# PROVISIONS ON SHIPS' ROUTEING SYSTEM IN ANHUI SECTION OF YANGTZE RIVER (2010)

## **Chapter I General Provisions**

**Article 1** The Provisions are developed in accordance with *the Regulations of the People's Republic of China on Administration of Traffic Safety in Inland Waters* and other relevant rules, to ensure the orderly water traffic in Auhui Section of Yangtze River, to improve navigation conditions, ensure safety, enhance navigation efficiency and promote the development of shipping industry.

**Article 2** The ships' routeing system applies to the navigation area, which is bounded by the line connecting the two tower lateral marks at Qianjiangzui and Qianjiangkou respectively along the Taiziji Waterway, and the line connecting Cihu River Mouth with Wujiang River Mouth along Fanjiaji Waterway, in Auhui Section of Yangtze River.

Ships' Routeing system follows the principle of keeping to the right, big ships and small ships in separated lanes, mitigating crossing occasions and fault liability.

**Article 3** All ships navigating, berthing or operating in this water area shall abide by the Provisions. Ships carrying out channel maintenance and search and rescue, or otherwise permitted by Maritime Administrations, are not subject to the Provisions, with the precondition of not impeding other ships' safety.

**Article 4** Changjiang Maritime Safety Administration of the People's Republic of China, and its subordinate branches and agencies (hereinafter referred to as "the Administration") are responsible for the oversight of implementation of the Provisions.

#### **Chapter II Navigation Routes**

**Article 5** In water areas suitable for traffic separation, navigation routes are divided into separated lanes as per Traffic Lane Standards (as seen in Annex 1), and marked by buoys and beacons.

Taking the channel central line as separation line, the left bank side lane is for upbound ships and the right bank side for downbound ones.

**Article 6** In navigable water areas, one-way routes are set as per One-way Route Standards (as seen in Annex 2), and marked by buoys and beacons.

**Article 7** Recommended routes outside the separated lanes are set as per Recommended Route Standards (as seen in Annex 3).

**Article 8** Within certain areas along the both sides of the separation line, deep-water routes are set as per Deep-Water Route Standards (as seen in Annex 4).

**Article 9** Precautionary areas are set in water areas with comparatively complex navigation conditions (as seen in Annex 5).

#### **Chapter III Navigation**

**Article 10** Ships shall navigate in the prescribed routes.

**Article 11** Ships shall stay as far as possible away from the separation line when navigating in the separated lanes.

**Article 12** All upbound ships, except those approaching upwards to enter Ma'anshan Port or those restricted by the depth, shall navigate in Wujiang Waterway.

**Article 13** Small ships with actual draft of less than 2.7m shall take the recommended lane.

Where no recommended lanes are available, with the precondition of ensuring their own safety, small ships may navigate along the outside of the separation lanes but still keep in the same direction as those ships in the adjacent separation lane.

**Article 14** Ships with deep draft shall navigate in the deep-water lane.

**Article 15** When navigating through the precautionary areas, ships shall follow the rules for the areas and proceed with caution.

**Article 16** When in tributary arms, ships shall follow the prescribed navigation rules (as seen in Annex 6).

**Article 17** When passing through the bridge area, ships shall follow the administrative measures of navigation safety in the bridge area.

**Article 18** Ships in need of crossing the specified routes for entering and departing ports, anchorages and tributary arms or plying as ferries, shall not impede other ships'

navigation.

When crossing the routes, ships shall maintain vigilant and navigate as nearly as practicable at right angle to the route.

**Article 19** When proceeding through port, bridge, construction, berthing and precautionary areas as well as anchorages, ferries and tributary arms, etc., ships shall maintain proper lookout, be vigilant about crossing ships' movement, and proceed with caution.

**Article 20** In close-quarters situations and at collision risks, ships, in order to avoid accidents, may deviate from prescribed routes with the precondition of not impeding other ships' safety. After the close-quarters situation being cleared up, ships shall return to prescribed route and report such to the Administration.

**Article 21** Ships shall navigate at a safe speed. Except for avoidance or give-way in emergency situations, ships are forbidden to stop engine and drift in complex water areas such as turning sections with narrow passages, bridge areas or precautionary areas.

**Article 22** Ships in need of reducing the speed for entering and departing ports, anchorages and berthing areas shall navigate as close as practicable along the right side of the route.

