AUDIT OF SALMON CLOSURE ZONE COMPLIANCE MONITORING, BERING SEA POLLOCK FISHERY, 2016 SEASON

Prepared for

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BACKGROUND

Closure zones were established for the Bering Sea pollock (*Theragra calcogramma*) fishery to ensure that fishing vessels would avoid areas with the potential for substantial bycatch of chum salmon (*Oncorhynchus keta*). Vessel Monitoring System (VMS) units monitored the movement and location of fishing vessels, and fisheries observers and vessel logbooks recorded whether vessels were actively fishing. Sea State, Inc., establishes these closure zones and monitors vessel compliance of these zones using VMS data.

In addition to these requirements, The National Oceanic and Atmospheric Administration (NOAA) Fisheries, Alaska Region, requires for the Pollock fishery "an external audit designed to evaluate the accuracy of the approach used by Sea State to monitor compliance." The 2016 audit, which NOAA required be based on an "[e]xamination of a randomly selected subset of vessel/days representing 10% of the catch" was conducted by ABR, Inc.—Environmental Research and Services (hereafter, ABR) for Sea State, Inc. This report presents the analytical methods used to evaluate Sea State's salmon closure zone compliance monitoring, and the results of the audit.

STUDY OBJECTIVES

The objectives of the audit were twofold: (1) assess the compliance of fishing vessels within salmon closure zones by sampling 10% of the 2016 fishing effort, and (2) compare the audit findings with Sea State's conclusions regarding closure violations.

ASSUMPTIONS

The audit is based upon the following assumptions, which we have not independently verified:

1. Fishing observer data are always correct, and these sources never report non-fishing activity when fishing actually was occurring, or fishing activity when vessels were not fishing.

2. The following data provided by Sea State are free from errors, including the table of VMS locations; the tables of observer data indicating haul start and stop times and catch weights, and the tables used to determine co-op membership.

3. All coordinates specified in the VMS location tables and vessel closure announcements were in the same horizontal datum, namely World Geodetic System 1984 (WGS1984).

AUDIT METHODS

SUBSET SELECTION

The pollock fishery has 3 major sectors (Catcher/Processors, Catcher vessels supplying motherships, and Catcher vessels supplying shoreside fish processors). All vessels have fisheries observers on board, so we have complete data detailing when each vessel was fishing.

Although the NOAA Fisheries requirement stipulated that "vessel/days representing 10% of the catch" were to be audited, we did not interpret this literally because fish catches were not reported by day. Catch was reported for each haul and/or for each individual fishing trip. These catch totals might cover a portion of a day or portions of multiple days. We believe our sampling method, described in the following paragraph, was consistent with the intent of the permit stipulation.

Data collected by fisheries observers provided full coverage for the fishery with start times, stop times, and catch weight for each haul. To select vessel/days representing 10% of the catch, individual hauls were randomly selected without replacement until the total exceeded 10% of the catch (Appendix 1).

IDENTIFICATION OF CANDIDATE CLOSURE ZONE VIOLATIONS

Before performing any analyses on the VMS location data, we built closure polygons and verified tier status information by examining all closure notification memos. The dates that a closure applied for each permit cooperative unit (co-op) was also recorded from the original memos.

All VMS points (i.e., a "point" is a specific latitude-longitude coordinate for the fishing vessel) were then passed through a series of geoprocessing operations and database filters to reduce the full set of data down to a limited number of potential closure zone violations.

First, the VMS points were intersected with the dataset of closure polygons (i.e., the geographic area of the closure zones) for all points that were within a closure when the closure was operational. This overlay excluded all points that were outside of closure zones, or were inside zones when the closure was not in effect. Each occurrence of a point within a closure zone resulted in an output table row linking the VMS point with the closure zone.

Next, these intersections of VMS points and closures were reduced by removing all intersections that were not part of the 10% random sample of trips or hauls we generated earlier. The remaining point/closure intersections represent the list of "candidate" (i.e., possible) violation points.

We found 7 candidate violations in our 10% sample.

BUFFER FILTER

The accuracy of each reported VMS location is subject to the accuracy of the GPS system, which depends on the number and distribution of satellites visible to the equipment on each vessel. Typical GPS accuracy ranges from 5 to 30 meters, which means that points found to be within a closure should only be considered violations if a 30 meter buffer around the reported location is completely within the closure.

We applied a simple 30 meter buffer around each point and compared these with the closure zone boundaries. When the buffer polygons were partially outside the closure zone of interest, the corresponding points were flagged as "excluded by buffer" and these points were eliminated from further consideration.

TIER STATUS FILTER

Location points that still remained as candidate violations were then compared to the tier status reports to determine whether the vessel was exempt from the closure restrictions at the time of the candidate violation. Some closures applied to all vessels, regardless of tier status. Other closures were advisory only, and so technically did not apply to any vessels. The remainder of closures applied to only certain vessels—some vessels were exempt, based on past performance of their co-op at avoiding salmon bycatch. Candidate violations that occurred when

the vessel was exempt from closure restrictions were flagged as "exempt from closure due to tier status" and excluded from further consideration.

At this point, all remaining observations with observer data were flagged as "possible violation" indicating that the vessel was within a closure zone when it was not allowed to fish there.

SPEED FILTER

For those locations that have been flagged as "possible violation," we examined the speed of the vessel between locations to eliminate vessels that were actually running rather than fishing, and to identify any locations where high speeds could indicate an inaccurate satellite position. We applied the simple speed threshold we developed for our assessment of the 2006 season (Macander and Dissing 2007). This is an automated way to filter out many points that clearly corresponded to rapid vessel travel or were inaccurate, rather than potential fishing activity.

The speed filter applied several criteria to candidate violations to determine whether they could be excluded on the basis of vessel speed. Locational points met the speed test criteria and were excluded based on a high sustained speed, if they had 1) at least 5-min elapsed time from the previous point, 2) at least 5-min elapsed time to the next point, 3) a calculated speed of >5.6 knots from the previous point, and 4) a calculated speed of >5.6 knots to the next point. We excluded locations that were within 5 minutes of each other because they were likely to be position errors and the speeds between those locations were often artificially high due to this error. The speed filter was able to predict fishing activity correctly for 99.83% of examined points in 2006 (Macander and Dissing 2007).

To develop the data necessary to apply the speed filter, the minimum sustained speed and the time interval to and from successive VMS locations were calculated for each point. Speeds were calculated from the distance and difference in time between successive VMS locations. These values corresponded to a minimum speed because vessels traveling a zig-zag course between 2 observations would have a speed higher than the calculated speed. Candidate violations that met our speed test criteria were flagged as "excluded due to high sustained speed." These data were excluded from further consideration.

VISUAL EXAMINATION

The remaining candidate violations were reviewed manually. In the past, we have noted that some of the points that did not pass the conservative speed test corresponded to non-fishing activity. For example, some points, which were just below the speed threshold, were along a straight line with several other points that did meet the criteria of the speed filter. Points that did not meet the speed test, but which were determined to correspond to running out to the fishing ground (based on visual review), were flagged as "excluded by manual review: vessel running." These data were excluded from further consideration.

Remaining points corresponded to fishing in closure zones, and are flagged as "possible violation." Violations will be reported to Sea State and the North Pacific Fisheries Management Council (NPFMC). A database containing the relevant attribute data for these violations, and maps for each violation, will be provided to Sea State and NPFMC.

COMPARISON WITH SEA STATE DETERMINATIONS

A comparison of the violations reported by ABR was made to those reported by Sea State. All of the location points that were part of ABR's 10% selection were considered in this assessment.

RESULTS AND DISCUSSION

IDENTIFICATION OF CANDIDATE CLOSURE ZONE VIOLATIONS

IDENTIFYING CANDIDATE VIOLATIONS

The identification of candidate violations was entirely automated, without any interpretation or subjective thresholds (Table 1). This automated approach efficiently reduced the number of points requiring closer examination from 436,584 for the total fishery to zero.

Table 1.   Number of vessel locations considered at different stages of the closure violation audit, Bering Sea pollock fishery, 2016.

Category	Locations
All VMS Locations	436,584
Select 10% of Hauls	10,542
Points in Closure when Closed (Candidate Violations)	7
Violations	0

CATEGORIZING CANDIDATE VIOLATIONS

A small degree of subjectivity is involved in setting the buffer distances and vessel speed thresholds, as well as in the process of reviewing vessel tracks manually. We believe, however, that our approach was cautious, well-documented, and reasonable. In this year's audit, all candidate locations came from vessels fishing in a co-op that was not required to observe the closure. As a result, we found no closure violations in our 10% sample (Table 2).

Table 2.   Results of ABR review of candidate violations of the closure zones, Bering Sea pollock fishery, 2016.

Category	Total
Candidate Violations	7
Excluded by buffer	0
Excluded based on tier status	7
Excluded by speed filter	0
Excluded by visual review	0
Violations	0

COMPARISON WITH SEA STATE DETERMINATIONS

For all cases where we had data, our verdicts agreed with Sea State's determinations (Appendix 2). Our 10% subsample did not identify any errors in Sea State's original determinations, and we did not further investigate locations outside of our subsample.

CONCLUSIONS

ABR agreed with the determinations of Sea State for the 10% sample that we examined, and we found no closure zone violations. Of points examined, our determination agreed with Sea State for all 10,542 locations in our subsample.

With the exception of the closure zone data, which we reconstruct from the closure documents, ABR's assessment was based on our review and processing of data tables developed and provided by Sea State, Inc. As a result, our audit does not systematically assess any errors that might have occurred during Sea State's data compilation process.

LITERATURE CITED

Macander, M. J., and D. Dissing. 2007. Audit of salmon closure zone compliance monitoring Bering Sea pollock fishery. ABR, Inc.—Environmental Research & Services, Fairbanks, AK. 48 pp..

Appendix 1.   Audited hauls for the Bering Sea pollock fishery, 2016.

Vessel	Deploy Date/Time	Retrieve Date/Time
Alaska Ocean	2016-01-21 10:55	2016-01-21 13:15
Alaska Ocean	2016-01-23 09:35	2016-01-23 13:40
Alaska Ocean	2016-01-27 13:30	2016-01-27 18:20
Alaska Ocean	2016-01-29 15:10	2016-01-29 19:40
Alaska Ocean	2016-02-03 11:45	2016-02-03 13:55
Alaska Ocean	2016-02-11 05:15	2016-02-11 10:15
Alaska Ocean	2016-02-11 11:30	2016-02-11 13:30
Alaska Ocean	2016-02-23 16:45	2016-02-23 19:50
Alaska Ocean	2016-02-24 15:05	2016-02-24 15:45
Alaska Ocean	2016-02-26 07:00	2016-02-26 10:40
Alaska Ocean	2016-03-01 06:35	2016-03-01 10:50
Alaska Ocean	2016-03-04 03:25	2016-03-04 06:00
Alaska Ocean	2016-03-04 09:00	2016-03-04 11:15
Alaska Ocean	2016-03-04 19:00	2016-03-04 23:45
Alaska Ocean	2016-03-06 16:10	2016-03-06 18:20
Alaska Ocean	2016-03-07 18:15	2016-03-07 22:30
Alaska Ocean	2016-03-11 21:00	2016-03-11 23:05
Alaska Ocean	2016-03-21 00:15	2016-03-21 02:55
Alaska Ocean	2016-03-21 03:35	2016-03-21 06:00
Alaska Ocean	2016-06-26 15:00	2016-06-26 17:30
Alaska Ocean	2016-07-01 11:10	2016-07-01 15:00
Alaska Ocean	2016-07-04 07:00	2016-07-04 09:15
Alaska Ocean	2016-07-05 03:40	2016-07-05 09:25
Alaska Ocean	2016-07-10 11:25	2016-07-10 14:30
Alaska Ocean	2016-07-10 23:00	2016-07-11 01:33
Alaska Ocean	2016-07-11 05:45	2016-07-11 08:25
Alaska Ocean	2016-07-13 09:25	2016-07-13 12:40
Alaska Ocean	2016-07-15 15:15	2016-07-15 19:55
Alaska Ocean	2016-07-17 00:10	2016-07-17 05:30
Alaska Ocean	2016-07-18 01:40	2016-07-18 06:05
Alaska Ocean	2016-07-26 22:50	2016-07-26 23:50
Alaska Ocean	2016-07-27 18:40	2016-07-27 19:40
Alaska Ocean	2016-07-29 07:05	2016-07-29 12:35
Alaska Ocean	2016-08-06 19:30	2016-08-07 02:25
Alaska Ocean	2016-08-15 01:05	2016-08-15 04:10
Alaska Ocean	2016-08-17 07:55	2016-08-17 09:30
Alaska Ocean	2016-08-17 21:50	2016-08-18 03:30

