



U.S. Department
of Homeland Security
**United States
Coast Guard**

LOCAL NOTICE TO MARINERS

District: 14

Week: 07/09

February 18, 2009

ISSUED BY:

Commander (dpw)

Fourteenth Coast Guard District
300 Ala Moana Boulevard Room 9-216
Honolulu, HI 96850-4982

Telephone: (808) 535-3409 Night: (808) 842-2600/2601 Fax: (808) 535-3414

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Website: <http://www.uscg.mil/d14/cmd/dpw/>

Note:

Unless otherwise indicated, missing and destroyed structures are presumed to be in the immediate vicinity, possibly beneath the surface. Mariners should proceed with caution.

References:

Light List, Volume VI, Pacific Coast and Pacific Islands, 2007 Edition (COMDTPUB P16502.6).

U.S. Coast Pilot 7, Pacific Coast : California, Oregon, Washington, Hawaii, Pacific Islands 2009 (41st Edition).

Navigation information having been of immediate concern to the mariner, and promulgated by the following broadcasts, have been incorporated in this notice when still significant:

COMCOGARD SECTOR HONOLULU HI BNMs: 091-09 to 102-09

COMCOGARD SECTOR GUAM BNMs: 034-08 to 037-09

ABBREVIATIONS

A through H

ACOE - Army Corps of Engineers
ADRIFT - Buoy Adrift
AICW - Atlantic Intracoastal Waterway
AI - Alternating
B - Buoy
BKW - Breakwater
bl - Blast
BNM - Broadcast Notice to Mariner
bu - Blue
C - Canadian
CHAN - Channel
CGD - Coast Guard District
C/O - Cut Off
CONT - Contour
CRK - Creek
CONST - Construction
DBN/Dbn - Daybeacon
DBD/DAYBD - Dayboard
DEFAC - Defaced
DEST - Destroyed
DISCON - Discontinued
DMGD/DAMGD - Damaged
ec - eclipse
EST - Established Aid
ev - every
EVAL - Evaluation
EXT - Extinguished
F - Fixed
fl - flash

I through O

I - Interrupted
ICW - Intracoastal Waterway
IMCH - Improper Characteristic
INL - Inlet
INOP - Not Operating
INT - Intensity
ISL - Islet
Iso - Isophase
kHz - Kilohertz
LAT - Latitude
LB - Lighted Buoy
LBB - Lighted Bell Buoy
LHB - Lighted Horn Buoy
LGB - Lighted Gong Buoy
LONG - Longitude
LNM - Local Notice to Mariners
LT - Light
LT CONT - Light Continuous
LTR - Letter
LWB - Lighted Whistle Buoy
LWP - Left Watching Properly
MHz - Megahertz
MISS/MSNG - Missing
Mo - Morse Code
MSLD - Misleading
N/C - Not Charted
NGA - National Geospatial-Intelligence Agency
NO/NUM - Number
NOS - National Ocean Service

P through Z

PRIV - Private Aid
Q - Quick
R - Red
RACON - Radar Transponder Beacon
Ra ref - Radar reflector
RBN - Radio Beacon
REBUILT - Aid Rebuilt
RECOVERED - Aid Recovered
RED - Red Buoy
REFL - Reflective
RRL - Range Rear Light
RELIGHTED - Aid Relit
RELOC - Relocated
RESET ON STATION - Aid Reset on Station
RFL - Range Front Light
RIV - River
s - seconds
SEC - Section
SHL - Shoaling
si - silent
SIG - Signal
SND - Sound
SPM - Single Point Mooring Buoy
SS - Sound Signal
STA - Station
STRUCT - Structure
St M - Statute Mile
TEMP - Temporary Aid Change
TMK - Topmark

FI - Flashing
G - Green
HAZ - Hazard to Navigation
HBR - Harbor
HOR - Horizontal Clearance
HT - Height

NW - Notice Writer
OBSCU - Obscured
OBST - Obstruction
OBSTR - Obstruction
Oc - Occulting
ODAS - Anchored Oceanographic Data Buoy

TRLB - Temporarily Replaced by Lighted Buoy
TRLT - Temporarily Replaced by Light
TRUB - Temporarily Replaced by Unlighted Buoy
W - White
Y - Yellow

Additional Abbreviations Specific to this LNM Edition:

MSLD SIG - Misleading Signal

SECTION I - SPECIAL NOTICES

This section contains information of special concern to the Mariner.

PACIFIC OCEAN - NATIONAL WEATHER SERVICE BUOY 51004

National Data Buoy Center buoy 51004 is off station and adrift approximately 150 NM east of Johnston Atoll in position 16-18.6N/167-04.2W. This six meter NOMAD buoy is yellow in color and transmitting hourly positions that can be found on the National Data Buoy Center website at http://www.ndbc.noaa.gov/station_page.php?station=51004.

HI ISLANDS - FAD BUOY DEPLOYMENT

From February 22, 2009, through March 01, 2009, the FAD program will be replacing Q (Pauwela Pt., Maui), XX (Puako, Hawaii), OT (Waikoloa Pt., Hawaii), UU (Auau Pt., Hawaii), and E (Leleiwi Pt., Hawaii). The 56' Aloha Spirit will perform the work. Approximately 2.5 NM of FAD mooring line may be present on the ocean surface near the work site posing a temporary hazard to navigation. In the interest of safety, all mariners are asked to remain clear of these areas during servicing.

HI ISLANDS - HAWAII - KEALAKEKUA BAY SAFETY ZONE

In coordination with the State Department of Land and Natural Resources, the Coast Guard Safety Zone enacted on October 16, 2006, is revised to encompass the area within Kealakekua Bay from the shore to a line from the Captain Cook Monument to Hikiau Heiau. Commercial vessel traffic is precluded from operating within this safety zone.

HI ISLANDS - HAWAII - WATERCRAFT TESTING

Liquid Robotics, Inc. will be conducting unattended sea trials of their Wave Glider (TM) vessels for several weeks at a time periodically throughout the year. The Wave Glider is a surfboard with mounted instruments and "submarine" components attached via a 15 foot cable. The sea trials will take place along a designated track off the Kohala Coast, between Waimea Point and Opolu Point, in an area bounded by the following coordinates:

19-57.483N/155-52.905W
19-58.260N/155-51.540W
19-58.690N/155-51.830W
19-58.420N/155-52.280W
19-58.853N/155-52.566W
19-58.330N/155-53.470W

The Wave Glider will be remotely operated and testing will be unattended when the Wave Glider is seaward of the above areas. The Wave Glider will stay at least two miles clear of FAD Buoys XX and ZZ and south of shipping traffic approaching Kawaihae from the northwest. All Mariners are advised to exercise caution within these areas.

HI ISLANDS - OAHU - NORTH OF OAHU - HAZARDOUS OPERATIONS

The military will be conducting a gunnery exercise on February 18, 2009, from 1530W - 1830W in an area approximately 30 NM Northeast of Oahu and bounded by the following coordinates:

22-00N/157-10W
21-49N/157-17W
22-00N/157-30W

In the interest of safety all vessels are requested to remain clear of the area during the specified times.

HI ISLANDS - OAHU - SUBSURFACE BUOYS

One subsurface buoy has been temporarily deployed near the Sand Island Ocean Outfall Diffuser. The buoy is anchored in 80 meters of water in position 21-16.79N/157-53.94W, floating 10 meters below the surface. Mariners are advised to exercise caution when transiting the area.

HI ISLANDS - OAHU - PEARL HARBOR - DREDGING

Healy Tibbits resumed dredging operations within the Middle Loch, West Loch, South Channel, and Main Channel of Pearl Harbor on January 21, 2008, and will continue until Spring of 2009. Work will be performed from barge WEEKS 544 (150' x 60'). The call sign is WCT8969 and VHF-Ch 69 will be monitored at all times. Mariners are requested to use caution when transiting the area.

HI ISLANDS - KAUAI - KIKIAOLA LIGHT DRAFT HARBOR - DREDGING

American Marine commenced dredging operations within the Kikiaola Light Draft Harbor, Kauai, on November 24, 2008, and will continue until Spring of 2009. The harbor will be closed from 0730W - 1600W Monday through Friday, but will re-open one hour per day, from 1130W - 1230W. Work will be performed from the spud barge AWB 140, which will be equipped with all around white lights during night operations. The tug AMERICAN EMERALD (call sign WDC6392) will be on scene monitoring VHF-Ch 16. The aids to navigation in this area must be considered unreliable during this time. All vessels are advised to use extreme caution while transiting the area.

PHILIPPINE SEA - MARIANA ISLANDS - FARALLON DE MEDINILLA - HAZARDOUS OPERATIONS

Military units will be conducting live fire training in the Farallon De Medinilla operations area on February 16, 2009, through February 20, 2009, from 1100K - 1800K daily. All vessels are advised to remain clear of a 10 NM radius of the Farallon De Medinilla operations area during this time.

MARIANA ISLANDS - GUAM - APRA HARBOR - MILITARY EXERCISES

A military unit will be conducting submerged operations continuously from February 14, 2009, through February 24, 2009 in an area approximately 30 NM South of Guam and bounded by the following coordinates:

- 13-10N/144-30E
- 13-10N/144-42E
- 12-50N/144-45E
- 12-50N/144-30E
- 12-40N/144-16E
- 12-40N/144-45E

Mariners are advised to remain clear of the area during this period.

SECTION II - DISCREPANCIES

This section lists all reported and corrected discrepancies related to Aids to Navigation in this edition. A discrepancy is a change in the status of an aid to navigation that differs from what is published or charted.

DISCREPANCIES (FEDERAL AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
28275	Kawaihae Harbor Entrance Lighted Buoy 1	LT EXT	19330	083-09	05/09	
29750	Ninini Point Lighted Buoy 2	LT EXT	19383	080-09	05/09	
29790	Nawiliwili Harbor Lighted Buoy 7	OFF STA	19383	095-09	07/09	
29793	Nawiliwili Harbor Buoy 9	OFF STA	19383	096-09	07/09	
29795	Nawiliwili Harbor Buoy 11	OFF STA	19383	097-09	07/09	
30190	Pago Pago Harbor Range Front Light	LT EXT	83484		07/09	
30195	Pago Pago Harbor Range Rear Light	LT EXT	83484		07/09	
30400	Kwajalein South Pass Buoy 1	MISSING	81715		07/09	

DISCREPANCIES (FEDERAL AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
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DISCREPANCIES (PRIVATE AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
28382.1	Kahului Boat Ramp Buoy 11	MISSING	19342	102-06	18/06	
28480	Lahaina Boat Basin Lighted Buoy 3	LT EXT	19348	067-09	03/09	
28485	Lahaina Boat Basin Lighted Buoy 4	OFF STA	19348	068-09	03/09	
28490	Lahaina Boat Basin Lighted Buoy 5	LT EXT	19348	069-09	03/09	
28500	Lahaina Boat Basin Lighted Buoy 7	LT EXT	19348	070-09	03/09	
28650	Kaunakakai Small Boat Harbor Buoy 5	MSLD SIG	19353	007-06	03/06	
28665	Kaunakakai Small Boat Harbor Daybeacon Reef	MISSING	19351	009-06	03/06	
29320	Keehi Lagoon Barge Channel Range Rear Light	MISSING	19367	002-08	01/08	
29741.1	Waikaea Channel Light 1	MISSING	19381	326-04	47/04	
29741.2	Waikaea Channel Light 2	DBN DEST	19381	327-04	47/04	
	Fad Site E - Lelewi, Hawaii	MISSING	19320	50-09	52/08	
	Fad Site P - Penguin Bank, Oahu	MISSING	19339	50-09	52/08	
	Fad Site Q - Pauwela Point, Maui	MISSING	19340	50-09	52/08	
	Fad Site Uu - Auau Point, Hawaii	MISSING	19320	216-08	40/08	
	Fad Site Wk - Wailua, Kauai	OFF STA	19381	090-09	06/09	
	Smiling Cove Light 2	LT EXT	81067	159-06	41/06	
	Water Quality Buoy "KN"	LT EXT	19367	84-09	07/09	

DISCREPANCIES (PRIVATE AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
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None

PLATFORM DISCREPANCIES

Name	Status	Position	BNM Ref.	LNM St	LNM End
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None

PLATFORM DISCREPANCIES CORRECTED

Name	Status	Position	BNM Ref.	LNM St	LNM End
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None

SECTION III - TEMPORARY CHANGES and TEMPORARY CHANGES CORRECTED

This section contains temporary changes and corrections to Aids to Navigation for this edition. When charted aids are temporarily relocated for dredging, testing, evaluation, or marking an obstruction, a temporary correction shall be listed in Section IV giving the new position.

