

Motobu Port (Motobu Area)
Entry/Departure Procedures
for Large Passenger Ships

June 2021

Okinawa Prefectural Government
Department of Civil Engineering and Constructions

【Preparation of Motobu Port Entry/Departure Procedures for Large Passenger Ship】

In addition to measures for safety of navigation for large class Cruise ship entry/departure investigated for 220,000 GT class Cruise ships in fiscal year 2017, this entry/leaving procedure includes measures for Regular ships; measures to avoid competition with other ships that use Motobu Port; information announcement of entry/departure; and requesting cooperation during entry/departure. This procedure also includes measures that large Cruise ships shall take toward marine leisure activity users who use vicinity water area as well.

【Terms and definitions】

1. Cruise ship

Refers to any large Cruise ship that enters/leaves Motobu Port irregularly. Called “Cruise ship” to distinguish it from Regular ship and Other ship.

2. Regular ship

Refers to regular passenger ship and regular cargo ship that plies on routes to Kagoshima and Tokyo.

3. Other ship

Refers to ship other than Cruise ship nor Regular ship that enters/leaves Motobu Port.

This procedure is the English translation version, and if there may be any dispute or discrepancy regarding meanings or intentions, the Japanese language version shall be the original.

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1 Safety measures related to entering/leaving port of Cruise ship

1.1 Standards for Cruise ship entering/leaving port

1.1.1 Standards for entering/leaving port

A Cruise ship shall maintain close contact with the shipping agent on weather and sea condition around Motobu Port and the wharf (-10.5m), and shall enter/leave port in accordance with the range of standards below.

Overall judgement of the average wind speed within the port shall be made based on information from the wind anemometers and so on.

Table 1.1.1 Standards for Cruise ship entering/leaving port

Item	220,000 GT Class or Below	Remarks
1. Average Wind Speed	Below 10m/s	Does not require a tugboat arrangement
2. Significant Wave Height	Below 1.5m	Wave height at which pilot can embark/disembark a ship
3. Visibility	2,000m or over	-

Note: Attention shall be paid that average wind speed of 10m/s or below has been determined in relation to the Regular ships that use adjoining wharf (-7.5m).

1.1.2 Ensuring under keel clearance

A Cruise ship shall ensure that a margin in under keel clearance greater than 10% of the draft exists in the maneuverable water area within the port.

1.2 Support plan while entering/leaving port

1.2.1 Pilot

A Cruise ship shall request a pilot when using Motobu port.

As Motobu Port is not the pilotage area in accordance with Pilotage Act, a Cruise ship may request for pilotage services to a pilot who belongs to Japan Federation of Pilot Association (JFPA), Naha Branch when pilotage is necessary.

1.2.2 Arrangement and operation of passage warning boat

(1) Arrangement

A Cruise ship shall arrange one passage warning boat (loading marine VHF radio) when using Motobu Port.

(2) Operations

- ① Prior to a Cruise ship's entering/leaving, a passage warning boat shall check the condition and status of passage route, turning and mooring basin, and wharf, and shall request for cooperation to secure maneuverable water area as necessary.
- ② When a Cruise ship is entering/leaving, a passage warning boat shall study and check movement of other ships around passage, then shall provide status information to a Cruise ship. In addition, a passage warning boat shall request cooperation to other ships to clear passage for Cruise ship and to avoid competition as necessary.
- ③ While a Cruise ship is entering/leaving, attention must be paid to pleasure boats and marine leisure activity users on passage, and shall alert not to come close to a Cruise ship.
- ④ A passage warning boat shall assist a Cruise ship on communication with other passing ships.
- ⑤ A passage warning boat shall perform other related operations as necessary.

1.3 Precautions related to the route for Cruise ship's entry/departure and on passage

1.3.1 Navigation route for entry/departure and maneuverable water area

In principle, navigation route for entry/departure of Motobu Port is as shown in Fig.1.3.1.

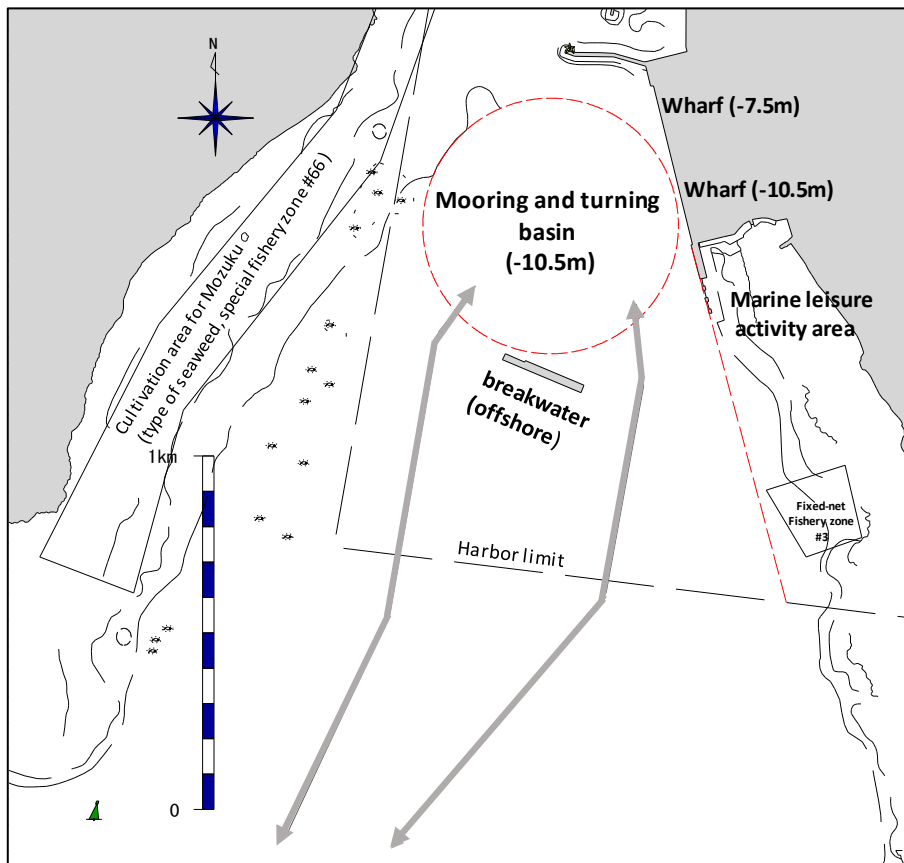


Fig. 1.3.1 Navigation route for entry/departure of Cruise ship

1.3.2 Studying movement of other ships during entering/leaving port, and securing maneuverable water area

(1) Studying movements of other ships within the port

When entering/leaving port, a Cruise ship shall appropriately study the movements of other ships from AIS information, study movements of small boats by passage warning, and request cooperation adequately.

(2) Checking positions of anchored vessels and securing maneuverable water area

- ① Motobu Port Administration Office shall request cooperation to other ships in advance not to anchor at maneuverable water area within the port such as fairway and passage between Sesokojima Island and offshore breakwater.
- ② For a Cruise ship's entry/departure, a Cruise ship shall check in advance positions of anchored vessels by using a passage warning boat, and make sure to secure maneuverable water area.