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Alaska Ocean	2016-08-18 08:00	2016-08-18 12:30
Alaska Ocean	2016-08-20 21:40	2016-08-21 02:15
Alaska Ocean	2016-08-26 04:00	2016-08-26 07:50
Alaska Ocean	2016-08-26 17:35	2016-08-26 20:50
Alaska Ocean	2016-08-30 18:45	2016-08-31 01:35
Alaska Ocean	2016-09-03 08:15	2016-09-03 13:00
Alaska Ocean	2016-09-03 14:20	2016-09-03 17:45
Alaska Ocean	2016-09-03 18:15	2016-09-03 22:00
Alaska Ocean	2016-09-04 15:25	2016-09-04 17:15
Alaska Rose	2016-02-09 16:30	2016-02-09 18:00
Alaska Rose	2016-02-29 12:15	2016-02-29 16:45
Alaska Rose	2016-03-05 16:00	2016-03-05 23:10
Alaska Rose	2016-03-10 17:00	2016-03-10 18:00
Alaska Rose	2016-03-17 01:30	2016-03-17 03:00
Alaska Rose	2016-03-23 15:15	2016-03-23 16:30
Alaska Rose	2016-06-12 17:15	2016-06-12 22:15
Alaska Rose	2016-06-17 19:30	2016-06-17 20:45
Alaska Rose	2016-07-01 12:15	2016-07-01 16:30
Alaska Rose	2016-07-21 04:00	2016-07-21 06:00
Alaska Rose	2016-07-31 17:40	2016-07-31 21:00
Alaska Rose	2016-08-29 09:00	2016-08-29 12:20
Alaska Rose	2016-08-29 16:15	2016-08-29 17:30
Aldebaran	2016-02-03 21:15	2016-02-03 22:09
Aldebaran	2016-02-06 10:45	2016-02-06 11:30
Aldebaran	2016-02-14 11:05	2016-02-14 13:20
Aldebaran	2016-02-14 20:30	2016-02-14 22:10
Aldebaran	2016-03-09 13:20	2016-03-09 18:00
Aldebaran	2016-04-18 13:45	2016-04-18 16:30
Aldebaran	2016-06-29 17:05	2016-06-29 22:45
Aldebaran	2016-07-11 09:40	2016-07-11 11:55
Aldebaran	2016-07-14 07:10	2016-07-14 11:20
Aldebaran	2016-07-18 14:04	2016-07-18 15:05
Aldebaran	2016-07-21 22:10	2016-07-22 07:42
Aldebaran	2016-07-26 19:50	2016-07-26 22:50
Aldebaran	2016-07-27 00:20	2016-07-27 06:58
Aldebaran	2016-08-08 13:00	2016-08-08 14:45
Aldebaran	2016-08-08 17:30	2016-08-08 18:15
Aldebaran	2016-08-12 14:45	2016-08-12 17:00

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Aldebaran	2016-08-17 08:15	2016-08-17 10:00
Aldebaran	2016-09-20 17:00	2016-09-20 17:33
Alsea	2016-02-02 10:05	2016-02-02 19:30
Alsea	2016-06-10 22:13	2016-06-11 00:43
Alsea	2016-06-11 12:28	2016-06-11 16:23
Alsea	2016-06-20 21:57	2016-06-20 22:57
Alsea	2016-07-07 11:34	2016-07-07 13:29
Alsea	2016-08-05 15:59	2016-08-05 19:19
Alsea	2016-08-09 07:51	2016-08-09 09:56
American Beauty	2016-01-27 15:45	2016-01-28 00:28
American Beauty	2016-02-04 13:00	2016-02-04 15:15
American Beauty	2016-02-10 14:20	2016-02-10 16:30
American Dynasty	2016-01-26 00:55	2016-01-26 06:00
American Dynasty	2016-01-31 22:30	2016-02-01 02:15
American Dynasty	2016-02-01 14:30	2016-02-01 20:45
American Dynasty	2016-02-04 11:55	2016-02-04 13:45
American Dynasty	2016-02-04 20:35	2016-02-04 22:50
American Dynasty	2016-02-14 07:30	2016-02-14 12:55
American Dynasty	2016-02-18 16:03	2016-02-18 20:25
American Dynasty	2016-02-19 13:35	2016-02-19 18:05
American Dynasty	2016-02-23 08:45	2016-02-23 10:45
American Dynasty	2016-03-05 21:10	2016-03-06 00:25
American Dynasty	2016-03-06 23:00	2016-03-07 03:00
American Dynasty	2016-03-12 14:45	2016-03-12 17:25
American Dynasty	2016-03-13 19:55	2016-03-13 22:30
American Dynasty	2016-03-14 05:10	2016-03-14 09:40
American Dynasty	2016-03-17 23:45	2016-03-18 03:10
American Dynasty	2016-06-12 00:40	2016-06-12 03:50
American Dynasty	2016-06-19 01:10	2016-06-19 07:25
American Dynasty	2016-06-19 08:01	2016-06-19 11:01
American Dynasty	2016-06-19 12:15	2016-06-19 15:45
American Dynasty	2016-06-20 03:45	2016-06-20 11:10
American Dynasty	2016-06-26 18:45	2016-06-26 22:40
American Dynasty	2016-07-06 16:40	2016-07-06 19:45
American Dynasty	2016-07-07 23:00	2016-07-08 03:25
American Dynasty	2016-07-10 06:35	2016-07-10 10:30
American Dynasty	2016-07-18 12:03	2016-07-18 15:03
American Dynasty	2016-07-19 13:20	2016-07-19 17:00
American Dynasty	2016-07-25 03:23	2016-07-25 06:35

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
American Dynasty	2016-07-26 07:15	2016-07-26 10:30
American Dynasty	2016-07-29 04:55	2016-07-29 08:25
American Dynasty	2016-07-29 16:00	2016-07-29 20:20
American Dynasty	2016-07-30 01:00	2016-07-30 04:15
American Dynasty	2016-07-30 21:00	2016-07-30 23:00
American Dynasty	2016-07-31 03:15	2016-07-31 06:55
American Dynasty	2016-08-10 05:15	2016-08-10 09:40
American Dynasty	2016-08-10 22:10	2016-08-11 02:45
American Dynasty	2016-08-11 05:20	2016-08-11 12:10
American Dynasty	2016-08-16 07:00	2016-08-16 09:00
American Dynasty	2016-08-19 03:10	2016-08-19 07:40
American Dynasty	2016-08-20 21:00	2016-08-21 04:30
American Dynasty	2016-08-21 10:55	2016-08-21 17:25
American Dynasty	2016-08-22 19:20	2016-08-22 22:25
American Dynasty	2016-08-23 15:10	2016-08-23 19:05
American Dynasty	2016-08-28 05:30	2016-08-28 10:15
American Dynasty	2016-08-30 03:25	2016-08-30 08:05
American Dynasty	2016-08-30 17:55	2016-08-30 22:30
American Eagle	2016-08-04 19:00	2016-08-04 21:00
American Eagle	2016-08-16 21:30	2016-08-16 23:30
American Eagle	2016-08-19 22:00	2016-08-20 04:05
American Triumph	2016-01-25 09:15	2016-01-25 11:15
American Triumph	2016-01-25 13:55	2016-01-25 16:50
American Triumph	2016-01-30 05:10	2016-01-30 08:05
American Triumph	2016-02-07 06:55	2016-02-07 10:15
American Triumph	2016-02-12 05:00	2016-02-12 10:45
American Triumph	2016-02-13 14:15	2016-02-13 19:35
American Triumph	2016-02-14 02:25	2016-02-14 06:25
American Triumph	2016-02-16 14:00	2016-02-16 22:00
American Triumph	2016-02-17 19:10	2016-02-18 03:05
American Triumph	2016-02-18 08:35	2016-02-18 13:45
American Triumph	2016-02-26 11:40	2016-02-26 16:10
American Triumph	2016-03-02 15:15	2016-03-02 18:00
American Triumph	2016-03-02 18:50	2016-03-02 21:50
American Triumph	2016-03-04 23:15	2016-03-05 05:00
American Triumph	2016-03-11 08:40	2016-03-11 14:50
American Triumph	2016-03-13 08:15	2016-03-13 15:20
American Triumph	2016-03-14 03:00	2016-03-14 07:55
American Triumph	2016-03-14 09:15	2016-03-14 17:00

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
American Triumph	2016-03-19 01:25	2016-03-19 03:15
American Triumph	2016-06-10 13:55	2016-06-10 16:25
American Triumph	2016-06-13 09:45	2016-06-13 11:50
American Triumph	2016-06-14 03:50	2016-06-14 06:50
American Triumph	2016-06-15 01:10	2016-06-15 05:30
American Triumph	2016-06-15 06:40	2016-06-15 11:30
American Triumph	2016-06-17 02:20	2016-06-17 07:00
American Triumph	2016-06-18 17:25	2016-06-18 21:10
American Triumph	2016-06-24 19:10	2016-06-25 00:15
American Triumph	2016-06-27 17:45	2016-06-27 22:15
American Triumph	2016-06-30 23:45	2016-07-01 05:00
American Triumph	2016-07-03 14:45	2016-07-03 17:45
American Triumph	2016-07-08 17:45	2016-07-08 22:25
American Triumph	2016-07-10 20:50	2016-07-11 00:20
American Triumph	2016-07-21 02:00	2016-07-21 06:10
American Triumph	2016-07-22 06:40	2016-07-22 12:05
American Triumph	2016-07-28 03:15	2016-07-28 08:30
American Triumph	2016-07-28 13:55	2016-07-28 15:35
American Triumph	2016-07-31 05:05	2016-07-31 09:25
American Triumph	2016-08-05 14:00	2016-08-05 16:00
American Triumph	2016-08-06 06:45	2016-08-06 10:50
American Triumph	2016-08-06 11:45	2016-08-06 15:45
American Triumph	2016-08-06 21:05	2016-08-07 03:10
American Triumph	2016-08-08 21:35	2016-08-09 02:20
American Triumph	2016-08-12 20:10	2016-08-13 01:15
American Triumph	2016-08-17 21:30	2016-08-18 01:10
American Triumph	2016-08-19 00:10	2016-08-19 04:40
American Triumph	2016-08-25 18:10	2016-08-25 22:00
American Triumph	2016-08-26 09:50	2016-08-26 12:35
American Triumph	2016-08-27 18:00	2016-08-27 23:50
American Triumph	2016-08-30 03:50	2016-08-30 06:45
American Triumph	2016-08-31 02:45	2016-08-31 07:00
American Triumph	2016-09-02 19:20	2016-09-03 00:20
American Triumph	2016-09-03 10:30	2016-09-03 15:16
American Triumph	2016-09-03 16:10	2016-09-03 16:30
Anita J	2016-02-24 13:31	2016-02-24 14:59
Anita J	2016-03-01 18:08	2016-03-01 19:30
Anita J	2016-06-10 12:30	2016-06-10 20:50
Anita J	2016-06-27 09:30	2016-06-27 11:30

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Anita J	2016-07-30 12:00	2016-07-30 20:30
Arctic Explorer	2016-03-25 08:15	2016-03-25 09:50
Arctic Explorer	2016-04-05 07:30	2016-04-05 09:40
Arctic Explorer	2016-07-03 07:30	2016-07-03 09:45
Arctic Explorer	2016-07-10 12:50	2016-07-10 18:55
Arctic Explorer	2016-07-21 01:25	2016-07-21 10:30
Arctic Explorer	2016-08-04 19:15	2016-08-04 22:25
Arctic Explorer	2016-08-17 07:00	2016-08-17 08:36
Arctic Explorer	2016-08-21 09:10	2016-08-21 10:45
Arctic Explorer	2016-08-25 10:45	2016-08-25 13:25
Arctic Fjord	2016-01-22 15:25	2016-01-22 16:05
Arctic Fjord	2016-01-26 16:35	2016-01-26 20:45
Arctic Fjord	2016-01-27 05:20	2016-01-27 07:20
Arctic Fjord	2016-01-31 09:10	2016-01-31 12:55
Arctic Fjord	2016-01-31 21:20	2016-02-01 00:20
Arctic Fjord	2016-02-04 03:30	2016-02-04 09:05
Arctic Fjord	2016-02-05 12:00	2016-02-05 15:50
Arctic Fjord	2016-02-11 07:50	2016-02-11 10:20
Arctic Fjord	2016-02-11 13:35	2016-02-11 15:00
Arctic Fjord	2016-02-16 22:30	2016-02-17 02:05
Arctic Fjord	2016-02-20 16:45	2016-02-20 21:15
Arctic Fjord	2016-02-21 07:15	2016-02-21 13:00
Arctic Fjord	2016-02-21 22:10	2016-02-22 02:40
Arctic Fjord	2016-02-25 00:00	2016-02-25 03:30
Arctic Fjord	2016-02-25 06:05	2016-02-25 08:05
Arctic Fjord	2016-03-02 15:00	2016-03-02 16:10
Arctic Fjord	2016-03-04 09:35	2016-03-04 12:00
Arctic Fjord	2016-03-06 08:00	2016-03-06 13:00
Arctic Fjord	2016-03-11 00:00	2016-03-11 02:05
Arctic Fjord	2016-03-14 14:00	2016-03-14 18:35
Arctic Fjord	2016-03-20 12:55	2016-03-20 15:55
Arctic Fjord	2016-03-22 01:25	2016-03-22 03:25
Arctic Fjord	2016-06-20 08:00	2016-06-20 10:00
Arctic Fjord	2016-06-20 11:10	2016-06-20 13:05
Arctic Fjord	2016-06-20 15:45	2016-06-20 16:45
Arctic Fjord	2016-06-21 13:25	2016-06-21 14:05
Arctic Fjord	2016-06-28 18:20	2016-06-28 20:50
Arctic Fjord	2016-06-30 05:45	2016-06-30 09:20
Arctic Fjord	2016-07-01 12:30	2016-07-01 15:25