# **Chapter 4 Berthing**

**Article 23** Ships shall anchor or berth in the prescribed anchorages or berthing areas accordingly. (as seen in Annex 7).

Small ships may also anchor or berth in waters other than the prescribed anchorages or berthing areas, and shall stay as far as practicable away from the route.

**Article 24** In case of severe weather, equipment failure and other emergencies, ships shall keep away from the route as far as possible and report such promptly to the Administration.

#### Chapter 5 Give-way

**Article 25** Ships not following the prescribed routes shall initiatively give way to those proceeding in prescribed routes.

- **Article 26** Ships in and out of the mouths of tributary arms, shall initiatively give way to ships in the prescribed routes in the mainstream.
- **Article 27** Ships crossing the prescribed routes, shall initiatively give way to ships in the prescribed routes.

# **Chapter 6 Liabilities**

- **Article 28** Ships causing collision accidents due to their failure to give way to other ships as prescribed in Article 25, 26 and 27 of the Provisions shall take the main or full liabilities.
- **Article 29** Ships causing collision accidents without following the prescribed routes shall take the main or full liabilities.
- **Article 30** Ships violating the rules of the precautionary areas, which has caused the collision accidents with ships complying with the prescribed rules, shall take the main or full liabilities.
- **Article 31** Ships violating the Provisions and causing the collision accidents by anchoring or berthing carelessly shall take the main or full liabilities.
- **Article 32** The Administration, in accordance with relevant laws, rules and regulations, shall carry out administrative punishment or administrative coercive measures on actions violating the Provisions.

# **Chapter 7 Supplementary Provisions**

- **Article 33** The annexes to the Provisions have the same legal effect as the articles of the Provisions. Changjiang Maritime Safety Administration will issue notices to mariners in case of any changes.
- **Article 34** For the purpose of the Provisions, the terms are defined as follows:
- (a) water areas refer to the navigable waters bounded by the line as the upper demarcation connecting the two tower lateral marks, one at Qianjiangkou (30°32′29″N/117°13′55″E) which is at the right bank of Taiziji waterway and the other at Qianjiangzui (30°32′50″N/117°14′44″E) which is at the left bank of Taiziji waterway, and the line as the lower demarcation connecting Cihu River Mouth

- (31°46′30″N/118°29′48″E) at the right bank and Wujiang River Estuary(31°46′30″N/118°29′48″E) at the left bank, with the exclusion of Yuxihou waterway.
- (b) Berthing areas refer to the waters announced by the Administration for berthing.
- (c) Crossing refers to the process and actions that the ship enters into one side of the separated lane and exits from the other side or that the ship transversely or obliquely passes through the separated lane along the ship heading including "navigation of all kinds of crossing ferries", "entering and exiting the docks or berthing areas by crossing the separated lane", "the give-way ship's bow overstepped the boundaries of separation lines" and "crossing the separated lane in the precautionary areas", etc.
- (d) Small ships refer to the ships (fleet) with actual draft of less than 4.5 meters or with length overall of less than 50 meters.
  - (e) Deep draft ships refer to the ships with actual draft of more than 6 meters.
- **Article 35** In case of any discrepancies, the Provisions shall prevail other provisions concerning navigation, anchorage, give-way and so on. Any other related matters not covered by the Provisions shall be subject to relevant rules and regulations.
- **Article 36** The Provisions shall be implemented from 1 October 2010. The previous version of *the Provisions on Ships' Routeing System in Anhui Section of Yangtze River* shall be abrogated simultaneously.

#### **Traffic Lane Standards**

Traffic lane is 500 meters wide in principle (sections with favored conditions can be broadened appropriately in width; when the lane width is less than 500 meters, the actual channel width prevails, but it shall be no less than 200 meters wide). Under general circumstances, the distance between neighboring buoys on the same side shall not be more than 3,000 meters.

Wuhu Changjiang Bridge to Cihu River Mouth: from June 1 to September 30, the maintenance water depth of the channel is 9.0 meters; from Oct 1 to next May 31, the maintenance water depth is 7.5 meters.

