

# Medical activity training using SDF (Self Defense Force) ship at wide area disaster

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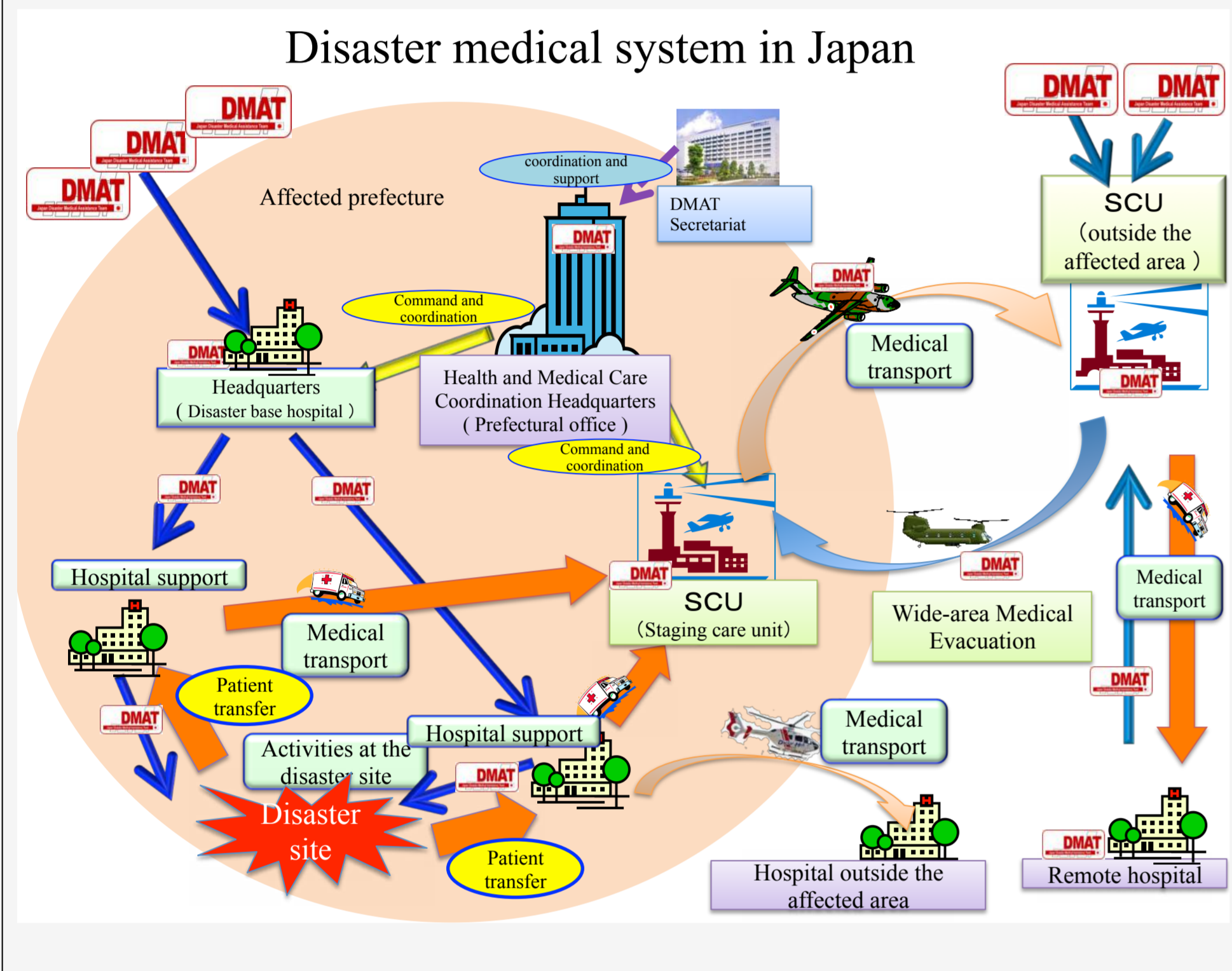
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## Why SDF ships ?

Every year, DMAT, the Ministry of Defense and the Cabinet Office conduct medical activity training on ships in large-scale disasters.