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Arctic Fjord	2016-07-02 00:25	2016-07-02 03:25
Arctic Fjord	2016-07-02 09:10	2016-07-02 12:10
Arctic Fjord	2016-07-03 23:10	2016-07-04 04:05
Arctic Fjord	2016-07-07 13:00	2016-07-07 14:40
Arctic Fjord	2016-07-10 03:20	2016-07-10 04:50
Arctic Fjord	2016-07-11 18:15	2016-07-11 20:30
Arctic Fjord	2016-07-19 05:25	2016-07-19 09:00
Arctic Fjord	2016-07-27 23:50	2016-07-28 02:30
Arctic Fjord	2016-07-28 22:20	2016-07-29 01:25
Arctic Fjord	2016-07-30 17:10	2016-07-30 19:05
Arctic Fjord	2016-07-30 19:50	2016-07-31 00:35
Arctic Fjord	2016-08-04 20:00	2016-08-05 01:40
Arctic Fjord	2016-08-10 18:50	2016-08-10 22:40
Arctic Fjord	2016-08-13 23:00	2016-08-14 02:45
Arctic Fjord	2016-08-17 12:35	2016-08-17 13:15
Arctic Fjord	2016-08-19 01:05	2016-08-19 03:00
Arctic Fjord	2016-08-30 05:45	2016-08-30 09:10
Arctic Fjord	2016-08-31 10:50	2016-08-31 15:10
Arctic Fjord	2016-09-07 07:15	2016-09-07 10:00
Arctic Fjord	2016-09-10 07:10	2016-09-10 12:10
Arctic Ram	2016-06-11 13:30	2016-06-11 16:35
Arctic Ram	2016-07-07 11:50	2016-07-07 14:45
Arctic Ram	2016-07-11 15:00	2016-07-11 17:45
Arctic Storm	2016-02-06 15:25	2016-02-06 18:05
Arctic Storm	2016-02-10 01:00	2016-02-10 03:00
Arctic Storm	2016-02-12 08:10	2016-02-12 10:35
Arctic Storm	2016-02-18 16:30	2016-02-18 20:30
Arctic Storm	2016-02-24 02:40	2016-02-24 06:00
Arctic Storm	2016-02-24 18:25	2016-02-24 23:50
Arctic Storm	2016-02-26 02:50	2016-02-26 04:35
Arctic Storm	2016-03-01 22:35	2016-03-02 01:15
Arctic Storm	2016-03-04 14:10	2016-03-04 19:30
Arctic Storm	2016-03-11 05:00	2016-03-11 07:40
Arctic Storm	2016-03-18 23:00	2016-03-19 01:30
Arctic Storm	2016-03-20 18:30	2016-03-20 23:05
Arctic Storm	2016-03-22 00:40	2016-03-22 02:20
Arctic Storm	2016-03-23 20:15	2016-03-23 20:55
Arctic Storm	2016-03-24 18:50	2016-03-24 20:25
Arctic Storm	2016-03-30 12:10	2016-03-30 14:40

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Arctic Storm	2016-03-31 08:45	2016-03-31 11:15
Arctic Storm	2016-04-01 08:30	2016-04-01 11:15
Arctic Storm	2016-06-23 19:30	2016-06-23 22:10
Arctic Storm	2016-06-24 00:30	2016-06-24 04:30
Arctic Storm	2016-06-24 06:35	2016-06-24 10:45
Arctic Storm	2016-06-24 13:00	2016-06-24 15:30
Arctic Storm	2016-06-27 08:15	2016-06-27 12:05
Arctic Storm	2016-06-27 21:30	2016-06-28 00:40
Arctic Storm	2016-06-29 03:55	2016-06-29 07:50
Arctic Storm	2016-07-02 10:45	2016-07-02 11:35
Arctic Storm	2016-07-03 19:50	2016-07-03 23:05
Arctic Storm	2016-07-04 00:30	2016-07-04 01:35
Arctic Storm	2016-07-10 17:20	2016-07-10 17:50
Arctic Storm	2016-07-21 21:05	2016-07-22 00:40
Arctic Storm	2016-07-23 06:40	2016-07-23 09:25
Arctic Storm	2016-07-23 10:30	2016-07-23 14:30
Arctic Storm	2016-07-27 13:30	2016-07-27 16:45
Arctic Storm	2016-07-27 18:25	2016-07-27 23:15
Arctic Storm	2016-07-29 20:10	2016-07-30 02:05
Arctic Storm	2016-07-30 14:25	2016-07-30 18:20
Arctic Storm	2016-07-31 13:30	2016-07-31 15:55
Arctic Storm	2016-08-01 15:00	2016-08-01 18:00
Arctic Storm	2016-08-11 16:40	2016-08-11 21:15
Arctic Storm	2016-08-17 11:30	2016-08-17 14:30
Arctic Storm	2016-08-18 17:15	2016-08-18 20:30
Arctic Storm	2016-08-26 17:00	2016-08-26 17:30
Arctic Wind	2016-09-08 11:00	2016-09-08 12:30
Arctic Wind	2016-09-20 07:30	2016-09-20 11:00
Arctic Wind	2016-09-25 21:00	2016-09-26 07:00
Arcturus	2016-02-03 14:20	2016-02-03 15:26
Arcturus	2016-02-18 05:15	2016-02-18 10:45
Arcturus	2016-02-26 14:30	2016-02-26 16:00
Arcturus	2016-04-11 10:30	2016-04-11 14:45
Arcturus	2016-07-05 16:42	2016-07-05 17:57
Arcturus	2016-07-16 03:00	2016-07-16 07:40
Arcturus	2016-07-16 09:10	2016-07-16 13:35
Argosy	2016-06-13 09:30	2016-06-13 14:00
Argosy	2016-07-16 16:20	2016-07-16 22:30
Argosy	2016-07-19 20:30	2016-07-20 06:45

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Argosy	2016-07-24 08:10	2016-07-24 17:30
Auriga	2016-02-10 08:50	2016-02-10 11:20
Auriga	2016-02-14 09:25	2016-02-14 12:25
Auriga	2016-02-21 16:20	2016-02-21 19:02
Auriga	2016-02-26 11:55	2016-02-26 13:00
Auriga	2016-02-29 09:57	2016-02-29 13:14
Auriga	2016-03-03 15:00	2016-03-03 18:20
Auriga	2016-07-12 11:35	2016-07-12 13:40
Auriga	2016-07-23 20:47	2016-07-24 07:00
Auriga	2016-08-06 09:25	2016-08-06 12:22
Aurora	2016-01-26 13:05	2016-01-26 14:30
Aurora	2016-01-26 19:40	2016-01-26 21:10
Aurora	2016-02-04 14:30	2016-02-04 16:10
Aurora	2016-02-08 12:00	2016-02-08 13:10
Aurora	2016-02-14 10:35	2016-02-14 12:10
Aurora	2016-02-14 13:30	2016-02-14 14:50
Aurora	2016-02-26 12:00	2016-02-26 12:50
Aurora	2016-06-14 17:30	2016-06-14 19:20
Aurora	2016-07-26 22:45	2016-07-27 00:10
Aurora	2016-08-05 22:00	2016-08-06 00:50
Aurora	2016-08-16 22:35	2016-08-17 03:20
Bering Defender	2016-01-23 14:50	2016-01-23 17:05
Bering Defender	2016-01-23 20:15	2016-01-23 22:10
Bering Defender	2016-02-26 08:45	2016-02-26 10:15
Bering Defender	2016-03-10 10:45	2016-03-10 12:35
Bering Defender	2016-03-21 04:35	2016-03-21 06:35
Bering Defender	2016-06-18 20:30	2016-06-18 21:45
Bering Defender	2016-07-17 13:35	2016-07-17 16:50
Bering Defender	2016-07-22 09:30	2016-07-22 14:25
Bering Defender	2016-08-07 16:25	2016-08-07 18:30
Bering Defender	2016-08-29 20:20	2016-08-30 00:10
Bering Defender	2016-08-30 09:26	2016-08-30 13:40
Bering Defender	2016-09-01 09:15	2016-09-01 11:35
Bering Defender	2016-09-12 15:10	2016-09-12 15:43
Bering Rose	2016-01-20 13:30	2016-01-20 17:00
Bering Rose	2016-03-13 11:30	2016-03-13 17:30
Bering Rose	2016-03-29 11:00	2016-03-29 14:30
Bering Rose	2016-06-22 01:00	2016-06-22 09:30
Bering Rose	2016-07-25 07:00	2016-07-25 12:45

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Bering Rose	2016-07-29 13:30	2016-07-29 16:00
Bering Rose	2016-08-19 00:00	2016-08-19 18:00
Bering Rose	2016-08-30 09:15	2016-08-30 12:45
Bristol Explorer	2016-01-22 09:27	2016-01-22 10:46
Bristol Explorer	2016-01-25 10:38	2016-01-25 14:26
Bristol Explorer	2016-02-07 17:50	2016-02-08 00:15
Bristol Explorer	2016-02-17 11:13	2016-02-17 20:56
Bristol Explorer	2016-03-01 14:05	2016-03-01 15:38
Bristol Explorer	2016-03-02 08:41	2016-03-02 12:03
Bristol Explorer	2016-03-18 18:00	2016-03-18 19:57
Bristol Explorer	2016-06-18 06:18	2016-06-18 11:15
Bristol Explorer	2016-06-21 15:22	2016-06-21 16:45
Bristol Explorer	2016-07-01 22:34	2016-07-02 03:40
Bristol Explorer	2016-07-06 05:36	2016-07-06 13:43
Bristol Explorer	2016-07-16 17:48	2016-07-16 23:56
Bristol Explorer	2016-07-18 13:53	2016-07-18 16:00
Bristol Explorer	2016-07-27 08:04	2016-07-27 11:05
Bristol Explorer	2016-08-05 16:51	2016-08-05 22:41
Bristol Explorer	2016-08-26 02:30	2016-08-26 07:10
Bristol Explorer	2016-08-31 08:39	2016-08-31 11:11
Caitlin Ann	2016-01-21 10:25	2016-01-21 13:45
Caitlin Ann	2016-01-25 05:25	2016-01-25 10:30
Caitlin Ann	2016-03-22 05:55	2016-03-22 07:45
Caitlin Ann	2016-03-28 11:35	2016-03-28 13:55
Caitlin Ann	2016-07-11 15:50	2016-07-11 16:30
Caitlin Ann	2016-07-21 07:50	2016-07-21 15:55
Caitlin Ann	2016-08-17 08:45	2016-08-17 12:20
Caitlin Ann	2016-09-08 17:40	2016-09-08 22:10
Cape Kiwanda	2016-06-27 13:03	2016-06-27 14:33
Cape Kiwanda	2016-07-26 17:10	2016-07-26 18:22
Chelsea K	2016-01-28 10:32	2016-01-28 12:58
Chelsea K	2016-02-14 23:27	2016-02-15 00:37
Chelsea K	2016-02-15 08:54	2016-02-15 11:56
Chelsea K	2016-02-20 08:47	2016-02-20 09:57
Chelsea K	2016-02-28 20:31	2016-02-28 23:44
Chelsea K	2016-03-05 20:38	2016-03-05 23:24
Chelsea K	2016-03-06 00:28	2016-03-06 03:35
Chelsea K	2016-03-06 07:06	2016-03-06 07:30
Chelsea K	2016-03-09 17:38	2016-03-09 19:25

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Chelsea K	2016-03-18 21:08	2016-03-18 21:48
Chelsea K	2016-03-18 23:06	2016-03-19 00:27
Chelsea K	2016-06-11 00:21	2016-06-11 08:43
Chelsea K	2016-06-12 01:26	2016-06-12 09:54
Chelsea K	2016-06-18 17:04	2016-06-18 18:27
Chelsea K	2016-06-23 00:09	2016-06-23 05:48
Chelsea K	2016-07-09 14:02	2016-07-09 16:35
Chelsea K	2016-08-04 20:45	2016-08-04 21:57
Chelsea K	2016-08-09 14:57	2016-08-09 16:00
Chelsea K	2016-08-21 20:42	2016-08-22 05:31
Chelsea K	2016-08-25 02:24	2016-08-25 09:06
Chelsea K	2016-08-25 12:27	2016-08-25 14:22
Chelsea K	2016-08-30 11:20	2016-08-30 15:13
Chelsea K	2016-08-30 20:00	2016-08-30 21:05
Chelsea K	2016-09-03 15:38	2016-09-03 17:23
Chelsea K	2016-09-10 08:12	2016-09-10 12:04
Collier Brothers	2016-06-12 08:40	2016-06-12 09:41
Collier Brothers	2016-06-17 09:02	2016-06-17 11:48
Collier Brothers	2016-06-19 17:00	2016-06-19 21:30
Columbia	2016-01-24 00:45	2016-01-24 02:15
Columbia	2016-02-01 13:00	2016-02-01 14:15
Columbia	2016-02-04 12:00	2016-02-04 13:10
Columbia	2016-02-22 00:50	2016-02-22 02:00
Columbia	2016-08-06 12:15	2016-08-06 13:30
Columbia	2016-08-06 14:35	2016-08-06 16:50
Columbia	2016-08-12 13:40	2016-08-12 20:00
Columbia	2016-08-18 12:30	2016-08-18 15:10
Columbia	2016-08-22 08:45	2016-08-22 14:40
Commodore	2016-02-15 12:10	2016-02-15 13:10
Commodore	2016-02-15 14:15	2016-02-15 15:00
Commodore	2016-02-26 09:30	2016-02-26 10:40
Commodore	2016-06-29 09:50	2016-06-29 10:50
Commodore	2016-06-29 12:35	2016-06-29 15:45
Commodore	2016-07-03 16:55	2016-07-03 18:05
Commodore	2016-07-17 05:30	2016-07-17 10:00
Commodore	2016-07-20 15:40	2016-07-20 23:15
Commodore	2016-07-23 17:41	2016-07-24 04:30
Commodore	2016-07-28 07:15	2016-07-28 15:00
Commodore	2016-08-02 18:15	2016-08-02 23:30