Wuhu Changjiang Bridge to Qianjiangzui: from Dec 1 to next Mar 31, the maintenance water depth of the channel is 5.0 meters; from Apr. 1 to May 31, the maintenance water depth of the channel is 6.0 meters; from Jun 1 to Sep 30, the maintenance water depth of the channel is 7.5 meters; from Oct 1 to Nov 30, the maintenance water depth of the channel is 6.0 meters.

#### **One-way Route Standards**

One-way route is set in Wujiang Waterway, with 200 meters in width. When it is less than 200 meters, the actual channel width prevails and shall be no less than 150 meters. Under general circumstances, the distance between neighboring buoys on the same side shall not exceed 3 kilometers, and the maintenance water depth of channel is 4.5 meters (in special calendar years when water depth is less than 4.5 meters, the data released by the waterway administrations prevails.)

#### Annex 3

#### **Recommended Route Standards**

- 1. Recommended routes for upbound ships are established outside the upbound traffic lanes from Donggeng tower lateral mark to #179 White Buoy, from #202 White Buoy to lower end of Taiyangzhou tower lateral mark and from middle stream part of Tuqiao tower lateral mark to #250 White Buoy (with the exclusion of Tongling Changjiang Road Bridge water area).
- 2. Recommended routes are 100 meters in width and at least 3.0 meters in depth.

#### Annex 4

#### **Deep-Water Route Standards**

From the line connecting Qiangjiangzui tower lateral mark in Taiziji Waterway and Qiangjiangkou tower lateral mark to Cihu River Mouth in Fanjiafan Waterway (the bridge area excluded), deep-water routes are established in both sides of the separation line of traffic lanes within 100 meters in width respectively. Generally deep-water routes are within thalweg area of channels.

Down from Wuhu Changjiang Bridge, the maintenance water depth of deep-water routes is the same as that of traffic lanes in this section; Up from Wuhu Changjiang Bridge, the maintenance water depth of deep-water routes is 7.5 meters, the same as

that of main channel from Jun 1 to Sep 30; 6.5 meters in May and October, and 6.0 meters from Nov 1 to Nov 15; in other durations of each year, the maintenance water depth of deep-water routes is the same as that of traffic lanes in this section; When the actual channel water depth is lower than above, data released by waterway administrations prevail.

#### Annex 5

## **Precautionary Areas**

# 1. Huangzhou Xintan Precautionary Area

#### 1.1 Range

Upper bound: line bounded by Xiaohuangzhou Tower Lateral Mark and Yangtze River #165 Red Buoy;

Lower bound: line bounded by Yangtze River #163 Black Buoy and Shennongzhou along shore mark.

## 1.2 Navigation Rules

- 1.2.1 Upbound ships and downbound ships shall pass on the port side of the other.
- 1.2.2 Overtaking or navigating abreast is forbidden.

#### 1.3 VHF Contact Locations

- 1.3.1 Upbound ships: downstream area from Lower Bound Buoy of Xiaohuangzhou Anchorage, Ma'anshan Port.
- 1.3.2 Downbound ships: upstream area from Donggeng Tower Lateral Mark.

## 2. Chenjiazhou Precautionary Area

#### 2.1 Range

Upper bound: 2,000 meters upwards beyond the line connecting Dongliangshan Power Tower and Xiliangshan Power Tower;

Lower bound: line connecting Dongliangshan Power Tower and Xiliangshan Power Tower

#### 2.2 Navigation Rules

Downbound Ship entering Yuxikou Waterway from the main branch and upbound ship entering the main branch downwards along Yuxikou Waterway shall pass on the port side of the other.

## 2.3 Give-way Rules

Downbound Ship entering Yuxikou Waterway from the main branch shall initiatively give way to upbound ships entering the main branch downwards along Yuxikou Waterway.

# 3. Lanjiangji Precautionary Area

#### 3.1 Range

Upper bound: line connecting Upper-Right Buoy and Upper-Left Buoy in Lanjiangji Precautionary Area;

Lower bound: line connecting Lower-Right Buoy and Lower-Left Buoy in Lanjiangji Precautionary Area

# 3.2 Navigation Rules

Overtaking or navigating abreast is forbidden. Head-on situation is forbidden for ships under control.

#### 3.3 Control Rules

- 3.3.1 Water areas under control: the upper bound is the line connecting Upper-Right Buoy and Upper-Left Buoy in Lanjiangji Precautionary Area, and the lower bound is the line connecting Lower-Right Buoy and Lower-Left Buoy in Lanjiangji Precautionary Area.
- 3.3.2 Ships under control: between fleets of ships, between ships of more than 90 meters in length, between fleet of ships and ship of more than 90 meters in length.