## Characteristics of disaster medical care in Japan



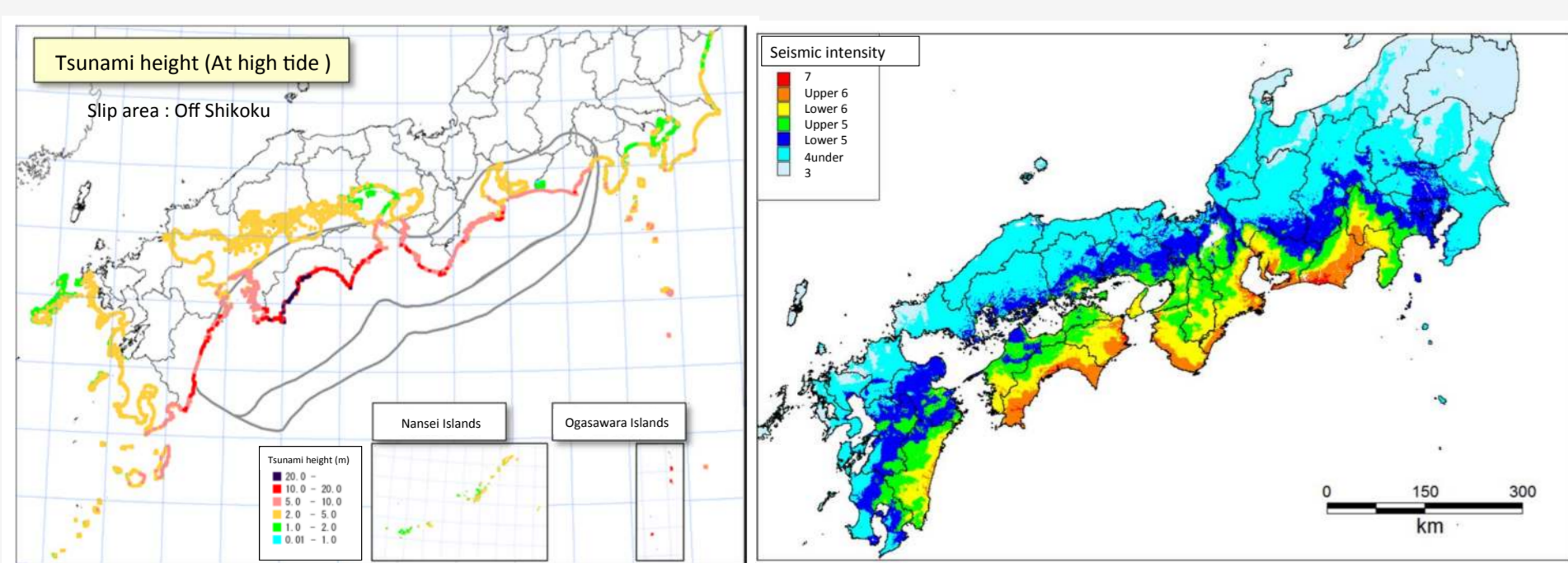
## Role of ships in large-scale earthquake disasters

Japan is a maritime country with a long coastline and many remote islands. In the event of a wide-area disaster, there will be a large number of injured patients, and if the medical institution's tolerance is exceeded, it will be necessary to transfer the injured patients.

SCU is a temporary shelter for patients. Wide-area medical transport is to collect patients from the area to the SCU and transport them out of the disaster area by SDF aircraft. SDF ships are expected to act as offshore SCUs. In addition, the role of transporting a large number of patients is also assumed to support hospital evacuation.

