

Summary of Large Vessel Transits of Unimak Pass in 2012
Brief to the Aleutian Islands Risk Assessment Advisory Panel and Management Team
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Introduction

While U.S. regulations generally rely on large vessel operators to ensure a basic level of preparedness if something goes wrong, vessels in innocent passage are exempt from Vessel Response Plan (VRP) requirements.¹ This is a particular challenge in the Aleutian Islands, where large, commercial vessels frequently pass through the area in innocent passage as they move cargo between East Asia and Western Canada along the North Pacific Great Circle Route.

Methodology

Nuka Research and Planning Group, LLC (Nuka Research) summarized Automated Identification System (AIS) data provided by the Marine Exchange of Alaska for vessels transiting Unimak Pass in 2012 to better understand the number and type of vessels moving along this route. AIS data was obtained for Unimak Pass only, and does not include fishing or other smaller vessels that are not equipped with AIS. Vessels will also use other passes or stay south of the Aleutian Islands. (When they do this they typically still pass through the U.S. Exclusive Economic Zone).

For each transit, AIS data on the vessels next and last ports of call were used to determine whether the vessel departing from (westbound) or destined to (eastbound) a U.S. port. Of the 4,615 transits recorded through Unimak Pass, Nuka Research could not determine whether the vessel was in innocent passage for 137 transits. These are noted as “unknown” in the data summary tables.

Summary of data

In 2012, a total of 1,961 large vessels made 4,615 recorded transits through Unimak Pass.

Transits by Direction

The data for Unimak Pass indicate that this route through the pass is more commonly used for westbound voyages:

- 3,109 (67%) of recorded transits through Unimak Pass were WESTBOUND
- 1,369 (30%) of recorded transits through Unimak Pass were EASTBOUND
- 137 transits were unknown

Assuming that vessels identified as traveling twice in the same direction also made a trip in the opposite direction in between those recorded journeys through Unimak Pass. Based on this assumption, there were 963 eastbound voyages south of the Aleutian Islands and 87 westbound voyages additional to the recorded transits reported above. This assumption may still miss some vessels, however, if they make a round trip between East Asia and Western North America without passing through Unimak Pass in either direction.

¹ 33 CFR 155.1015(c)(7)

Transits in Innocent Passage

For 2,462 (53%) of recorded transits through Unimak Pass, vessels were in innocent passage, while 2,462 were subject to U.S. VRP regulations. (This could not be determined for 137 recorded transits.)

Unique Vessels in Innocent Passage

A total of 1,961 unique large vessels were recorded passing through Unimak Pass in 2012. Of these: 1,045 vessels were subject to VRP regulations for at least one transit during the year. (Vessels making multiple transits across the north Pacific may have different ports of departure and destinations.) There were 853 vessels that transited Unimak Pass only in innocent passage (i.e., never to or from a U.S. port when on this route). For 63 vessels, AIS data was not conclusive as to whether they were subject to VRP regulations or in innocent passage. This is summarized in Table 1.

Table 1. Summary of unique vessels transiting Unimak Pass in 2012

| Regulated Status | # of Unique Vessels |
|-----------------------------------------------------------------------------------------------------------|---------------------|
| Vessels in U.S. trade only, subject to VRP regulations | 684 |
| Vessels in <u>both</u> U.S. trade and innocent passage, subject to VRP regulation for at least one voyage | 361 |
| <i>Vessels subject to U.S. regulations for at least one transit through Unimak Pass in 2012</i> | 1045 |
| <hr/> | |
| Vessels in <u>innocent passage only</u> | 853 |
| Vessels for which regulated status is unknown | 63 |
| <i>Total unique vessels transiting Unimak Pass in 2012</i> | 1961 |

Vessel Type

Ninety-seven percent of the 1,961 vessels recorded were primarily non-tank vessels (bulkers, container ships, and others). There were also some tank vessels. The breakdown of vessels is summarized in Table 2.

Table 2. Summary of vessel types transiting Unimak Pass in 2012, both those that made at least one voyage where a U.S VRP was required and those transiting ONLY in innocent passage that year

| Regulated Status | Tank Vessels | Non-tank Vessels | | |
|------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------|----------------------|----------------------|
| | | Bulker | Container | Other |
| Vessels in <u>both</u> U.S. trade and innocent passage, subject to VRP regulation for at least one voyage | 15 | 1030 | 335 | 133 |
| Vessels in <u>innocent passage only</u> | 36 | 594 | 113 | 110 |
| Vessels for which regulated status is unknown | 1 | 26 | 31 | 5 |
| TOTAL | 52 (3%) | 1182 (60%) | 479 (24%) | 248 (13%) |