# 3.3.3 Contact Locations

Upbound Ships: downstream area from #264 White Buoy

Downbound ships: upstream area from #274 White Buoy

- 3.3.4 Waiting Rule: upbound ships (fleets) under control shall wait for downbound ships (fleets) under control.
- 3.3.5 Waiting Area: area down from #266 White Buoy for upbound ships.

# **Navigation Rules in Tributary Waterways**

## 1. Navigation Rules in Taipingfu Waterway

#### 1.1Range

- 1.1.1 Upper bound: the line connecting Pengxingzhou Tower Lateral Mark and #174 Red Buoy;
- 1.1.2 Lower bound: the line bearing 90 degree to #164 Red Buoy.

#### 1.2 Navigation principles

Each ship shall navigate to the right.

# 1.3 Passing limitations

Ships shall, taking into consideration of the actual water depth, draft and height limits of river-crossing constructions, choose to pass with the precondition of ensuring safety.

#### 2. Navigation Rules in Heishazhou North Waterway

# 2.1 Range

Upper bound: the line connecting #206 Red Buoy and #207 white light ship;

Lower bound: 500 meters upwards beyond the line connecting Gao'anwei Tower Lateral Shoremark and #200 White Buoy.

#### 2.2 Navigation principles

Ships shall follow two-way traffic with the principle of navigating to the right respectively.

# 2.3 Passing limitations

Ships shall, taking into consideration of the actual water depth, draft and height limits of river-crossing constructions, choose to pass with the precondition of ensuring safety.

#### 3. Navigation Rules in Tongling Little Port

#### 3.1Range

Upper bound: the extension line of due north to Xingou Site;

Lower bound: the extension line of due west to Jinniudu Tower Lateral Mark

# 3.2 Navigation principles

Ships shall follow two-way traffic with the principle of navigating to the right respectively.

## 3.3 Passing limitations

Ships shall, taking into consideration of the actual water depth, draft and height limits of river-crossing constructions, choose to pass with the precondition of ensuring safety.

## 4. Navigation Rules in Chengdezhou East Harbor

#### 4.1 Range

Upper bound: the line connecting #236 red light ship and the bottom edge of Pier 6 of Tongling Port

Lower bound: the line connecting #227 red light ship and #227 Red Buoy and its extension line

# 4.2 Navigation principles

Ships shall follow two-way traffic with the principle of navigating to the right respectively.

#### 4.3 Passing limitations

- 4.3.1 Ships shall, taking into consideration of the actual water depth, draft and height limits of river-crossing constructions, choose to pass with the precondition of ensuring safety.
- 4.3.2 Ships of 1,600GT and above shall report to the Administration when passing.

#### 5. Navigation Rules in Datongxiaogang Port

#### 5.1 Range

Upper bound: the line connecting Tieban Chau Chau Tau site and Qingtong River Mouth;

Lower bound: the line connecting Yangshanji site and periphery of Heyue Chau end.

#### 5.2 Navigation principles

Ships shall follow two-way traffic with the principle of navigating to the right

respectively.

# 5.3 Passing limitations

- 5.3.1 Ships shall, taking into consideration of the actual water depth, draft and height limits of river-crossing constructions, choose to pass with the precondition of ensuring safety.
- 5.3.2 Ships of 600GT and above shall report to the Administration when passing.

# 6. Navigation Rules in Guichi South Harbor

#### 6.1 Range

Upper bound: the extension line of due south of #4 White Buoy, Guichi South Harbor;

Lower bound: the extension line of due south of #252 left and right traffic mark

6.2 Navigation principles

Ships shall follow two-way traffic with the principle of navigating to the right respectively.

# 6.3 Passing limitations

- 6.3.1 Ships shall, taking into consideration of the actual water depth, draft and height limits of river-crossing constructions, choose to pass with the precondition of ensuring safety.
- 6.3.2 Upstream area from #274 White Buoy of Guichi South Harbor is non-navigable waters.

