honolulu  NP12  23N/158W  Bruce M. Howe  5/8
Arr: 22 Jun 18 Honolulu  NP12  23N/158W
Unld: 24 Jun 18

Clearances: NONE(T)

Ancillary Facilities: Other ROV

Notes: KM-18-09: ACO cruise with Lu'ukai ROV still mobilized on KM.

Wessel, P/UH_SOEST  REU SOEST  1/NSF-OCE/F
Wessel, P/UH_SOEST  REU SOEST  1/NSF-GEO/F
Wessel, P/UH_SOEST  REU SOEST  1/INST-UH/F

Load: 25 Jun 18  Hawaiian Island
Dep: 26 Jun 18 Honolulu  NP11  18N/160W  Paul Wessel  3/5
Arr: 28 Jun 18 Honolulu  NP12  23N/155W
Unld: 29 Jun 18

Clearances: NONE(T)

Notes: KM-18-10: REU student cruise
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Equipment/Activity</th>
<th>Load Date</th>
<th>Port of Departure</th>
<th>Coordinates</th>
<th>Clearances</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armstrong, A</td>
<td>JHC UNH</td>
<td>GofAK ECS Survey</td>
<td>30 Jun 18</td>
<td>Gulf of Alaska</td>
<td>21N/158W</td>
<td>NONE(T)</td>
<td><strong>Notes:</strong> KM-18-11: NOAA ECS survey in Gulf of Alaska</td>
</tr>
<tr>
<td>GofAK ECS Survey</td>
<td></td>
<td></td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>Andrew Armstrong</td>
<td>34/35</td>
</tr>
<tr>
<td>Armstrong, A</td>
<td>JHC UNH</td>
<td>GofAK ECS Survey</td>
<td>tbd</td>
<td>Seattle</td>
<td>NP09</td>
<td>48N/122W</td>
<td><strong>Clearances:</strong> NONE(T)</td>
</tr>
<tr>
<td>Shor, A</td>
<td>UH_SOEST</td>
<td>NSF transit share</td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>NSF transit share</td>
<td></td>
<td></td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>Armstrong, A</td>
<td>JHC UNH</td>
<td>GofAK ECS Survey</td>
<td></td>
<td>Seattle</td>
<td>NP09</td>
<td>48N/122W</td>
<td><strong>Clearances:</strong> NONE(T)</td>
</tr>
<tr>
<td>Shor, A</td>
<td>UH_SOEST</td>
<td>Transit to Honolulu</td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>NSF transit share</td>
<td></td>
<td></td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>Shor, A</td>
<td>UH_SOEST</td>
<td>Transit to Honolulu</td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>NSF transit share</td>
<td></td>
<td></td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>Tivey, M</td>
<td>WHOI</td>
<td>Weathering SMS 1657794</td>
<td>04 Aug 18</td>
<td>Juan de Fuca</td>
<td>NP09</td>
<td>48N/129W</td>
<td><strong>Clearances:</strong> Canada(S)</td>
</tr>
<tr>
<td>Heintz, M</td>
<td>WHOI</td>
<td>2018 Jason Eng</td>
<td></td>
<td>Seattle</td>
<td>NP09</td>
<td>48N/129W</td>
<td></td>
</tr>
<tr>
<td>Nooner, S</td>
<td>UNCW</td>
<td>Deformation at Axial 1736926</td>
<td>17 Aug 18</td>
<td>Astoria</td>
<td>NP09</td>
<td>46N/130W</td>
<td><strong>Clearances:</strong> NONE(T)</td>
</tr>
<tr>
<td>UX3</td>
<td></td>
<td></td>
<td></td>
<td>Astoria</td>
<td>NP09</td>
<td>46N/130W</td>
<td></td>
</tr>
<tr>
<td>Shor, A</td>
<td>UH_SOEST</td>
<td>Transit to Honolulu</td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>NSF transit share</td>
<td></td>
<td></td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>Shor, A</td>
<td>UH_SOEST</td>
<td>Transit to Honolulu</td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>NSF transit share</td>
<td></td>
<td></td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>Shor, A</td>
<td>UH_SOEST</td>
<td>Transit to Honolulu</td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
<tr>
<td>NSF transit share</td>
<td></td>
<td></td>
<td></td>
<td>Honolulu</td>
<td>NP12</td>
<td>21N/158W</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- KM-18-11: NOAA ECS survey in Gulf of Alaska
- KM-18-12: SMS, with JASON ROV - Dual Body configuration. De/re-mobe of JASON tightly coordinated with Revelle on these dates in Seattle.
Load: 30 Aug 18        Transit
Dep: 30 Aug 18 Astoria    NP09  46N/124W    Alexander Shor  8/8
Arr: 06 Sep 18 Honolulu  NP12  21N/158W    Transit
Unld: 06 Sep 18