TEMPORARY CHANGES

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
29900	Kikiaola Boat Harbor Range Front Light	DISCONTINUED	19386		48/08	
29901	Kikiaola Boat Harbor Range Rear Light	DISCONTINUED	19386		48/08	
30310	Roi-Namur Island Channel Approach Lighted Buoy 2	Reduced Intensity	81715		44/08	
30315	Roi-Namur Island Channel Lighted Buoy 5	Reduced Intensity			44/08	
	Fad Site AA - Port Allen, Kauai	DISCONTINUED	19381		48/08	
	Fad Site CC - Kaena Point, Lanai	DISCONTINUED	19351	018-09	48/08	
	Fad Site HS - Nakaohu, Maui	DISCONTINUED	19320		48/08	
	Fad Site I - Halona, Kahoolawe	DISCONTINUED	19347		48/08	
	Fad Site LA - Lahaina, Maui	DISCONTINUED	19347	215-08	48/08	

TEMPORARY CHANGES CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
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None

PLATFORM TEMPORARY CHANGES

Name	Status	Position	BNM Ref.	LNM St	LNM End
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None

PLATFORM TEMPORARY CHANGES CORRECTED

Name	Status	Position	BNM Ref.	LNM St	LNM End
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None

SECTION IV - CHART CORRECTIONS

None

SECTION V - ADVANCE NOTICES

This section contains advance notice of approved projects, changes to aids to navigation, or upcoming temporary changes such as dredging, etc. Mariners are advised to use caution while transiting these areas.

SUMMARY OF ADVANCED APPROVED PROJECTSApproved Project(s)Project DateRef. LNM

None

Advance Notice(s)

None

SECTION VI - PROPOSED CHANGES

Periodically, the Coast Guard evaluates its system of aids to navigation to determine whether the conditions for which the aids to navigation were established have changed. When changes occur, the feasibility of improving, relocating, replacing, or discontinuing aids are considered. This section contains notice(s) of non-approved, proposed projects open for comment. SPECIAL NOTE: Mariners are requested to respond in writing to the District office unless otherwise noted (see banner page for address).

PROPOSED WATERWAY PROJECTS OPEN FOR PUBLIC COMMENTProposed Project(s)ClosingDocket No.Ref. LNM

None

Proposed Change Notice(s)**HI ISLANDS - HAWAII - CHANGES TO KAILUA AIDS TO NAVIGATION**

The Coast Guard is conducting a Waterways Analysis and Management System (WAMS) study of the aids to navigation as listed below and their associated waterway. The study focuses on the area's aid to navigation system, waterborne commerce, marine casualty information, port/harbor resources, emergency response plans, routine and emergency communication capabilities, and future development projects.

The Coast Guard is considering altering the light characteristic of Kailua Light (LLNR 28185). The characteristic of the light would change from ISO 6s to FI W 6s.

The Coast Guard is also considering removing the red and green light sectors from Kailua Bay Directional Light (LLNR 28180) and altering the dayboard color to a non-lateral green and white. Additionally, the characteristics would change from a Oc W 4s to FI G 4s.

Interested parties are strongly encouraged to comment on this proposal in writing, either personally or through their organization, by March 31, 2009. All comments will be carefully considered. Any company or individual wishing to provide comments or participate in a user survey should contact:

Commander (dpw)

Fourteenth Coast Guard District
300 Ala Moana Boulevard Room 9-216
Honolulu, HI 96850
Attn: BM1 Katharine Bogle
(808) 535-3409
Email: Katharine.M.Bogle@uscg.mil

Charts: 530 540 19004 19007 19008 19009 19010 19320 19327 19331

LNLM: 02/09

HI ISLANDS - HAWAII - KEAUHOU BAY - WAMS STUDY

The Coast Guard is conducting a Waterways Analysis and Management System (WAMS) study of the aids to navigation as listed below and their associated waterway. The study focuses on the area's aid to navigation system, waterborne commerce, marine casualty information, port/harbor resources, emergency response plans, routine and emergency communication capabilities, and future development projects.

The following aids to navigation will be studied:

Keauhou Bay Light (LLNR 28155)
Keauhou Bay Entrance Directional Light (LLNR 28165)
Keauhou Bay Range Front Daybeacon (LLNR 28170)
Keauhou Bay Range Rear Daybeacon (LLNR 28175)

Interested Mariners are strongly encouraged to comment on this proposal in writing, either personally or through their organization by March 03, 2009. All comments will be carefully considered. Any company or individual wishing to provide comments or participate in a user survey should contact:

Officer in Charge
Aids to Navigation Team
400 Sand Island Access Road
Honolulu, HI. 96819
Attn: BMCS Garrett
Email: David.L.Garrett@uscg.mil

Chart 19327

LNLM: 52/08

HI ISLANDS - HAWAII - LAUPAHOEHOE HARBOR - WAMS STUDY -

The Coast Guard is conducting a Waterways Analysis and Management System (WAMS) study of the aids to navigation as listed below and their associated waterway. The study focuses on the area's aid to navigation system, waterborne commerce, marine casualty information, port/harbor resources, emergency response plans, routine and emergency communication capabilities, and future development projects.

Laupahoehoe Point Light (LLNR 28020)
Laupahoehoe Harbor Breakwater Light 2 (LLNR 28021)

Interested parties are strongly encouraged to comment on this proposal in writing, either personally or through their organization, by March 03, 2009. All comments will be carefully considered. Any company or individual wishing to provide comments or participate in a user survey should contact:

Officer in Charge
Aids to Navigation Team
400 Sand Island Access Road
Honolulu, HI 96819
Attn: BMCS Garrett
(808) 842-2851
Email: David.L.Garrett@uscg.mil

Chart 19320

LNLM: 02/09

HI ISLANDS - OAHU - PYRAMID ROCK LIGHT - CHANGES TO AIDS TO NAVIGATION

The Coast Guard is considering altering the light characteristics of Pyramid Rock Light (LLNR 28675). Characteristics of the light would change from Oc W 4s to Fl W 6s.

Interested parties are strongly encouraged to comment on this proposal in writing, either personally or through their organization, by March 03, 2009. All comments will be carefully considered. Any company or individual wishing to provide comments or participate in a user survey should contact:

Commander (dpw)
Fourteenth Coast Guard District
300 Ala Moana Boulevard Room 9-216
Honolulu, HI 96850
Attn: BM1 Katharine Bogle
(808) 535-3409
Email: Katharine.M.Bogle@uscg.mil

HI ISLANDS - OAHU - SAMPAN CHANNEL - CHANGES TO AIDS TO NAVIGATION

The Coast Guard is considering changing the light characteristic of Sampan Channel Rear Range Light (LLNR 28825). Currently the light is showing a Fixed lighting characteristic. In an effort to update to a conventional range system, the characteristic of the rear light would change from Fixed to flashing ISO 6s.

Interested parties are strongly encouraged to comment on this proposal in writing, either personally or through their organization, by March 10, 2009. All comments will be carefully considered. Any company or individual wishing to provide comments or participate in a user survey should contact:

Officer in Charge
Aids to Navigation Team
400 Sand Island Access Road
Honolulu, HI 96819
Attn: BMCS Garrett
(808) 842-2851
Email: David.L.Garrett@uscg.mil

Chart 19359

LNM: 06/09

HI ISLANDS - OAHU - HONOLULU HARBOR - CHANGES TO AIDS TO NAVIGATION

The Coast Guard is considering reducing the Honolulu Harbor Range Front Light (LLNR 29815) nominal range from 13 NM to 12 NM and the Honolulu Harbor Rear Range Light (LLNR 29190) nominal range from 15 NM to 13 NM. Currently both lights are showing Fixed lighting characteristics. In an effort to update to a conventional range system, characteristics of Honolulu Harbor Range Front Light would change from Fixed to Quick flashing and the rear light from Fixed to flashing ISO 6s. These lights are operating 24 hours a day on commercial power; they would also be solarized and modified to operate at night only, which would greatly reduce monthly operating costs and prevent the loss of power during outages.

Interested parties are strongly encouraged to comment on this proposal in writing, either personally or through their organization, by March 03, 2009. All comments will be carefully considered. Any company or individual wishing to provide comments or participate in a user survey should contact:

Commander (dpw)
Fourteenth Coast Guard District
300 Ala Moana Boulevard Room 9-216
Honolulu, HI 96850
Attn: BM1 Katharine Bogle
(808) 535-3409
Email: Katharine.M.Bogle@uscg.mil

Charts: 19327 19330 19357 19367

LNM: 01/09

HI ISLANDS - MAUI - LAHAINA HARBOR - CHANGES TO AIDS TO NAVIGATION

The Coast Guard is considering reducing the Lahaina Boat Basin Range Front Light (LLNR 28470) nominal range from 13 NM to 11 NM and the Lahaina Boat Basin Rear Range Light (LLNR 28475) nominal range from 13 NM to 12 NM. Currently both lights are showing Fixed lighting characteristics. In an effort to update to a conventional range system, characteristics of Lahaina Boat Basin Range Front Light would change from Fixed to Quick flashing and the rear light from Fixed to flashing ISO 6s.

Interested parties are strongly encouraged to comment on this proposal in writing, either personally or through their organization, by March 03, 2009. All comments will be carefully considered. Any company or individual wishing to provide comments or participate in a user survey should contact:

Officer in Charge
Aids to Navigation Team
400 Sand Island Access Road
Honolulu, HI 96819
Attn: BMCS Garrett
(808) 842-2851
Email: David.L.Garrett@uscg.mil

Chart 19348

LNM: 01/09

HI ISLANDS - MOLOKAI - KAUNAKAKAI HARBOR - CHANGES TO AIDS TO NAVIGATION

The Coast Guard is considering changing the light characteristics of Kaunakakai Harbor Range Front Light (28605) and Kaunakakai Harbor Range Rear Light (28610). Currently both lights are showing Fixed lighting characteristics. In an effort to update to a conventional range system, characteristics of the front light would change from Fixed to Quick flashing and the rear light from Fixed to flashing ISO 6s.

Interested parties are strongly encouraged to comment on this proposal in writing, either personally or through their organization, by March 03, 2009. All comments will be carefully considered. Any company or individual wishing to provide comments or participate in a user survey should contact:

Officer in Charge
Aids to Navigation Team
400 Sand Island Access Road
Honolulu, HI 96819
Attn: BMCS Garrett
(808) 842-2851
Email: David.L.Garrett@uscg.mil
Chart 19351

SECTION VII - GENERAL

This section contains information of general concern to the Mariners. Mariners are advised to use caution while transiting these areas.

DEPARTMENT OF HOMELAND SECURITY - REPORTS OF SUSPICIOUS ACTIVITIES

The Department of Homeland Security (DHS) encourages the maritime public to report information concerning suspicious activity to their local Federal Bureau of Investigation (FBI) Joint Terrorism Task Force (JTTF) office, <http://www.fbi.gov/contact/fo/fo.htm>, or to other appropriate authorities. Individuals can contact the DHS watch and warning unit at (202) 323-3205, toll free at 1-888-585-9078, or by e-mail to nipc.watch@fbi.gov. The U.S. Coast Guard reminds the maritime industry that they may also report information concerning suspicious activity to the National Response Center (NRC) at 1-800-424-8802.

TRANSPORTATION WORKER IDENTIFICATION CREDENTIAL (TWIC)

TWIC was established by Congress through the Maritime Transportation Act of 2002 (MTSA) and is administered by the Transportation Security Administration (TSA) and U.S. Coast Guard (USCG). TWICs are tamper-resistant biometric credentials that will be issued to ALL USCG CREDENTIALLED MERCHANT MARINERS, as well as workers who require unescorted access to secure areas of ports, vessels, and outer continental shelf facilities.

By April 15, 2009, all USCG credentialed mariners will be required to hold a TWIC in order for their license, Merchant Mariner Document (MMD), Certificate of Registry (COR), or Standards of Training, Certification, and Watchkeeping (STCW) endorsement to remain valid. Failure to obtain a TWIC may result in suspension or revocation of a mariner's credential under 46 U.S.C. 7702 and 7703.

To obtain a TWIC, an individual must visit an enrollment center where they will pay the enrollment fee, provide biographic information and a complete set of fingerprints, and sit for a digital photograph. Pre-enrollment is highly encouraged as it is designed to save the applicant time and provides the ability to make an appointment. You will need to pick up your TWIC, after being notified it is ready, at the same enrollment center where you applied. The cost for TWIC is \$132.50 and it is valid for five years. Mariners who already hold a USCG credential may pay a reduced fee of \$105.25, however, their TWIC will then expire when their USCG credential expires.