# Anchorages & Berthing Areas

# 1. Anchorages

No.	Name	Location	Controlling points' coordinates	Range and designated usage
1	XiaoHuangzhou Anchorage of Ma'anshan Port	Left bank side of Ma'anshan waterway adjoining Xiaohuangzhou	A(31°42′50.33″N 118°26′34.23″E) B(31°43′23.52″N 118°26′49.63″E) C(31°43′35.60″N 118°26′55.21″E) D(31°45′42.87″N 118°27′53.35″E) E(31°45′45.19″N 118°27′46.55″E) F(31°43′38.25″N 118°26′47.77″E) G(31°43′26.27″N 118°26′41.93″E) H(31°42′52.98″N 118°26′26.79″E)	2400m ×200m at upper part For riverboats  700m × 200m at lower part For unloaded seagoing ships
2	Wuhu joint inspection anchorage	East to the #177 Red Buoy of the Xihua waterway	A(31°28′11.52″N 118°20′31.98″E) B(31°28′25.21″N 118°20′41.60″E) C(31°28′21.87″N 118°20′48.11″E) D(31°28′08.17″N 118°20′38.48″E)	500m × 200m For ships engaged in international voyages

3	Jiuhua Anchorage of Chizhou	At the mileage of of about 567.5 km of Yangtze River downstream waterway, right bank of Datong waterway, about 1 km away from downstream of single-user wharf of Jiuhua power plant, Chizhou	`	,	供单船、驳舶锚泊 1000m ×300m For single vessels or barges
4	Jianghailun Anchorage of Chongwenzhou	Right edge waters of Chongwenzhou lower end of Guichi waterway, At the mileage of of about 575km to 577 km of Yangtze River downstream waterway	B(30°44′00″N C(30°44′39″N	117°30′48″E) 117°30′51″E) 117°31′52″E) 117°31′56″E)	1000m× 200m For single vessels or barges  1000m× 200m For seagoing ships and ships engaged in international voyages
5	Machuangou Anchorage	Left bank of Guichi waterway, down from the lateral shore mark of Machuangou	A(30°43'47"N B(30°43'43.7"N 1 C(30°44'15.6"N 1 D(30°43'56.9"N 1	117°25′3.6″E) 17°25′56.2″E)	1500m× 200m For single vessels or barges

# 2. Berthing Areas

No.	Name	Location	Controlling points' coordinates	Range and designated usage
1	Xinshengzhou Berthing Area	Beyond the downbound lane below #159 Black Buoy of Yangtze River located on upper end of Xinshengzhoutou adjoining the left bank of Ma'anshan waterway, at the mileage of about 390km of Yangtze River downstream waterway	A(31°47′23.44″N 118°24′46.79″ E) B(31°47′14.14″N 118°29′31.89″ E) C(31°47′08.66″N 118°29′36.78″ E) D(31°47′18.06″N 118°29′52.06″ E)	500m × 200m  For the temporary berth of ships operating at Ma'anshan Port
2	Ma'anshan Berthing Area	From Pier 6 of Ma'anshan to the pier of 3rd Water Supply Plant	A(31°44′26.83″N 118°27′39.73″E) B(31°45′16.40″N 118°28°07.67″E) C(31°45′16.40″N 118°28′45.81″E) D(31°45′52.77″N 118°28′51.75″E) E(31°45′12.35″N 118°28′13.57″E) F(31°44′24.16″N 118°27′46.68″E)	$1000m \times 200m$ For all types of ships
3	Hejiazhou Berthing Area	Between Jiangxinzhou waterway and Taipingfu waterway	A(31°40′06.58″N 118°25′11.23″E) B(31°40′43.99″N 118°25′47.67″E) C(31°40′51.64″N 118°25′37.69″E) D(31°40′11.78″N 118°25′04.59″E)	1500m in length For small ships