Clearances: NONE(T)

Notes: KM-18-14: Reposition to Honolulu (transit speed increased due to Hurricane Norman).

=================================================================================================

==
Karl, D/UH_SOEST    HOT 2018-2023    1756517    5/NSF-OCE-BIO/F
=================================================================================================

Load: 07 Sep 18        Station ALOHA
Dep: 10 Sep 18 Honolulu    NP12  23N/158W    David Karl  5/8
Arr: 14 Sep 18 Honolulu  NP12  23N/158W
Unld: 14 Sep 18

Clearances: NONE(T)

Notes: KM-18-15: Includes 1 mobe day and 1 lay day, prior to departure.
Sailing Mon-Fri.

=================================================================================================

==
Smith, J/UH_SOEST    DORD Mn-nodule study    21/OTHER/F
=================================================================================================

Load: 15 Sep 18        ISA Lease Area
Dep: 18 Sep 18 Honolulu    NP12  10N/148W    John R. Smith  21/25
Arr: 08 Oct 18 Honolulu  NP12  11N/149W
Unld: 09 Oct 18

Clearances: NONE(T)

Notes: KM-18-16: ISA survey, foreign funding (DORD - Japan).

=================================================================================================

==
Karl, D/UH_SOEST    HOT 2018-2023    1756517    5/NSF-OCE-BIO/F
=================================================================================================

Load: 10 Oct 18        Station ALOHA
Dep: 11 Oct 18 Honolulu    NP12  23N/158W    David Karl  5/6
Arr: 15 Oct 18 Honolulu  NP12  23N/158W
Unld: 15 Oct 18

Clearances: NONE(T)
Notes: KM-18-17: Shift to immediately follow DORD Sailing Thu-Mon.

Freeman, C/geodynamicsgroup PMRF survey 6/OTHER/F

Load: 16 Oct 18 PMRF-Kauai
Dep: 16 Oct 18 Honolulu NP12 21N/158W Chris W. Freeman 6/9
Arr: 21 Oct 18 Honolulu NP12 21N/158W
Unld: 24 Oct 18

Clearances: NONE(T)

Notes: KM-18-18: Charter for Navy contractor (multibeam survey of PMRF), includes 4 survey and 2 transit days, plus 2 contingency days (pending) if required for wx standby or other factors. Must complete de-mobe by COB on 10/24/2018.

Howe, B/UH_SOEST ALOHA:RAP Tomography 4/NAVY-ONR/F

Load: 25 Oct 18 Station ALOHA
Dep: 26 Oct 18 Honolulu NP12 23N/158W Bruce M. Howe 5/7
Arr: 30 Oct 18 Honolulu NP12 23N/158W
Unld: 31 Oct 18

Clearances: NONE(T)

Notes: KM-18-19: RAP dedicated cruise, split from KM-18-09.

Haddock, S/MBARI Dimensions 2015 1542679 10/NSF-BIO-DEB/F

Load: 01 Nov 18 Hawaii
Dep: 03 Nov 18 Honolulu NP12 21N/158W Steven Haddock 10/13
Arr: 12 Nov 18 Honolulu NP12 21N/158W
Unld: 13 Nov 18

Clearances: NONE(T)

Ancillary Facilities: Other ROV
Notes: KM-18-20: Dimensions - year 2 cruise.

