指导性文件
GD33-2023

中　国　船　级　社

通过运河船舶构造与设备符合性检验指南

2023

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北　京

出版说明

为了更系统性地开展相关工作，提升客户体验，我社特编制本指南，旨在为我社验船师开展船舶满足相关运河航行规则的符合性检验服务并为客户签发“符合相关运河构造和设备要求的检验声明”提供指导。

目　录

第 1 章　通　　则

1.1　目的

1.1.1　本指南旨在为中国船级社(以下简称为“CCS”)开展船舶满足巴拿马或苏伊士《运河航行规则》(以下简称“规则”)的符合性检验服务提供指导。

1.2　应用范围

1.2.1　本指南适用于具有 CCS 船级的通过巴拿马或苏伊士运河船舶。

1.2.2　通过运河船舶除应满足 SOLAS 公约要求外，还应考虑“规则”中的要求[①](详见本指南第 2 章)。

1.2.3　本指南仅包括“规则”中对船舶“构造”和“设备配备”的规定，对特定船舶过运河时，还应注意相关运河当局和船旗国主管机关的其他有关规定。

1.3　图纸资料

1.3.1　对申请签发“符合巴拿马运河船舶构造和设备要求检验声明”的船舶，应提交如下图纸资料供核查[②]：

（1）拖带、系泊布置图

（2）引航员平台和遮阳篷布置图(如适用)

（3）桅杆和信号布置图

（4）驾驶室布置图，包括但不限于下列内容：

- VHF 无线电装置；
- AIS 引航员接口；
- 舵角指示器；
- 螺旋桨转速指示器；
- 本指南规定的甲板两翼的电气设备。

（5）引航员梯及登离船装置布置图(如需与舷梯组合使用，还应提交舷梯布置图)

（6）证明“最大高度”不超“过运河水线”57.91m 的图纸资料

（7）船舶突出物横剖面图(如适用)

（8）甲板货物安全通道布置图(如适用)

（9）引航员舱室设备布置图(可包含于其他图纸中)

1.3.2　对申请签发“符合苏伊士运河船舶构造和设备要求检验声明”的船舶，应提交如下图纸资料供核查[③]：

（1）总布置图/舱室设备布置图

（2）锚、系泊布置图

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① 有关这些要求的细节，见巴拿马运河主管当局官方网站 https://pancanal.com/en/maritime-services/notices-to-shipping/上颁布的《巴拿马运河航行规则》关于船舶的要求(OP NOTICE TO SHIPPING No. N-1-2xxx)和苏伊士运河主管当局官方网站 http://www.suezcanal.gov.eg/English/Navigation/Pages/RulesOfNavigation.aspx 上颁布的《苏伊士运河航行规则》

② 对营运船，原船图纸若不满足运河主管当局要求，应对原图纸作相应修改以满足要求，则只需提交修改部分图纸。

③ 对营运船，原船图纸若不满足运河主管当局要求，应对原图纸作相应修改以满足要求，则只需提交修改部分图纸。对申请签发“符合苏伊士运河船舶构造和设备要求检验声明”的船舶，考虑到苏伊士《运河航行规则》对船舶的要求相对简单，相关图纸资料的核查可直接由现场验船师完成。

（3）桅杆和信号布置图

1.4 检验范围

就本指南而言，对申请签发“符合相关运河船舶构造和设备要求的检验声明”的检验范围详见本指南第 3 章。

1.5 符合性检验声明的签发④

1.5.1 在 1.3 所要求图纸获得相关运河当局批准之前，应船厂或船东自愿申请，CCS 进行船舶满足相关《运河航行规则》中对船舶构造和设备配备要求的符合性审图和检验，合格后签发“符合相关运河船舶构造和设备要求的检验声明”。

1.5.2 签发“符合相关运河船舶构造和设备要求的检验声明”的前提条件是 1.3.1 或 1.3.2 所列图纸资料已得到运河当局的认可或 CCS 的认可，且经现场验船师检验后确认实船与认可图纸相符。

1.5.3 对非首次通过相关运河的船舶，除非有做过涉及相关《运河航行规则》对船舶构造和设备要求的改建或相关《运河航行规则》对船舶构造和设备要求有更新并有追溯性，否则不必签发“符合相关运河船舶构造和设备要求的检验声明”。

1.5.4 已向船舶签发的“符合相关运河船舶构造和设备要求的检验声明”将长期有效，除非船舶有经过不符合相关《运河航行规则》对船舶构造和设备要求的改建或相关《运河航行规则》对船舶构造和设备要求有更新并有追溯性。