				200m × 100m
4		300m below Quarry Wharf	A(31°39′34.13″N 118°26′40.11″E)	For the temporary
	Quarry Berthing	located on the right bank of Taipingfu waterway,	B(31°39′31.96″N 118°26′36.13″E)	berth of unloaded
	Area	at the mileage of 408km of	C(31°39′20.74″N 118°26′43.66″E)	ships going in and
		the Yangtze River downstream waterway	D(31°39′22.36″N 118°26′46.84″E)	out of the quarrying
				operation area
		Foot to the line connecting #175 Ded Ducy	A(31°28′26.34″N 118°20′39.50″E)	2500m × 350m
_	Dongliangshan Berthing Area	East to the line connecting #175 Red Buoy	B(31°29′36.21″N 118°21′27.63″E)	
5		and # 177 Red Buoy of the Yangtze River	C(31°29′31.01″N 118°21′37.63″E)	For barges and
		(downstream Wuhu Joint Inspection Anchorage)	D(31°28′20.44″N 118°20′50.85″E)	single vessels
			A(31°17′56.91″N 118°17′37.91″E)	
6	Baimaosha	South of the line connecting #187 Red Buoy and	B(31°17′42.75″N 118°19′10.98″E)	2500m in length
6	Berthing Area	#189 Red Buoy	C(31°17′31.34″N 118°19′09.54″E)	For small ships
			D(31°17′51.46″N 118°17′37.00″E)	
7	Berthing Area below Zhongjiakou	From Baodingwei tower lateral shore mark to 2000m below	A(31°16′01.91″N 118°10′44.52″E) B(31°16′42.87″N 118°12′06.07″E) C(31°16′31.25″N 118°12′12.84″E)	2500m in length, 300m in width upstream, 400m in width downstream
			D(31°15′53.51″N 118°10′50.23″E)	For barges

				and single vessels
				700m × 150m
		Beyond the upbound lane of Sanshan River	A(31°39′34.13″N 118°26′40.11″E)	For the temporary
	Sanshanhe	tower lateral shore mark located on the right	B(31°39′31.96″N 118°26′36.13″E)	berth of general
8	Berthing Area	bank of Baimao Waterway, at the mileage of	C(31°39′20.74″N 118°26′43.66″E)	cargo ships
		472km of Yangtze River downstream waterway	D(31°39′22.36″N 118°26′46.84″E)	operating at Hailuo
				Wharf
		Beyond the upbound lane of Heishazhou tower	A(31°09′42.30″N 118°00′23.27″E)	400m × 100m
	Heishazhou	lateral mark located on the right bank of Digang	B(31°09′32.32″N 118°00′16.07″E)	For the temporary
9	Berthing Area	waterway, at the mileage of 486.5 km of Yangtze	C(31°09′29.37″N 118°00′19.32″E)	berth of general
		River downstream waterway	D(31°09′41.23″N 118°00′26.17″E)	cargo ships
			A(31°08′09.57″N 117°48′49.17″E)	600m × 150m
	Taiyangzhou Berthing Area	Buoy, at the mileage of 517km of Yangtze River	B(31°02′20.37″N 117°48′27.79″E)	For the temporary
10			C(31°07′58.81″N 117°48′30.32″E)	berth of general
			D(31°08′05.40″N 117°48′51.03″E)	cargo ships

11	Heyuezhou Berthing Area	Datong Waterway located at the mileage of 554km of Yangtze River downstream waterway, and beyond the lane of right bank below Heyuezhou	A(30°50′20.17″N 117°43′41.60″E) B(30°50′01.73″N 117°43′34.91″E) C(30°49′59.94″N 117°43′40.96″E) D(30°50′18.59″N 117°43′47.53″E)	600m × 150m  For the temporarily berth of unloaded ships at Shangfeng Wharf
12	Chizhou South Port Berthing Area	Upstream the #3 White Buoy on the left bank of Chizhou South Port, Guichi Waterway	A(30°40′47.9″N 117°27′13.9″E) B(30°40′44.3″N 117°27′14.1″E) C(30°40′43.9″N 117°27′42.8″E) D(30°40′47.1″N 117°27′42.4″E)	1000m × 200m For single vessels and barges
13	Wusha Berthing Area	Water area beyond the waterway near Wusha, right bank of Guichi Waterway	A(30°40′50.9″N 117°19′12.9″E) B(30°40′48.4″N 117°19′19″E) C(30°41′06″N 117°19′45.1″E) D(30°40′59.6″N 117°19′43.4″E)	1000m × 500m  For single vessels and barges
14	Sanjiangkou Berthing Area	Left bank of Guichi Waterway, Sanjiangkou water area	A(30°40′25.9″N 117°16′50″E) B(30°40′18.7″N 117°16′34.5″E) C(30°40′33.2″N 117°16′59.7″E) D(30°40′6.2″N 117°16′42″E)	1000m × 500m  For single vessels and barges