For more information on the TWIC program including enrollment locations please visit TSA's websites at <http://www.twicinformation.com/twicinfo/index.jsp> or <http://www.tsa.gov/twic>.

Additional information can be found on the Coast Guard's HOMEPORT website at <http://homeport.uscg.mil/twic> or by calling U.S. Coast Guard Sector Honolulu at (808) 522-8264

LONG RANGE IDENTIFICATION AND TRACKING OF SHIPS (LRIT)

On April 29, 2008, the Coast Guard published in the Federal Register Vol. 73, no.83, the final rule that amended 33 Code of Federal Regulations (CFR) Part 169 to implement LRIT requirements in the United States. This rule requires, consistent with international law, certain ships to report identifying and position data electronically and became effective on May 29, 2008. Additionally, it implements an amendment to Chapter V of the International Convention for the Safety of Life at Sea (SOLAS), Regulation 19-1.

Additionally, the U.S. Coast Guard will operate the U.S. National Data Center (NDC), located in Martinsburg, West Virginia, which will become operational on December 31, 2008. The U.S. NDC will be responsible for the collection, dissemination and management of all LRIT data submitted by U.S. flagged vessels subject to the LRIT regulations. In addition, the U.S. NDC will collect foreign flagged vessel LRIT information from other data centers based on LRIT entitlements.

Furthermore, the U.S. has agreed to operate the International Data Exchange (IDE) on an interim basis from December 31, 2008 until December 31, 2011. During this interim period, the IDE will also be operated by the U.S. Coast Guard in Martinsburg, West Virginia.

Beginning January 1, 2009, the U.S. Coast Guard will examine foreign and U.S. flagged vessels subject to the LRIT regulations to determine status of compliance.

U.S. flagged vessel operators subject to the regulations may view information on how to comply by following the Domestic Vessels links on the USCG Homeport website at: <http://homeport.uscg.mil>.

All U.S. flagged vessel operators subject to the LRIT Regulation are encouraged to visit <http://www.navcen.uscg.gov/lrit/default.htm> to review the latest information regarding LRIT implementation and conformance test scheduling.

LONG RANGE IDENTIFICATION AND TRACKING OF SHIPS (LRIT)

PUBLICATION - U.S. COAST GUARD LIGHT LIST VOLUME VI AVAILABILITY

The 2007 U.S. Coast Guard Light List Volume VI, updated to LNM week 27/07 (NTM week 29/07) is now available on the Navigation Center internet site (www.navcen.uscg.gov/pubs/lightlists/lightlists.htm). Hard copy editions are now available from the Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402. For pricing, ordering information and availability, please contact the Superintendent of Documents at (866) 512-1800 or online at <http://bookstore.gpo.gov>.

PUBLICATION - U.S. COAST PILOT 7 - NEW EDITION

U.S. Coast Pilot 7, Pacific Coast: California, Oregon, Washington, Hawaii, and Pacific Islands, 2009, 41st Edition, is ready for issue and may be obtained from:

Federal Aviation Administration
National Aeronautical Charting Office
Distribution Division, AJW-3550
10201 Good Luck Road
Glenn Dale, MD 20769-9700

and authorized agents of the National Ocean Service. Price \$30.00.

The 2009 Edition cancels the preceding 2008 Edition.

All corrections to the previous edition issued in Notices to Mariners are incorporated in this edition.

Mariners are encouraged to use the convenient "RECORD OF CHANGES" form on Page V of this book. All Coast Pilot changes published in the U.S. Coast Guard Local Notice to Mariners, National Geospatial-Intelligence Agency Notice to Mariners, and on the internet at <http://nauticalcharts.noaa.gov/nsd/cpdownload.htm> are serially numbered (i.e., Change No. 1, Change No. 2, etc.) to assist you in tracking the changes.

NOAA - RASTER NAVIGATIONAL CHARTS SERVICE RESUMES

NOAA has resumed its full service of providing free weekly updates and new editions of RNCs via the Internet at

<http://www.nauticalcharts.noaa.gov>. A list of certified RNC distributors is also available at the above Internet site. Address questions to NOAA at <http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx>.

CHARTS / PUBLICATIONS - NATIONAL OCEAN SERVICE - DATES OF LATEST EDITIONS

The Dates of Latest Editions, Nautical Charts and Miscellaneous Maps, is no longer available in printed form. The information that was included in this publication is now only available online at: <http://chartmaker.ncd.noaa.gov/mcd/dole.htm>.

LOCAL NOTICE TO MARINERS - AUTOMATIC NOTIFICATION SERVICE

The USCG publishes the Local Notice to Mariners (LNM) exclusively over the internet in order to improve service and reduce costs. The LNM can be found at www.navcen.uscg.gov/lnm.

Users may now sign up to receive automatic notices via email when current information pertaining to the Local Notice to Mariners, Light List, Summary of Corrections, and other maritime related information is posted. To sign up for this automatic notification service, please visit <http://www.navcen.uscg.gov/lnm/listserver.htm>. Registration is free.

INTERFERENCE TO GPS RECEIVERS FROM CONSUMER ELECTRONICS - GRADE ACTIVE VHF/UHF MARINE TELEVISION ANTENNAS

The U.S. Coast Guard and Federal Communications Commission have ascertained that certain powered VHF/UHF marine television antennas are causing operational degradation in the performance of GPS receivers. This degradation in performance or interference may be realized as a display of inaccurate position information or a complete loss of GPS receiver acquisition and tracking ability. The interference interactions have been reported up to 2000 feet from the interference source. This interference has been associated, in some instances, with temperature extremes or proximity to a television broadcast site.

If you are experiencing recurring outages or degradation of your GPS receiver, these may be caused by one of these antennas on your vessel or nearby. If you have a powered VHF/UHF antenna aboard your vessel, you should perform an on-off test of your TV antenna. If turning off the power to the antenna results in improvement in the GPS receiver performance, the antenna may be the source of interference in the GPS band. In that case, you should contact the manufacturer of the antenna and identify the symptoms. If the test is not positive and the GPS interference persists, you should contact the Coast Guard Navigation Information Service at (703) 313-5900, by email: nisws@navcen.uscg.mil, or through the website at <http://www.navcen.uscg.gov>

EMERGENCY POSITION INDICATING RADIO BEACONS

The Coast Guard is reminding mariners to check their boating equipment, because after Feb. 1, 2009, only distress alerts from 406 MHz beacons will continue to be detected and processed by search and rescue satellites worldwide. Older model EPIRBs (Emergency Position Indicating Radio Beacons) that transmit a distress alert on 121.5 MHz or 243 MHz will no longer be monitored by satellite, and are likely to go completely undetected

EMERGENCY POSITION INDICATING RADIO BEACONS

in an emergency. Mariners disposing of their old EPIRB before Feb. 1, 2009 are urged to first remove the battery. Additional information of EPIRBs can be found at www.navcen.uscg.gov/marcomms/gmdss/epirb.htm.

HI ISLANDS DGPS STATUS

To obtain status updates of the Differential GPS broadcast sites at Pahoia, Upolu Point, and Kokole Point, HI, contact the NAVCEN WEST watchstander at (707) 765-7612.

PRIVATE AIDS TO NAVIGATION

The term private aids to navigation (ATON) includes all marine aids to navigation operated in the navigable waters of the United States other than those operated by the Federal Government. Private ATON includes lighted structures and day beacons, lighted and unlighted buoys, RACONS and fog signals. Almost half of the aids to navigation established in the Fourteenth District are operated and maintained by private interests. These interests include private citizens, marina and yacht clubs, municipal and state governments, construction and dredging companies, research and non-profit organizations, beachfront associations, and large industrial concerns.

No person, public body or instrumentality not under the control of the Commandant, exclusive of the Armed Forces, shall establish and maintain, discontinue, change or transfer ownership of any aid to maritime navigation, without first obtaining permission to do so from the Commandant and the Army Corps of Engineers.

Owners contemplating establishing such buoys should review CFR 33 Part 66 and contact the appropriate authority, usually the Army Corps of Engineers, to determine what additional requirements may exist. Additionally, private aids on navigable waters regulated by the federal government require either a Coast Guard permit or Coast Guard letter of no objection. The application for a letter of no objection or for a permit, form CG-2554, can be obtained by writing or faxing the Private ATON Manager at the address and phone number given below, or via the website at <http://www.uscg.mil/d14/cmd/dpw/>.

The Private ATON Manager provides applicants assistance in processing their paperwork. Federal regulations governing aids to navigation, copies of permits previously issued to the applicant, illustrations of standard markings, and lists of commercial ATON manufacturers are available. Questions and requests should be directed to:

Commander (dpw)
Fourteenth Coast Guard District
300 Ala Moana Boulevard, 9-216
Honolulu, HI 96850-4982
Attn: Private ATON Manager
Tel: (808) 535-3408
Fax: (808) 535-3414

U. S. Army Corps of Engineers
Honolulu District
Building 230
Ft. Shafter, HI 96858-5440
Attn: CEPOH-EC-R
Phone: (808) 438-9258

Mariners are reminded that they have a responsibility to report discrepant private aids to the nearest Coast Guard unit. The failure of a mariner to report a discrepant aid to navigation may result in casualties to others. All aids to navigation in the Fourteenth District, both private and federally maintained, are user monitored. When owners receive discrepancy reports from the Coast Guard, they are obligated to take immediate action to correct the discrepancy. Owners are reminded of their responsibility for the proper operation and maintenance of their private aids to navigation. All classes of private aids to navigation shall be maintained in proper operating condition. They are subject to inspection by the Coast Guard at any time and without prior notice. The Coast Guard issues broadcast notice to mariners for reported discrepancies that remain in effect until the discrepancy is corrected or is published in the Local Notice to Mariners.

FISH AGGREGATING DEVICE (FAD) BUOY INFORMATION AND DISCREPANCIES

The State of Hawaii has placed Fish Aggregating Devices (FADs) in the waters surrounding the main Hawaiian Islands. These buoys attract schools of tuna and other important pelagic fishes, such as dolphinfish (Mahimahi), wahoo (Ono), and billfish. FADs allow fishermen to easily locate and catch these species. The buoys are anchored using approximately 2.5 miles of mooring line, which creates a very large swing circle. Mariners are advised that these buoys may maneuver anywhere from three to five miles from their charted positions.

Mariners requesting up to date information concerning Hawaiian Island's FAD Buoys, or reports of discrepancies, may either visit the Hawaii FAD web site at <http://www.hawaii.edu/HIMB/FADS/>, contact Mr. Warren Cortez at (808) 848-2939, or send written correspondence to:

Mr. Warren Cortez
Fish Aggregating Devices Program
1 Sand Island Road
Honolulu, HI 96819

Mariners requesting up to date information concerning Guam's FAD Buoys, or reports of discrepancies, may either visit the Guam FAD web site at <http://www.guamdavr.org/aquatics>, contact Mr. Brent Tibbats at (671) 735-3987, or send written correspondence to:

FISH AGGREGATING DEVICE (FAD) BUOY INFORMATION AND DISCREPANCIES

Mr. Brent Tibbats
Guam Department of Agriculture
Division of Aquatics and Wildlife Resources
163 Dairy Road
Mangilao, Guam 96913

NAVIGATION INTERNET SITES

Chart Corrections: <http://nauticalcharts.noaa.gov/mcd/updates/index.htm>
Light List Corrections: <http://www.navcen.uscg.gov/pubs/LightLists/LightLists.htm>
Coast Pilot Corrections: <http://nauticalcharts.noaa.gov/nsd/cpdownload.htm>
NOAA Weather Buoy Sites: <http://www.ndbc.noaa.gov/Maps/rmd.shtml>
Hawaii Weather: <http://www.prh.noaa.gov/pr/hnl/>
Online Chart Viewer: <http://www.nauticalcharts.noaa.gov/mcd/OnLineViewer.html>

(For NOAA Print-on-Demand (POD) charts only)

NOAA, Coast Survey, in partnership with OceanGrafix, LLC, offer mariners official nautical charts continually updated by NOAA cartographers to the latest Notice to Mariners and to all Critical Safety Information known to Coast Survey in advance of its publication in a Notice. From NOAA digital files OceanGrafix prints corrected charts, to order, for sale to mariners through the OceanGrafix retail network. Produced and distributed by authority of NOAA, these charts meet all U.S. Coast Guard chart carriage requirements, including the requirements for updating (Titles 33 & 46 CFR). New Editions are available 2-8 weeks before their release as a traditional NOAA chart.

