MEMORANDUM

To: Peg Parker
From: Anna-Marie Laura
Date: December 13, 2011
Re: Liability issues concerning fisheries gear interaction with the Pioneer Array

Woods Hole Oceanographic Institution, as the entity responsible for the coastal moorings and their autonomous vehicles, will have to meet Coast Guard requirements and responsibilities for Private Aids to Navigation (PATON).

Coast Guard Feedback:

- 33 Code of Federal Regulations (CFR) Part 66 covers Private Aids to Navigation (PATON). It defines PATON requirements and responsibilities administered by the Coast Guard and the Army Corps of Engineers (ACOE).

- Ocean monitoring equipment established and maintained by the Federal Government are not considered Private Aids to Navigation (PATON), examples of which include weather, tidal, and current data buoys established by the National Oceanographic and Atmospheric Administration (NOAA). However, similar equipment and instruments established by entities other than the Federal Government are considered PATON. For ocean sensing equipment of this type, the term "aid to navigation" (ATON) indicates that it will be appropriately lit and marked to aid mariners in avoiding collisions with the equipment.

- PATON is defined as "all marine aids to navigation operated in the navigable waters of the United States other than those operated by the Federal Government...or those operated in State waters for private aids to navigation" 33 Code of Federal Regulations (CFR) § 66.01-1(b).

- In order to establish its buoys and markers per this regulation, the Woods Hole Oceanographic Institute (WHOI) must submit a permit application to the Commander, Coast Guard's First District Office in Boston, MA. Upon receiving a permit application, the Coast Guard seeks consultation with the ACOE because they have a separate permitting requirement for PATON.

- Within the regulations administered by the Coast Guard, the liability WHOI carries is that they:
  1) must ensure the Aid is maintained in good working order while deployed, and
  2) if WHOI decides to change, move or discontinue use of an Aid (i.e. buoys and markers), they must first obtain permission from the aforementioned District Office prior to taking any action.

- As long as the PATON owner complies with 33 CFR 66, it will have no liability to the U.S. Government.
Gear interactions between fishing vessels and Pioneer Array infrastructure will be considered under traditional admiralty or maritime law. A dispute between two private entities, such as WHOI and a fishing vessel, would be handled under maritime tort law. If an interaction occurs where one party is injured, the other can seek compensation and a court would decide liability and assess damages.

If a fishing vessel interacts with Pioneer Array infrastructure and the infrastructure is in compliance with all PATON regulations, a court would be more likely to find the fishing vessel liable for damages to Array infrastructure.

If a fishing vessel interacts with Pioneer Array infrastructure that is not in compliance with PATON regulations (i.e. the lights are out, the equipment has moved, a marker buoy detached and drifted away), a court would be more likely to find WHOI liable for damages to fishing equipment.

One possibility might be to create an informal dispute resolution process by prior agreement. A difficulty with this approach would be determining an appropriate entity to represent the fishing community.

NSF Response to liability question:

With regard to your questions concerning liability resulting from gear interactions, NSF’s position continues to be that traditional maritime/admiralty law governs such issues. As you may recall, NSF will take steps to reduce the risk of gear interactions in the first instance. For example, NSF will ensure that notice to mariners of the locations of the mooring buoys is provided along with all required buoy markings. In addition, NSF is in the process of considering deployment of guard buoys to warn other ocean users of the presence of the Pioneer Array’s mooring buoys if the input from the public indicates safety value. It is anticipated that these measures will be effective in reducing the risk of gear interactions. Please note that if gear interactions do ultimately occur, NSF lacks the legal authority to promulgate regulations imposing civil or criminal remedies seeking to address fault. Moreover, because traditional maritime/admiralty law governs gear interaction issues, there are no plans to establish an entanglement fund. Likewise, NSF has no plans to establish a Board to determine accidental or intentional/avoidable gear interactions.

Regarding your questions about gear interactions, please note that, in the event of gear interactions between any equipment (including Private Aids to Navigation) associated with the Pioneer Array and fishing gear or fishing vessels, NSF will follow Coast Guard communication procedures; such procedures are applicable to events at sea. If gear
becomes entangled once the operations phase of the Pioneer Array is initiated, mariners should contact the U.S. Coast Guard (USCG) if a safety issue exists, and, if a mooring buoy is damaged, a telephone number of the OOI Field Operations Manager will be provided on the infrastructure. There will also be contact information on each buoy as well as on the mobile assets (gliders and Autonomous Underwater Vehicles). The project will develop a web-based data screen for the public users of the area where the Pioneer Array will be located. The website will have the ability to type in informational questions that can be answered by the project team and posted on the website as an FAQ. Once the deployment period is complete, a regular meeting frequency will be developed.

