

# Marine Scientific Research

Professor Stuart Kaye

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UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA

**ANCORS**  
AUSTRALIAN NATIONAL CENTRE FOR  
OCEAN RESOURCES & SECURITY



# Outline

- Marine scientific research under the Law of the Sea Convention
- MSR vs intelligence gathering
  - “Military survey”
- Incidents
- Emerging issues
  - Use of uncrewed devices and vehicles

# Law of the Sea Convention

- Attempted to set up a regime for MSR
- Lack of consensus between OECD, Warsaw Pact and G77
- No definition of MSR adopted
  - Detailed regime established in Part XIII of the Convention

# Part XIII, LOSC

- Right to undertake MSR guaranteed in Article 238
- Encouragement of international cooperation (Articles 239 and 242)
  - Creation of “favourable conditions” (Article 243)
- Publication of data (Article 244)

# General Principles – Art. 240

- a. marine scientific research shall be conducted exclusively for peaceful purposes;
- b. marine scientific research shall be conducted with appropriate scientific methods and means compatible with this Convention;
- c. marine scientific research shall not unjustifiably interfere with other legitimate uses of the sea compatible with this Convention and shall be duly respected in the course of such uses;
- d. marine scientific research shall be conducted in compliance with all relevant regulations adopted in conformity with this Convention including those for the protection and preservation of the marine environment.

# Authority

- Territorial Sea – (Art. 245)
  - Coastal State: exclusive
- EEZ/Continental Shelf – (Art. 246)
  - Coastal State: consent regime
- High Seas
  - Open to all

# Consent Regime

- EEZ/Continental Shelf Research
  - Coastal State consent required
  - “Normal circumstances” cannot be refused
    - Does not preclude an absence of diplomatic relations
  - Can be withheld if:
    - Concerns exploitation/exploration of natural resources
    - Involves drilling
    - Involves building artificial islands, installations or structures
    - False data provided to coastal State

# Consent Regime

- Consent may be implied after 6 months if no response to request (Article 252)
- Access to dispute resolution for a refusal or cancellation of access:
  - No obligation to accept the submission of a dispute under Part XV (Art.297(2)(a))



# Application to conduct MSR – Art. 248

- a. the nature and objectives of the project;
- b. the method and means to be used, including name, tonnage, type and class of vessels and a description of scientific equipment;
- c. the precise geographical areas in which the project is to be conducted;
- d. the expected date of first appearance and final departure of the research vessels, or deployment of the equipment and its removal, as appropriate;
- e. the name of the sponsoring institution, its director, and the person in charge of the project; and
- f. the extent to which it is considered that the coastal State should be able to participate or to be represented in the project.

# Conditions for MSR in EEZ – Art. 249

- a. Coastal State participation or representation in research, especially on board research vessels and other craft or scientific research installations, without obligation to contribute towards the costs of the project;
- b. provide the coastal State, at its request, with preliminary reports, as soon as practicable, and with the final results and conclusions after the completion of the research;
- c. undertake to provide access for the coastal State, at its request, to all data and samples derived from the marine scientific research project and likewise to furnish it with data which may be copied and samples which may be divided without detriment to their scientific value;

# Conditions for MSR in EEZ – Art. 249

- d. if requested, provide the coastal State with an assessment of such data, samples and research results or provide assistance in their assessment or interpretation;
- e. ensure that the research results are made internationally available through appropriate national or international channels, as soon as practicable;
- f. inform the coastal State immediately of any major change in the research programme;
- g. unless otherwise agreed, remove the scientific research installations or equipment once the research is completed

# Other Provisions

- Recognition for land-locked and geographically disadvantaged States (Article 254)
- Encouragement to adopt reasonable rules and procedures to facilitate MSR (Article 255)
- Research in the Area (Article 256)
- Provisions for installations (Section 4, Part XIII)

# Military Survey

- A military survey is the collection of marine data for military purposes and, whether classified or not, is generally not made publicly available. A military survey may include collection of oceanographic, hydrographic, marine, geological, geophysical, chemical, biological, acoustic, and related data.

- Para 2.6.2.2, *US Commander's Handbook on the Law of Naval Operations*

# Military Survey

- US and UK distinguish MSR from “military survey”
- No accepted international definition of military survey exists
- In their view, military survey:
  - does not require the consent of the coastal State
  - does not require the cooperation of the coastal State
  - has no obligation to release data to the coastal State or anyone else
  - Is conducted by vessels which are sovereign immune, and therefore such vessels are not subject to arrest or the laws of the coastal State

# Military Survey

- LOSC
  - Use of “MSR” and “hydrographic survey” in Articles 21 and 40 suggest they are distinct concepts
- Article IV of the *Convention relative to certain Restrictions with regard to the Exercise of the Right of Capture in Naval War* (Hague XI) (1907)
  - provides that vessels engaged in "scientific missions" are exempt from capture in wartime.
  - This would clearly not apply to a commissioned survey ship of one of the combatants, and suggests a different status for such vessels.
- Supported by the *San Remo Manual on International Law Applicable to Armed Conflicts at Sea* which says Hague XI is limited to "non-military scientific" vessels.

