





Issues of piloting cruise ships in Shanghai

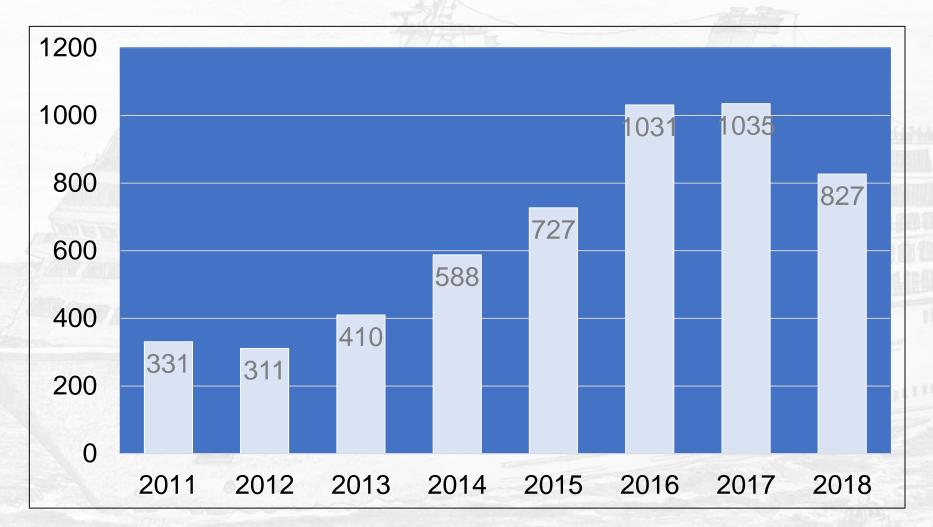




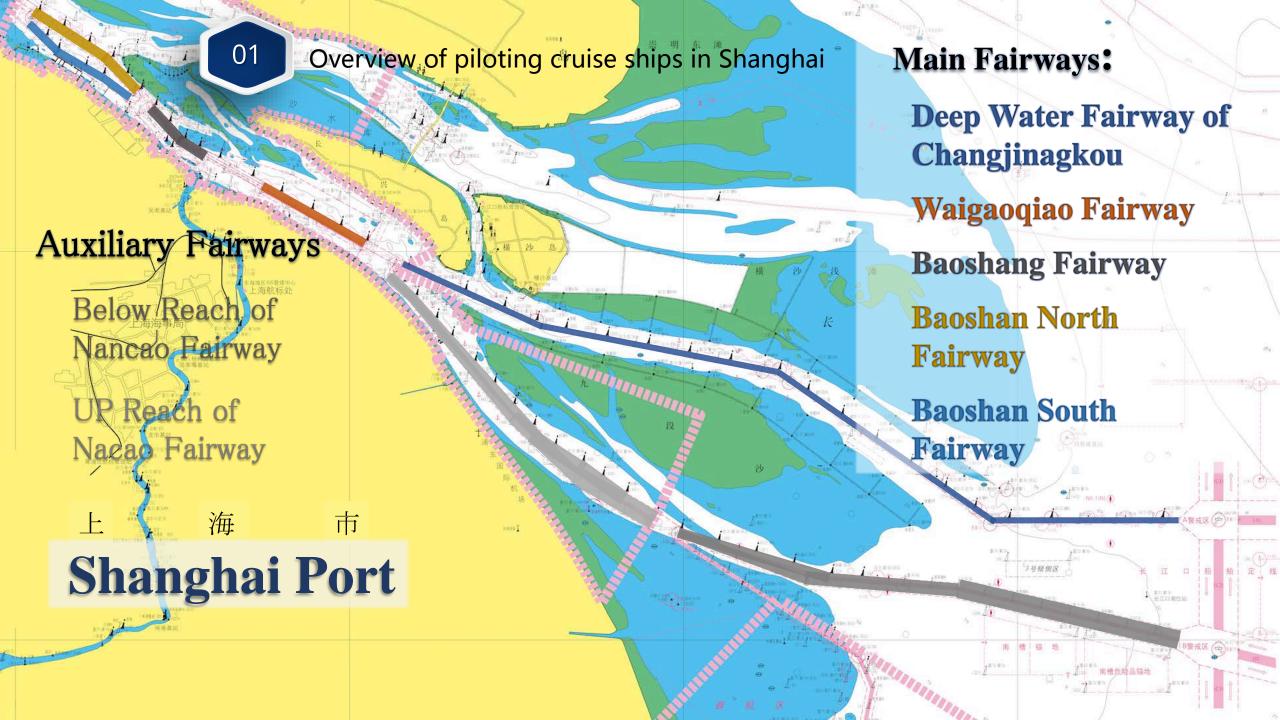


#### Pilotage Volume



















# WICT Home port

SPICT
Port of call







#### WICT

Size: huge

Navigational aids: brand-new

& advanced

Berthing time: fixed



Podded propulsion or Conventional electric propulsion

#### **SPICT**

Size: medium

Navigational aids: ordinary

Berthing time: not fixed



Twin-screw with controllable pitch propellers or either conventional propellers