These new charts feature operational information for the commercial mariner, and educational and safety information for the recreational boater. They have brighter colors and higher contrast for better readability in various light conditions. They come either laminated or on water resistant paper. Customized charts are being introduced.

These POD charts are available through POD chart agents at <http://OceanGrafix.com/>, 1-877-56CHART, or contact NOAA at <http://nauticalcharts.noaa.gov/pod/Pod.htm>. For questions contact NOAA at help@nauticalcharts.gov.

HI ISLANDS - KAHO'OLAWA ISLAND RESERVE COMMISSION - NOTICE OF OPEN WATERS SCHEDULE

Notice to Trollers: The dates below mark the Open Waters Trolling Schedule for January through December 2009. Should you have any questions, please contact the Ocean Resources Program at the Kaho'olawe Island Reserve Commission (KIRC) by emailing the Ocean Resources Specialist at dtokishi@kirc.hawaii.gov or by calling 808-243-5889. This information is also posted on the KIRC website at <http://kahoolawe.hawaii.gov>.

0001W Saturdays to 2359W Sundays as follows:

February 21-22; March 07-08, 14-15; April 04-05, 18-19; May 02-03, 16-17; June 13-14, 27-28; July 11-12, 25-26; August 15-16, 29-30; September 12-13, 26-27; October 10-11, 24-25; November 07-08, 14-15; December 12-13, 19-20.

The Kaho'olawe Island Reserve (defined as the submerged lands and waters within two nautical miles of the island) is divided into two zones; Zones A and B. These zones are defined as:

Zone A: Includes the island of Kaho'olawe and all the submerged lands and waters between the shoreline of Kaho'olawe and the 30-fathom isobath surrounding Kaho'olawe (HAR 13-261). Unauthorized entry into Zone A is prohibited at all times except in case of emergency.

Zone B: All waters and submerged lands between the 30-fathom isobath surrounding Kaho'olawe and two nautical miles from the shoreline of the island. Unauthorized entry into Zone B is prohibited at all times except for trolling as authorized by KIRC on the days stipulated by the Open Waters Schedule as listed above or in case of emergency. Trollers must remain underway, making way at all times while in Zone B. All lures or live bait must remain on the water surface. All other fishing, ocean recreation, and any other activities are strictly prohibited. All vessels fishing in the Kaho'olawe Island Reserve during the open trolling weekends are required by state law (H.A.R. 13-261) to register and submit catch reports to the KIRC. KIRC will be implementing its new registration and catch report system beginning January 2007. For more information on how to register and where to submit your catch reports, call 808-243-5889.

Warning: Kaho'olawe and its surrounding submerged lands and waters contain unknown quantities of unexploded ordnance that are hazardous to public health and safety.

Authority: (H.R.S. §6K, H.A.R. §13-261)

HI ISLANDS - OAHU - KANEOHE BAY - ULUPAU CRATER WEAPONS DANGER ZONE - HAZARDOUS OPERATIONS

The Ulupau Crater Weapons Training Range Danger Zone is being revised to encompass a sector extending seaward for 3.8 nautical miles (present definition as per 33CFR 334.1380 is 3,900 yards) between radial lines bearing 001 and 129 degrees true, from a point on Mokapu Peninsula at 21-27-10N, 157-43-45W. Whenever live firing is scheduled and in progress during daylight hours, two large red triangular warning pennants will be flown on the shore at Ulupau Crater. Whenever any weapons firing is scheduled and in progress during periods of darkness, flashing red warning beacons will be displayed on the shore at Ulupau Crater. Boaters will have complete access to the Danger Zone whenever weapons firing is not scheduled, which will be indicated by the absence of any warning flags, pennants, or beacons displayed ashore. The danger zone is considered unsafe for mariners whenever live firing is in progress; in such cases boaters shall vacate the zone at best speed and by the most direct route. However, vessels are permitted to expeditiously pass through the danger zone when live firing is in progress; all firing would be temporarily suspended until the vessel has cleared the zone. Additional information may be obtained by calling the MCBH Range Manager (AC/S G-3) at (808) 257-8816/17.

HI ISLANDS - OAHU - KANEHOE BAY - ULUPAU CRATER WEAPONS DANGER ZONE - HAZARDOUS OPERATIONS

The following are hazardous operations to mariners for February 18, 2009 - February 25, 2009:

Zones 1 (NE Range)

Feb 18 0700 - 1800
Feb 19 0700 - 1800
Feb 20 0700 - 1800
Feb 21 N/A
Feb 22 N/A
Feb 23 0700 - 2200
Feb 24 0700 - 1800
Feb 25 0700 - 1700

Zones 2 (E Range)

Feb 18 0800 - 1700
Feb 19 0800 - 1200
Feb 20 N/A
Feb 21 N/A
Feb 22 N/A
Feb 23 N/A
Feb 24 0600 - 2200
Feb 25 0600 - 2200

HI ISLANDS - OAHU - KEAHI POINT - HAZARDOUS OPERATIONS

The Keahi Point Danger Zone is located in ocean waters as described by the below coordinates and is closed at all times to surface craft, swimmers, and divers, with the exception of authorized personnel.

Additional information may be obtained by contacting Daniel Geltmacher at daniel.geltmacher@usmc.mil (33CFR 334.1370).

The Danger Zone is bounded by the following coordinates:

21-18-21N/157-59-14W
21-18-11N/158-00-17W
21-17-11N/158-00-06W
21-17-22N/157-59-03W

The following are hazardous operations to mariners for February 18, 2009 - February 25, 2009:

Feb 18 0700 - 1700
Feb 19 0700 - 1700
Feb 20 0700 - 1600
Feb 21 0800 - 1700
Feb 22 0800 - 1700
Feb 23 0700 - 1700
Feb 24 0700 - 1700
Feb 25 0700 - 1700

HI ISLANDS - KAUAI - BARKING SANDS - PACIFIC MISSILE RANGE FACILITY HI AREA - HAZARDOUS OPERATIONS

Intermittent missile firing operations are conducted by the Pacific Missile Range Facility (PMRF), Barking Sands, Kauai, in the Whiskey 188 (W-188) operating area. Operations are conducted periodically throughout each week in an area bound by the following coordinates:

22-02.4N/159-47.3W, 22-00.0N/159-51.0W, 22-00.0N/160-00.0W, 22-02.7N/160-09.1W, 22-03.0N/160-21.0W, 22-05.0N/161-35.0W, 22-56.0N/161-49.0W, 22-45.0N/161-25.0W, 23-57.0N/160-41.0W, 25-41.0N/161-36.0W, 25-47.0N/158-15.0W, 23-54.0N/158-15.0W, 22-20.0N/159-09.0W, 21-58.1N/159-20.5W, 22-13.0N/159-42.0W, 22-00.0N/159-51.0W

Vessels may be requested to alter course due to firing operations and are requested to contact "Missile Range Barking Sands" on HF 2182 KHz, 4491 USB, or VHF-Ch 16 prior to entering the above boundaries. If unable to contact the PMRF prior to entering or while in the warning area, relay messages through U.S. Coast Guard Honolulu. Vessels inbound and outbound for Hawaiian ports will create the least interference to firing operations as well as enhance vessel's safety by passing South of the Islands of Kauai and Niihau during the specified times. Federal law provides for civil penalties of \$32,500 and/or criminal penalties of 6 years in prison for each violation of the PMRF safety zone during the schedule of designated activity (33CFR 165.1406).

The following are hazardous operations to mariners for February 18, 2009 - February 25, 2009:

Feb 18 0001 - 2400 Kaulakahi Channel and Nohili Pt. to 60 NM West through North.
Feb 19 0001 - 1300 Kaulakahi Channel and Nohili Pt. to 60 NM West through North.
Feb 20 0730 - 1730 Kaulakahi Channel and Nohili Pt. to 40 NM West through North.
Feb 21 No Hazardous Operations Scheduled.
Feb 22 No Hazardous Operations Scheduled.
Feb 23 No Hazardous Operations Scheduled.
Feb 24 No Hazardous Operations Scheduled.
Feb 25 0700 - 1730 Kaulakahi Channel and Nohili Pt. to 60 NM West through North.

HI ISLANDS - KAUAI - BARKING SANDS - PACIFIC MISSILE RANGE FACILITY HI AREA - HAZARDOUS OPERATIONS

HI ISLANDS - SOUTH COAST OAHU - HAZARDOUS OPERATIONS - HOT AREAS

FACSFAC Pearl Harbor established a "HOT AREA" named "KAPU" on April 15, 1995, and a "HOT AREA" named "WELA" on March 1, 1997. Both areas have effective hours of 0700W to 2300W Monday-Friday, and on weekends by request (less federal holidays). Activities include intermittent naval gunnery exercises and airborne ordnance drops. "KAPU" is also designated as the emergency jettison area for aircraft with hung stores, etc. Hot area "KAPU" is an area bounded by 20-41N/158-04W, 18-51N/158-24W, 19-08N/159-15W, 20-46N/158-16W, thence to the point of origin. Hot area "WELA" is an area bounded by 19-30N/158-18W, 18-50N/158-26W, 19-08N/159-15W, 19-43N/158-54W, thence to the point of origin. Scheduling authority is FACSFAC Pearl Harbor call sign "HULA DANCER". "HULA DANCER" can be reached on primary 266.4/127.0 MHz, or secondary 336.8/132.4 MHz or telephone (808) 472-7333/7337 and may authorize transits through these areas on a case-by-case basis. No exclusive events involving ordnance will be authorized in areas "KAPU" and "WELA" from 1730W to 0730W unless requests are received no later than three working days prior to event date. Immediate fire evolution Report/Debrief is requested by FACSFACPH with recommendations to improve this evolution.

MARINE EVENTS

This section contains information of general concern to the mariner. All event forms must be received no later than noon on Tuesday a week prior to the event. Mariners are advised to use caution while transiting these areas.

HI ISLANDS - OAHU - FIREWORKS DISPLAY

Hilton Hawaiian Village will be conducting a fireworks display in Waikiki on February 20, 2009, from 1900W - 2000W. In the interest of safety, all vessels must maintain a safe distance of 210 feet from the discharge site.

HI ISLANDS - HAWAII - CANOE RACE

Hawaii Island Paddlesports Association will be conducting the Kama'ili Nursery Pohoiki Challenge from Pohoiki to Kehena, west Hawaii waters, on February 21, 2009, from 0830W - 1200W.

HI ISLANDS - MAUI - CANOE RACE

The Maui Canoe & Kayak Club will be conducting the Maliko canoe race from Maliko to Kahului on February 21, 2009, from 0900W - 1300W.

HI ISLANDS - MAUI - CANOE RACE

The Kona Sailing Club will be conducting the Sledgehammer Race from Maliko to Kahului on February 21, 2009, from 1130W - 1600W.

HI ISLANDS - OAHU - SAILBOAT RACE

The Hawaii Yacht Club will be conducting the HYC Kokohead Race in ocean waters off Waikiki and Kokohead on February 22, 2009, from 0630W - 1630W.

SECTION VIII - LIGHT LIST CORRECTIONS

An Asterisk *, indicates the column in which a correction has been made to new information

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
None							

PUBLICATION CORRECTIONS

U.S COAST PILOT 7 CHANGES

U.S. Coast Pilot 7, Pacific Coast: California, Oregon, Washington, Hawaii, and Pacific Islands, 2009 (41st) Edition. Changes No. 08 and No. 09. See Enclosures (1) and (2).

UPDATE TO THE 2009 EDITION OF THE NOS TIDAL CURRENT TABLES

The NOAA National Ocean Service's Center for Operational Oceanographic Products and Services (CO-OPS) is issuing a correction to the Latitude/Longitude position recorded in the 2009 Tidal Current Tables - Pacific Coast of North America and Asia for the station at San Christoval

Rock. The corrected position for the station is:

Index#	Name	Latitude	Longitude
3416	San Christoval Rock	55° 33.76	133° 17.95

This change will be reflected in the 2010 edition of the Tidal Current Tables - Pacific Coast of North America and Asia.

ENCLOSURES

ENCLOSURE (1)

U.S. Coast Pilot 7, Pacific Coast: California, Oregon, Washington, Hawaii, and Pacific Islands, 2008 (41st) Edition. Change No. 08.

ENCLOSURE (2)

U.S. Coast Pilot 7, Pacific Coast: California, Oregon, Washington, Hawaii, and Pacific Islands, 2008 (41st) Edition. Change No. 09.

M. Brown
Rear Admiral, U.S. Coast Guard
Commander, Fourteenth Coast Guard District

Page 56-Paragraph 263 through Page 62-Paragraph 359; read:

Subpart K—Cordell Bank National Marine Sanctuary

§922.110 Boundary.