1.3.3 Precautions related to use of propulsion device and thruster of Cruise ship

- ① East side of water area is used as marine leisure activity area; therefore, a cruise ship shall consider the use of propulsion devices and thrusters during berthing/unberthing, as it would generate discharge of current and such current may impact towards marine leisure activity users. Thus, a Cruise ship shall use propulsion devices and thrusters as small output power as practicable with maintaining safe maneuver.
- ② A Cruise ship shall consider raising a cloud of seabed sediment during berthing/unberthing maneuver. Thus, a Cruise ship shall use propulsion devices and thrusters as small output power as practicable with maintaining safe maneuver.

1.3.4 Precautions on navigation route for entering/leaving port

A Cruise ship that enter/leave port shall navigate paying attention to followings. (Fig. 1.3.2 shall be referred.)

- ① West side of water area around fishing reef is used by fishermen as diving fishery and Mozuku (*nemacystus decipiens*: type of seaweed) cultivation fishery; therefore, a Cruise ship shall navigate paying attention to such fishermen and fishing boats in operation.
- ② A Cruise ship shall navigate maintaining safe distance from above ① mentioned area as far as safe maneuver and safe speed practicable.
- ③ East side of water area is used by marine leisure activity users; therefore, a Cruise ship shall navigate away from such area as far as possible. A Cruise ship also shall navigate paying strict attention to marine leisure activity users such as pleasure boats.
- ④ Particularly, behind the wharf (-10.5m) area is used by marine leisure activity users, and such

users might use in front of the same wharf area as well; therefore, a Cruise ship shall pay strict attention to movement of such users and pleasure boats, swimmers and the like.

1.3.5 Precautions related to Cruise ship's maneuver during entering/leaving port

Precautions on maneuver for large Cruise ship during entering/leaving Motobu Port is as follows.

- ① A Cruise ship shall well consider the impact by pressurized flow of wind towards leeward side, and maneuver carefully when approaching in the vicinity of breakwater or shallow water area during navigation on narrows and passage; maneuvering at low speed around breakwater area; and turning at front area of the wharf. Particularly, a Cruise ship shall navigate careful maneuver considering the characteristics of maneuver devices such as pods.
- ② In order to grasp position relationship such as shallow water area and maneuver target point at all time, a Cruise ship shall utilize Electronic Chart Display and Information System (ECDIS) and passage warning boat effectively.

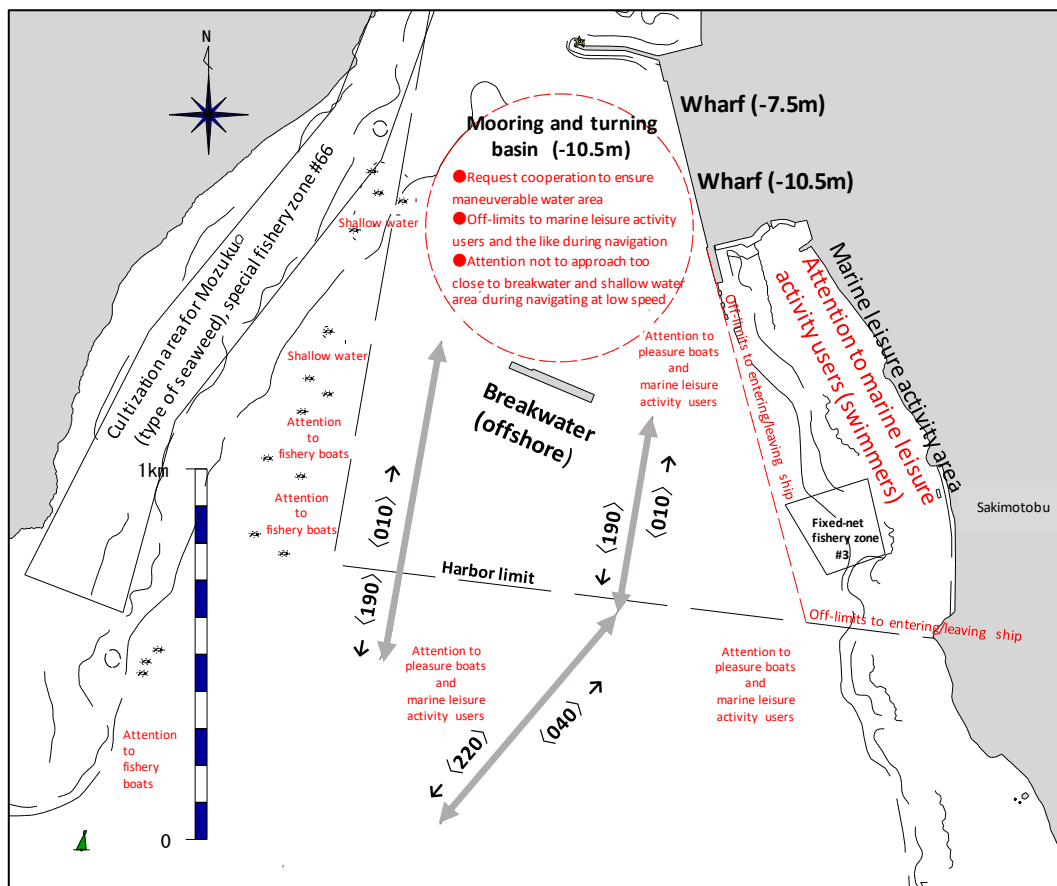


Fig. 1.3.2 Precautions around fairway and passage during Cruise ship's entering/leaving port

1.4 Operational adjustment for Cruise ship and other ship

Adjustment of operation to avoid Cruise ship and other ships from competing with each other is as follows.

1.4.1 Basic concept of operational adjustment

(1) Setting of berthing/unberthing time (Priority berthing/unberthing time for Regular ship)

At the adjoining wharf (-7.5m), Regular ships operate as below schedule. In order to avoid competition, berthing/unberthing time of Regular ships who operate with set time table on determined routes shall be considered in principle.

Berthing/unberthing time for Regular ships at Motobu Port from April 2021 to March 2022 is as below. However, a Cruise ship shall double-check in advance the time schedule of such ships on the date of the Cruise ship' entry/departure.

- Daily Arrival 09:00 Departure 09:20
- Daily Arrival 16:40 Departure 17:10
- Saturdays Arrival 20:00 Departure 22:00

(2) Ensuring time interval of berthing /unberthing time (for all ships includes Cruise ships)

Time interval of berthing/unberthing time of Cruise ships and Regular ships shall be 60 minutes or more in principle.

1.4.2 Individual roles related to operational adjustments

In view of ensuring safety of Regular ships when a Cruise ship enters/leaves at Motobu Port, operational adjustment in the port is required. Followings are individual roles on operational adjustments in Motobu Port during entering/leaving port of a Cruise ship.

(1) Motobu Port Administration Office

Prior response

Motobu Port Administration Office shall perform below when issuing wharf use permit.

- ① Motobu Port Administration Office shall obtain operational information of the Cruise ship such as time of berthing/unberthing from the shipping agent in advance the scheduled entry/departure of the Cruise ship.
- ② Motobu Port Administration Office shall check and make sure that scheduled berthing/unberthing time of the Cruise ship shall have no possibilities to affect operation of other Regular ships.
- ③ If Motobu Port Administration Office anticipates competition of maneuverable water area between Cruise ships and Regular ships, Motobu Port Administration Office shall have

competing ships adjust in accordance with aforementioned 1.4.1.

- ④ Motobu Port Administration Office shall conduct berth meeting as necessary.