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Commodore	2016-09-13 08:35	2016-09-13 09:10
Defender	2016-01-21 15:35	2016-01-21 19:00
Defender	2016-02-03 12:30	2016-02-03 15:00
Defender	2016-02-15 05:40	2016-02-15 10:00
Defender	2016-02-19 00:45	2016-02-19 05:20
Defender	2016-03-03 20:15	2016-03-03 23:30
Defender	2016-03-06 17:00	2016-03-06 18:30
Defender	2016-03-08 19:00	2016-03-08 20:45
Destination	2016-01-25 17:15	2016-01-25 21:20
Destination	2016-02-15 10:25	2016-02-15 14:00
Destination	2016-02-26 13:45	2016-02-26 15:30
Destination	2016-04-01 22:50	2016-04-02 01:20
Destination	2016-06-29 17:50	2016-06-29 21:00
Destination	2016-07-12 21:10	2016-07-13 06:15
Destination	2016-07-17 16:00	2016-07-17 18:10
Destination	2016-08-18 08:50	2016-08-18 13:55
Destination	2016-08-23 22:40	2016-08-24 05:30
Dominator	2016-02-01 02:15	2016-02-01 03:50
Dominator	2016-06-20 11:30	2016-06-20 12:40
Dominator	2016-07-03 22:15	2016-07-03 22:35
Dominator	2016-07-07 15:10	2016-07-07 17:30
Dominator	2016-07-26 14:50	2016-07-26 17:05
Dominator	2016-07-30 12:20	2016-07-30 18:25
Dominator	2016-09-24 17:50	2016-09-24 20:15
Elizabeth F	2016-04-18 10:18	2016-04-18 17:00
Elizabeth F	2016-04-22 09:00	2016-04-22 11:00
Elizabeth F	2016-04-23 19:15	2016-04-24 03:00
Elizabeth F	2016-04-28 12:15	2016-04-28 17:18
Elizabeth F	2016-06-14 14:00	2016-06-14 15:00
Elizabeth F	2016-06-14 16:00	2016-06-14 17:30
Elizabeth F	2016-06-16 07:48	2016-06-16 09:45
Elizabeth F	2016-06-19 20:00	2016-06-19 22:00
Elizabeth F	2016-06-21 23:30	2016-06-22 04:00
Excalibur II	2016-02-01 16:18	2016-02-01 16:50
Excalibur II	2016-02-15 11:07	2016-02-15 14:33
Excalibur II	2016-08-03 13:40	2016-08-03 15:10
Excalibur II	2016-08-10 08:30	2016-08-10 10:30
Excalibur II	2016-08-11 18:45	2016-08-11 19:40
Excellence	2016-01-27 10:39	2016-01-27 12:10

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Excellence	2016-01-30 07:10	2016-01-30 13:32
Excellence	2016-02-01 13:08	2016-02-01 13:42
Excellence	2016-02-05 12:46	2016-02-05 19:20
Excellence	2016-02-06 21:25	2016-02-06 23:23
Excellence	2016-02-06 21:35	2016-02-06 23:35
Excellence	2016-02-11 15:50	2016-02-11 16:57
Excellence	2016-02-21 06:08	2016-02-21 08:04
Excellence	2016-02-21 22:08	2016-02-21 23:35
Excellence	2016-02-22 19:34	2016-02-22 20:28
Excellence	2016-02-24 10:42	2016-02-24 12:07
Excellence	2016-02-24 15:59	2016-02-24 16:42
Excellence	2016-02-27 00:41	2016-02-27 03:02
Excellence	2016-03-01 02:23	2016-03-01 03:20
Excellence	2016-03-01 03:40	2016-03-01 06:46
Excellence	2016-03-01 15:21	2016-03-01 15:51
Excellence	2016-03-02 06:10	2016-03-02 07:15
Excellence	2016-03-02 23:43	2016-03-03 02:32
Fierce Allegiance	2016-02-24 20:30	2016-02-24 22:45
Fierce Allegiance	2016-03-09 11:30	2016-03-09 13:44
Fierce Allegiance	2016-06-12 03:10	2016-06-12 14:00
Fierce Allegiance	2016-06-30 03:00	2016-06-30 09:00
Fierce Allegiance	2016-07-05 23:00	2016-07-05 23:59
Fierce Allegiance	2016-07-17 10:00	2016-07-17 12:00
Gladiator	2016-01-30 19:05	2016-01-30 20:02
Gladiator	2016-03-12 13:40	2016-03-12 16:57
Gladiator	2016-03-19 17:20	2016-03-19 19:14
Gladiator	2016-03-26 05:48	2016-03-26 10:07
Gladiator	2016-03-31 12:35	2016-03-31 15:02
Gladiator	2016-07-24 13:35	2016-07-24 19:30
Gladiator	2016-07-29 17:00	2016-07-29 19:00
Gladiator	2016-08-03 16:31	2016-08-03 19:00
Golden Alaska	2016-01-27 00:38	2016-01-27 05:57
Golden Alaska	2016-01-28 18:35	2016-01-28 19:50
Golden Alaska	2016-01-29 14:13	2016-01-29 15:30
Golden Alaska	2016-01-31 19:25	2016-02-01 00:20
Golden Alaska	2016-02-02 10:07	2016-02-02 10:46
Golden Alaska	2016-02-04 21:20	2016-02-04 21:55
Golden Alaska	2016-02-07 18:45	2016-02-07 21:50
Golden Alaska	2016-02-08 18:25	2016-02-08 21:30

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Golden Alaska	2016-02-12 20:15	2016-02-12 21:30
Golden Alaska	2016-02-14 10:20	2016-02-14 21:30
Golden Alaska	2016-02-17 12:10	2016-02-17 12:30
Golden Alaska	2016-02-19 21:05	2016-02-20 02:00
Golden Alaska	2016-02-25 21:00	2016-02-26 01:00
Golden Alaska	2016-02-28 04:15	2016-02-28 09:30
Golden Alaska	2016-02-29 22:00	2016-03-01 00:10
Golden Alaska	2016-03-01 23:15	2016-03-02 02:00
Golden Alaska	2016-03-03 16:30	2016-03-03 16:55
Golden Alaska	2016-03-10 10:56	2016-03-10 13:00
Golden Alaska	2016-03-10 19:08	2016-03-10 21:36
Golden Alaska	2016-03-10 23:12	2016-03-11 04:32
Golden Alaska	2016-03-11 02:40	2016-03-11 06:40
Golden Alaska	2016-03-11 20:15	2016-03-12 01:20
Golden Alaska	2016-03-12 04:15	2016-03-12 11:40
Golden Alaska	2016-03-13 16:44	2016-03-13 22:20
Golden Alaska	2016-03-15 08:18	2016-03-15 12:06
Golden Alaska	2016-03-19 03:30	2016-03-19 05:50
Golden Alaska	2016-03-20 04:45	2016-03-20 06:45
Golden Alaska	2016-03-21 19:00	2016-03-22 00:05
Golden Alaska	2016-03-22 04:00	2016-03-22 04:50
Golden Alaska	2016-03-28 01:10	2016-03-28 05:28
Golden Alaska	2016-03-31 10:16	2016-03-31 12:04
Golden Alaska	2016-04-01 09:00	2016-04-01 11:40
Golden Alaska	2016-07-22 21:40	2016-07-23 04:35
Golden Alaska	2016-07-23 11:35	2016-07-23 14:00
Golden Alaska	2016-07-24 06:15	2016-07-24 09:45
Golden Alaska	2016-07-24 16:25	2016-07-24 17:30
Golden Alaska	2016-07-26 07:40	2016-07-26 13:45
Golden Alaska	2016-07-28 11:54	2016-07-28 13:17
Golden Alaska	2016-07-31 10:45	2016-07-31 13:50
Golden Alaska	2016-07-31 16:48	2016-07-31 19:00
Golden Alaska	2016-08-03 22:20	2016-08-04 03:57
Golden Alaska	2016-08-05 10:30	2016-08-05 12:40
Golden Alaska	2016-08-07 16:00	2016-08-07 19:42
Golden Alaska	2016-08-12 02:16	2016-08-12 05:48
Golden Alaska	2016-08-17 15:17	2016-08-17 17:25
Golden Alaska	2016-08-18 13:16	2016-08-18 15:30
Golden Alaska	2016-08-18 23:01	2016-08-19 05:10

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Golden Alaska	2016-08-19 02:28	2016-08-19 04:45
Golden Alaska	2016-08-22 01:13	2016-08-22 07:29
Golden Alaska	2016-08-22 13:27	2016-08-22 16:07
Golden Alaska	2016-08-24 23:17	2016-08-25 05:05
Golden Alaska	2016-08-25 13:40	2016-08-25 15:25
Golden Alaska	2016-08-25 21:25	2016-08-25 23:50
Golden Alaska	2016-08-26 00:01	2016-08-26 04:01
Golden Alaska	2016-08-29 05:41	2016-08-29 08:15
Golden Alaska	2016-08-29 16:20	2016-08-29 18:05
Golden Alaska	2016-08-29 20:14	2016-08-29 23:15
Golden Alaska	2016-08-31 08:30	2016-08-31 09:30
Golden Alaska	2016-08-31 17:37	2016-08-31 18:30
Golden Alaska	2016-09-01 15:45	2016-09-01 16:15
Golden Alaska	2016-09-01 17:46	2016-09-01 19:20
Golden Alaska	2016-09-02 00:00	2016-09-02 03:25
Golden Alaska	2016-09-02 06:19	2016-09-02 07:36
Golden Alaska	2016-09-03 02:30	2016-09-03 07:02
Golden Alaska	2016-09-05 16:36	2016-09-05 18:10
Golden Alaska	2016-09-06 02:30	2016-09-06 07:08
Golden Alaska	2016-09-06 15:35	2016-09-06 16:30
Golden Alaska	2016-09-08 01:24	2016-09-08 05:20
Golden Alaska	2016-09-09 07:14	2016-09-09 08:26
Golden Alaska	2016-09-13 02:30	2016-09-13 09:30
Golden Alaska	2016-09-14 21:10	2016-09-15 01:35
Golden Alaska	2016-09-15 08:05	2016-09-15 11:10
Golden Alaska	2016-09-16 12:42	2016-09-16 14:40
Golden Alaska	2016-09-22 01:50	2016-09-22 05:50
Golden Alaska	2016-09-22 08:40	2016-09-22 12:10
Golden Alaska	2016-09-23 03:00	2016-09-23 10:50
Golden Alaska	2016-09-25 05:47	2016-09-25 10:20
Golden Alaska	2016-09-25 08:50	2016-09-25 11:47
Golden Alaska	2016-09-27 10:01	2016-09-27 12:10
Golden Alaska	2016-10-02 16:45	2016-10-02 19:00
Golden Dawn	2016-03-08 15:33	2016-03-08 20:12
Golden Dawn	2016-03-29 17:56	2016-03-29 19:37
Golden Dawn	2016-04-12 11:57	2016-04-12 16:11
Golden Dawn	2016-04-18 08:58	2016-04-18 15:39
Golden Dawn	2016-06-27 19:13	2016-06-27 21:00
Golden Dawn	2016-07-07 19:32	2016-07-08 02:16

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Golden Dawn	2016-07-08 04:25	2016-07-08 10:54
Golden Dawn	2016-07-11 06:51	2016-07-11 14:35
Golden Dawn	2016-07-14 12:03	2016-07-14 18:45
Golden Dawn	2016-07-17 21:43	2016-07-18 10:18
Golden Dawn	2016-08-26 15:35	2016-08-26 17:33
Golden Dawn	2016-09-28 22:43	2016-09-29 11:29
Golden Pisces	2016-06-15 14:05	2016-06-15 16:30
Golden Pisces	2016-06-21 15:20	2016-06-21 18:35
Golden Pisces	2016-07-24 18:15	2016-07-25 00:15
Golden Pisces	2016-08-07 15:30	2016-08-07 16:30
Golden Pisces	2016-08-24 09:20	2016-08-24 13:00
Golden Pisces	2016-09-18 11:00	2016-09-18 11:40
Gold Rush	2016-06-12 07:19	2016-06-12 09:26
Gold Rush	2016-06-15 07:36	2016-06-15 09:30
Gold Rush	2016-07-10 07:05	2016-07-10 12:04
Great Pacific	2016-02-06 23:15	2016-02-07 13:35
Great Pacific	2016-02-07 15:36	2016-02-07 19:02
Great Pacific	2016-02-25 12:11	2016-02-25 15:14
Great Pacific	2016-03-05 15:16	2016-03-05 18:03
Half Moon Bay	2016-01-28 20:40	2016-01-29 02:00
Half Moon Bay	2016-02-19 15:40	2016-02-19 19:15
Half Moon Bay	2016-03-21 11:30	2016-03-21 12:30
Half Moon Bay	2016-06-10 01:15	2016-06-10 04:45
Half Moon Bay	2016-08-15 18:00	2016-08-16 00:30
Half Moon Bay	2016-08-30 05:50	2016-08-30 10:50
Half Moon Bay	2016-09-06 07:45	2016-09-06 10:20
Hickory Wind	2016-04-09 20:15	2016-04-09 23:30
Hickory Wind	2016-04-10 01:10	2016-04-10 06:00
Hickory Wind	2016-06-18 18:40	2016-06-19 06:30
Hickory Wind	2016-06-19 08:45	2016-06-19 11:00
Hickory Wind	2016-06-22 08:30	2016-06-22 10:00
Hickory Wind	2016-06-24 15:30	2016-06-24 17:10
Hickory Wind	2016-06-25 07:45	2016-06-25 10:00
Hickory Wind	2016-07-09 20:15	2016-07-09 23:00
Hickory Wind	2016-07-13 00:36	2016-07-13 09:45
Hickory Wind	2016-07-19 14:00	2016-07-19 16:30
Hickory Wind	2016-07-19 19:30	2016-07-19 21:00
Hickory Wind	2016-07-22 21:00	2016-07-23 04:00
Hickory Wind	2016-07-27 12:55	2016-07-27 15:20