The Cordell Bank National Marine Sanctuary (Sanctuary) boundary encompasses a total area of approximately 399 square nautical miles (nmi) of ocean waters, and submerged lands thereunder, off the northern coast of California approximately 50 miles west-northwest of San Francisco, California. The Sanctuary boundary extends westward (approximately 250 degrees) from the northwestern most point of the Gulf of the Farallones National Marine Sanctuary (GFNMS) to the 1,000 fathom isobath northwest of Cordell Bank. The Sanctuary boundary then generally follows this isobath in a southerly direction to the western-most point of the GFNMS boundary. The Sanctuary boundary then follows the GFNMS boundary again to the northwestern corner of the GFNMS. (Reference NOS Chart 18640).

§922.111 Definitions.

In addition to the definitions found in §922.3, the following definitions apply to this subpart:

Clean means not containing detectable levels of harmful matter.

Cruise ship means a vessel with 250 or more passenger berths for hire.

Harmful matter means any substance, or combination of substances, that because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a present or potential threat to Sanctuary resources or qualities, including but not limited to: fishing nets, fishing line, hooks, fuel, oil, and those contaminants (regardless of quantity) listed pursuant to 42 U.S.C.

Introduced species means any species (including, but not limited to, any of its biological matter capable of propagation) that is non-native to the ecosystems of the Sanctuary; or any organism into which altered genetic matter, or genetic matter from another species, has been transferred in order that the host organism acquires the genetic traits of the transferred genes.

§922.112 Prohibited or otherwise regulated activities.

(a) The following activities are prohibited and thus are unlawful for any person to conduct or to cause to be conducted within the Sanctuary:

(1)(i) Discharging or depositing from within or into the Sanctuary, other than from a cruise ship, any material or other matter except:

(A) Fish, fish parts, or chumming materials (bait), used in or resulting from lawful fishing activity within the Sanctuary, provided that such discharge or deposit is during the conduct of lawful fishing activity within the Sanctuary;

(B) For a vessel less than 300 gross registered tons (GRT), or a vessel 300 GRT or greater without sufficient holding tank capacity to hold sewage while within the Sanctuary, clean effluent generated incidental to vessel use and generated by an operable Type I or II marine sanitation device (U.S. Coast Guard classification) approved in accordance with section 312 of the Federal Water Pollution Control Act, as amended, (FWPCA), 33 U.S.C. 1322. Vessel operators must lock all marine sanitation devices in a manner that prevents discharge or deposit of untreated sewage;

(C) Clean vessel deck wash down, clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, or anchor wash; or

(D) Vessel engine or generator exhaust.

(ii) Discharging or depositing, from within or into the Sanctuary, any material or other matter from a cruise ship except clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, or anchor wash.

(iii) Discharging or depositing, from beyond the boundary of the Sanctuary, any material or other matter that subsequently enters the Sanctuary and injures a Sanctuary resource or quality, except as listed in paragraphs (a)(1)(i) and (a)(1)(ii) of this section.

(2) On or within the line representing the 50-fathom isobath surrounding Cordell Bank, removing, taking, or injuring or attempting to remove, take, or injure benthic invertebrates or algae located on Cordell Bank. This prohibition does not apply to use of bottom contact gear used during fishing activities,

which is prohibited pursuant to 50 CFR part 660 (Fisheries off West Coast States). (Reference NOS Chart 18645). There is a rebuttable presumption that any such resource found in the possession of a person within the Sanctuary was taken or removed by that person.

(3) Exploring for, or developing or producing, oil, gas, or minerals in any area of the Sanctuary.

(4)(i) On or within the line representing the 50-fathom isobath surrounding Cordell Bank, drilling into, dredging, or otherwise altering the submerged lands; or constructing, placing, or abandoning any structure, material or other matter on or in the submerged lands. This prohibition does not apply to use of bottom contact gear used during fishing activities, which is prohibited pursuant to 50 CFR part 660 (Fisheries off West Coast States). (Reference NOS Chart 18645).

(ii) In the Sanctuary beyond the line representing the 50-fathom isobath surrounding Cordell Bank, drilling into, dredging, or otherwise altering the submerged lands; or constructing, placing, or abandoning any structure, material or matter on the submerged lands except as incidental and necessary for anchoring any vessel or lawful use of any fishing gear during normal fishing activities. (Reference NOS Chart 18645).

(5) Taking any marine mammal, sea turtle, or bird within or above the Sanctuary, except as authorized by the Marine Mammal Protection Act, as amended, (MMPA), 16 U.S.C. 1361 *et seq.*, Endangered Species Act, as amended, (ESA), 16 U.S.C. 1531 *et seq.*, Migratory Bird Treaty Act, as amended, (MBTA), 16 U.S.C. 703 *et seq.*, or any regulation, as amended, promulgated under the MMPA, ESA, or MBTA.

(6) Possessing within the Sanctuary (regardless of where taken, moved or removed from), any marine mammal, sea turtle or bird taken, except as authorized by the MMPA, ESA, MBTA, by any regulation, as amended, promulgated under the MMPA, ESA, or MBTA, or as necessary for valid law enforcement purposes.

(7) Introducing or otherwise releasing from within or into the Sanctuary an introduced species, except striped bass (*Morone saxatilis*) released during catch and release fishing activity.

(b) The prohibitions in paragraph (a) of this section do not apply to activities necessary to respond to an emergency threatening life, property or the environment, or except as may be permitted by the Director in accordance with §922.48 and §922.113.

(c) All activities being carried out by the Department of Defense (DOD) within the Sanctuary on the effective date of designation that are necessary for national defense are exempt from the prohibitions contained in the regulations in this subpart. Additional DOD activities initiated after the effective date of designation that are necessary for national defense will be exempted by the Director after consultation between the Department of Commerce and DOD. DOD activities not necessary for national defense, such as routine exercises and vessel operations, are subject to all prohibitions contained in the regulations in this subpart.

(d) Where necessary to prevent immediate, serious, and irreversible damage to a Sanctuary resource, any activity may be regulated within the limits of the Act on an emergency basis for no more than 120 days.

§922.113 Permit procedures and issuance criteria.

(a) A person may conduct an activity prohibited by §922.112 if such activity is specifically authorized by, and conducted in accordance with the scope, purpose, terms and conditions of, a permit issued under §922.48 and this section.

(b) The Director, at his or her discretion, may issue a national marine sanctuary permit under this section, subject to terms and conditions, as he or she deems appropriate, if the Director finds that the activity will:

(1) Further research or monitoring related to Sanctuary resources and qualities;

(2) Further the educational value the Sanctuary;

(3) Further salvage or recovery operations in or near the Sanctuary in connection with a recent air or marine casualty; or

(4) Assist in managing the Sanctuary.

(c) In deciding whether to issue a permit, the Director shall consider such factors as:

(1) The applicant is qualified to conduct and complete the proposed activity;

(2) The applicant has adequate financial resources available to conduct and complete the proposed activity;

(3) The methods and procedures proposed by the applicant are appropriate to achieve the goals of the proposed activity, especially in relation to the potential effects of the proposed activity on Sanctuary resources and qualities;

(4) The proposed activity will be conducted in a manner compatible with the primary objective of protection of Sanctuary resources and qualities,

considering the extent to which the conduct of the activity may diminish or enhance Sanctuary resources and qualities, any potential indirect, secondary or cumulative effects of the activity, and the duration of such effects;

(5) The proposed activity will be conducted in a manner compatible with the value of the Sanctuary, considering the extent to which the conduct of the activity may result in conflicts between different users of the Sanctuary, and the duration of such effects;

(6) It is necessary to conduct the proposed activity within the Sanctuary;

(7) The reasonably expected end value of the proposed activity to the furtherance of Sanctuary goals and purposes outweighs any potential adverse effects on Sanctuary resources and qualities from the conduct of the activity; and

(8) Any other factors as the Director deems appropriate.

(d) Applications.

(1) Applications for permits should be addressed to the Director, Office of National Marine Sanctuaries; ATTN: Superintendent, Cordell Bank National Marine Sanctuary, P.O. Box 159, Olema, CA 94950.

(2) In addition to the information listed in §922.48(b), all applications must include information to be considered by the Director in paragraph (b) and (c) of this section.

(e) The permittee must agree to hold the United States harmless against any claims arising out of the conduct of the permitted activities.

Subpart M—Monterey Bay National Marine Sanctuary

§922.130 Boundary.

The Monterey Bay National Marine Sanctuary (Sanctuary) consists of two separate areas. (a) The first area consists of an area of approximately 4,016 square nautical miles (nmi) of coastal and ocean waters, and submerged lands thereunder, in and surrounding Monterey Bay off the central coast of California. The northern terminus of the Sanctuary boundary is located along the southern boundary of the Gulf of the Farallones National Marine Sanctuary (GFNMS) beginning at Rocky Point just south of

Stinson Beach in Marin County. The Sanctuary boundary follows the GFNMS boundary westward to a point approximately 29 nmi offshore from Moss Beach in San Mateo County. The Sanctuary boundary then extends southward in a series of arcs, which generally follow the 500 fathom isobath, to a point approximately 27 nmi offshore of Cambria, in San Luis Obispo County. The Sanctuary boundary then extends eastward towards shore until it intersects the Mean High Water Line (MHWL) along the coast near Cambria. The Sanctuary boundary then follows the MHWL northward to the northern terminus at Rocky Point. The shoreward Sanctuary boundary excludes a small area between Point Bonita and Point San Pedro. Pillar Point Harbor, Santa Cruz Harbor, Monterey Harbor, and Moss Landing Harbor are all excluded from the Sanctuary except for Moss Landing Harbor, where all of Elkhorn Slough east of the Highway One bridge, and west of the tide gate at Elkhorn Road and toward the center channel from the MHWL is included within the Sanctuary, excluding areas within the Elkhorn Slough National Estuarine Research Reserve. (Reference NOS Charts 18680 and 18700).

(b) The Davidson Seamount Management Zone is also part of the Sanctuary. This area, bounded by geodetic lines connecting a rectangle centered on the top of the Davidson Seamount, consists of approximately 585 square nmi of ocean waters and the submerged lands thereunder. The shoreward boundary of this portion of the Sanctuary is located approximately 65 nmi off the coast of San Simeon in San Luis Obispo County. Exact coordinates for the Davidson Seamount Management Zone boundary are provided in Appendix F to this subpart.

§922.131 Definitions.

In addition to those definitions found at 15 CFR 922.3, the following definitions apply to this subpart:

Attract or attracting means the conduct of any activity that lures or may lure any animal by using food, bait, chum, dyes, decoys, acoustics, or any other means, except the mere presence of human beings (e.g., swimmers, divers, boaters, kayakers, surfers).

Clean means not containing detectable levels of harmful matter.

Cruise ship means a vessel with 250 or more passenger berths for hire.

Davidson Seamount Management Zone means the area bounded by geodetic lines connecting a rectangle centered on the top of the Davidson

Seamount, and consists of approximately 585 square nmi of ocean waters and the submerged lands thereunder. The shoreward boundary of this portion of the Sanctuary is located approximately 65 nmi off the coast of San Simeon in San Luis Obispo County. Exact coordinates for the Davidson Seamount Management Zone boundary are provided in Appendix F to this subpart.

Deserting means leaving a vessel aground or adrift without notification to the Director of the vessel going aground or becoming adrift within 12 hours of its discovery and developing and presenting to the Director a preliminary salvage plan within 24 hours of such notification, after expressing or otherwise manifesting intention not to undertake or to cease salvage efforts, or when the owner/operator cannot after reasonable efforts by the Director be reached within 12 hours of the vessel's condition being reported to authorities; or leaving a vessel at anchor when its condition creates potential for a grounding, discharge, or deposit and the owner/operator fails to secure the vessel in a timely manner.

Federal Project means any water resources development project conducted by the U.S. Army Corps of Engineers or operating under a permit or other authorization issued by the Corps of Engineers and authorized by Federal law.

Hand tool means a hand-held implement, utilized for the collection of jade pursuant to 15 CFR 922.132(a)(1), that is no greater than 36 inches in length and has no moving parts (e.g., dive knife, pry bar, or abalone iron). Pneumatic, mechanical, electrical, hydraulic, or explosive tools are, therefore, examples of what does not meet this definition.

Harmful matter means any substance, or combination of substances, that because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a present or potential threat to Sanctuary resources or qualities, including but not limited to: Fishing nets, fishing line, hooks, fuel, oil, and those contaminants (regardless of quantity) listed pursuant to 42 U.S.C. 9601(14) of the Comprehensive Environmental Response, Compensation and Liability Act at 40 CFR 302.4.