(2) Regular ship and Other ship

Prior response

When scheduled berthing/unberthing time may change in advance, Regular ships and Other ships shall inform of the change to maritime related personnel such as Motobu Port Administration Office and shipping agent of a Cruise ship.

Response on the day of entry/departure

On the day of entry/departure of a Cruise ship, Regular ships and Other ships shall cooperate to provide information on their change in berthing/unberthing time or ship position or others, when asked by Cruise ship's shipping agent or pilot.

(3) Cruise ship

Prior Response

- ① Berthing/unberthing time of a Cruise ship shall not affect those of Regular ships.
- ② When Cruise ship may change berthing/unberthing time, such change shall be adjusted in accordance with aforementioned 1.4.1.

Response on the day of entry/departure

- ① A Cruise ship shall adhere to the scheduled time of entry/departure as far as possible.
- ② A Cruise ship shall make efforts to collect information of other ships' movement through pilots and passage warning boats; to check AIS information; to listen to maritime VHS radio and so on, and make sure that there will be no possibilities of passing or crossing the course of Regular ships within Motobu Port.
- ③ If a Cruise ship may change berthing/unberthing time, such change shall be adjusted in accordance with undermentioned 1.4.3.

(4) Shipping agent of Cruise ship

Prior Response

A shipping agent of Cruise ship shall in advance collect and grasp operational information of other ships such as scheduled time of berthing/unberthing in Motobu Port.

Response on the day of entry/departure

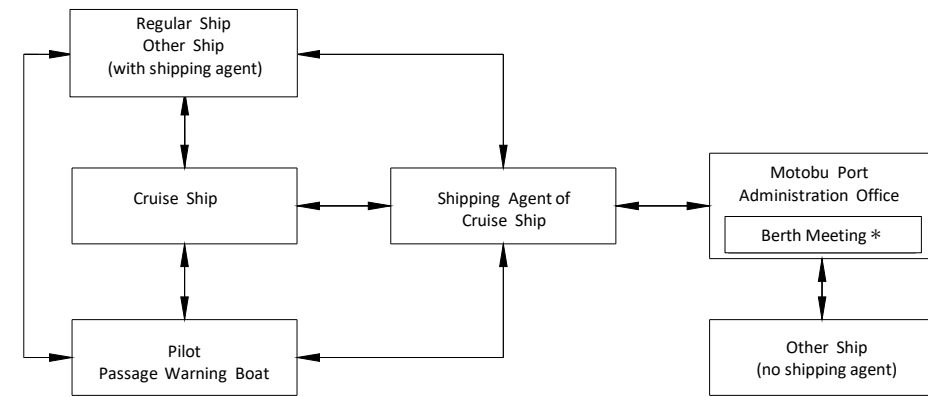
- ① A shipping agent of Cruise ship shall provide information immediately to the Cruise ship, pilot, and passage warning boat, if obtaining information on schedule change of Regular ships'

berthing/unberthing time on the day of entry/departure of Cruise ship.

- ② When a shipping agent of Cruise ship anticipates that berthing/unberthing time of Cruise ship may affect scheduled operation of Regular ships, a shipping agent of Cruise ship shall make adjustment with such competing ships in accordance with undermentioned 1.4.3.

(5) Liaison communication system

Liaison communication system related to operational adjustment is shown as below Fig. 1.4.1.



* Berth meeting will be held as necessary.

Fig. 1.4.1 Liaison communication tree related to operational adjustment

1.4.3 Avoiding competition

- (1) When competition is anticipated due to change of berthing/unberthing time or like reason

When competition of berthing/unberthing time is anticipated with other ships include Regular ships due to change of berthing/unberthing time or like reason, a Cruise ship shall study position and movement of competing ships by using AIS information and marine VHF radio, then adjust her own berthing/unberthing time voluntarily. Or adjustment in berthing/unberthing time shall be made through mutual communication with other competing ship via marine VHF radio and/or via shipping agent.

Adjustment of berthing/unberthing time shall be made in accordance with aforementioned 1.4.1 in principle. However, in case ships compete each other with short time slot of berthing/unberthing, settlement shall be made between those ships mutually, and such order shall prevail and apply.

In addition, a Cruise ship shall in advance collect necessary operational information of other ships from shipping agent or Motobu Port Administration Office, and check if there is any competition.

- (2) Cases of time interval adjustment (Reference)

In case two ships use port for entry/leaving one after another, below cases shall be referred.

(Fig.1.4.2 shall be referred.)

① Case 1: The first ship is outbound, and the second ship is inbound

The second ship shall berth with time interval of 60 minutes or more after the first ship unberthed.

② Case 2: The first ship is inbound, and the second ship is outbound

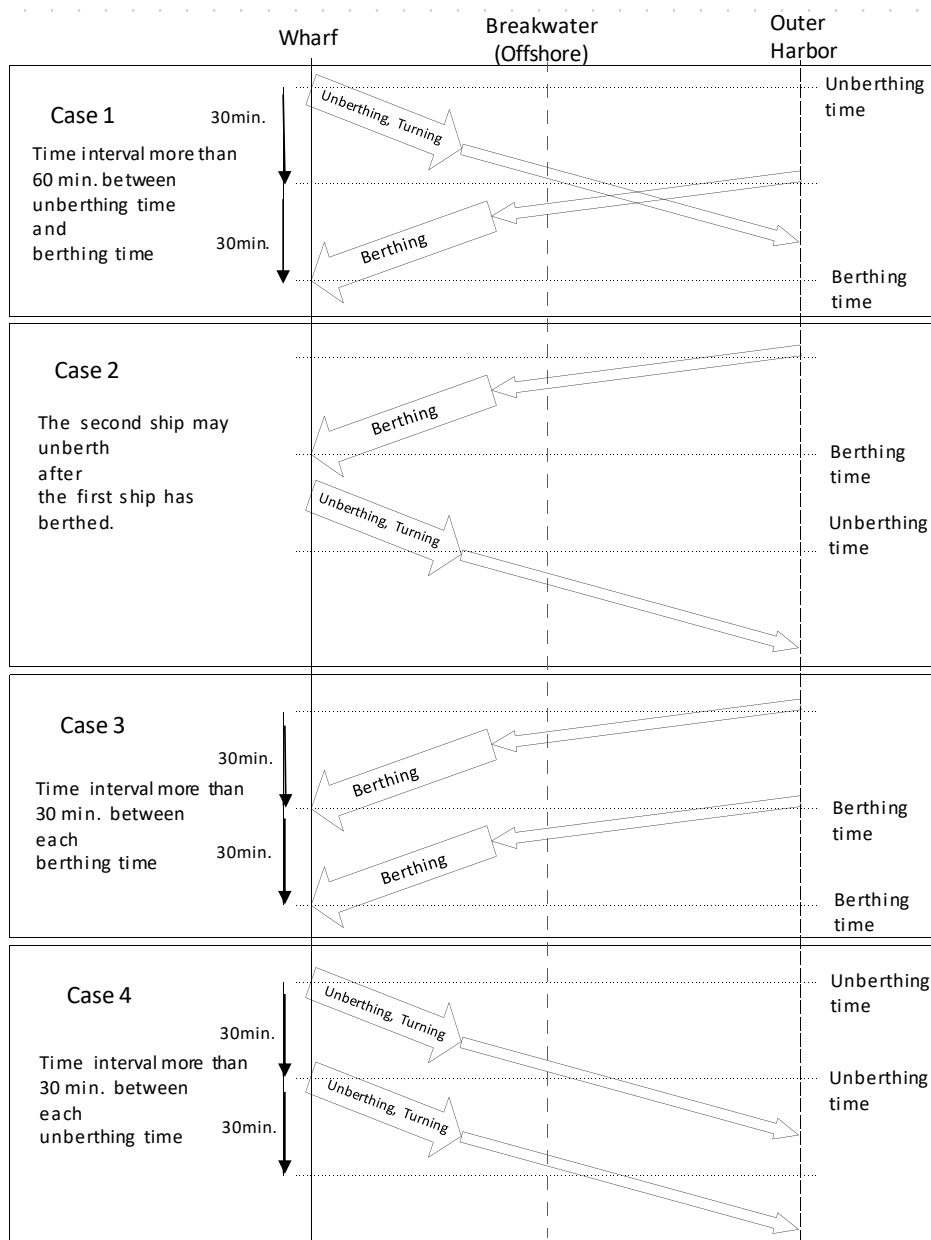
The second ship shall unberth after the first ship has berthed.