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Hickory Wind	2016-08-03 08:00	2016-08-03 09:30
Hickory Wind	2016-08-03 17:25	2016-08-03 21:30
Hickory Wind	2016-08-06 17:40	2016-08-06 20:00
Hickory Wind	2016-08-15 16:45	2016-08-15 23:45
Island Enterprise	2016-01-29 09:15	2016-01-29 11:10
Island Enterprise	2016-01-30 14:25	2016-01-30 15:40
Island Enterprise	2016-02-06 18:05	2016-02-06 21:00
Island Enterprise	2016-02-09 05:25	2016-02-09 06:35
Island Enterprise	2016-02-10 17:05	2016-02-10 18:45
Island Enterprise	2016-02-15 03:20	2016-02-15 06:30
Island Enterprise	2016-02-22 05:50	2016-02-22 09:45
Island Enterprise	2016-02-23 07:30	2016-02-23 12:30
Island Enterprise	2016-02-25 19:30	2016-02-25 21:05
Island Enterprise	2016-03-09 05:10	2016-03-09 08:30
Island Enterprise	2016-03-15 18:30	2016-03-15 21:45
Island Enterprise	2016-03-19 18:20	2016-03-19 19:00
Island Enterprise	2016-07-04 01:05	2016-07-04 08:30
Island Enterprise	2016-07-04 09:40	2016-07-04 13:45
Island Enterprise	2016-07-08 11:20	2016-07-08 15:30
Island Enterprise	2016-07-11 10:30	2016-07-11 16:30
Island Enterprise	2016-07-18 09:35	2016-07-18 11:05
Island Enterprise	2016-07-20 00:45	2016-07-20 04:20
Island Enterprise	2016-07-21 21:20	2016-07-21 23:45
Island Enterprise	2016-07-26 07:35	2016-07-26 13:50
Island Enterprise	2016-07-27 09:15	2016-07-27 10:50
Island Enterprise	2016-07-31 08:50	2016-07-31 11:45
Island Enterprise	2016-08-01 04:35	2016-08-01 08:00
Island Enterprise	2016-08-05 20:30	2016-08-05 22:40
Island Enterprise	2016-08-08 01:05	2016-08-08 02:35
Island Enterprise	2016-08-08 06:25	2016-08-08 09:35
Island Enterprise	2016-08-14 07:15	2016-08-14 15:00
Island Enterprise	2016-08-15 00:20	2016-08-15 06:15
Island Enterprise	2016-08-16 08:05	2016-08-16 12:40
Island Enterprise	2016-08-22 17:15	2016-08-22 17:55
Island Enterprise	2016-08-28 01:45	2016-08-28 04:15
Island Enterprise	2016-08-30 08:20	2016-08-30 12:00
Island Enterprise	2016-09-01 07:15	2016-09-01 13:00
Island Enterprise	2016-09-07 21:40	2016-09-07 23:40
Island Enterprise	2016-09-17 18:15	2016-09-17 22:30

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Katie Ann	2016-10-09 10:20	2016-10-09 12:24
Kodiak Enterprise	2016-01-30 04:40	2016-01-30 09:30
Kodiak Enterprise	2016-01-30 12:45	2016-01-30 14:00
Kodiak Enterprise	2016-02-09 22:30	2016-02-09 23:20
Kodiak Enterprise	2016-02-13 09:15	2016-02-13 11:45
Kodiak Enterprise	2016-02-16 09:50	2016-02-16 15:50
Kodiak Enterprise	2016-02-17 00:50	2016-02-17 06:30
Kodiak Enterprise	2016-02-17 14:30	2016-02-17 21:55
Kodiak Enterprise	2016-02-18 17:50	2016-02-18 18:40
Kodiak Enterprise	2016-02-29 14:05	2016-02-29 16:55
Kodiak Enterprise	2016-03-10 03:05	2016-03-10 06:00
Kodiak Enterprise	2016-03-14 02:10	2016-03-14 04:55
Kodiak Enterprise	2016-03-19 21:10	2016-03-20 01:40
Kodiak Enterprise	2016-03-20 14:25	2016-03-20 18:25
Kodiak Enterprise	2016-03-21 18:10	2016-03-21 20:40
Kodiak Enterprise	2016-03-23 23:50	2016-03-24 03:45
Kodiak Enterprise	2016-06-30 23:40	2016-07-01 05:25
Kodiak Enterprise	2016-07-01 18:50	2016-07-01 21:05
Kodiak Enterprise	2016-07-02 17:45	2016-07-02 20:05
Kodiak Enterprise	2016-07-03 03:55	2016-07-03 07:00
Kodiak Enterprise	2016-07-08 21:10	2016-07-08 23:05
Kodiak Enterprise	2016-07-09 21:10	2016-07-10 01:20
Kodiak Enterprise	2016-07-12 17:50	2016-07-13 00:30
Kodiak Enterprise	2016-07-16 09:30	2016-07-16 11:20
Kodiak Enterprise	2016-07-28 14:00	2016-07-28 15:35
Kodiak Enterprise	2016-08-01 06:30	2016-08-01 10:25
Kodiak Enterprise	2016-08-03 18:15	2016-08-03 19:05
Kodiak Enterprise	2016-08-08 05:30	2016-08-08 06:30
Kodiak Enterprise	2016-08-11 05:20	2016-08-11 06:50
Kodiak Enterprise	2016-08-11 18:50	2016-08-11 21:35
Kodiak Enterprise	2016-08-14 06:50	2016-08-14 14:05
Kodiak Enterprise	2016-08-14 20:30	2016-08-14 22:35
Kodiak Enterprise	2016-08-15 04:40	2016-08-15 09:50
Kodiak Enterprise	2016-08-24 19:25	2016-08-24 21:15
Kodiak Enterprise	2016-08-31 16:15	2016-08-31 18:15
Kodiak Enterprise	2016-09-02 11:20	2016-09-02 17:20
Kodiak Enterprise	2016-09-02 18:30	2016-09-02 23:40
Kodiak Enterprise	2016-09-03 02:30	2016-09-03 06:15
Kodiak Enterprise	2016-09-11 20:25	2016-09-11 23:40

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Kodiak Enterprise	2016-09-12 10:45	2016-09-12 14:00
Leslie Lee	2016-06-21 08:00	2016-06-21 12:25
Leslie Lee	2016-07-02 16:15	2016-07-02 22:15
Leslie Lee	2016-07-24 07:55	2016-07-24 16:10
Leslie Lee	2016-08-03 18:25	2016-08-03 20:00
Lisa Melinda	2016-04-07 16:30	2016-04-07 21:15
Lisa Melinda	2016-04-08 11:00	2016-04-08 14:30
Majesty	2016-06-12 08:15	2016-06-12 11:03
Majesty	2016-06-24 23:20	2016-06-25 05:30
Majesty	2016-08-01 14:15	2016-08-01 15:59
Majesty	2016-08-05 19:13	2016-08-05 21:38
Majesty	2016-08-05 22:40	2016-08-06 02:43
Majesty	2016-08-18 01:38	2016-08-18 07:19
Marcy J	2016-07-03 05:30	2016-07-03 09:30
Marcy J	2016-07-06 18:00	2016-07-06 19:40
Margaret Lyn	2016-03-14 23:04	2016-03-15 01:09
Margaret Lyn	2016-04-02 14:14	2016-04-02 16:05
Margaret Lyn	2016-04-02 17:27	2016-04-02 18:28
Miss Berdie	2016-02-04 12:07	2016-02-04 12:59
Miss Berdie	2016-03-27 11:45	2016-03-27 15:50
Morning Star	2016-02-01 05:30	2016-02-01 11:15
Morning Star	2016-02-09 00:20	2016-02-09 08:30
Morning Star	2016-02-18 21:45	2016-02-19 01:40
Morning Star	2016-02-22 11:00	2016-02-22 15:05
Morning Star	2016-06-11 08:08	2016-06-11 18:05
Morning Star	2016-07-18 13:25	2016-07-18 16:45
Morning Star	2016-08-23 00:03	2016-08-23 09:27
Morning Star	2016-09-04 13:13	2016-09-04 16:50
Nordic Fury	2016-01-22 12:50	2016-01-22 13:25
Nordic Fury	2016-06-28 10:50	2016-06-28 13:20
Nordic Fury	2016-07-17 14:30	2016-07-17 19:00
Nordic Fury	2016-08-03 10:45	2016-08-03 14:35
Nordic Fury	2016-08-19 08:45	2016-08-19 15:00
Nordic Fury	2016-08-19 17:00	2016-08-19 18:45
Nordic Star	2016-01-30 02:57	2016-01-30 03:43
Nordic Star	2016-02-10 11:25	2016-02-10 12:13
Nordic Star	2016-02-10 16:28	2016-02-10 17:13
Nordic Star	2016-03-29 13:28	2016-03-29 16:38
Nordic Star	2016-06-28 11:36	2016-06-28 12:36

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Nordic Star	2016-07-04 15:59	2016-07-04 17:56
Nordic Star	2016-07-05 13:31	2016-07-05 15:12
Nordic Star	2016-08-12 14:49	2016-08-12 17:25
Nordic Star	2016-08-15 13:06	2016-08-15 14:37
Nordic Star	2016-08-21 16:51	2016-08-21 21:39
Northern Eagle	2016-02-01 21:40	2016-02-02 00:10
Northern Eagle	2016-02-03 13:00	2016-02-03 17:05
Northern Eagle	2016-02-06 11:05	2016-02-06 12:05
Northern Eagle	2016-02-24 00:40	2016-02-24 03:40
Northern Eagle	2016-02-24 23:10	2016-02-25 02:10
Northern Eagle	2016-02-26 00:30	2016-02-26 04:20
Northern Eagle	2016-02-26 06:30	2016-02-26 09:55
Northern Eagle	2016-02-29 09:45	2016-02-29 13:00
Northern Eagle	2016-03-05 14:45	2016-03-05 18:30
Northern Eagle	2016-03-07 06:15	2016-03-07 12:10
Northern Eagle	2016-03-08 18:10	2016-03-08 21:15
Northern Eagle	2016-03-09 09:20	2016-03-09 13:45
Northern Eagle	2016-03-20 21:50	2016-03-21 04:50
Northern Eagle	2016-03-21 19:30	2016-03-22 00:25
Northern Eagle	2016-03-27 16:25	2016-03-27 18:50
Northern Eagle	2016-03-29 22:45	2016-03-30 03:25
Northern Eagle	2016-06-15 19:20	2016-06-15 21:55
Northern Eagle	2016-06-20 06:35	2016-06-20 12:45
Northern Eagle	2016-06-22 17:10	2016-06-22 21:35
Northern Eagle	2016-06-22 22:20	2016-06-23 00:40
Northern Eagle	2016-06-23 23:15	2016-06-24 03:05
Northern Eagle	2016-06-29 12:35	2016-06-29 14:10
Northern Eagle	2016-06-29 17:20	2016-06-29 18:40
Northern Eagle	2016-06-30 12:00	2016-06-30 15:20
Northern Eagle	2016-07-01 20:25	2016-07-02 00:15
Northern Eagle	2016-07-06 02:30	2016-07-06 06:30
Northern Eagle	2016-07-06 09:30	2016-07-06 12:15
Northern Eagle	2016-07-06 15:40	2016-07-06 20:10
Northern Eagle	2016-07-07 09:00	2016-07-07 10:45
Northern Eagle	2016-07-07 20:35	2016-07-08 01:00
Northern Eagle	2016-07-15 02:00	2016-07-15 08:40
Northern Eagle	2016-07-15 13:50	2016-07-15 17:55
Northern Eagle	2016-07-17 01:25	2016-07-17 05:45
Northern Eagle	2016-07-17 17:40	2016-07-17 21:05

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Northern Eagle	2016-07-19 00:05	2016-07-19 02:30
Northern Eagle	2016-07-29 17:50	2016-07-29 20:35
Northern Eagle	2016-07-30 05:35	2016-07-30 07:55
Northern Eagle	2016-08-03 01:45	2016-08-03 05:30
Northern Eagle	2016-08-16 09:05	2016-08-16 12:45
Northern Eagle	2016-08-19 12:20	2016-08-19 16:20
Northern Eagle	2016-08-25 06:50	2016-08-25 11:40
Northern Eagle	2016-08-25 23:00	2016-08-26 03:50
Northern Hawk	2016-01-21 16:50	2016-01-21 19:00
Northern Hawk	2016-01-22 23:55	2016-01-23 03:55
Northern Hawk	2016-01-24 00:40	2016-01-24 01:45
Northern Hawk	2016-01-25 15:45	2016-01-25 17:10
Northern Hawk	2016-01-27 22:15	2016-01-28 02:40
Northern Hawk	2016-01-28 22:30	2016-01-29 02:45
Northern Hawk	2016-01-29 17:10	2016-01-29 22:10
Northern Hawk	2016-01-30 11:50	2016-01-30 14:45
Northern Hawk	2016-02-05 02:55	2016-02-05 06:00
Northern Hawk	2016-02-05 13:20	2016-02-05 19:05
Northern Hawk	2016-02-08 00:10	2016-02-08 05:00
Northern Hawk	2016-02-08 05:30	2016-02-08 10:45
Northern Hawk	2016-02-08 17:00	2016-02-08 21:55
Northern Hawk	2016-02-14 20:25	2016-02-14 21:55
Northern Hawk	2016-02-18 13:40	2016-02-18 19:25
Northern Hawk	2016-02-22 21:35	2016-02-22 23:55
Northern Hawk	2016-02-24 06:25	2016-02-24 12:00
Northern Hawk	2016-02-24 21:20	2016-02-24 23:25
Northern Hawk	2016-02-25 07:30	2016-02-25 12:55
Northern Hawk	2016-02-25 23:00	2016-02-26 02:30
Northern Hawk	2016-02-28 05:20	2016-02-28 10:40
Northern Hawk	2016-03-06 08:30	2016-03-06 10:40
Northern Hawk	2016-03-09 00:20	2016-03-09 04:30
Northern Hawk	2016-03-09 20:10	2016-03-09 23:45
Northern Hawk	2016-03-14 23:20	2016-03-15 01:00
Northern Hawk	2016-06-15 15:50	2016-06-15 19:10
Northern Hawk	2016-06-16 02:10	2016-06-16 06:10
Northern Hawk	2016-06-16 20:00	2016-06-16 21:50
Northern Hawk	2016-06-18 19:15	2016-06-18 21:55
Northern Hawk	2016-06-19 15:15	2016-06-19 17:00
Northern Hawk	2016-06-20 06:25	2016-06-20 09:35