## Earthquake disaster assumed in Japan

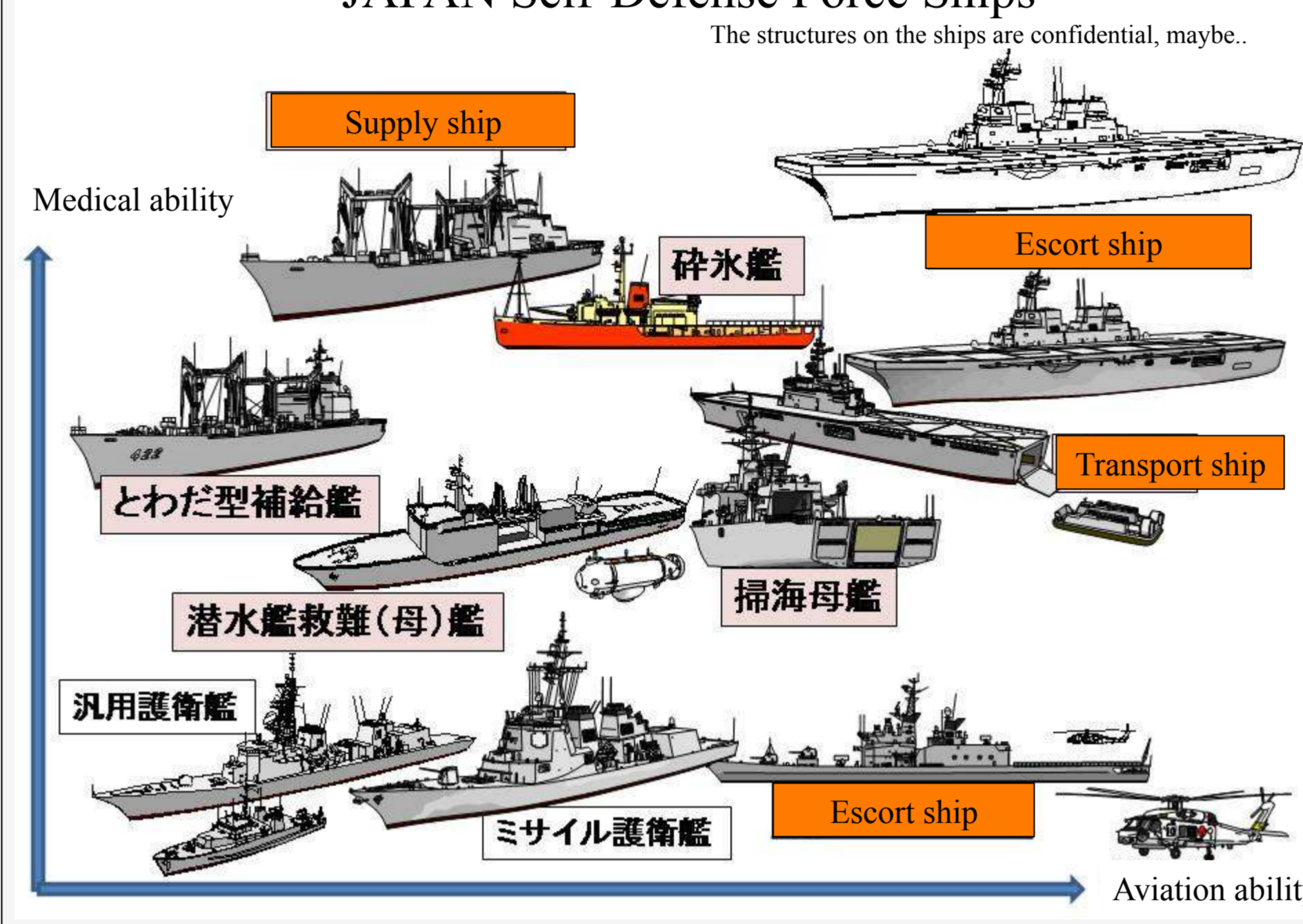
Nankai Trough earthquake  
Subduction earthquake in the Nankai Trough  
Probability of occurrence in the next 30 years:  
70-80%  
Estimated number of victims: more than 200,000  
(earthquake, tsunami)



## Ships used for training

Ship type	Ship name	Full length	Speed	heliport
Supply ship	Omi	221m	24 knots	1
Transport ship	Osumi, Shimokita	178m	22 knots	2
Escort ship	Hyuga	197m	30 knots	4
Escort ship	Izumo	248m	30 knots	4