③ Case 3: The first ship is inbound, and the second ship is inbound

The second ship shall berth with time interval of 30 minutes or more after the first ship has berthed.

④ Case 4: The first ship is outbound, and the second ship is outbound

The second ship shall unberth with time interval of 30 minutes or more after the first ship unberthed.



Note: Cases of avoiding competition of Wharf (-10.5m) and Wharf (-7.5m)

Fig. 1.4.2 Cases of use of maneuverable water area between two ships and time interval of entry/departure time slot

1.5 Precautions during berthing/unberthing of Cruise ship

1.5.1 Coming-alongside speed

A Cruise ship shall come-alongside parallel to the berth and at an adequately safe speed, as far as possible. Below Table. 1.5.1 shows standard coming-alongside speed.

Table. 1.5.1 Coming-alongside speed of Cruise ship

Wharf	220,000 GT class or below
Wharf (-10.5m)	Below 9cm/s

1.5.2 Berthing side

Berthing side of a Cruise ship shall be determined beforehand considering 2.3 of this procedure as well as the equipment onboard the ship.

1.5.3 Berthing point indicators

To identify the bridge position to the wharf when a Cruise ship comes alongside, the N flag shall be displayed during day time, and a light shall be displayed at an easy visible position on the bridge during night time.

1.5.4 Ensuring lighting of the wharf when ship enters/leaves port at night time

When Cruise ship enters/leaves port at night time, adequate lighting of the wharf shall be provided by using wharf lighting facilities or temporary lighting devices so that the position of the fenders and face line of the wharf are clearly visible.

1.6 Precautions during entry/departure of Cruise ship

1.6.1 Preparation of nautical chart

Each ship shall be equipped with at least the latest or corrected nautical charts on board for entering Motobu Port.

Northern Part of Okinawa Shima [W222B] , Approaches to Toguchi Ko [W240]

1.6.2 Appropriate deployment of AIS

Each ship equipped with AIS, shall perform correct AIS settings for itself and shall strive to enter the latest voyage data such as draft and destination.

Correct entry of its own AIS data (latest destination, voyage conditions, ETA, etc.) shall be checked and AIS messages received shall be checked periodically.

1.6.3 Listening to marine VHF radio

Each ship shall always monitor and listen to marine VHF radio channel 16 and respond to any call.

2 Safety measures related to mooring of Cruise ship

2.1 Mooring facilities

At the wharf (-10.5m) to be moored by Cruise ship, bollards are installed as shown on table 2.1.1 and fig.2.1.1. A Cruise ship shall be moored considering the strength of each mooring bollard.

Table 2.1.1 Strength of mooring bollards at wharf (-10.5m)

Wharf	Wharf (-10.5m)
Strength of mooring bollard	1,500kN (153t) × 4 (A, B, C, H) 1,000kN (102t) × 15 (1~11, D, E, F, G)

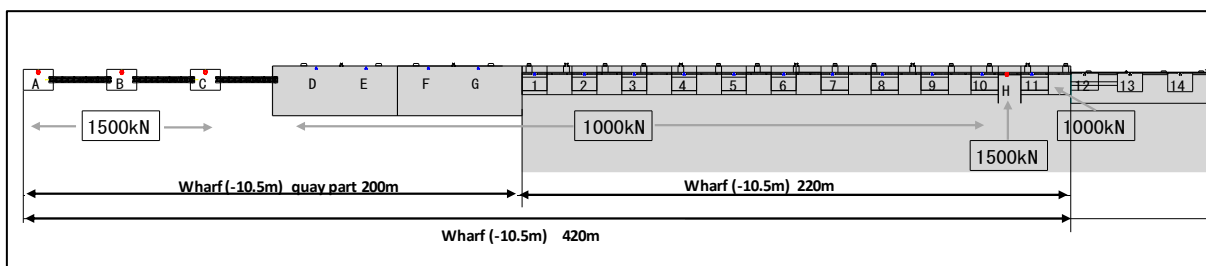


Fig.2.1.1 Bollards arrangement plan [Wharf (-10.5m)]

2.2 Ensuring distance between Cruise ship and Regular ship

Distance between Regular ship that uses the adjoining wharf (-7.5m) and Cruise ship shall be kept for 70m or more. (Fig. 2.2.1 and Fig. 2.2.2 shall be referred.)

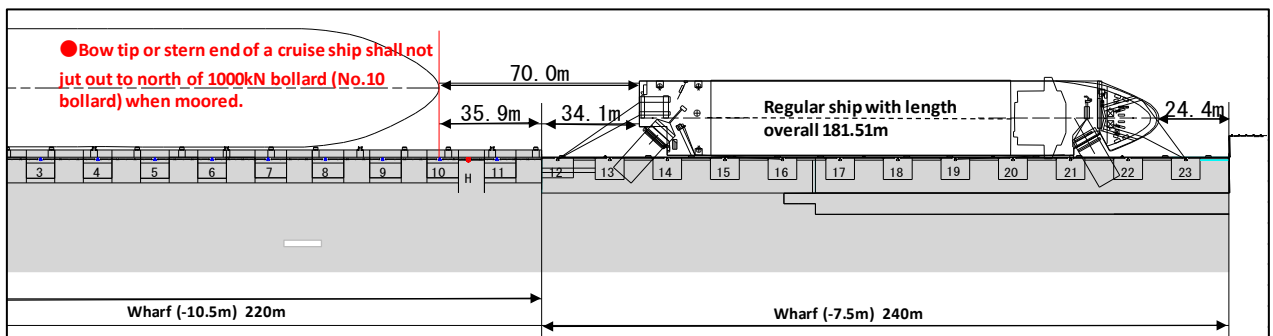


Fig. 2.2.1 Keeping distance for 70m or more between ships

Case 1 (Regular ship with length overall of 182m class, and Cruise ship)