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Northern Hawk	2016-06-22 01:35	2016-06-22 06:05
Northern Hawk	2016-06-23 09:30	2016-06-23 16:10
Northern Hawk	2016-06-24 06:35	2016-06-24 07:30
Northern Hawk	2016-06-25 17:50	2016-06-25 19:30
Northern Hawk	2016-06-30 18:15	2016-06-30 22:20
Northern Hawk	2016-07-03 03:55	2016-07-03 07:40
Northern Hawk	2016-07-03 16:40	2016-07-03 21:15
Northern Hawk	2016-07-06 12:30	2016-07-06 14:35
Northern Hawk	2016-07-14 03:00	2016-07-14 08:40
Northern Hawk	2016-07-15 12:15	2016-07-15 14:00
Northern Hawk	2016-07-16 21:50	2016-07-17 02:55
Northern Hawk	2016-07-17 10:30	2016-07-17 12:05
Northern Hawk	2016-07-28 01:25	2016-07-28 06:25
Northern Hawk	2016-07-30 21:20	2016-07-30 23:00
Northern Hawk	2016-07-31 04:00	2016-07-31 07:15
Northern Hawk	2016-08-01 04:50	2016-08-01 07:10
Northern Hawk	2016-08-04 11:40	2016-08-04 16:10
Northern Hawk	2016-08-09 00:35	2016-08-09 02:20
Northern Hawk	2016-08-10 14:25	2016-08-10 17:30
Northern Hawk	2016-08-14 15:45	2016-08-14 21:00
Northern Hawk	2016-08-14 23:15	2016-08-15 02:30
Northern Jaeger	2016-02-02 17:30	2016-02-03 01:11
Northern Jaeger	2016-02-04 01:12	2016-02-04 05:42
Northern Jaeger	2016-02-09 02:48	2016-02-09 07:37
Northern Jaeger	2016-02-23 03:45	2016-02-23 08:15
Northern Jaeger	2016-02-24 20:45	2016-02-24 21:30
Northern Jaeger	2016-03-05 17:50	2016-03-05 18:19
Northern Jaeger	2016-03-07 18:15	2016-03-07 20:03
Northern Jaeger	2016-03-10 06:47	2016-03-10 12:05
Northern Jaeger	2016-03-10 13:40	2016-03-10 16:45
Northern Jaeger	2016-03-17 16:40	2016-03-17 18:12
Northern Jaeger	2016-03-17 19:20	2016-03-17 20:00
Northern Jaeger	2016-03-21 06:58	2016-03-21 08:07
Northern Jaeger	2016-03-22 02:18	2016-03-22 04:45
Northern Jaeger	2016-04-07 03:50	2016-04-07 05:45
Northern Jaeger	2016-04-07 09:26	2016-04-07 12:42
Northern Jaeger	2016-07-20 19:48	2016-07-21 02:55
Northern Jaeger	2016-07-23 12:05	2016-07-23 13:40
Northern Jaeger	2016-07-26 10:10	2016-07-26 13:30

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Northern Jaeger	2016-08-09 03:03	2016-08-09 09:25
Northern Jaeger	2016-08-09 14:05	2016-08-09 16:45
Northern Jaeger	2016-08-20 03:30	2016-08-20 06:33
Northern Jaeger	2016-08-24 21:29	2016-08-25 02:49
Northern Jaeger	2016-09-10 16:45	2016-09-11 00:01
Northern Jaeger	2016-09-11 00:50	2016-09-11 05:12
Northern Jaeger	2016-09-12 21:08	2016-09-13 00:02
Northern Patriot	2016-02-15 13:11	2016-02-15 15:01
Northern Patriot	2016-02-15 16:17	2016-02-15 16:50
Northern Patriot	2016-02-20 16:50	2016-02-21 01:08
Northern Patriot	2016-02-24 18:30	2016-02-25 02:40
Northern Patriot	2016-02-28 18:07	2016-02-28 22:23
Northern Patriot	2016-03-04 12:33	2016-03-04 13:58
Northern Patriot	2016-04-05 22:18	2016-04-06 09:38
Northern Patriot	2016-04-09 11:10	2016-04-09 13:28
Northern Patriot	2016-07-22 15:14	2016-07-22 16:46
Northern Patriot	2016-08-10 16:58	2016-08-10 20:45
Northern Patriot	2016-08-23 14:36	2016-08-23 17:22
Northern Patriot	2016-09-19 14:27	2016-09-19 15:34
Northern Patriot	2016-09-22 19:30	2016-09-22 23:42
Northwest Explorer	2016-01-28 11:50	2016-01-28 18:04
Northwest Explorer	2016-03-14 15:15	2016-03-14 16:00
Northwest Explorer	2016-03-14 19:15	2016-03-14 21:35
Northwest Explorer	2016-03-27 15:38	2016-03-27 19:52
Northwest Explorer	2016-04-06 16:36	2016-04-06 20:12
Ocean Explorer	2016-01-24 13:35	2016-01-24 15:18
Ocean Explorer	2016-02-01 14:05	2016-02-01 16:31
Ocean Explorer	2016-03-16 02:05	2016-03-16 03:44
Ocean Explorer	2016-04-12 20:36	2016-04-12 23:04
Ocean Explorer	2016-06-12 12:30	2016-06-12 13:41
Ocean Explorer	2016-06-18 15:16	2016-06-18 17:35
Ocean Explorer	2016-07-20 14:37	2016-07-20 16:45
Ocean Explorer	2016-07-21 22:48	2016-07-22 07:26
Ocean Explorer	2016-07-24 19:56	2016-07-24 21:40
Ocean Explorer	2016-07-24 22:22	2016-07-25 05:26
Ocean Explorer	2016-08-12 06:33	2016-08-12 08:32
Ocean Explorer	2016-08-21 11:14	2016-08-21 13:33
Ocean Explorer	2016-08-26 02:10	2016-08-26 08:52
Ocean Hope 3	2016-01-20 17:02	2016-01-20 18:15

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Ocean Hope 3	2016-01-24 12:50	2016-01-24 14:00
Ocean Hope 3	2016-01-24 17:15	2016-01-24 19:00
Ocean Hope 3	2016-02-02 15:00	2016-02-02 19:30
Ocean Hope 3	2016-02-14 14:30	2016-02-14 15:45
Ocean Hope 3	2016-07-01 07:15	2016-07-01 10:30
Ocean Hope 3	2016-07-23 05:15	2016-07-23 06:50
Ocean Hope 3	2016-09-20 12:00	2016-09-20 14:50
Ocean Leader	2016-07-30 12:00	2016-07-30 20:00
Ocean Leader	2016-08-06 16:15	2016-08-06 19:40
Ocean Phoenix	2016-01-31 13:15	2016-01-31 14:05
Ocean Phoenix	2016-02-03 16:50	2016-02-03 17:35
Ocean Phoenix	2016-02-04 14:15	2016-02-04 16:15
Ocean Phoenix	2016-02-05 17:15	2016-02-05 20:50
Ocean Phoenix	2016-02-06 05:00	2016-02-06 09:30
Ocean Phoenix	2016-02-09 13:30	2016-02-09 15:45
Ocean Phoenix	2016-02-10 11:20	2016-02-10 11:45
Ocean Phoenix	2016-02-11 06:55	2016-02-11 09:35
Ocean Phoenix	2016-02-11 21:00	2016-02-12 00:45
Ocean Phoenix	2016-02-12 16:36	2016-02-12 18:16
Ocean Phoenix	2016-02-13 03:00	2016-02-13 04:10
Ocean Phoenix	2016-02-13 09:42	2016-02-13 12:09
Ocean Phoenix	2016-02-14 23:45	2016-02-15 01:30
Ocean Phoenix	2016-02-15 08:30	2016-02-15 11:38
Ocean Phoenix	2016-02-15 16:06	2016-02-15 16:35
Ocean Phoenix	2016-02-22 03:37	2016-02-22 05:42
Ocean Phoenix	2016-03-05 02:55	2016-03-05 09:05
Ocean Phoenix	2016-03-05 13:45	2016-03-05 15:30
Ocean Phoenix	2016-03-06 04:07	2016-03-06 09:05
Ocean Phoenix	2016-03-06 05:45	2016-03-06 10:40
Ocean Phoenix	2016-03-07 16:25	2016-03-07 17:43
Ocean Phoenix	2016-03-08 01:40	2016-03-08 04:05
Ocean Phoenix	2016-03-08 03:05	2016-03-08 06:10
Ocean Phoenix	2016-03-08 11:20	2016-03-08 14:05
Ocean Phoenix	2016-03-08 18:40	2016-03-08 22:30
Ocean Phoenix	2016-03-09 14:40	2016-03-09 15:25
Ocean Phoenix	2016-03-11 05:30	2016-03-11 05:50
Ocean Phoenix	2016-03-12 07:35	2016-03-12 09:15
Ocean Phoenix	2016-03-14 07:15	2016-03-14 08:05
Ocean Phoenix	2016-03-14 13:05	2016-03-14 14:10

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Ocean Phoenix	2016-03-14 15:10	2016-03-14 15:35
Ocean Phoenix	2016-03-14 19:15	2016-03-14 19:55
Ocean Phoenix	2016-03-16 12:55	2016-03-16 14:10
Ocean Phoenix	2016-03-16 21:08	2016-03-16 22:15
Ocean Phoenix	2016-03-16 22:33	2016-03-16 23:45
Ocean Phoenix	2016-03-17 04:43	2016-03-17 05:40
Ocean Phoenix	2016-03-19 00:44	2016-03-19 01:47
Ocean Phoenix	2016-03-19 05:25	2016-03-19 08:25
Ocean Phoenix	2016-06-10 20:55	2016-06-11 09:15
Ocean Phoenix	2016-06-10 23:05	2016-06-11 10:10
Ocean Phoenix	2016-06-11 10:37	2016-06-11 11:56
Ocean Phoenix	2016-06-11 16:31	2016-06-11 19:00
Ocean Phoenix	2016-06-13 11:35	2016-06-13 12:00
Ocean Phoenix	2016-06-15 10:43	2016-06-15 12:28
Ocean Phoenix	2016-06-16 17:51	2016-06-16 18:19
Ocean Phoenix	2016-06-16 21:00	2016-06-16 23:15
Ocean Phoenix	2016-06-16 23:33	2016-06-17 00:30
Ocean Phoenix	2016-06-17 18:50	2016-06-17 20:07
Ocean Phoenix	2016-06-17 21:05	2016-06-17 22:15
Ocean Phoenix	2016-06-18 01:20	2016-06-18 04:10
Ocean Phoenix	2016-06-18 10:23	2016-06-18 10:51
Ocean Phoenix	2016-06-21 22:00	2016-06-22 05:50
Ocean Phoenix	2016-06-22 20:35	2016-06-22 22:45
Ocean Phoenix	2016-06-23 11:40	2016-06-23 13:05
Ocean Phoenix	2016-06-23 19:40	2016-06-23 21:00
Ocean Phoenix	2016-06-25 18:49	2016-06-25 19:46
Ocean Phoenix	2016-06-26 18:06	2016-06-26 19:15
Ocean Phoenix	2016-06-28 12:30	2016-06-28 16:45
Ocean Phoenix	2016-07-02 01:30	2016-07-02 08:45
Ocean Phoenix	2016-07-09 22:00	2016-07-09 22:55
Ocean Phoenix	2016-07-10 11:39	2016-07-10 12:33
Ocean Phoenix	2016-07-12 15:40	2016-07-12 16:10
Ocean Phoenix	2016-07-13 10:35	2016-07-13 12:17
Ocean Phoenix	2016-07-14 10:10	2016-07-14 11:35
Ocean Phoenix	2016-07-15 03:45	2016-07-15 08:45
Ocean Phoenix	2016-07-15 05:12	2016-07-15 08:30
Ocean Phoenix	2016-07-15 13:13	2016-07-15 14:15
Ocean Phoenix	2016-07-15 17:55	2016-07-15 18:35
Ocean Phoenix	2016-07-18 01:35	2016-07-18 04:30