### The pilotage characteristics of cruise ships

#### **Huge size**





**Enormous number of tide-utilizing vessels** 



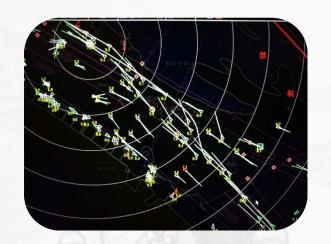
**Curved and narrow channel** 

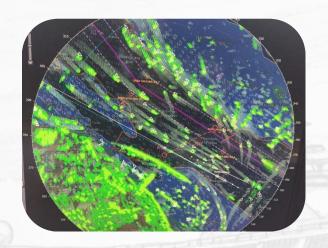






#### The difficulty in piloting cruise ships in Shanghai







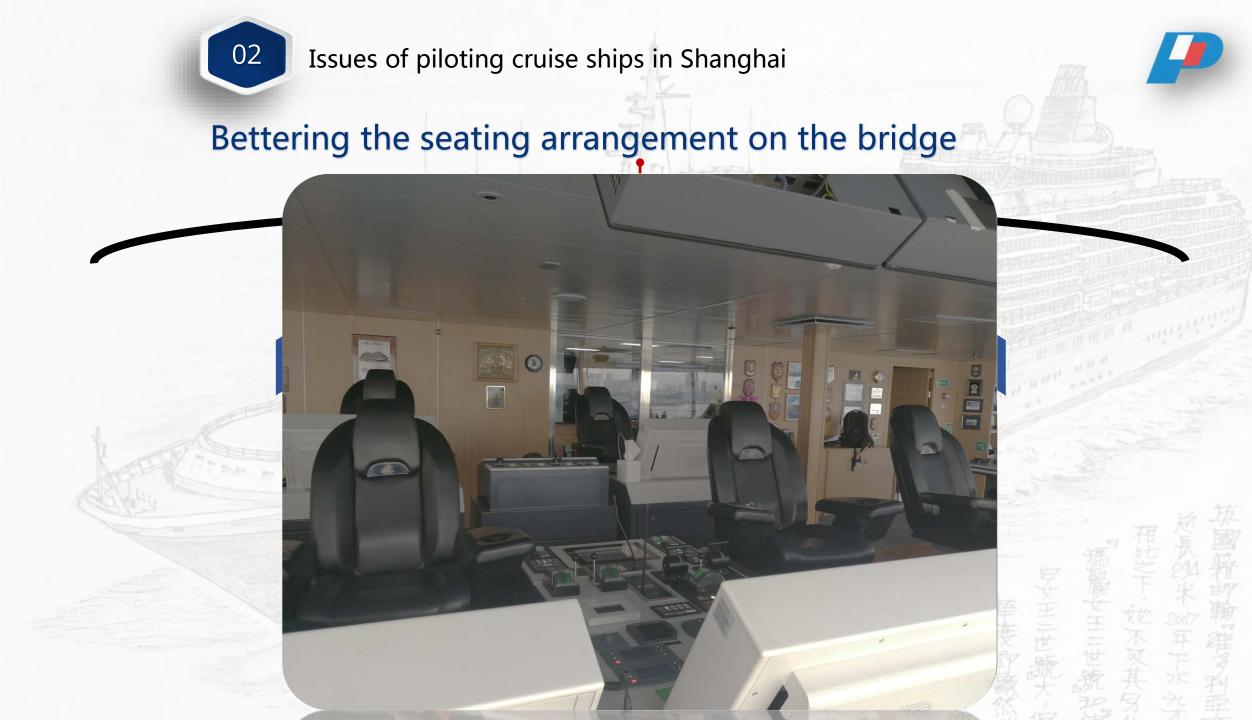


The contradiction between the tide-utilizing vessels moving in accordance with the tide time and the cruise ship's scheduled berthing and departure.