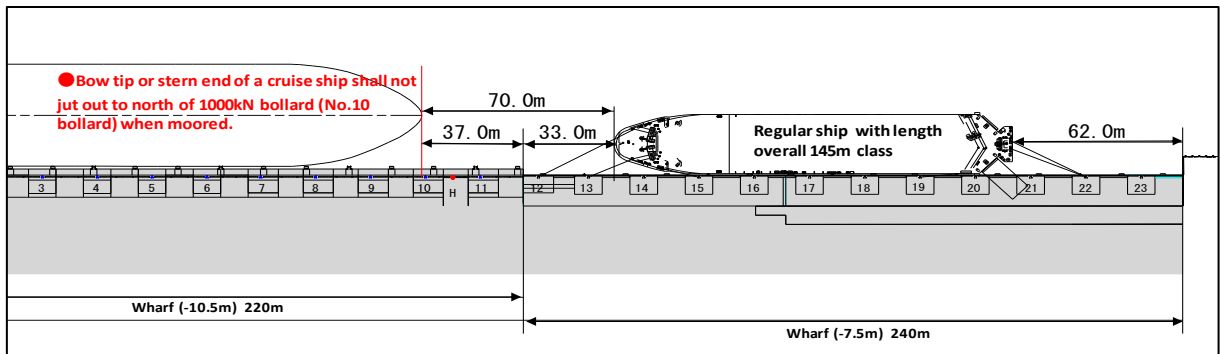


Fig. 2.2.2 Keeping distance for 70m or more between ships
Case 2 (Regular ship with length overall of 145m class, and Cruise ship)

2.3 Mooring position by ship length

2.3.1 Mooring position of a Cruise ship between length overall of 350m to 362m

When Cruise ship with length overall of 350m or more shall be moored simultaneously with Regular ship, Cruise ship shall be moored at mooring position where distance between ships shall be kept for 70m or more. (Fig. 2.3.1 and Fig.2.3.2 shall be referred.)

2.3.2 Mooring position of Cruise ship between length overall of 265m to 350m

Mooring position of Cruise ship between length overall of 265m to 350m shall refer Fig. 2.3.2 to Fig. 2.3.4 as below.

【Precautions on use of thruster and like device】

When Cruise ship with length overall of 265m and more shall approach to berth/unberth (using thruster), Cruise ship shall use thruster as small output power as practicable with maintaining safe maneuvering, taking into consideration of impact for marine leisure activity users who use land side of the quay area. (1.3.3 shall be referred.)

2.3.3 Mooring position of Cruise ship with length overall below 265m

Mooring position of Cruise ship with length overall below 265m shall be at 320m section from north of the wharf, so that discharge current being generated by Cruise ship propulsion devices such as thrusters shall not affect marine leisure activity water area during berthing/unberthing.

Mooring position shown on Fig.2.3.5 shall be referred.

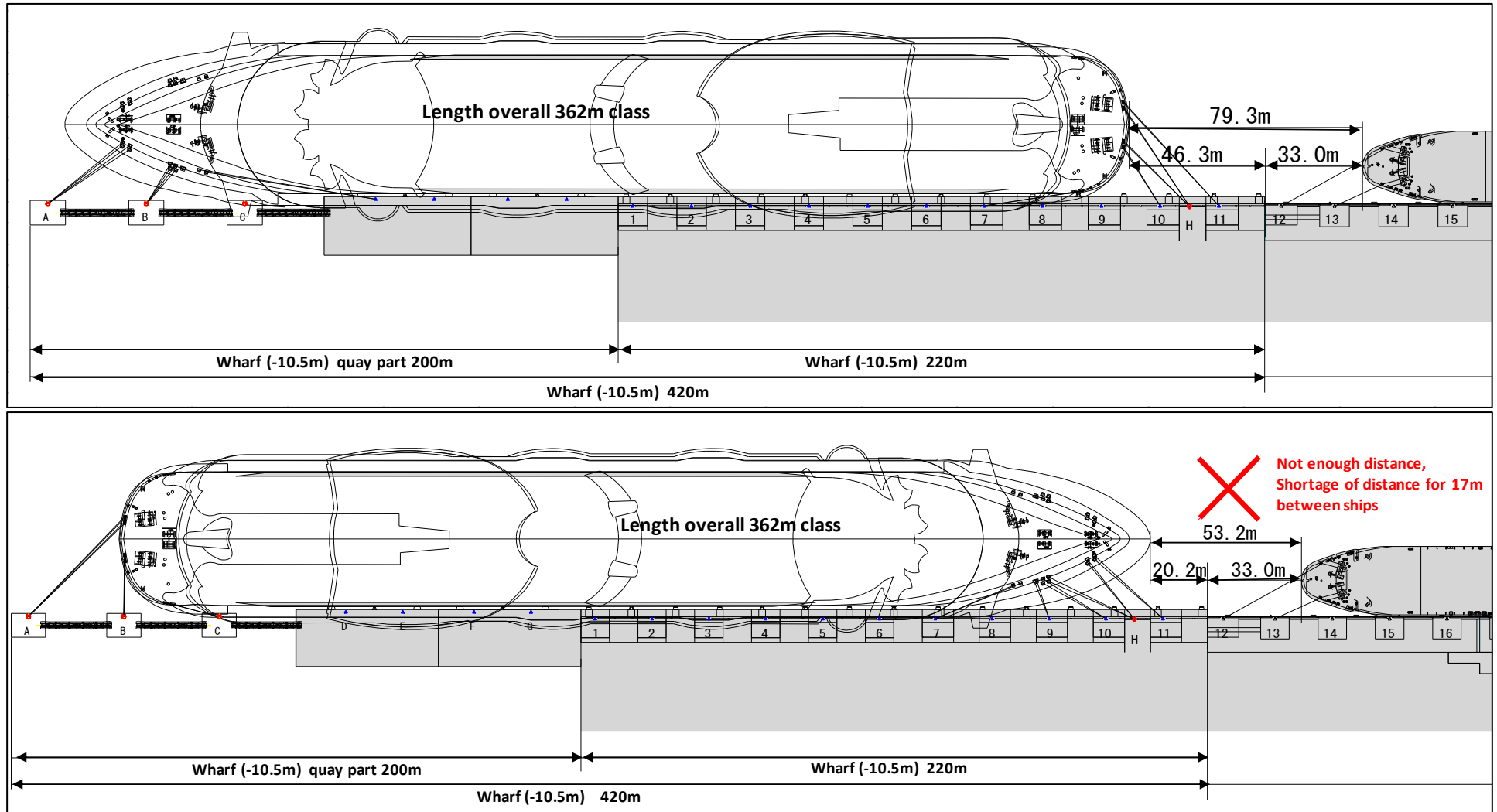


Fig. 2.3.1 Mooring position and distance between ships
(length overall below 362m class Cruise ship)