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Ocean Phoenix	2016-07-18 09:17	2016-07-18 09:53
Ocean Phoenix	2016-07-18 13:37	2016-07-18 15:00
Ocean Phoenix	2016-07-19 14:36	2016-07-19 16:30
Ocean Phoenix	2016-07-19 17:30	2016-07-19 18:12
Ocean Phoenix	2016-07-19 19:30	2016-07-19 21:30
Ocean Phoenix	2016-07-20 23:00	2016-07-21 05:53
Ocean Phoenix	2016-07-22 04:45	2016-07-22 08:05
Ocean Phoenix	2016-07-22 10:08	2016-07-22 12:20
Ocean Phoenix	2016-07-22 11:09	2016-07-22 12:49
Ocean Phoenix	2016-07-24 06:54	2016-07-24 09:28
Ocean Phoenix	2016-07-25 05:45	2016-07-25 08:15
Ocean Phoenix	2016-07-25 11:10	2016-07-25 14:10
Ocean Phoenix	2016-07-28 13:40	2016-07-28 14:05
Ocean Phoenix	2016-07-29 02:05	2016-07-29 07:55
Ocean Phoenix	2016-07-29 04:00	2016-07-29 08:35
Ocean Phoenix	2016-08-04 19:05	2016-08-04 19:56
Ocean Phoenix	2016-08-06 15:05	2016-08-06 15:50
Ocean Phoenix	2016-08-06 20:31	2016-08-06 21:02
Ocean Phoenix	2016-08-07 20:04	2016-08-07 21:17
Ocean Phoenix	2016-08-08 19:52	2016-08-08 20:05
Ocean Phoenix	2016-08-10 09:00	2016-08-10 10:12
Ocean Phoenix	2016-08-10 13:10	2016-08-10 13:29
Ocean Phoenix	2016-08-11 02:05	2016-08-11 03:00
Ocean Phoenix	2016-08-11 03:15	2016-08-11 06:10
Ocean Phoenix	2016-08-11 10:30	2016-08-11 11:42
Ocean Phoenix	2016-08-12 19:35	2016-08-12 20:17
Ocean Phoenix	2016-08-12 22:30	2016-08-13 01:10
Ocean Phoenix	2016-08-17 08:14	2016-08-17 10:42
Ocean Phoenix	2016-08-18 12:30	2016-08-18 14:35
Ocean Phoenix	2016-08-18 15:45	2016-08-18 16:37
Ocean Phoenix	2016-08-19 01:34	2016-08-19 06:00
Ocean Phoenix	2016-08-26 23:55	2016-08-27 02:00
Ocean Phoenix	2016-08-27 01:25	2016-08-27 04:05
Ocean Phoenix	2016-08-28 09:05	2016-08-28 11:45
Ocean Phoenix	2016-08-29 23:00	2016-08-30 01:45
Ocean Phoenix	2016-08-30 19:23	2016-08-30 21:57
Ocean Phoenix	2016-08-31 04:40	2016-08-31 07:30
Ocean Phoenix	2016-08-31 15:35	2016-08-31 17:34
Ocean Phoenix	2016-09-01 22:00	2016-09-01 23:35

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Ocean Phoenix	2016-09-02 21:20	2016-09-02 23:45
Ocean Phoenix	2016-09-03 02:15	2016-09-03 08:52
Ocean Phoenix	2016-09-03 05:45	2016-09-03 09:27
Ocean Phoenix	2016-09-04 14:12	2016-09-04 15:04
Ocean Phoenix	2016-09-06 02:19	2016-09-06 07:41
Ocean Phoenix	2016-09-06 10:25	2016-09-06 12:33
Ocean Phoenix	2016-09-06 23:50	2016-09-07 04:05
Ocean Phoenix	2016-09-07 20:50	2016-09-07 23:48
Ocean Rover	2016-01-28 10:00	2016-01-28 15:45
Ocean Rover	2016-01-31 03:40	2016-01-31 06:05
Ocean Rover	2016-02-08 16:00	2016-02-09 00:40
Ocean Rover	2016-02-13 16:40	2016-02-13 23:20
Ocean Rover	2016-02-14 05:35	2016-02-14 07:45
Ocean Rover	2016-02-18 08:25	2016-02-18 13:10
Ocean Rover	2016-02-22 07:00	2016-02-22 14:20
Ocean Rover	2016-02-27 19:15	2016-02-27 23:35
Ocean Rover	2016-03-08 18:05	2016-03-08 21:30
Ocean Rover	2016-03-09 18:35	2016-03-10 04:40
Ocean Rover	2016-03-12 16:00	2016-03-12 18:30
Ocean Rover	2016-03-24 23:35	2016-03-25 01:25
Ocean Rover	2016-03-30 09:15	2016-03-30 14:40
Ocean Rover	2016-06-29 22:00	2016-06-30 01:00
Ocean Rover	2016-07-02 11:35	2016-07-02 17:20
Ocean Rover	2016-07-19 08:50	2016-07-19 11:05
Ocean Rover	2016-07-21 00:30	2016-07-21 03:45
Ocean Rover	2016-07-24 03:30	2016-07-24 09:00
Ocean Rover	2016-08-03 07:30	2016-08-03 11:00
Ocean Rover	2016-08-03 14:00	2016-08-03 15:05
Ocean Rover	2016-08-10 21:55	2016-08-10 23:20
Ocean Rover	2016-08-13 01:30	2016-08-13 05:40
Ocean Rover	2016-08-14 10:55	2016-08-14 13:00
Ocean Rover	2016-08-22 22:25	2016-08-23 03:30
Ocean Rover	2016-08-27 16:00	2016-08-27 19:55
Pacific Explorer	2016-01-26 07:55	2016-01-26 11:50
Pacific Explorer	2016-02-09 11:00	2016-02-09 11:35
Pacific Explorer	2016-03-21 06:53	2016-03-21 09:45
Pacific Explorer	2016-03-31 16:15	2016-03-31 16:55
Pacific Explorer	2016-07-22 09:06	2016-07-22 12:10
Pacific Explorer	2016-07-31 16:30	2016-07-31 18:00

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Pacific Glacier	2016-01-20 18:06	2016-01-20 20:14
Pacific Glacier	2016-01-20 23:00	2016-01-21 00:59
Pacific Glacier	2016-01-21 18:30	2016-01-21 23:30
Pacific Glacier	2016-01-23 21:47	2016-01-23 23:25
Pacific Glacier	2016-01-25 03:10	2016-01-25 03:35
Pacific Glacier	2016-01-30 19:20	2016-01-30 22:30
Pacific Glacier	2016-02-05 17:10	2016-02-05 21:10
Pacific Glacier	2016-02-12 22:30	2016-02-13 04:00
Pacific Glacier	2016-02-13 23:15	2016-02-14 01:00
Pacific Glacier	2016-02-15 12:40	2016-02-15 17:05
Pacific Glacier	2016-02-15 17:35	2016-02-15 22:15
Pacific Glacier	2016-02-17 12:40	2016-02-17 13:48
Pacific Glacier	2016-02-20 12:00	2016-02-20 14:15
Pacific Glacier	2016-02-20 22:35	2016-02-21 03:40
Pacific Glacier	2016-02-23 04:15	2016-02-23 07:15
Pacific Glacier	2016-02-25 16:00	2016-02-25 19:18
Pacific Glacier	2016-02-26 06:00	2016-02-26 08:40
Pacific Glacier	2016-03-02 02:38	2016-03-02 07:45
Pacific Glacier	2016-03-02 17:20	2016-03-02 21:55
Pacific Glacier	2016-03-03 09:40	2016-03-03 12:30
Pacific Glacier	2016-03-04 09:25	2016-03-04 12:00
Pacific Glacier	2016-03-04 13:17	2016-03-04 16:22
Pacific Glacier	2016-03-07 00:10	2016-03-07 05:10
Pacific Glacier	2016-03-12 01:35	2016-03-12 05:30
Pacific Glacier	2016-03-16 07:20	2016-03-16 08:30
Pacific Glacier	2016-03-17 15:37	2016-03-17 16:01
Pacific Glacier	2016-03-22 10:43	2016-03-22 14:11
Pacific Glacier	2016-03-26 03:30	2016-03-26 08:53
Pacific Glacier	2016-03-26 18:03	2016-03-26 21:45
Pacific Glacier	2016-06-20 10:35	2016-06-20 14:55
Pacific Glacier	2016-06-21 01:40	2016-06-21 03:45
Pacific Glacier	2016-06-27 23:15	2016-06-28 03:25
Pacific Glacier	2016-06-28 23:00	2016-06-29 01:55
Pacific Glacier	2016-06-30 08:55	2016-06-30 13:10
Pacific Glacier	2016-07-02 11:07	2016-07-02 16:17
Pacific Glacier	2016-07-06 13:00	2016-07-06 14:50
Pacific Glacier	2016-07-08 18:48	2016-07-09 00:05
Pacific Glacier	2016-07-10 13:32	2016-07-10 16:05
Pacific Glacier	2016-07-15 19:55	2016-07-15 22:10

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Pacific Glacier	2016-07-23 17:00	2016-07-23 18:10
Pacific Glacier	2016-07-28 10:25	2016-07-28 15:00
Pacific Glacier	2016-07-30 11:20	2016-07-30 13:00
Pacific Glacier	2016-08-03 08:15	2016-08-03 11:40
Pacific Glacier	2016-08-04 06:00	2016-08-04 08:40
Pacific Glacier	2016-08-07 02:00	2016-08-07 08:10
Pacific Glacier	2016-08-07 11:45	2016-08-07 15:20
Pacific Glacier	2016-08-08 08:45	2016-08-08 11:45
Pacific Glacier	2016-08-08 13:50	2016-08-08 17:00
Pacific Glacier	2016-08-12 23:50	2016-08-13 07:25
Pacific Glacier	2016-08-16 10:28	2016-08-16 15:36
Pacific Glacier	2016-08-18 09:19	2016-08-18 11:35
Pacific Glacier	2016-08-19 02:30	2016-08-19 04:00
Pacific Glacier	2016-08-19 05:00	2016-08-19 07:30
Pacific Glacier	2016-08-19 19:46	2016-08-20 01:10
Pacific Glacier	2016-08-24 06:55	2016-08-24 08:51
Pacific Glacier	2016-08-24 13:32	2016-08-24 15:25
Pacific Glacier	2016-08-27 02:30	2016-08-27 07:50
Pacific Glacier	2016-08-29 02:35	2016-08-29 07:40
Pacific Glacier	2016-08-29 20:10	2016-08-30 01:30
Pacific Glacier	2016-09-16 22:10	2016-09-17 02:15
Pacific Glacier	2016-09-17 03:05	2016-09-17 04:25
Pacific Glacier	2016-09-17 09:42	2016-09-17 16:21
Pacific Glacier	2016-09-20 18:59	2016-09-20 23:20
Pacific Glacier	2016-09-22 02:35	2016-09-22 06:25
Pacific Prince	2016-02-21 20:20	2016-02-21 21:46
Pacific Prince	2016-02-27 15:25	2016-02-27 16:45
Pacific Prince	2016-03-07 16:40	2016-03-07 20:00
Pacific Prince	2016-03-17 18:30	2016-03-17 19:50
Pacific Prince	2016-06-24 15:51	2016-06-24 20:01
Pacific Prince	2016-06-25 10:00	2016-06-25 13:33
Pacific Prince	2016-06-30 05:17	2016-06-30 10:13
Pacific Prince	2016-07-03 21:05	2016-07-04 00:18
Pacific Prince	2016-07-18 15:15	2016-07-18 16:05
Pacific Prince	2016-08-15 11:25	2016-08-15 12:43
Pacific Prince	2016-08-24 14:15	2016-08-24 15:30
Pacific Prince	2016-09-09 09:30	2016-09-09 14:45
Pacific Ram	2016-04-09 08:54	2016-04-09 10:40
Pacific Ram	2016-04-11 11:55	2016-04-11 16:11

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Pacific Ram	2016-04-11 18:05	2016-04-11 19:12
Pacific Viking	2016-04-04 19:55	2016-04-05 06:00
Pacific Viking	2016-04-13 16:51	2016-04-13 17:24
Pacific Viking	2016-06-10 16:59	2016-06-10 19:00
Pacific Viking	2016-08-18 18:10	2016-08-18 18:47
Pacific Viking	2016-08-23 09:26	2016-08-23 10:38
Patricia L	2016-02-21 10:15	2016-02-21 13:00
Patricia L	2016-03-05 09:40	2016-03-05 12:45
Patricia L	2016-03-05 14:40	2016-03-05 17:25
Patricia L	2016-03-08 10:35	2016-03-08 15:05
Patricia L	2016-03-12 20:10	2016-03-12 23:45
Patricia L	2016-07-24 14:00	2016-07-24 15:00
Patricia L	2016-08-18 09:30	2016-08-18 12:20
Patricia L	2016-08-31 09:30	2016-08-31 16:00
Patricia L	2016-09-09 02:00	2016-09-09 07:00
Patricia L	2016-09-17 09:15	2016-09-17 12:45
Patricia L	2016-09-17 22:00	2016-09-17 23:00
Peggy Jo	2016-09-13 14:00	2016-09-13 16:00
Peggy Jo	2016-09-13 17:30	2016-09-13 19:10
Progress	2016-02-22 15:30	2016-02-22 18:15
Progress	2016-04-08 12:40	2016-04-08 16:05
Progress	2016-06-15 11:10	2016-06-15 13:50
Progress	2016-06-29 17:50	2016-06-29 22:00
Progress	2016-07-16 19:05	2016-07-17 01:00
Progress	2016-07-21 15:50	2016-07-21 20:55
Progress	2016-08-05 16:00	2016-08-05 18:00
Progress	2016-08-05 20:25	2016-08-05 22:20
Raven	2016-01-31 16:15	2016-01-31 17:45
Raven	2016-04-05 19:00	2016-04-05 22:10
Raven	2016-04-08 17:45	2016-04-08 19:23
Royal American	2016-01-29 14:50	2016-01-29 16:20
Royal American	2016-03-15 22:36	2016-03-15 23:12
Royal American	2016-03-25 19:00	2016-03-26 00:31
Royal American	2016-06-14 10:14	2016-06-14 16:24
Royal American	2016-06-17 12:28	2016-06-17 17:44
Royal American	2016-06-17 19:39	2016-06-17 19:55
Royal American	2016-06-21 15:48	2016-06-21 16:33
Royal American	2016-07-23 05:31	2016-07-23 06:43
Royal American	2016-08-11 04:09	2016-08-11 08:14