Introduced species means: Any species (including but not limited to any of its biological matter capable of propagation) that is non-native to the ecosystems of the Sanctuary; or any organism into which altered genetic matter, or genetic matter from another species, has been transferred in order that the host

organism acquires the genetic traits of the transferred genes.

Motorized personal watercraft (MPWC) means any vessel, propelled by machinery, that is designed to be operated by standing, sitting, or kneeling on, astride, or behind the vessel, in contrast to the conventional manner, where the operator stands or sits inside the vessel; any vessel less than 20 feet in length overall as manufactured and propelled by machinery and that has been exempted from compliance with the U.S. Coast Guard's Maximum Capacities Marking for Load Capacity regulation found at 33 CFR Parts 181 and 183, except submarines; or any other vessel that is less than 20 feet in length overall as manufactured, and is propelled by a water jet pump or drive.

§922.132 Prohibited or otherwise regulated activities.

(a) Except as specified in paragraphs (b) through (e) of this section, the following activities are prohibited and thus are unlawful for any person to conduct or to cause to be conducted:

(1) Exploring for, developing, or producing oil, gas, or minerals within the Sanctuary, except: Jade may be collected (meaning removed) from the area bounded by the 35.92222 N latitude parallel (coastal reference point: Beach access stairway at south Sand Dollar Beach), the 35.88889 N latitude parallel (coastal reference point: Westernmost tip of Cape San Martin), and from the mean high tide line seaward to the 90-foot isobath (depth line) (the "authorized area") provided that:

(i) Only jade already loose from the submerged lands of the Sanctuary may be collected;

(ii) No tool may be used to collect jade except:

(A) A hand tool (as defined at 15 CFR 922.131) to maneuver or lift the jade or scratch the surface of a stone as necessary to determine if it is jade;

(B) A lift bag or multiple lift bags with a combined lift capacity of no more than two hundred pounds; or

(C) A vessel (except for motorized personal watercraft) (see paragraph (a)(7) of this section) to provide access to the authorized area;

(iii) Each person may collect only what that person individually carries; and

(iv) For any loose piece of jade that cannot be collected under paragraphs (a)(1) (ii) and (iii) of this section, any person may apply for a permit to collect such a loose piece by following the procedures in 15 CFR 922.133.

(2)(i) Discharging or depositing from within or into the Sanctuary, other than from a cruise ship, any material or other matter, except:

(A) Fish, fish parts, chumming materials, or bait used in or resulting from lawful fishing activities within the Sanctuary, provided that such discharge or deposit is during the conduct of lawful fishing activities within the Sanctuary;

(B) For a vessel less than 300 gross registered tons (GRT), or a vessel 300 GRT or greater without sufficient holding tank capacity to hold sewage while within the Sanctuary, clean effluent generated incidental to vessel use by an operable Type I or II marine sanitation device (U.S. Coast Guard classification) approved in accordance with section 312 of the Federal Water Pollution Control Act, as amended (FWPCA), 33 U.S.C. 1322. Vessel operators must lock all marine sanitation devices in a manner that prevents discharge or deposit of untreated sewage;

(C) Clean vessel deck wash down, clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, or anchor wash;

(D) For a vessel less than 300 gross registered tons (GRT), or a vessel 300 GRT or greater without sufficient holding capacity to hold graywater while within the Sanctuary, clean graywater as defined by section 312 of the FWPCA;

(E) Vessel engine or generator exhaust; or

(F) Dredged material deposited at disposal sites authorized by the U.S. Environmental Protection Agency (EPA) (in consultation with the U.S. Army Corps of Engineers (COE)) prior to the effective date of Sanctuary designation (January 1, 1993), provided that the activity is pursuant to, and complies with the terms and conditions of, a valid Federal permit or approval existing on January 1, 1993. Authorized disposal sites within the Sanctuary are described in Appendix C to this subpart.

(ii) Discharging or depositing from within or into the Sanctuary any material or other matter from a cruise ship except clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, or anchor wash.

(iii) Discharging or depositing from beyond the boundary of the Sanctuary any material or other matter that subsequently enters the Sanctuary and injures a Sanctuary resource or quality, except those listed in paragraphs (a)(2)(i)(A) through (E) and (a)(2)(ii) of this section and dredged material deposited at the authorized disposal sites, described in Appendix D to this subpart, provided that the

dredged material disposal is pursuant to, and complies with the terms and conditions of, a valid Federal permit or approval.

(3) Possessing, moving, removing, or injuring, or attempting to possess, move, remove, or injure, a Sanctuary historical resource. This prohibition does not apply to, moving, removing, or injury resulting incidentally from kelp harvesting, aquaculture, or lawful fishing activities.

(4) Drilling into, dredging, or otherwise altering the submerged lands of the Sanctuary; or constructing, placing, or abandoning any structure, material, or other matter on or in the submerged lands of the Sanctuary, except as incidental and necessary to:

(i) Conduct lawful fishing activities;

(ii) Anchor a vessel;

(iii) Conduct aquaculture or kelp harvesting;

(iv) Install an authorized navigational aid;

(v) Conduct harbor maintenance in an area necessarily associated with a Federal Project in existence on January 1, 1993, including dredging of entrance channels and repair, replacement, or rehabilitation of breakwaters and jetties;

(vi) Construct, repair, replace, or rehabilitate a dock or pier; or

(vii) Collect jade pursuant to paragraph (a)(1) of this section, provided that there is no constructing, placing, or abandoning any structure, material, or other matter on or in the submerged lands of the Sanctuary, other than temporary placement of an authorized hand tool as provided in paragraph (a)(1) of this section. The exceptions listed in paragraphs (a)(4)(ii) through (a)(4)(vii) of this section do not apply within the Davidson Seamount Management Zone.

(5) Taking any marine mammal, sea turtle, or bird within or above the Sanctuary, except as authorized by the Marine Mammal Protection Act, as amended, (MMPA), 16 U.S.C. 1361 et seq., Endangered Species Act, as amended, (ESA), 16 U.S.C. 1531 et seq., Migratory Bird Treaty Act, as amended, (MBTA), 16 U.S.C. 703 et seq., or any regulation, as amended, promulgated under the MMPA, ESA, or MBTA.

(6) Flying motorized aircraft, except as necessary for valid law enforcement purposes, at less than 1,000 feet above any of the four zones within the Sanctuary described in Appendix B to this subpart.

(7) Operating motorized personal watercraft within the Sanctuary except within the five designated zones and access routes within the

Sanctuary described in Appendix E to this subpart. Zone Five (at Pillar Point) exists only when a High Surf Warning has been issued by the National Weather Service and is in effect for San Mateo County, and only during December, January, and February.

(8) Possessing within the Sanctuary (regardless of where taken, moved, or removed from), any marine mammal, sea turtle, or bird, except as authorized by the MMPA, ESA, MBTA, by any regulation, as amended, promulgated under the MMPA, ESA, or MBTA, or as necessary for valid law enforcement purposes.

(9) Deserting a vessel aground, at anchor, or adrift in the Sanctuary.

(10) Leaving harmful matter aboard a grounded or deserted vessel in the Sanctuary.

(11) (i) Moving, removing, taking, collecting, catching, harvesting, disturbing, breaking, cutting, or otherwise injuring, or attempting to move, remove, take, collect, catch, harvest, disturb, break, cut, or otherwise injure, any Sanctuary resource located more than 3,000 feet below the sea surface within the Davidson Seamount Management Zone. This prohibition does not apply to fishing below 3,000 feet within the Davidson Seamount Management Zone, which is prohibited pursuant to 50 CFR part 660 (Fisheries off West Coast States).

(ii) Possessing any Sanctuary resource the source of which is more than 3,000 feet below the sea surface within the Davidson Seamount Management Zone. This prohibition does not apply to possession of fish resulting from fishing below 3,000 feet within the Davidson Seamount Management Zone, which is prohibited pursuant to 50 CFR part 660 (Fisheries off West Coast States).

(12) Introducing or otherwise releasing from within or into the Sanctuary an introduced species, except striped bass (*Morone saxatilis*) released during catch and release fishing activity.

(13) Attracting any white shark within the Sanctuary.

(14) Interfering with, obstructing, delaying, or preventing an investigation, search, seizure, or disposition of seized property in connection with enforcement of the Act or any regulation or permit issued under the Act.

(b) The prohibitions in paragraphs (a)(2) through (11) of this section do not apply to an activity necessary to respond to an emergency threatening life, property, or the environment.

(c)(1) All Department of Defense activities must be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities. The prohibitions in paragraphs (a)(2) through (12) of this section do not apply to existing military activities carried out by the Department of Defense, as specifically identified in the Final Environmental Impact Statement and Management Plan for the Proposed Monterey Bay National Marine Sanctuary (NOAA, 1992). (Copies of the FEIS/MP are available from the Monterey Bay National Marine Sanctuary, 299 Foam Street, Monterey, CA 93940.) For purposes of the Davidson Seamount Management Zone, these activities are listed in the 2008 Final Environmental Impact Statement. New activities may be exempted from the prohibitions in paragraphs (a)(2) through (12) of this section by the Director after consultation between the Director and the Department of Defense.

(2) In the event of destruction of, loss of, or injury to a Sanctuary resource or quality resulting from an incident, including but not limited to discharges, deposits, and groundings, caused by a Department of Defense activity, the Department of Defense, in coordination with the Director, must promptly prevent and mitigate further damage and must restore or replace the Sanctuary resource or quality in a manner approved by the Director.

(d) The prohibitions in paragraph (a)(1) of this section as it pertains to jade collection in the Sanctuary, and paragraphs (a)(2) through (11) and (a)(13) of this section, do not apply to any activity conducted under and in accordance with the scope, purpose, terms, and conditions of a National Marine Sanctuary permit issued pursuant to 15 CFR 922.48 and 922.133 or a Special Use permit issued pursuant to section 310 of the Act.

(e) The prohibitions in paragraphs (a)(2) through (a)(8) of this section do not apply to any activity authorized by any lease, permit, license, approval, or other authorization issued after the effective date of Sanctuary designation (January 1, 1993) and issued by any Federal, State, or local authority of competent jurisdiction, provided that the applicant complies with 15 CFR 922.49, the Director notifies the applicant and authorizing agency that he or she does not object to issuance of the authorization, and the applicant complies with any terms and conditions the Director deems necessary to protect Sanctuary resources and qualities. Amendments, renewals, and extensions of authorizations in existence on the effective date of designation constitute authorizations

issued after the effective date of Sanctuary designation.

(f) Notwithstanding paragraphs (d) and (e) of this section, in no event may the Director issue a National Marine Sanctuary permit under 15 CFR 922.48 and 922.133 or a Special Use permit under section 310 of the Act authorizing, or otherwise approve: the exploration for, development, or production of oil, gas, or minerals within the Sanctuary, except for the collection of jade pursuant to paragraph (a)(1) of this section; the discharge of primary-treated sewage within the Sanctuary (except by certification, pursuant to 15 CFR 922.47, of valid authorizations in existence on January 1, 1993 and issued by other authorities of competent jurisdiction); or the disposal of dredged material within the Sanctuary other than at sites authorized by EPA (in consultation with COE) prior to January 1, 1993. Any purported authorizations issued by other authorities within the Sanctuary shall be invalid.

§922.133 Permit procedures and criteria.

(a) A person may conduct an activity prohibited by §922.132(a)(1) as it pertains to jade collection in the Sanctuary, §922.132(a)(2) through (11), and §922.132(a)(13), if such activity is specifically authorized by, and conducted in accordance with the scope, purpose, terms, and conditions of, a permit issued under this section and 15 CFR 922.48.

(b) The Director, at his or her sole discretion, may issue a permit, subject to terms and conditions as he or she deems appropriate, to conduct an activity prohibited by §922.132(a)(1) as it pertains to jade collection in the Sanctuary, §922.132(a)(2) through (11), and §922.132(a)(13), if the Director finds that the activity will have at most short-term and negligible adverse effects on Sanctuary resources and qualities and:

(1) Is research designed to further understanding of Sanctuary resources and qualities;

(2) Will further the educational, natural, or historical value of the Sanctuary;

(3) Will further salvage or recovery operations within or near the Sanctuary in connection with a recent air or marine casualty;

(4) Will assist in managing the Sanctuary;

(5) Will further salvage or recovery operations in connection with an abandoned shipwreck in the Sanctuary title to which is held by the State of California; or

(6) Will allow the removal, without the use of pneumatic, mechanical, electrical, hydraulic or

explosive tools, of loose jade from the Jade Cove area under §922.132(a)(1)(iv).