# Incidents over Military Survey

- KEGOSTROV
  - Brazil
- USS LIBERTY
  - Israel
- USS PUEBLO
  - North Korea
- HMS SCOTT
  - India
- USNS IMPECCABLE
  - China
- USNS BOWDITCH
  - China
  - India



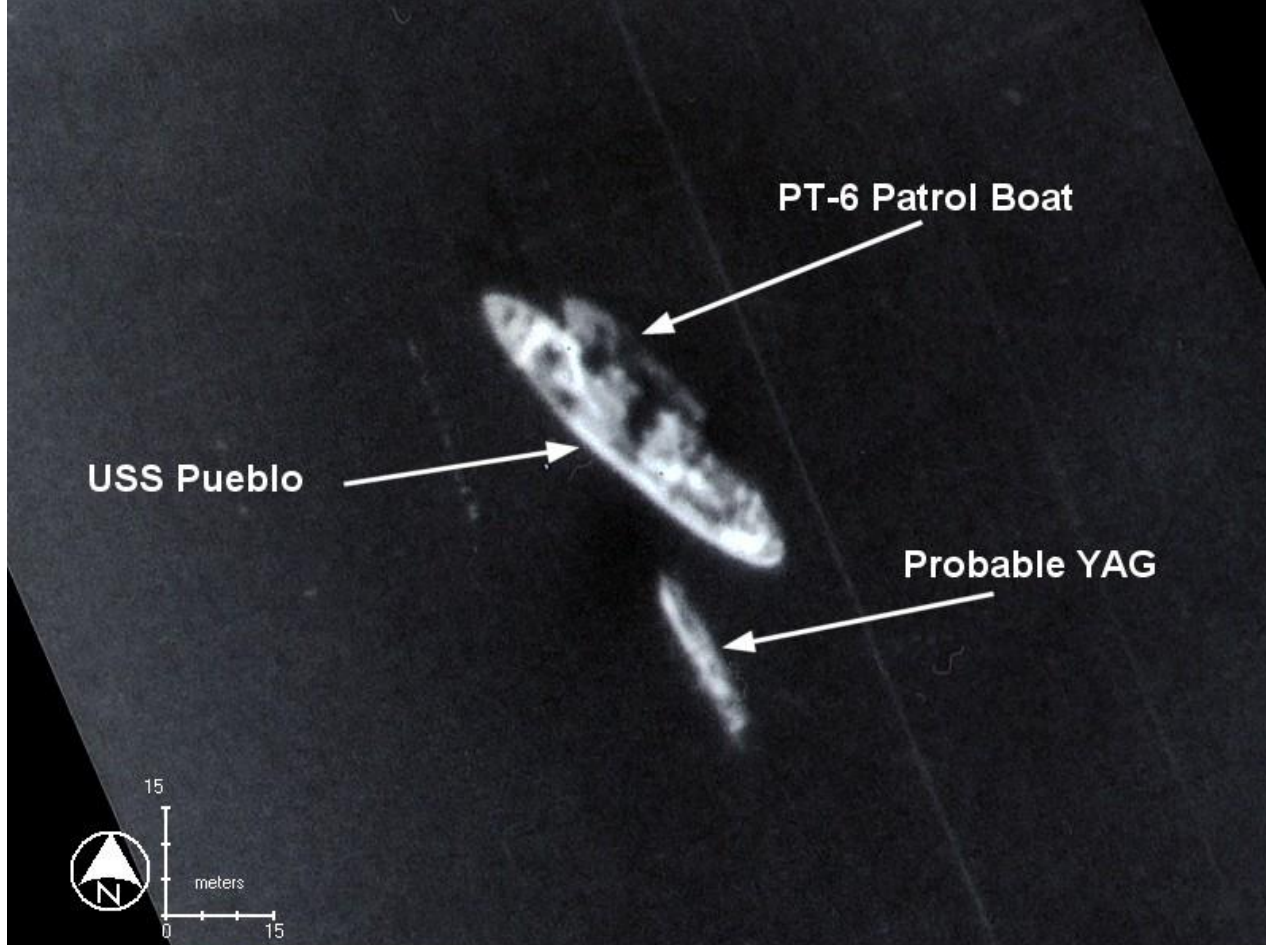






























# Aerial Incidents

- Hainan Island
- South China Sea

# EP-3E on Hainan Island



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# Uncrewed vessels and aircraft – US Position

- All State ships and aircraft, regardless of the presence of a crew, are entitled to sovereign immunity
- All rights of warships in respect of belligerent acts at sea are available regardless of the presence of a crew

*To meet these obligations, the direction and execution of belligerent rights at sea from any platform, manned or unmanned and however classified, must be conducted by military commanders and military personnel.*



# Uncrewed vessels and aircraft – US Position

- *Unmanned systems (UMSs) are either autonomous or remotely navigated on the surface or underwater. They may operate independently as a ship or be launched from the surface, subsurface, air, or land. Unmanned maritime systems may be used to exercise any internationally lawful use of the seas. Such uses include:*

1. *Intelligence, surveillance, and reconnaissance*

...

6. *Oceanography*



MILITARY

# Pentagon: Chinese naval ship seized an unmanned U.S. underwater vehicle in South China Sea

By [Missy Ryan](#) and [Dan Lamothe](#)

December 17, 2016 at 2:03 a.m. EST



This file aerial view taken on July 27, 2012, shows part of the city of Sansha on the island of Yongxing, also known as Woody Island in the disputed Paracel chain, which China now considers part of Hainan province. (AFP/Getty)



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