Looking forward, the project is in the process of completing fishing community workshops to inform the siting plan for Pioneer. NSF plans to receive and review the material by email and send it (in December) out to the Pioneer blast email for final input by January 2012. This is consistent with our communication from the June, 2011 public meeting. We look forward to overseeing the process. Future community meetings will take place as the project transitions to operations.

At sea tests of the three test moorings for Pioneer are ongoing since September 23, 2011. OL has an update on the at sea tests on their website. The test is going well and providing good data. One of the buoys was repaired this past weekend due to the fact that the tower separated from the test buoy. The website provides all of the details, and all standard practices of Coast Guard notification and project repair were followed.

WHOI plans to identify the problem and improve the buoy design if needed. 

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observatories.org%2f2011%2focean-observatories-initiative-east-coast-at-sea-test-update%2f
§ 66.01-1 Basic provisions.

(a) The Uniform State Waterway Marking System's (USWMS) aids to navigation provisions for marking channels and obstructions (see §66.10–15 in this part) may be used in those navigable waters of the U.S. that have been designated as state waters for private aids to navigation and in those internal waters that are non-navigable waters of the U.S. All other provisions for the use of regulatory markers and other aids to navigation must be in accordance with United States Aid to Navigation System, described in part 62 of this subchapter.

(b) For the purposes of this subpart, the term private aids to navigation includes all marine aids to navigation operated in the navigable waters of the United States other than those operated by the Federal Government (part 62 of this subchapter) or those operated in State waters for private aids to navigation (subpart 66.05).

(c) Coast Guard authorization of a private aid to navigation does not authorize any invasion of private rights, nor grant any exclusive privileges, nor does it obviate the necessity of complying with any other Federal, State or local laws or regulations.

(d) With the exception of radar beacons (racons) and shore based radar stations, operation of electronic aids to navigation as private aids will not be authorized.


§ 66.01-3 Delegation of authority to District Commanders.

(a) Under Section 888 of Pub. L. 107–296, 116 Stat. 2135, the Commandant delegates to the District Commanders within the confines of their respective districts (see Part 3 of this chapter for descriptions) the authority to grant permission to establish and maintain, discontinue, change or transfer ownership of private aids to maritime navigation, and otherwise administer the requirements of this subpart.

(b) The decisions of the District Commander may be appealed within 30 days from the date of decision. The decision of the Commandant in any case is final.

§ 66.01-5 Application procedure.

To establish and maintain, discontinue, change, or transfer ownership of a private aid to navigation, you must apply to the Commander of the Coast Guard District in which the aid is or will be located. You can find application form CG–2554 at http://www.uscgboating.org/safety/aton/aids.htm. You must complete all parts of the form applicable to the aid concerned, and must forward the application to the District Commander. You must include the following information:

(a) The proposed position of the aid to navigation by two or more horizontal angles, bearings and distance from charted landmarks, or the latitude and longitude as determined by GPS or differential GPS. Attach a section of chart or sketch showing the proposed position.

(b) The name and address of the person at whose expense the aid will be maintained.

(c) The name and address of the person who will maintain the aid to navigation.

(d) The time and dates during which it is proposed to operate the aid.

(e) The necessity for the aid.

(f) For lights: The color, characteristic, range, effective intensity, height above water, and description of illuminating apparatus. Attach a copy of the manufacturer's data sheet to the application.

(g) For sound signals: Type (whistle, horn, bell, etc.) and characteristic.

(h) For buoys or daybeacons: Shape, color, number, or letter, depth of water in which located or height above water.

(i) For racons: Manufacturer and model number of racon, height above water of desired installation, and requested coding characteristic. Equipment must have FCC authorization.


§ 66.01-10 Characteristics.

The characteristics of a private aid to navigation must conform to those prescribed by the United States Aids to Navigation System set forth in subpart B of part 62 of this subchapter.

§ 66.01-11 Lights.

(a) Except for range and sector lights, each light approved as a private aid to navigation must:

(1) Have at least the effective intensity required by this subpart omnidirectionally in the horizontal plane, except at the seams of its lens-mold.

(2) Have at least 50% of the effective intensity required by this subpart within ±2° of the horizontal plane.

(3) Have a minimum effective intensity of at least 1 candela for a range of 1 nautical mile, 3 candelas for one of 2 nautical miles, 10 candelas for one of 3 nautical miles, and 54 candelas for one of 5 nautical miles. The District Commander may change the requirements for minimum intensity to account for local environmental conditions. For a flashing light this intensity is determined by the following formula:

\[ I_e = \frac{G}{(0.2 + t_2 - t_1)} \]

Where:

\( I_e \) = Effective intensity
\( G \) = The integral of the instantaneous intensity of the flashed light with respect to time
\( t_1 \) = Time in seconds at the beginning of the flash
\( t_2 \) = Time in seconds at the end of the flash

\( t_2 - t_1 \) is greater than or equal to 0.2 seconds.