(c) In deciding whether to issue a permit, the Director shall consider such factors as:

(1) Will the activity be conducted by an applicant that is professionally qualified to conduct and complete the activity;

(2) Will the activity be conducted by an applicant with adequate financial resources available to conduct and complete the activity;

(3) Is the activity proposed for no longer than necessary to achieve its stated purpose;

(4) Must the activity be conducted within the Sanctuary;

(5) Will the activity be conducted using methods and procedures that are appropriate to achieve the goals of the proposed activity, especially in relation to the potential effects of the proposed activity on Sanctuary resources and qualities;

(6) Will the activity be conducted in a manner compatible with the primary objective of protection of Sanctuary resources and qualities, considering the extent to which the conduct of the activity may diminish or enhance Sanctuary resources and qualities, any potential indirect, secondary, or cumulative effects of the activity, and the duration of such effects;

(7) Will the activity be conducted in a manner compatible with the value of the Sanctuary as a source of recreation and as a source of educational and scientific information, considering the extent to which the conduct of the activity may result in conflicts between different users of the Sanctuary and the duration of such effects; and

(8) Does the reasonably expected end value of the activity to the furtherance of the Sanctuary goals and objectives outweigh any potential adverse effects on Sanctuary resources and qualities from the conduct of the activity.

(d) For jade collection, preference will be given for applications proposing to collect loose pieces of jade for research or educational purposes.

(e) The Director may consider such other factors as he or she deems appropriate.

(f) Applications.

(1) Applications for permits should be addressed to the Director, Office of National Marine Sanctuaries; ATTN: Superintendent, Monterey Bay National Marine Sanctuary, 299 Foam Street, Monterey, CA 93940.

(2) In addition to the information listed in 15 CFR 922.48(b), all applications must include information

the Director needs to make the findings in paragraph (b) of this section and information to be considered by the Director pursuant to paragraph (c) of this section.

(g) In addition to any other terms and conditions that the Director deems appropriate, a permit issued pursuant to this section must require that the permittee agree to hold the United States harmless against any claims arising out of the conduct of the permitted activities.

§922.134 Notification and review.

(a) [Reserved]

(b)(1) NOAA has entered into a Memorandum of Agreement (MOA) with the State of California, EPA, and the Association of Monterey Bay Area Governments regarding the Sanctuary regulations relating to water quality within State waters within the Sanctuary.

With regard to permits, the MOA encompasses:

(i) National Pollutant Discharge Elimination System (NPDES) permits issued by the State of California under section 13377 of the California Water Code; and

(ii) Waste Discharge Requirements issued by the State of California under section 13263 of the California Water Code.

(2) The MOA specifies how the process of 15 CFR 922.49 will be administered within State waters within the Sanctuary in coordination with the State permit program.

Appendix B to Subpart M of Part 922—Zones Within the Sanctuary Where Overflights Below 1,000 Feet are Prohibited

The four zones are:

(1) From mean high water out to three miles between a line extending from Point Santa Cruz on a southwesterly heading bearing of **220°** true and a line extending from 2 miles north of Pescadero Point on a southwesterly heading bearing of **240°** true.

(2) From mean high water out to three miles between a line extending from the Carmel River mouth on a westerly heading bearing of **270°** true and a line extending due west along latitude 35°33'17.6"N off of Cambria;

(3) From mean high water and within a five mile arc drawn from a center point at the end of Moss Landing Pier as it appeared on the most current NOAA nautical charts as of January 1, 1993; and

(4) Over the waters of Elkhorn Slough east of the Highway One bridge to Elkhorn Road.

Appendix C to Subpart M of Part 922—Dredged Material Disposal Sites Within the Sanctuary

Point No.	Latitude north	Longitude west
Santa Cruz Harbor/Twin Lakes Dredge Disposal Site		
1	36°57'45.0"	122°00'02.0"
2	36°57'45.0"	121°59'55.0"
3	36°57'41.0"	121°59'54.0"
4	36°57'41.0"	122°00'03.0"
SF-12 Dredge Disposal Site		
1	36°48'07.5"	121°47'31.5"
2	36°48'05.7"	121°47'31.8"
3	36°48'06.2"	121°47'35.7"
4	36°48'08.8"	121°47'34.6"
SF-14 Dredge Disposal Site (circle with 500 yard radius)		
1	36°47'52.8"	121°49'08.7"
Monterey Harbor/Wharf II Dredge Disposal Site		
1	36°36'10.7"	121°53'21.9"
2	36°36'10.2"	121°53'16.3"
3	36°36'03.3"	121°53'17.7"
4	36°36'04.3"	121°53'23.2"

Appendix D to Subpart M of Part 922—Dredged Material Disposal Sites Adjacent to the Monterey Bay National Marine Sanctuary

As of January 1, 1993, the U.S. Army Corps of Engineers operates the following dredged material disposal site adjacent to the Sanctuary off of the Golden Gate:

Point No.	Latitude north	Longitude west
1	37°45'52.5"	122°34'08.4"
2	37°44'58.7"	122°37'22.1"
3	37°44'29.5"	122°37'09.6"
4	37°45'24.4"	122°33'53.4"
5	37°45'52.5"	122°34'08.4"

Appendix E to Subpart M of Part 922—Motorized Personal Watercraft Zones and Access Routes within the Sanctuary

The five zones and access routes are:

(1) The approximately one (1) NM² area off Pillar Point Harbor from harbor launch ramps, through harbor entrance to the northern boundary of Zone One:

- (a) 37°29'38.2"N., 122°29'05.2"W. (flashing 5-second breakwater entrance light and horn located at the seaward end of the outer west breakwater);
- (b) 37°28'48.0"N., 122°29'00.0"W. (bell buoy);
- (c) 37°28'48.0"N., 122°28'00.0"W.
- (d) 37°29'36.0"N., 122°28'00.0"W.

(2) The approximately five (5) NM² area off of Santa Cruz Small Craft Harbor from harbor launch ramps, through harbor entrance, and then along a 100 yard wide access route southwest along a true bearing of approximately 196° true (180° magnetic) to the whistle buoy at 36°56'18"N., 122°00'36"W. Zone Two is bounded by:

- (a) 36°55'00.0"N., 122°02'00.0"W.
- (b) 36°55'00.0"N., 121°58'00.0"W.
- (c) 36°56'30.0"N., 121°58'00.0"W.
- (d) 36°56'30.0"N., 122°02'00.0"W.

(3) The approximately six (6) NM² area off of Moss Landing Harbor from harbor launch ramps, through harbor entrance, and then along a 100 yard wide access route west along a bearing of approximately 270° true (255° magnetic) due west to the eastern boundary of Zone Three bounded by:

- (a) 36°50'00.0"N., 121°49'18.0"W.
- (b) 36°50'00.0"N., 121°50'48.0"W.
- (c) 36°46'42.0"N., 121°50'48.0"W.
- (d) 36°46'42.0"N., 121°49'00.0"W.
- (e) 36°47'54.0"N., 121°48'06.0"W. (bell buoy)
- (f) 36°48'54.0"N., 121°48'12.0"W.

(4) The approximately five (5) NM² area off of Monterey Harbor from harbor launch ramps to the seaward end of the U.S. Coast Guard Pier, and then along a 100 yard wide access route due north to the southern boundary of Zone Four bounded by:

- (a) 36°38'42.0"N., 121°55'24.0"W.
- (b) 36°36'54.0"N., 121°52'30.0"W.
- (c) 36°38'18.0"N., 121°51'18.0"W.
- (d) 36°40'00.0"N., 121°54'24.0"W.

(5) The approximately one-tenth (0.1) NM² area near Pillar Point from Pillar Point Harbor entrance along a 100 yard wide access route southeast along a true bearing of approximately 174° true (159° magnetic) to the bell buoy (identified as "Buoy 3") at 37°28'53.5"N., 122°28'53.6"W. and then along a 100

yard wide access route northwest along a true bearing of approximately 284° true (269° magnetic) to the gong buoy (identified as "Buoy 1") at 37°29'10.5"N., 122°30'21.7"W., the southwest boundary of Zone Five. Zone Five exists only when a High Surf Warning has been issued by the National Weather Service and is in effect for San Mateo County and only during December, January, and February. Zone Five is bounded by:

- (a) 37°29'10.5"N., 122°30'21.7"W.; gong buoy
- (b) 37°29'35.0"N., 122°30'21.7"W.
- (c) 37°29'35.0"N., 122°30'03.8"W.; sail rock
- (d) 37°29'10.5"N., 122°30'03.8"W.

Appendix F to Subpart M of Part 922—Davidson Seamount Management Zone

Point No.	Latitude north	Longitude west
1	35°54'00.0"	123°00'00.0"
2	35°54'00.0"	122°30'00.0"
3	35°30'00.0"	122°30'00.0"
4	35°30'00.0"	123°00'00.0"

(FR 11/10/08)

Page 52-Paragraph 184 through Page 54-Paragraph 223; read:

Subpart H—Gulf of the Farallones National Marine Sanctuary

§922.80 Boundary.

The Gulf of the Farallones National Marine Sanctuary (Sanctuary) boundary encompasses a total area of approximately 966 square nautical miles (nmi) of coastal and ocean waters, and submerged lands thereunder, surrounding the Farallon Islands (and Noonday Rock) off the northern coast of California. The northernmost extent of the Sanctuary boundary is a geodetic line extending westward from Bodega Head approximately 6 nmi to the northern boundary of the Cordell Bank National Marine Sanctuary (CBNMS). The Sanctuary boundary then turns southward to a point approximately 6 nmi off Point Reyes, California, where it then turns westward again out towards the 1,000-fathom isobath. The Sanctuary boundary then extends in a southerly direction adjacent to the 1,000-fathom isobath until it intersects the northern extent of the Monterey Bay National Marine Sanctuary (MBNMS). The Sanctuary boundary then follows the MBNMS boundary eastward and northward until it intersects the Mean High Water Line at Rocky Point, California. The Sanctuary boundary then follows the MHWL north until it intersects the Point Reyes National Seashore (PRNS) boundary. The Sanctuary boundary then approximates the PRNS boundary, as established at the time of designation of the Sanctuary, to the intersection of the PRNS boundary and the MHWL in Tomales Bay. The Sanctuary boundary then follows the MHWL up Tomales Bay and Lagunitas Creek to the Route 1 Bridge where the Sanctuary boundary crosses the Lagunitas Creek and follows the MHWL until it intersects its northernmost extent near Bodega Head. The Sanctuary boundary includes Bolinas Lagoon, Estero de San Antonio (to the tide gate at Valley Ford Franklin School Road) and Estero Americano (to the bridge at Valley Ford Estero Road), as well as Bodega Bay, but not Bodega Harbor. Where the Sanctuary boundary crosses a waterway, the Sanctuary boundary excludes these waterways shoreward of the Sanctuary boundary line delineated by the coordinates provided. (Reference NOS Charts 18680 and 18640).

§922.81 Definitions.

In addition to those definitions found at §922.3, the following definitions apply to this subpart:

Areas of Special Biological Significance (ASBS) are those areas designated by California's State Water Resources Control Board as requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. ASBS are a subset of State Water Quality Protection Areas established pursuant to California Public Resources Code section 36700 *et seq.*

Attract or attracting means the conduct of any activity that lures or may lure any animal in the Sanctuary by using food, bait, chum, dyes, decoys (e.g., surfboards or body boards used as decoys), acoustics or any other means, except the mere presence of human beings (e.g., swimmers, divers, boaters, kayakers, surfers).

Clean means not containing detectable levels of harmful matter.

Cruise ship means a vessel with 250 or more passenger berths for hire.

Deserting means leaving a vessel aground or adrift without notification to the Director of the vessel going aground or becoming adrift within 12 hours of its discovery and developing and presenting to the Director a preliminary salvage plan within 24 hours of such notification, after expressing or otherwise manifesting intention not to undertake or to cease salvage efforts, or when the owner/operator cannot after reasonable efforts by the Director be reached within 12 hours of the vessel's condition being reported to authorities; or leaving a vessel at anchor when its condition creates potential for a grounding, discharge, or deposit and the owner/operator fails to secure the vessel in a timely manner.

Harmful matter means any substance, or combination of substances, that because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a present or potential threat to Sanctuary resources or qualities, including but not limited to: fishing nets, fishing line, hooks, fuel, oil, and those contaminants (regardless of quantity) listed pursuant to 42 U.S.C. 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act at 40 CFR 302.4.