=============================  =============================  =============================  ================  ===============

Karl, D/UH_SOEST          HOT 2018-2023   1756517     5/NSF-OCE-BIO/F

Load: 14 Nov 18          Station ALOHA
Dep: 15 Nov 18 Honolulu  NP12  23N/158W  David Karl  5/6
Arr: 19 Nov 18 Honolulu  NP12  23N/158W
Unld: 19 Nov 18

Clearances: NONE(T)

Notes: KM-18-21: Sailing Thu-Mon.

=============================  =============================  =============================  ================  ===============

Load: 20 Nov 18          UHMC Pier 35
Dep: 20 Nov 18 Honolulu  NP12  21N/158W  Alexander Shor  7/7
Arr: 26 Nov 18 Honolulu  NP12  21N/158W  Maintenance
Unld: 26 Nov 18

Clearances: NONE(T)

Notes: Alongside maintenance period available for main overhaul of SSDG#2.

=============================  =============================  =============================  ================  ===============

Freeman, C/geodynamicsgroup PMRF ROV survey     5/OTHER/F

Load: 27 Nov 18          PMRF-Kauai
Dep: 01 Dec 18 Honolulu  NP12  21N/158W  Chris W. Freeman  5/12
Arr: 05 Dec 18 Honolulu  NP12  21N/158W
Unld: 08 Dec 18

Clearances: NONE(T)

Notes: KM-18-22: Charter for Navy contractor (ROV survey of PMRF), includes 4-day mobe for ROV, and 3 survey + 2 transit days, with 2 contingency days (pending) if required for wx standby or other factors. De-mobe (1 day) must be complete by COB on 12/8/2018.

=============================  =============================  =============================  ================  ===============

Karl, D/UH_SOEST          HOT 2018-2023   1756517     3/NSF-OCE-BIO/F

Load: 09 Dec 18          Station ALOHA
Dep: 10 Dec 18 Honolulu    NP12    23N/158W    David Karl    3/4
Arr: 12 Dec 18 Honolulu    NP12    23N/158W
Unld: 12 Dec 18

Clearances: NONE(T)

Notes: KM-18-23: Includes 1 mobe day on 12/9 (Sun). Sailing Mon-Fri.
Cruise cut short (2 Days) due to weather and safety concerns of vessel equipment on A-frame.

Load: 13 Dec 18    UHMC Pier 35
Dep: 13 Dec 18 Honolulu    NP12    21N/158W    Alexander Shor    19/19
Arr: 31 Dec 18 Honolulu    NP12    21N/158W    Maintenance
Unld: 31 Dec 18

Clearances: NONE(T)

Notes: Period for general maintenance, and availability for re-tubing of chiller condensers (thru 1/10/2019).

Agency Totals

<table>
<thead>
<tr>
<th>Agency</th>
<th>Funded</th>
<th>Pending</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>INST</td>
<td>17</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>NAVY</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>NOAA</td>
<td>44</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>NSF</td>
<td>113</td>
<td>0</td>
<td>113</td>
</tr>
<tr>
<td>OTHER</td>
<td>81</td>
<td>0</td>
<td>81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>259</strong></td>
<td><strong>0</strong></td>
<td><strong>259</strong></td>
</tr>
</tbody>
</table>

Day Types Totals

<table>
<thead>
<tr>
<th>Day Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit Cruise</td>
<td>8</td>
</tr>
<tr>
<td>Inspection</td>
<td>4</td>
</tr>
<tr>
<td>Standby Days</td>
<td>2</td>
</tr>
<tr>
<td>Maintenance</td>
<td>51</td>
</tr>
</tbody>
</table>
At Sea for Science  241

Total  306

<table>
<thead>
<tr>
<th>Load/Unload Day</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ChargeLoad</td>
<td>7</td>
</tr>
<tr>
<td>ChargeUnload</td>
<td>3</td>
</tr>
<tr>
<td>NonChargeLoad</td>
<td>34</td>
</tr>
<tr>
<td>NonChargeUnload</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>59</td>
</tr>
</tbody>
</table>

**NOTE** If you wish to unsubscribe from this list, please send an e-mail to the UNOLS Office at: office@unols.org