(4) Unless the light is a prefocused lantern, have a means of verifying that the source of the light is at the focal point of the lens.

(5) Emit a color within the angle of 50% effective intensity with color coordinates lying within the boundaries defined by the corner coordinates in Table 66.01–11(5) of this part when plotted on the Standard Observer Diagram of the International Commission on Illumination (CIE).

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<thead>
<tr>
<th>Color</th>
<th>Coordinates of chromaticity</th>
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<tbody>
<tr>
<td></td>
<td>x axis</td>
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<tr>
<td>White</td>
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Table 66.01–11(5)—Coordinates of Chromaticity
(6) Have a recommended interval for replacement of the source of light that ensures that the lantern meets the minimal required intensity stated in paragraph (a)(3) of this section in case of degradation of either the source of light or the lens.

(7) Have autonomy of at least 10 days if the light has a self-contained power system. Power production for the prospective position should exceed the load during the worst average month of insolation. The literature concerning the light must clearly state the operating limits and service intervals. Low-voltage disconnects used to protect the battery must operate so as to prevent sporadic operation at night.

(b) The manufacturer of each light approved as a private aid to navigation must certify compliance by means of an indelible plate or label affixed to the aid that meets the requirements of §66.01–14.


§ 66.01-12  May I continue to use the private aid to navigation I am currently using?

If, after March 8, 2004, you modify, replace, or install any light that requires a new application as described in §66.01–5, you must comply with the rules in this part.
§ 66.01-13 When must my newly manufactured equipment comply with these rules?

After March 8, 2004, equipment manufactured for use as a private aid to navigation must comply with the rules in this part.

§ 66.01-14 Label affixed by manufacturer.

(a) Each light, intended or used as a private aid to navigation authorized by this part, must bear a legible, indelible label (or labels) affixed by the manufacturer and containing the following information:

(1) Name of the manufacturer.

(2) Model number.

(3) Serial number.

(4) Words to this effect: “This equipment complies with requirements of the U.S. Coast Guard in 33 CFR part 66.”

(b) This label must last the service life of the equipment.

(c) The manufacturer must provide the purchaser a data sheet containing the following information:

(1) Recommended service life based on the degradation of either the source of light or the lamp.

(2) Range in nautical miles.

(3) Effective intensity in candela.

(4) Size of lamp (incandescent only).

(5) Interval, in days or years, for replacement of dry-cell or rechargeable battery.

§ 66.01-15 Action by Coast Guard.

(a) The District Commander receiving the application will review it for completeness and will assign the aid one of the following classifications:
Class I: Aids to navigation on marine structures or other works which the owners are legally obligated to establish, maintain and operate as prescribed by the Coast Guard.

Class II: Aids to navigation exclusive of Class I located in waters used by general navigation.

Class III: Aids to navigation exclusive of Class I located in waters not ordinarily used by general navigation.

(b) Upon approval by the District Commander, a signed copy of the application will be returned to the applicant. Approval for the operation of radar beacons (racons) will be effective for an initial two year period, then subject to annual review without further submission required of the owner.


§ 66.01–20 Inspection.

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.

§ 66.01–25 Discontinuance and removal.

(a) No person, public body or instrumentality shall change, move or discontinue any authorized private aid to navigation required by statute or regulation (Class I, §66.01–15) without first obtaining permission to do so from the District Commander.

(b) Any authorized private aid to navigation not required by statute or regulation (Classes II and III, §66.01–15) may be discontinued and removed by the owner after 30 days' notice to the District Commander to whom the original request for authorization for establishment of the aid was submitted.

(c) Private aids to navigation which have been authorized pursuant to this part shall be discontinued and removed without expense to the United States by the person, public body or instrumentality establishing or maintaining such aids when so directed by the District Commander.

§ 66.01–30 Corps of Engineers' approval.

(a) Before any private aid to navigation consisting of a fixed structure is placed in the navigable waters of the United States, authorization to erect such structure shall first be obtained from the District Engineer, U.S. Army Corps of Engineers in whose district the aid will be located.

(b) The application to establish any private aid to navigation consisting of a fixed structure shall show evidence of the required permit having been issued by the Corps of Engineers.
§ 66.01-40  Exemptions.

(a) Nothing in the preceding sections of this subpart shall be construed to interfere with or nullify the requirements of existing laws and regulations pertaining to the marking of structures, vessels and other obstructions sunken in waters subject to the jurisdiction of the United States (Part 64 of this subchapter), the marking of artificial islands and structures which are erected on or over the seabed and subsoil of the Outer Continental Shelf (Part 67 of this subchapter), or the lighting of bridges over navigable waters of the United States (Subchapter J of this subchapter).