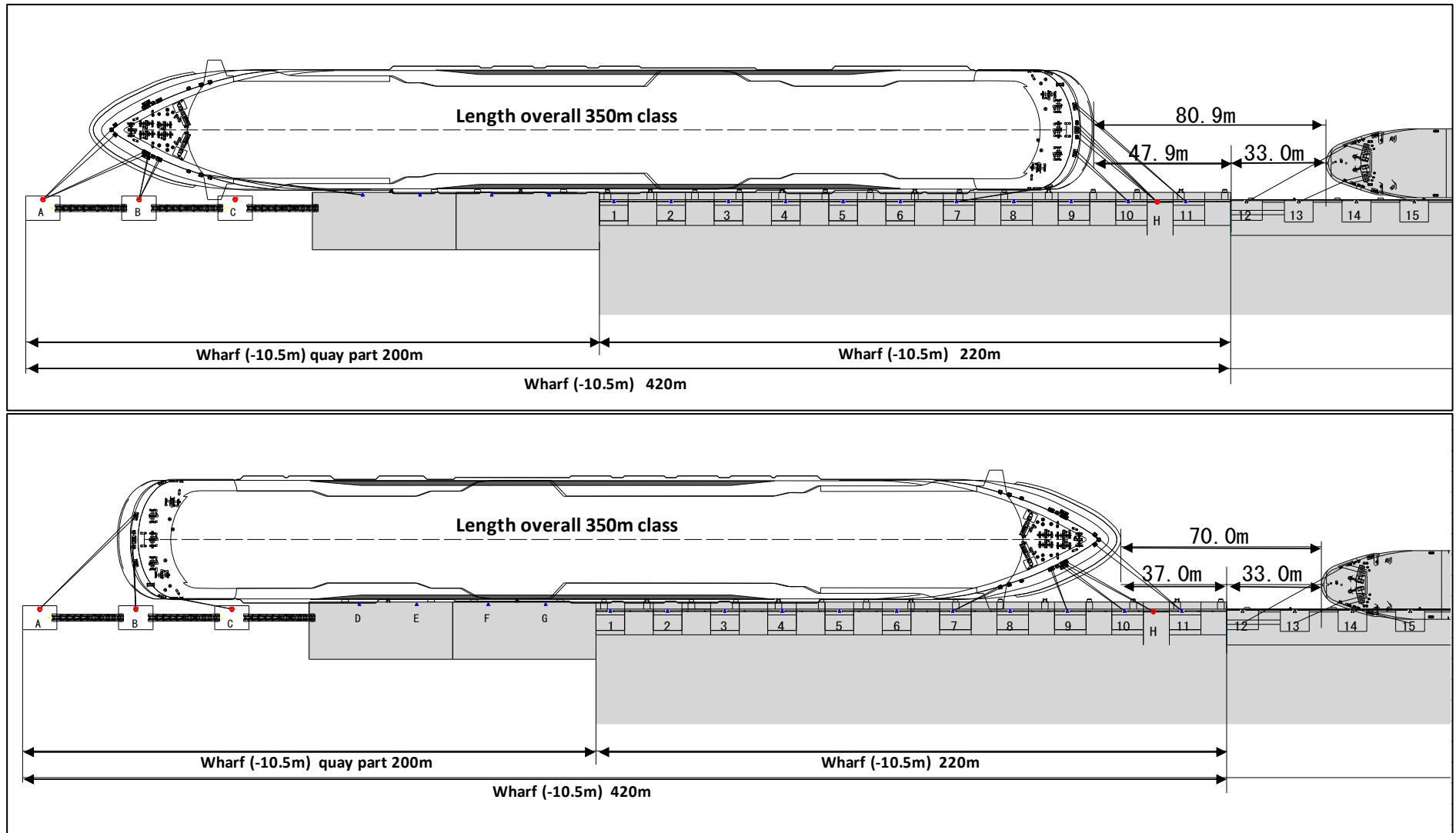


Fig. 2.3.2 Mooring position and distance between ships
(length overall below 350m class Cruise ship)

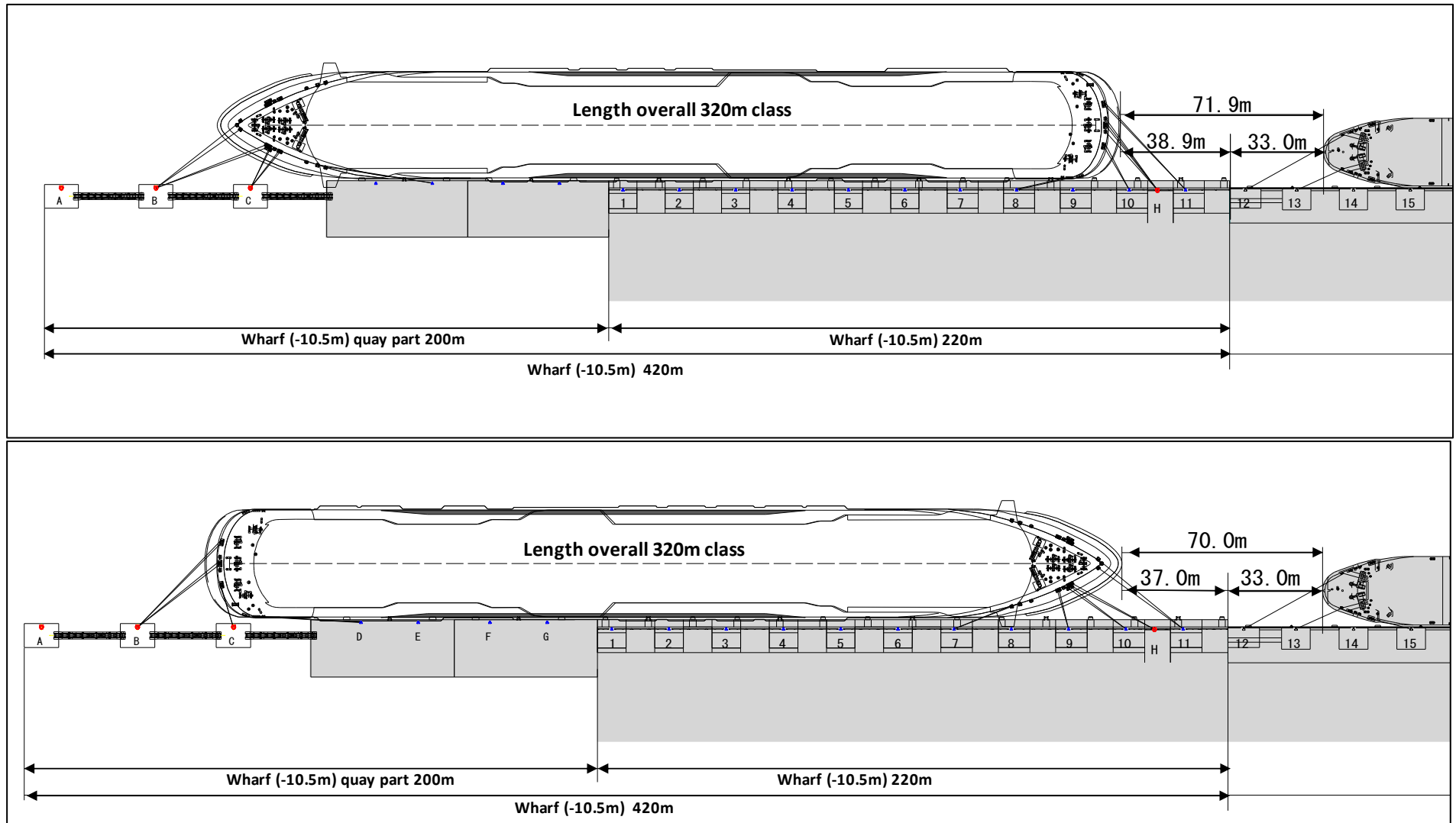


Fig. 2.3.3 Mooring position and distance between ships
(length overall below 320m class Cruise ship)