## JAPAN Self-Defense Force Ships

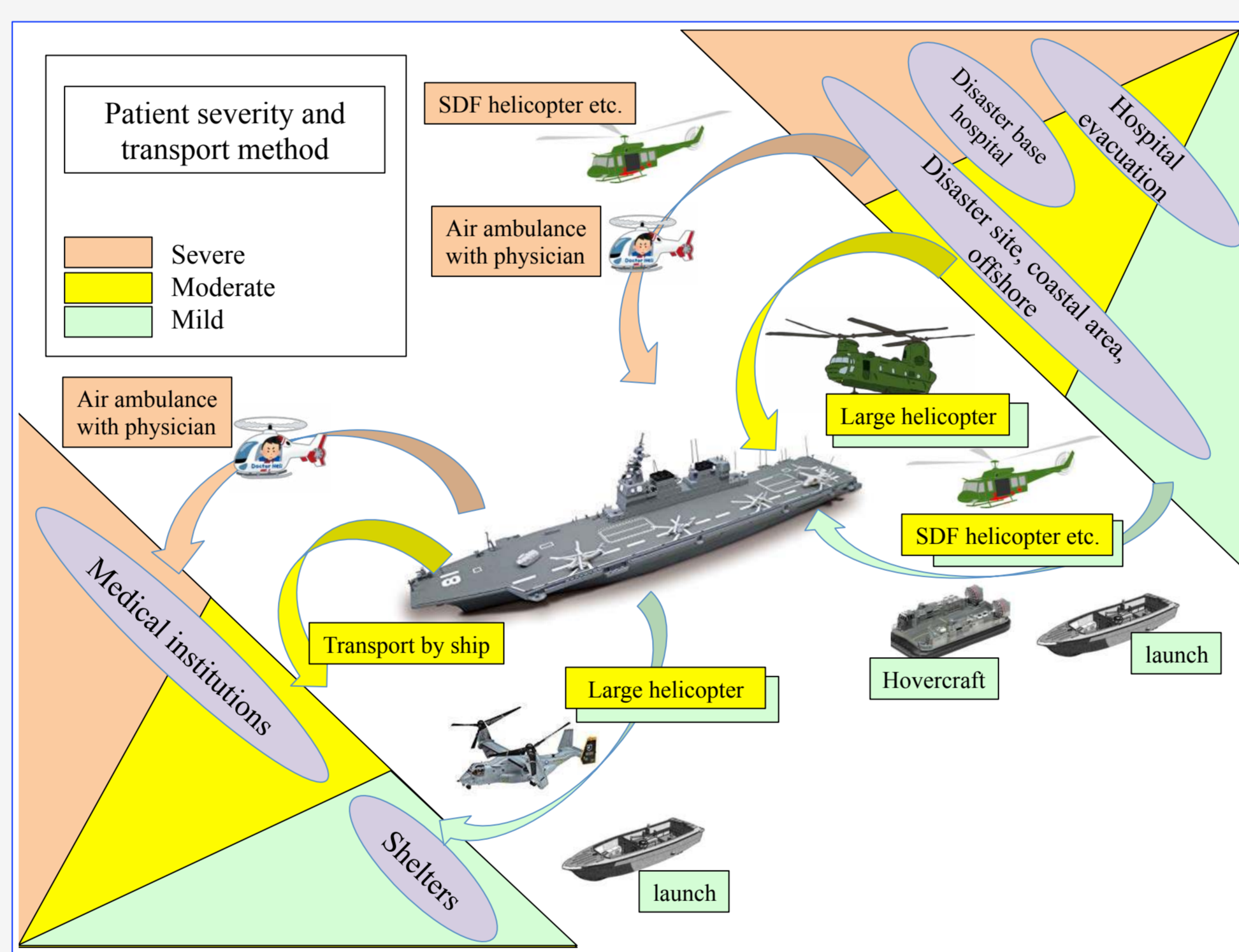


## Verification contents

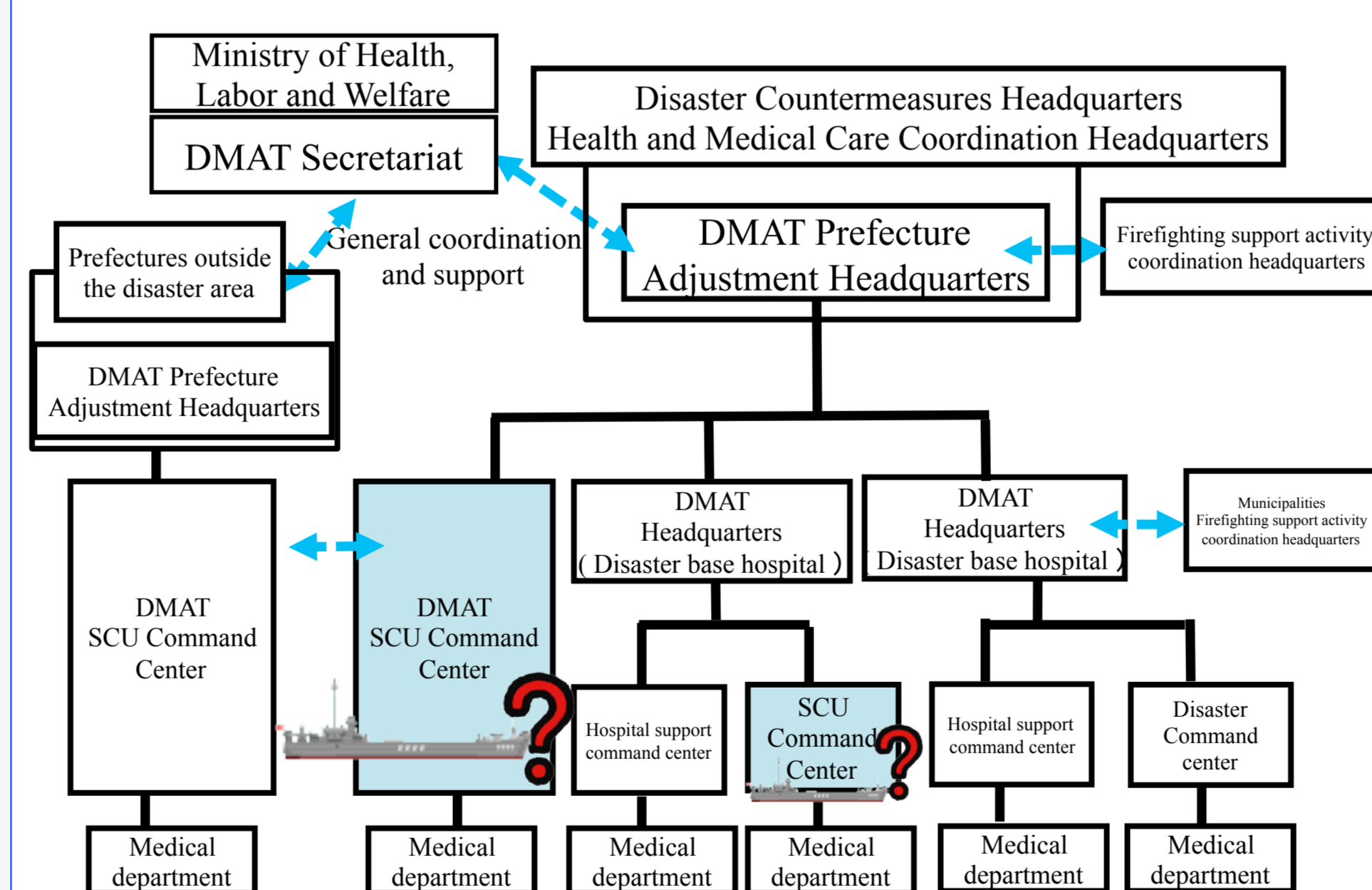
- 1 Cooperation between the SDF and DMAT command systems
- 2 Cooperation between the SDF and DMAT command systems
- 3 Information sharing on the ship
- 4 Types of patients
- 5 Medical contents on the ship
- 6 Use of the medical area (Another deck)
- 7 How to bring citizens and patients into the ship
- 8 Method of unloading from ship
- 9 Positioning of ships in the affected area
- 10 Type of ship

## Result

- 1 DMAT and SDF cooperation with other counterparts. Vertical command systems and horizontal coordination (command and control) at the field level are important.
- 2 Since the SDF ships have independent communication functions, it is difficult to build an independent communication environment.
- 3 Landline phones, mobile phones, transceivers, chats, messengers, etc. The contact network in the ship was able to be built closely.
- 4 Surgery as a curative treatment, intensive treatment requiring many devices, long-term stay are difficult.
- 5 The modularization of the equipment makes it easy to carry in. However, the staff who manage the equipment is necessary.
- 6 The use of medical compartments is limited. It is necessary to carry in equipment and materials.
- 7 A helicopter is effective for carrying in patients. We can use it on ships with hovercraft. The ride is bad and we need to select the patient.
- 8 Similar to 7, but an air ambulance with physician is useful for carrying out severe patients.
- 9 The ship moves. The position changes depending on which area patients are accepted.
- 10 It is necessary to study in the future.



## JAPAN DMAT command system in a wide area disaster



5 modularization of the equipment

## Future prospects and issues

The primary task of the ship is defense. However, plans for use for patients in the affected areas are in progress. The use of ships is considered useful in the event of a wide area disaster. The ship's amenities are not good. Careful consideration is required to provide appropriate care on a ship with shaking. DMAT consists of healthcare workers. However, its command system is similar to that of the SDF and other organizations. In the future, collaborative training between the two will be necessary.



Ship's hangar

Medical treatment by DMAT