(b) Persons marking bridges pursuant to Subchapter J of this title are exempted from the provisions of §66.01–5.

[CGD 78–156, 48 FR 11268, Mar. 17, 1983]

§ 66.01-45  Penalties.

Any person, public body or instrumentality, excluding the armed forces, who shall establish, erect or maintain any aid to maritime navigation without first obtaining authority to do so from the Coast Guard, with the exception of those established in accordance with §64.11 of this chapter, or who shall violate the regulations relative thereto issued in this part, is subject to the provisions of 14 U.S.C. 83.


§ 66.01-50  Protection of private aids to navigation.

Private aids to navigation lawfully maintained under these regulations are entitled to the same protection against interference or obstruction as is afforded by law to Coast Guard aids to navigation (Part 70 of this subchapter-included below). If interference or obstruction occurs, a prompt report containing all the evidence available should be made to the Commander of the Coast Guard District in which the aids are located.

§ 66.01-55  Transfer of ownership.

(a) When any private aid to navigation authorized by the District Commander, or the essential real estate or facility with which the aid is associated, is sold or transferred, both parties to the transaction shall submit application (§66.01–5) to the Commander of the Coast Guard District in which the aid is located requesting authority to transfer responsibility for maintenance of the aid.

(b) The party relinquishing responsibility for maintenance of the private aid to navigation shall indicate on the application form (CG–2554) both the discontinuance and the change of ownership of the aid sold or transferred.
(c) The party accepting responsibility for maintenance of the private aid to navigation shall indicate on the application form (CG–2554) both the establishment and the change of ownership of the aid sold or transferred.

(d) In the event the new owner of the essential real estate or facility with which the aid is associated refuses to accept responsibility for maintenance of the aid, the former owner shall be required to remove the aid without expense to the United States. This requirement shall not apply in the case of any authorized private aid to navigation required by statute or regulation (Class I, §66.01–15) which shall be maintained by the new owner until the conditions which made the aid necessary have been eliminated.
Title 33: Navigation and Navigable Waters
PART 70—INTERFERENCE WITH OR DAMAGE TO AIDS TO NAVIGATION

Subpart 70.01—Interference With Aids to Navigation

§ 70.01-1 General provisions.

No person, excluding the Armed Forces, shall obstruct or interfere with any aid to navigation established and maintained by the Coast Guard, or any private aid to navigation established and maintained in accordance with part 64, 66, 67, or 68 of this subchapter.

[CGFR 58–17, 23 FR 3383, May 20, 1958]

§ 70.01-5 Penalty.

Any person violating the provisions of this section shall be deemed guilty of a misdemeanor and be subject to a fine not exceeding the sum of $500 for each offense, and each day during which such violation shall continue shall be considered a new offense.

[CGFR 52–15, 18 FR 12, Jan. 1, 1953]

Subpart 70.05—Collision With or Damage to Aids to Navigation

Source: CGFR 52–15, 18 FR 12, Jan. 1, 1953, unless otherwise noted.

§ 70.05-1 General provisions.

No person shall take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, obstruct by fastening vessels thereto or otherwise, or in any manner whatever impair the usefulness of any aid to navigation established and maintained by the United States.

§ 70.05-5 Penalty.

Every person and every corporation that shall violate, or that shall knowingly aid, abet, authorize, or instigate a violation of the provisions of §70.05–1 shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of up to $25,000 per day, or by imprisonment (in case of a natural person) for not less than thirty days nor more than one year, or both, one half of such fine to be paid to the person or persons giving information which shall lead to conviction.

§ 70.05-10  Revocation of merchant mariner credential officer endorsement or license.

Every master, pilot, and engineer, or person or persons acting in such capacity, respectively, on board any boat or vessel who shall willfully injure or destroy an aid to navigation established and maintained by the United States shall be deemed guilty of violating the provisions of §70.05–1 and shall upon conviction be punished as provided in §70.05–5 and shall also have his merchant mariner credential officer endorsement or license revoked or suspended for a term to be fixed by the judge before whom tried and convicted.


§ 70.05-15  Liability for damages.

Any boat, vessel, scow, raft or other craft used or employed in violating any of the provisions of §70.05–1 shall be liable for the pecuniary penalties specified in §70.05–5, and in addition thereto for the amount of damage done by said boat, vessel, scow, raft or other craft, which may be proceeded against summarily by way of libel in any district court of the United States having jurisdiction thereof.

§ 70.05-20  Report required.

Whenever any vessel collides with an aid to navigation established and maintained by the United States or any private aid to navigation established or maintained in accordance with Part 64, 66, 67, or 68 of this subchapter, or is connected with any such collision, it shall be the duty of the person in charge of such vessel to report the accident to the nearest Officer in Charge, Marine Inspection, in accordance with 46 CFR 4.