Cruise ship is also a motor vessel, which has no priority in avoiding collision, especially when it crosses the channel from berth.







# Correct understanding to ship navigation aid



01

Never reach the ultimateness





# Correct understanding to ship navigation aid

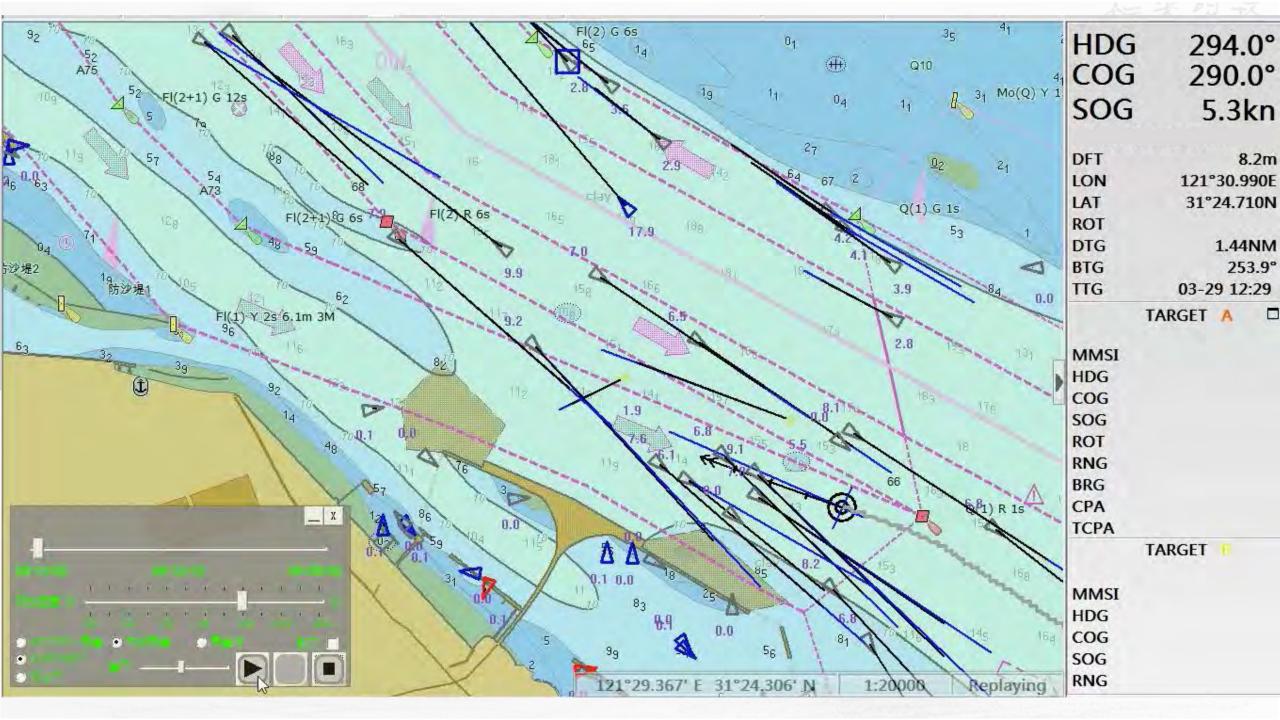


01

Never reach the ultimateness

02

Being aware of the inadequacies of the aid



# Correct understanding to ship navigation aid



01

Never reach the ultimateness

02

Being aware of the inadequacies of the aid

03

Never be overdependent on ship navigation aid



### Never be overdependent on ship navigation aid

The lack of Situational Awareness









Lost Shiphandling Skills



#### Issues of piloting cruise ships in Shanghai



### Effective integration of bridge resources



Perfect utilization of BRM based on information symmetry





Communication of the maneuvering plan

Communication of the maneuvering intention

#### Issues of piloting cruise ships in Shanghai



Communication of the maneuvering intention

Thinking aloud





Sometimes the Captains' solutions are not practical

Resolution: Recommended standard conning commands





#### Issues of piloting cruise ships in Shanghai

### Recommended standard conning commands

Engine Order	Rudder Order	
	System A	System B
Use level from zero to 10 of power in positive or negative direction	Use one pod inbound or outbound relative to the ship's center line with xx degrees	Use clock setting relative to the ship's bow
e.g. Port Pod Level 6 Positive	e.g. Port Pod inbound 60 degrees	e.g. Port Pod at two o'clock