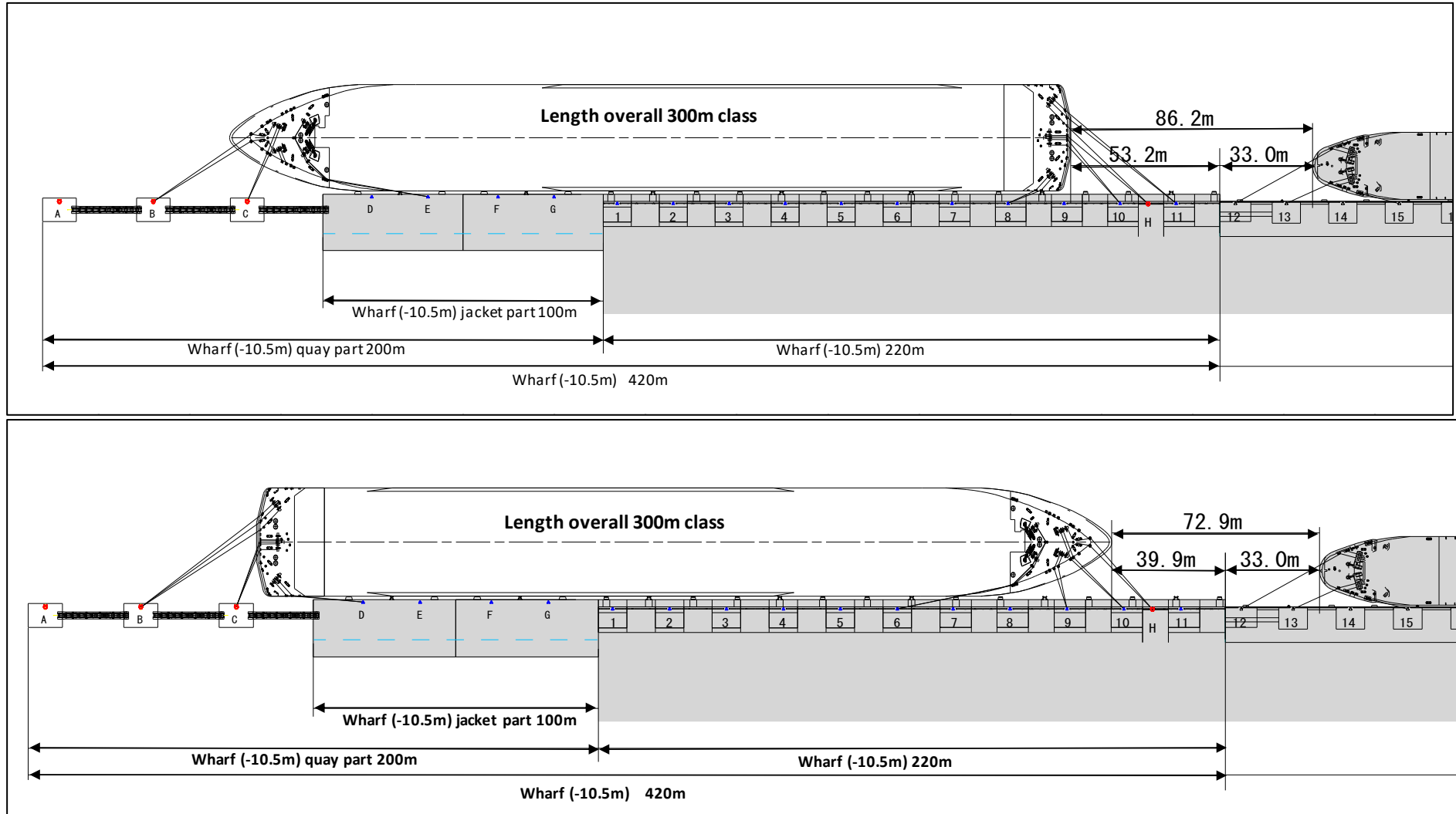


Fig. 2.3.4 Mooring position and distance between ships
(length overall below 300m class Cruise ship)

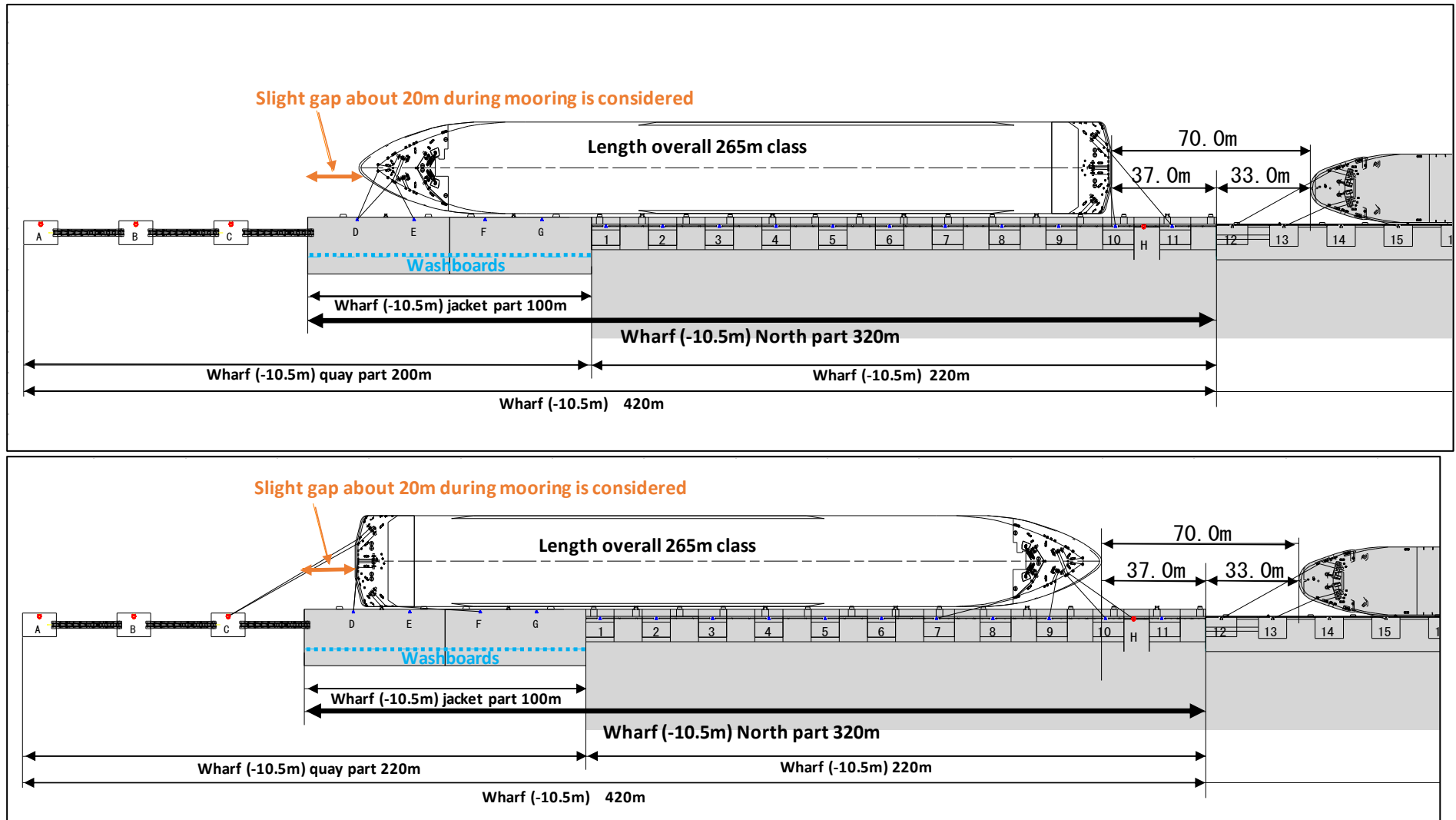


Fig. 2.3.5 Mooring position and distance between ships
(length overall below 265m class Cruise ship)

2.4 Condition of wind speed for mooring by berthing side

Average wind speed for capable mooring for Cruise ships is shown as Table 2.4.1.