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Royal American	2016-08-23 22:30	2016-08-24 04:54
Royal Atlantic	2016-03-30 18:53	2016-03-30 22:52
Royal Atlantic	2016-06-20 01:27	2016-06-20 02:17
Royal Atlantic	2016-07-11 17:51	2016-07-11 23:37
Royal Atlantic	2016-08-02 12:37	2016-08-02 17:51
Seadawn	2016-03-05 09:30	2016-03-05 18:00
Seadawn	2016-03-23 17:35	2016-03-23 18:40
Seadawn	2016-03-28 18:30	2016-03-28 22:40
Seadawn	2016-07-09 20:57	2016-07-09 21:46
Seadawn	2016-07-12 10:08	2016-07-12 11:31
Seadawn	2016-07-14 07:00	2016-07-14 13:15
Seadawn	2016-07-20 17:45	2016-07-21 00:30
Seadawn	2016-08-04 16:00	2016-08-04 18:30
Seattle Enterprise	2016-01-22 02:45	2016-01-22 05:30
Seattle Enterprise	2016-01-25 19:35	2016-01-25 21:40
Seattle Enterprise	2016-01-26 09:40	2016-01-26 13:05
Seattle Enterprise	2016-01-26 16:00	2016-01-26 16:45
Seattle Enterprise	2016-01-26 22:20	2016-01-26 23:15
Seattle Enterprise	2016-01-28 08:35	2016-01-28 11:05
Seattle Enterprise	2016-02-02 01:30	2016-02-02 02:50
Seattle Enterprise	2016-02-04 07:00	2016-02-04 08:20
Seattle Enterprise	2016-02-05 16:35	2016-02-05 19:30
Seattle Enterprise	2016-02-12 17:55	2016-02-12 22:00
Seattle Enterprise	2016-02-18 12:25	2016-02-18 15:05
Seattle Enterprise	2016-02-25 09:45	2016-02-25 12:45
Seattle Enterprise	2016-02-25 22:25	2016-02-25 23:55
Seattle Enterprise	2016-03-05 15:35	2016-03-05 18:20
Seattle Enterprise	2016-03-13 15:40	2016-03-13 17:50
Seattle Enterprise	2016-03-13 18:25	2016-03-13 23:25
Seattle Enterprise	2016-03-15 08:50	2016-03-15 10:55
Seattle Enterprise	2016-03-16 17:45	2016-03-16 18:45
Seattle Enterprise	2016-06-25 20:10	2016-06-25 22:50
Seattle Enterprise	2016-06-26 20:15	2016-06-27 01:45
Seattle Enterprise	2016-07-04 14:25	2016-07-04 18:30
Seattle Enterprise	2016-07-05 02:30	2016-07-05 06:30
Seattle Enterprise	2016-07-10 02:50	2016-07-10 06:50
Seattle Enterprise	2016-07-17 23:30	2016-07-18 03:40
Seattle Enterprise	2016-07-18 15:35	2016-07-18 17:05
Seattle Enterprise	2016-07-25 07:55	2016-07-25 09:30

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Seattle Enterprise	2016-07-25 13:55	2016-07-25 16:40
Seattle Enterprise	2016-07-29 20:35	2016-07-30 01:20
Seattle Enterprise	2016-08-04 07:45	2016-08-04 09:20
Seattle Enterprise	2016-08-04 13:35	2016-08-04 14:45
Seattle Enterprise	2016-08-07 20:00	2016-08-07 23:10
Seattle Enterprise	2016-08-11 11:05	2016-08-11 15:05
Seattle Enterprise	2016-09-03 01:05	2016-09-03 06:20
Seattle Enterprise	2016-09-03 19:05	2016-09-03 20:25
Seattle Enterprise	2016-09-09 03:05	2016-09-09 07:15
Seattle Enterprise	2016-09-10 15:50	2016-09-10 17:10
Seattle Enterprise	2016-09-18 11:45	2016-09-18 13:00
Seattle Enterprise	2016-09-22 03:25	2016-09-22 07:30
Seattle Enterprise	2016-10-02 15:00	2016-10-02 16:30
Sea Wolf	2016-02-03 11:50	2016-02-03 12:30
Sea Wolf	2016-02-08 17:45	2016-02-08 19:50
Sea Wolf	2016-02-27 02:00	2016-02-27 06:15
Sea Wolf	2016-02-27 10:05	2016-02-27 11:15
Sea Wolf	2016-03-20 20:40	2016-03-20 22:45
Sea Wolf	2016-07-05 19:00	2016-07-05 22:10
Sea Wolf	2016-07-16 14:15	2016-07-16 17:30
Sea Wolf	2016-08-31 10:10	2016-08-31 11:50
Seeker	2016-04-09 20:15	2016-04-09 23:00
Seeker	2016-04-15 13:00	2016-04-15 14:10
Seeker	2016-08-07 08:30	2016-08-07 13:10
Seeker	2016-08-24 15:35	2016-08-24 17:45
Seeker	2016-09-07 14:20	2016-09-07 16:00
Seeker	2016-09-16 12:45	2016-09-16 16:45
Sovereignty	2016-03-14 02:45	2016-03-14 08:20
Sovereignty	2016-03-26 13:15	2016-03-26 17:30
Sovereignty	2016-03-27 00:50	2016-03-27 09:00
Sovereignty	2016-07-01 11:20	2016-07-01 12:40
Sovereignty	2016-07-23 01:30	2016-07-23 04:40
Starbound	2016-08-12 05:45	2016-08-12 08:40
Starbound	2016-08-13 23:50	2016-08-14 04:50
Starbound	2016-08-20 07:30	2016-08-20 09:50
Starbound	2016-08-20 10:40	2016-08-20 13:18
Starbound	2016-09-03 23:25	2016-09-04 04:35
Starbound	2016-09-06 20:30	2016-09-07 04:10
Starbound	2016-09-15 14:33	2016-09-15 16:18

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Starbound	2016-09-15 22:21	2016-09-16 03:15
Starbound	2016-09-16 21:38	2016-09-17 02:25
Starbound	2016-09-18 04:40	2016-09-18 08:58
Starbound	2016-09-19 09:50	2016-09-19 12:12
Starbound	2016-09-25 06:35	2016-09-25 10:25
Starbound	2016-09-27 21:43	2016-09-28 03:07
Starbound	2016-10-04 00:45	2016-10-04 05:21
Starbound	2016-10-13 12:37	2016-10-13 18:18
Starfish	2016-03-13 06:30	2016-03-13 07:05
Starfish	2016-03-23 17:25	2016-03-23 19:35
Starfish	2016-03-27 14:25	2016-03-27 17:50
Starfish	2016-06-10 17:57	2016-06-11 07:15
Starfish	2016-06-13 10:30	2016-06-13 12:44
Starfish	2016-06-13 19:19	2016-06-13 20:23
Starfish	2016-07-14 16:57	2016-07-14 20:28
Starfish	2016-07-28 18:28	2016-07-28 20:31
Starfish	2016-08-01 08:35	2016-08-01 16:14
Starlite	2016-01-23 03:50	2016-01-23 07:15
Starlite	2016-01-29 03:20	2016-01-29 08:50
Starlite	2016-02-01 21:10	2016-02-02 01:40
Starlite	2016-02-22 10:50	2016-02-22 14:30
Starlite	2016-06-30 14:15	2016-06-30 15:45
Starlite	2016-07-10 08:55	2016-07-10 10:35
Starlite	2016-07-26 00:45	2016-07-26 14:00
Starlite	2016-07-26 20:35	2016-07-26 21:30
Starward	2016-06-16 20:00	2016-06-16 23:00
Starward	2016-06-30 07:00	2016-06-30 11:00
Starward	2016-07-06 07:40	2016-07-06 13:45
Storm Petrel	2016-02-08 04:15	2016-02-08 09:20
Storm Petrel	2016-03-09 14:45	2016-03-09 19:05
Storm Petrel	2016-03-10 09:50	2016-03-10 11:07
Storm Petrel	2016-06-28 09:15	2016-06-28 11:50
Storm Petrel	2016-07-01 17:20	2016-07-01 21:20
Storm Petrel	2016-08-07 17:35	2016-08-07 20:55
Storm Petrel	2016-08-11 04:40	2016-08-11 08:25
Storm Petrel	2016-08-26 08:00	2016-08-26 09:40
Sunset Bay	2016-04-06 08:40	2016-04-06 10:30
Traveler	2016-01-21 06:15	2016-01-21 11:55
Traveler	2016-02-05 15:45	2016-02-05 16:55

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Traveler	2016-06-13 12:20	2016-06-13 14:20
Traveler	2016-06-22 10:25	2016-06-22 11:20
Traveler	2016-06-28 15:10	2016-06-28 16:20
Vanguard	2016-06-10 12:21	2016-06-10 15:27
Vanguard	2016-06-21 19:25	2016-06-22 05:38
Viking	2016-01-21 19:24	2016-01-21 21:13
Viking	2016-01-29 22:20	2016-01-30 00:11
Viking	2016-02-08 13:09	2016-02-08 14:32
Viking	2016-02-08 15:46	2016-02-08 16:14
Viking	2016-02-19 00:29	2016-02-19 05:03
Viking	2016-03-27 08:14	2016-03-27 10:12
Viking	2016-07-23 14:11	2016-07-23 19:06
Viking	2016-08-10 07:10	2016-08-10 09:32
Viking	2016-08-17 18:00	2016-08-17 20:34
Viking	2016-08-22 11:57	2016-08-22 15:45
Viking	2016-08-30 23:34	2016-08-31 08:16
Viking Explorer	2016-01-28 13:20	2016-01-28 17:40
Viking Explorer	2016-02-02 00:35	2016-02-02 12:55
Viking Explorer	2016-02-08 07:55	2016-02-08 11:25
Viking Explorer	2016-03-28 13:45	2016-03-28 15:40
Viking Explorer	2016-06-13 02:15	2016-06-13 09:30
Viking Explorer	2016-08-06 18:30	2016-08-06 18:50
Viking Explorer	2016-08-22 10:45	2016-08-22 14:10
Viking Explorer	2016-09-05 23:50	2016-09-06 05:35
Walter N	2016-04-22 23:15	2016-04-23 04:15
Walter N	2016-06-12 16:30	2016-06-12 18:30
Walter N	2016-06-14 07:30	2016-06-14 10:35
Walter N	2016-06-19 16:00	2016-06-19 22:10
Walter N	2016-06-19 23:00	2016-06-20 01:00
Walter N	2016-06-24 13:30	2016-06-24 16:00
Walter N	2016-06-28 12:00	2016-06-28 13:10
Western Dawn	2016-07-12 12:35	2016-07-12 14:20
Western Dawn	2016-07-19 15:25	2016-07-19 17:15
Western Dawn	2016-07-19 19:00	2016-07-20 00:25
Western Dawn	2016-07-23 04:15	2016-07-23 09:15
Western Dawn	2016-07-23 11:00	2016-07-23 12:30
Western Dawn	2016-08-03 16:35	2016-08-03 18:15
Western Dawn	2016-08-07 12:35	2016-08-07 13:40
Westward I	2016-01-26 01:20	2016-01-26 02:35

Appendix 1. Continued.

Vessel	Deploy Date/Time	Retrieve Date/Time
Westward I	2016-01-26 16:30	2016-01-26 20:00
Westward I	2016-02-17 20:00	2016-02-18 04:45
Westward I	2016-03-12 23:15	2016-03-13 00:05
Westward I	2016-06-17 18:00	2016-06-17 18:10
Westward I	2016-06-25 16:15	2016-06-25 17:35
Westward I	2016-06-25 19:00	2016-06-25 19:20
Westward I	2016-07-01 08:20	2016-07-01 16:20
Westward I	2016-07-04 17:00	2016-07-04 20:55
Westward I	2016-07-14 21:15	2016-07-15 07:20
Westward I	2016-07-24 00:40	2016-07-24 07:35
Westward I	2016-09-06 10:50	2016-09-06 14:30
Westward I	2016-09-06 18:40	2016-09-06 22:15
Westward I	2016-09-13 08:45	2016-09-13 10:50
Westward I	2016-09-14 08:45	2016-09-14 11:00

Appendix 2. Candidate violations and verdicts by ABR and Sea State for a selected subset (10% observed hauls by sector) of the Bering Sea pollock fishery, 2016.

Vessel	Location Date/Time	ABR Verdict	Sea State Verdict	Agree?
Starlite	2016-07-26 01:00	No violation	Not affected by closure	Yes
Starlite	2016-07-26 01:30	No violation	Not affected by closure	Yes
Starlite	2016-07-26 07:00	No violation	Not affected by closure	Yes
Starlite	2016-07-26 07:30	No violation	Not affected by closure	Yes
Starlite	2016-07-26 08:00	No violation	Not affected by closure	Yes
Starlite	2016-07-26 21:00	No violation	Not affected by closure	Yes
Starlite	2016-07-26 21:30	No violation	Not affected by closure	Yes