Introduced species means any species (including, but not limited to, any of its biological matter capable

of propagation) that is non-native to the ecosystems of the Sanctuary; or any organism into which altered genetic matter, or genetic matter from another species, has been transferred in order that the host organism acquires the genetic traits of the transferred genes.

Motorized personal watercraft means a vessel which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person sitting, standing, or kneeling on the vessel, rather than the conventional manner of sitting or standing inside the vessel.

Routine maintenance means customary and standard procedures for maintaining docks or piers.

Seagrass means any species of marine angiosperms (flowering plants) that inhabit portions of the submerged lands in the Sanctuary. Those species include, but are not limited to: *Zostera asiatica* and *Zostera marina*.

§922.82 Prohibited or otherwise regulated activities.

(a) The following activities are prohibited and thus are unlawful for any person to conduct or to cause to be conducted within the Sanctuary:

(1) Exploring for, developing, or producing oil or gas except that pipelines related to hydrocarbon operations adjacent to the Sanctuary may be placed at a distance greater than 2 nmi from the Farallon Islands, Bolinas Lagoon and Areas of Special Biological Significance (ASBS) where certified to have no significant effect on Sanctuary resources in accordance with §922.84.

(2) Discharging or depositing from within or into the Sanctuary, other than from a cruise ship, any material or other matter except:

(i) Fish, fish parts, or chumming materials (bait) used in or resulting from lawful fishing activity within the Sanctuary, provided that such discharge or deposit is during the conduct of lawful fishing activity within the Sanctuary;

(ii) For a vessel less than 300 gross registered tons (GRT), or a vessel 300 GRT or greater without sufficient holding tank capacity to hold sewage while within the Sanctuary, clean effluent generated incidental to vessel use by an operable Type I or II marine sanitation device (U.S. Coast Guard classification) that is approved in accordance with section 312 of the Federal Water Pollution Control Act, as amended (FWPCA), 33 U.S.C. 1322. Vessel operators must lock all marine sanitation devices in a manner that prevents discharge or deposit of untreated sewage;

(iii) Clean vessel deck wash down, clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, or anchor wash; or

(iv) Vessel engine or generator exhaust.

(3) Discharging or depositing, from within or into the Sanctuary, any material or other matter from a cruise ship except clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, or anchor wash.

(4) Discharging or depositing, from beyond the boundary of the Sanctuary, any material or other matter that subsequently enters the Sanctuary and injures a Sanctuary resource or quality, except for the exclusions listed in paragraphs (a)(2)(i) through (iv) and (a)(3) of this section.

(5) Constructing any structure other than a navigation aid on or in the submerged lands of the Sanctuary; placing or abandoning any structure on or in the submerged lands of the Sanctuary; or drilling into, dredging, or otherwise altering the submerged lands of the Sanctuary in any way, except:

(i) By anchoring vessels (in a manner not otherwise prohibited by this part (see §922.82(a)(16))

;

(ii) While conducting lawful fishing activities;

(iii) The laying of pipelines related to hydrocarbon operations in leases adjacent to the Sanctuary in accordance with paragraph (a)(1) of this section;

(iv) Routine maintenance and construction of docks and piers on Tomales Bay; or

(v) Mariculture activities conducted pursuant to a valid lease, permit, license or other authorization issued by the State of California.

(6) Operating any vessel engaged in the trade of carrying cargo within an area extending 2 nmi from the Farallon Islands, Bolinas Lagoon or any ASBS. This includes but is not limited to tankers and other bulk carriers and barges, or any vessel engaged in the trade of servicing offshore installations, except to transport persons or supplies to or from the Islands or mainland areas adjacent to Sanctuary waters or any ASBS. In no event shall this section be construed to limit access for fishing, recreational or research vessels.

(7) Operation of motorized personal watercraft, except for the operation of motorized personal watercraft for emergency search and rescue missions or law enforcement operations (other than routine training activities) carried out by the National Park Service, U.S. Coast Guard, Fire or Police Departments or other Federal, State or local jurisdictions.

(8) Disturbing birds or marine mammals by flying motorized aircraft at less than 1,000 feet over the waters within one nmi of the Farallon Islands, Bolinas Lagoon, or any ASBS except to transport persons or supplies to or from the Islands or for enforcement purposes.

(9) Possessing, moving, removing, or injuring, or attempting to possess, move, remove or injure, a Sanctuary historical resource.

(10) Introducing or otherwise releasing from within or into the Sanctuary an introduced species, except:

(i) Striped bass (*Morone saxatilis*) released during catch and release fishing activity; or

(ii) Species cultivated by mariculture activities in Tomales Bay pursuant to a valid lease, permit, license or other authorization issued by the State of California and in effect on the effective date of the final regulation.

(11) Taking any marine mammal, sea turtle, or bird within or above the Sanctuary, except as authorized by the Marine Mammal Protection Act, as amended, (MMPA), 16 U.S.C. 1361 et seq., Endangered Species Act (ESA), as amended, 16 U.S.C. 1531 et seq., Migratory Bird Treaty Act, as amended, (MBTA), 16 U.S.C. 703 et seq., or any regulation, as amended, promulgated under the MMPA, ESA, or MBTA.

(12) Possessing within the Sanctuary (regardless of where taken, moved or removed from), any marine mammal, sea turtle, or bird taken, except as authorized by the MMPA, ESA, MBTA, by any regulation, as amended, promulgated under the MMPA, ESA, or MBTA, or as necessary for valid law enforcement purposes.

(13) Attracting a white shark in the Sanctuary; or approaching within 50 meters of any white shark within the line approximating 2 nmi around the Farallon Islands. (Reference NOS Chart 18645).

(14) Deserting a vessel aground, at anchor, or adrift in the Sanctuary.

(15) Leaving harmful matter aboard a grounded or deserted vessel in the Sanctuary.

(16) Anchoring a vessel in a designated seagrass protection zone in Tomales Bay, except as necessary for mariculture operations conducted pursuant to a valid lease, permit or license.

(b) All activities currently carried out by the Department of Defense within the Sanctuary are essential for the national defense and, therefore, not subject to the prohibitions in this section. The exemption of additional activities shall be determined in consultation between the Director and the Department of Defense. The coordinates for the no-

anchoring seagrass protection zones are listed in Appendix C to this subpart.

(c) The prohibitions in paragraph (a) of this section do not apply to activities necessary to respond to an emergency threatening life, property, or the environment, or except as may be permitted by the Director in accordance with §922.48 and §922.83.

§922.83 Permit procedures and issuance criteria.

(a) A person may conduct an activity prohibited by §922.82 if such activity is specifically authorized by, and conducted in accordance with the scope, purpose, terms and conditions of, a permit issued under §922.48 and this section.

(b) The Director, at his or her discretion, may issue a National Marine Sanctuary permit under this section, subject to terms and conditions as he or she deems appropriate, if the Director finds that the activity will:

(1) Further research or monitoring related to Sanctuary resources and qualities;

(2) Further the educational value of the Sanctuary;

(3) Further salvage or recovery operations; or

(4) Assist in managing the Sanctuary.

(c) In deciding whether to issue a permit, the Director shall consider factors such as:

(1) The applicant is qualified to conduct and complete the proposed activity;

(2) The applicant has adequate financial resources available to conduct and complete the proposed activity;

(3) The methods and procedures proposed by the applicant are appropriate to achieve the goals of the proposed activity, especially in relation to the potential effects of the proposed activity on Sanctuary resources and qualities;

(4) The proposed activity will be conducted in a manner compatible with the primary objective of protection of Sanctuary resources and qualities, considering the extent to which the conduct of the activity may diminish or enhance Sanctuary resources and qualities, any potential indirect, secondary or cumulative effects of the activity, and the duration of such effects;

(5) The proposed activity will be conducted in a manner compatible with the value of the Sanctuary, considering the extent to which the conduct of the activity may result in conflicts between different users of the Sanctuary, and the duration of such effects;

(6) It is necessary to conduct the proposed activity within the Sanctuary;

(7) The reasonably expected end value of the proposed activity to the furtherance of Sanctuary goals and purposes outweighs any potential adverse effects on Sanctuary resources and qualities from the conduct of the activity; and

(8) Any other factors as the Director deems appropriate.

(d) Applications.

(1) Applications for permits should be addressed to the Director, Office of National Marine Sanctuaries; ATTN: Superintendent, Gulf of the Farallones National Marine Sanctuary, 991 Marine Dr., The Presidio, San Francisco, CA 94129.

(2) In addition to the information listed in §922.48(b), all applications must include information to be considered by the Director in paragraph (b) and (c) of this section.

(e) The permittee must agree to hold the United States harmless against any claims arising out of the conduct of the permitted activities.

922.84 Certification of other permits.

A permit, license, or other authorization allowing: the laying of any pipeline related to hydrocarbon operations in leases adjacent to the Sanctuary and placed at a distance greater than 2 nmi from the Farallon Islands, Bolinas Lagoon, and any ASBS must be certified by the Director as consistent with the purpose of the Sanctuary and having no significant effect on Sanctuary resources. Such certification may impose terms and conditions as deemed appropriate to ensure consistency. In considering whether to make the certifications called for in this section, the Director may seek and consider the views of any other person or entity, within or outside the Federal government, and may hold a public hearing as deemed appropriate. Any certification called for in this section shall be presumed unless the Director acts to deny or condition certification within 60 days from the date that the Director receives notice of the proposed permit and the necessary supporting data. The Director may amend, suspend, or revoke any certification made under this section whenever continued operation would violate any terms or conditions of the certification. Any such action shall be forwarded in writing to both the holder of the certified permit and the issuing agency and shall set forth reason(s) for the action taken.

**Appendix C to Subpart H of Part 922—
No-Anchoring Seagrass Protection Zones in Tomales Bay**

Zone 1 Point	Latitude (N)	Longitude (W)
1	38°06'20.6"	122°50'44.3"
2	38°05'56.0"	122°50'09.7"
3	38°05'55.6"	122°50'39.5"
4	38°06'18.5"	122°50'56.5"
5	38°06'20.6"	122°50'44.3"

Zone 2 Point	Latitude (N)	Longitude (W)
1	38°08'26.6"	122°52'27.8"
2	38°06'49.9"	122°51'30.6"
3	38°07'08.4"	122°52'02.3"
4	38°07'32.3"	122°51'53.3"
5	38°07'38.1"	122°51'53.6"
6	38°07'59.7"	122°52'18.4"
7	38°08'26.6"	122°52'27.8"

Zone 3 Point	Latitude (N)	Longitude (W)
1	38°09'37.1"	122°53'39.9"
2	38°09'10.3"	122°53'23.7"
3	38°09'09.0"	122°53'25.5"
4	38°09'34.4"	122°53'44.6"
5	38°09'37.1"	122°53'39.9"

Zone 4 Point	Latitude (N)	Longitude (W)
1	38°12'02.6"	122°55'18.5"
2	38°09'45.3"	122°53'46.6"
3	38°09'44.2"	122°53'47.4"
4	38°09'55.3"	122°54'11.1"
5	38°10'07.3"	122°54'17.1"
6	38°10'28.2"	122°54'19.6"
7	38°10'45.1"	122°54'36.8"
8	38°11'11.4"	122°54'50.5"
9	38°11'19.7"	122°55'02.6"
10	38°12'02.6"	122°55'18.5"

Zone 5 Point	Latitude (N)	Longitude (W)
1	38°13'52.4"	122°57'46.8"
2	38°12'57.6"	122°56'15.0"
3	38°12'33.8"	122°56'29.5"
4	38°12'13.2"	122°55'56.9"
5	38°12'18.5"	122°55'28.3"
6	38°12'02.6"	122°55'18.5"
7	38°11'38.6"	122°56'05.2"
8	38°12'15.7"	122°56'35.0"
9	38°13'02.2"	122°57'44.1"
10	38°13'52.4"	122°57'46.8"

Zone 6 Point	Latitude (N)	Longitude (W)
1	38°08'17.2"	122°53'45.7"
2	38°08'25.4"	122°53'48.3"
3	38°08'27.7"	122°53'43.3"

4	38°08'21.1"	122°53'38.1"
5	38°08'17.2"	122°53'45.7"

Zone 7 Point	Latitude (N)	Longitude (W)
1	38°06'37.2"	122°51'55.6"
2	38°07'48.3"	122°53'14.7"
3	38°07'50.4"	122°53'10.3"
4	38°07'25.0"	122°52'47.4"
5	38°07'09.0"	122°52'29.7"
6	38°06'53.5"	122°52'08.3"
7	38°06'39.5"	122°51'52.8"
8	38°06'37.2"	122°51'55.6"

(FR 11/10/08)