Table.2.4.1 Average wind speed capable of mooring

Ship	Berthing side	Allowable average wind speed
220,000 GT class Cruise ship	Port side alongside head out	Below 12m/s
	Starboard side alongside head in	Below 13m/s
Below 220,000 GT class Cruise ship	—	Below 12m/s

2.5 Precautions for Cruise ships during mooring

2.5.1 Measures when anticipating strong wind

When anticipating wind speed exceeding the allowable wind speed during mooring, Cruise ships shall take prompt response in accordance with the range of standards of this procedure.

2.5.2 Precautions for mooring lines and mooring winches

Cruise ships shall keep tension of each mooring line as evenly as possible.

2.5.3 Compliance rules during mooring

- In the event of danger such as fire that may lead to harm others, ships shall immediately unberth or take other emergency measures as appropriate.
- Ships shall be well prepared to leave for safe refuge at any time when there is a threat of rough weather.
- Ships are not permitted to dump waste such as oil, waste materials, ashes and dust generated onboard on the wharf or into the water.

3 Communication and announcement system related to entering/leaving port of Cruise ship

3.1 Advance announcement of entry/departure schedule of Cruise ship

Port authority (Okinawa Prefectural Government) shall make announcement to relevant parties when accepting the reservation of entry/departure of Cruise ship. Announcement of schedule shall be posted on homepage or other.

3.2 Emergency communication system

3.2.1 Emergency communication system (when Cruise ship is aware of incident)

In case of an emergency related to Cruise ship's entry/departure, if Cruise ship is aware of emergency, below communication tree shall be used as shown on Fig.3.2.1.

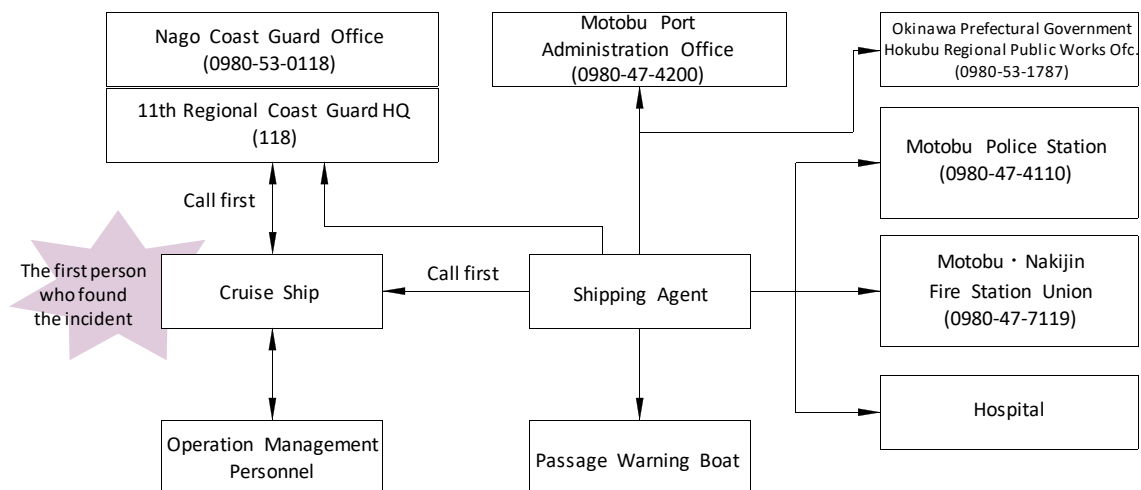


Fig.3.2.1 Emergency communication tree (when Cruise ship is aware of incident)

3.2.2 Emergency communication system (when Cruise ship is NOT aware of incident)

In case of an emergency during Cruise ship's entry/departure, if an emergency incident occurred for marine users or others other than Cruise ship, and if Cruise ship is not aware of the incident, below communication tree shall be used as shown on Fig.3.2.2.

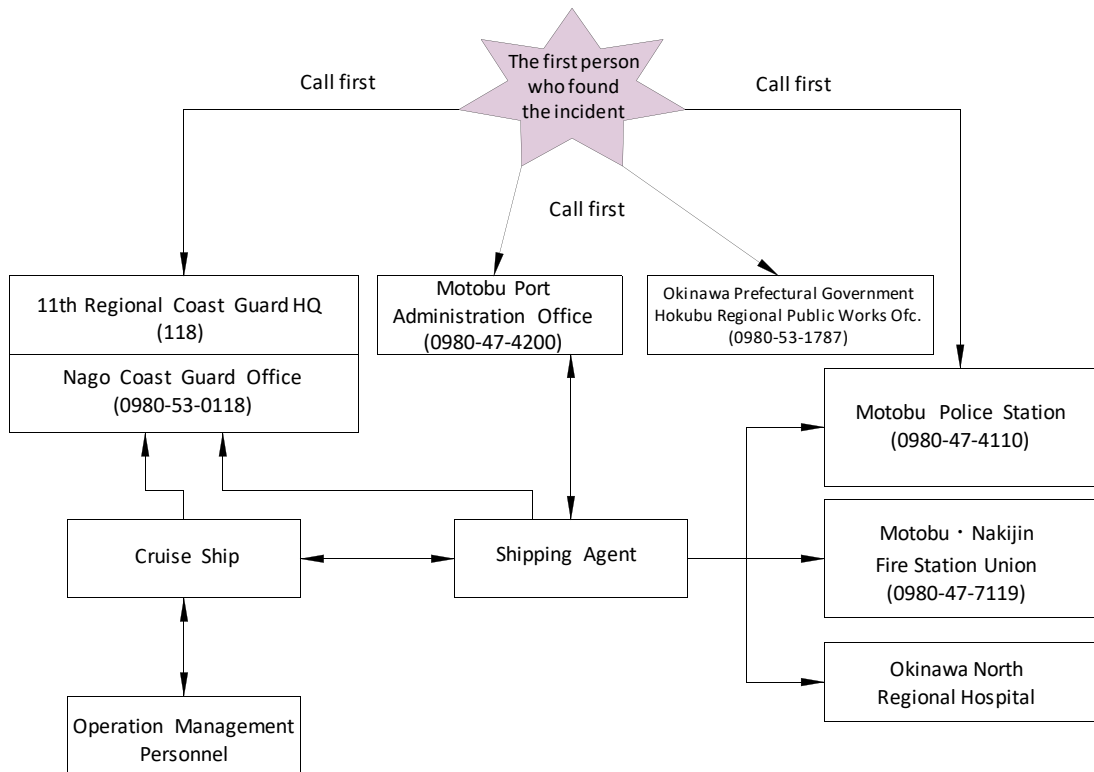


Fig.3.2.2 Emergency communication tree (when Cruise ship is NOT aware of incident)