④ 详见图 1 签发“符合相关运河船舶构造和设备要求的检验声明”流程图。

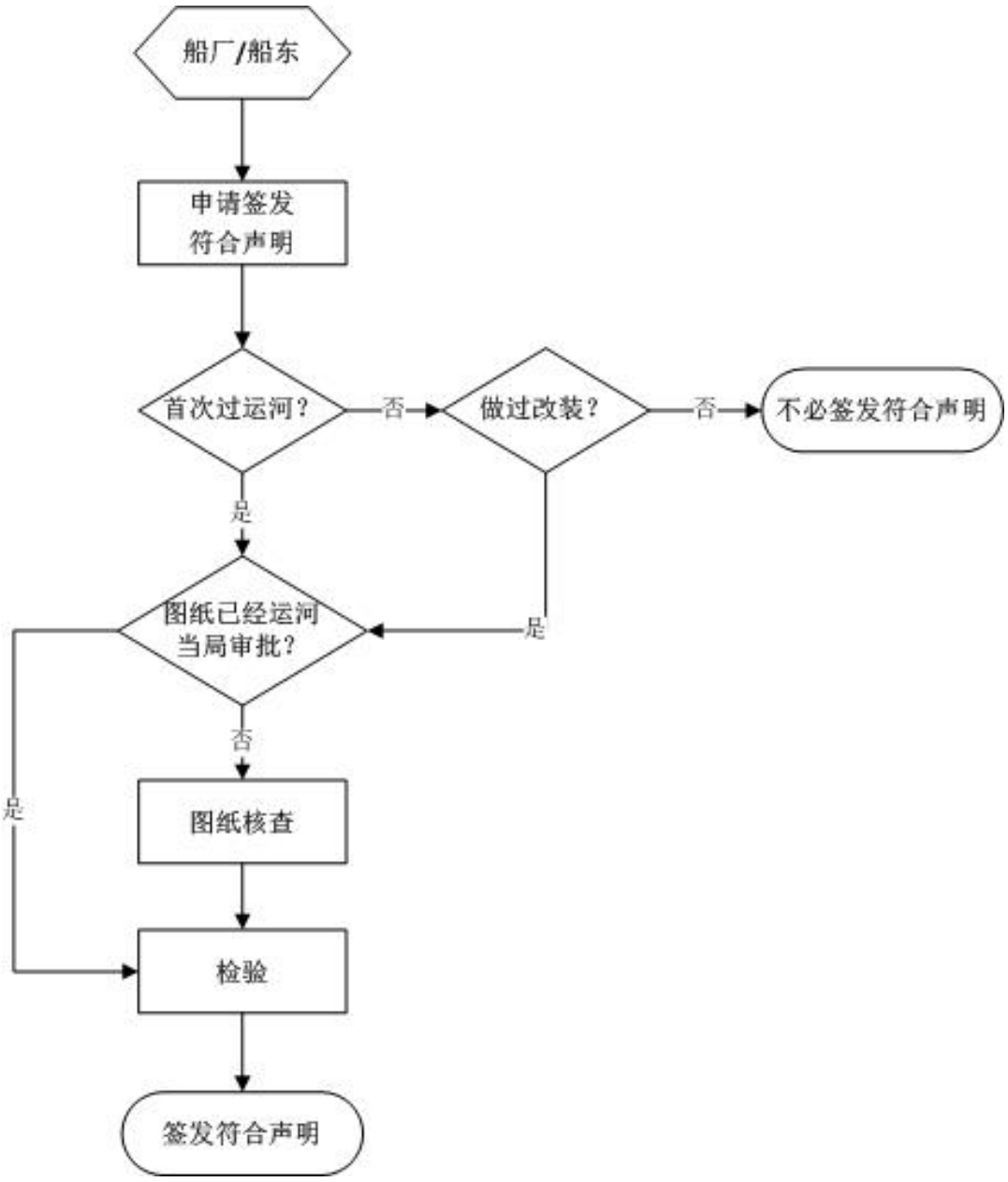

图 1　签发“符合相关运河船舶构造和设备要求的检验声明”流程图

1.6　各方责任

本社符合性检验声明不代表相关运河当局签发，仅表明符合 CCS 对其《运河航行规则》中有关通过运河船舶“构造”和“设备配备”要求的理解，并不排除相关运河当局在船舶通过运河时提出附加检验或要求提供附加证据的可能性。

第 2 章　船舶构造与设备要求

2.1　通过巴拿马运河船舶构造与设备要求

通过巴拿马运河船舶构造与设备要求见表 1。

表 1　通过巴拿马运河船舶构造与设备要求

序号	船舶构造与设备要求	OP NOTICE TO SHIPPING No.N-1-2xxx, Vessel Requirements	
1	巴拿马型(Panamax vessels) 超巴拿马型(Panamax Plus vessels) 新巴拿马型(Neopanamax)	1	Definitions
2	船舶突出物	2 7	Size and Draft Limitations of Vessels/ Protrusions (Annexes 1, 2 and 3) Deck Load Cargo
3	对特定船舶引航员平台和遮阳篷的要求	3	Requirement for Pilot Platforms and Shelters on Certain Vessels
4	对驾驶桥楼的要求	4	Navigation Bridge Features Required of Transiting Vessels
5	甲板载运货物	7	Deck Load Cargo
6	导缆孔和系缆柱的构造、数目和　位置	8	Construction, Number and Location of Chocks and Bitts
7	系泊缆绳、锚和甲板机械	9	Mooring Lines, Anchors and Deck Machinery
8	引航员登离船设备	10	Boarding Facilities
9	舱室与处所	23	Pilot Accommodations on Board Transiting Vessels

2.2　通过苏伊士运河船舶构造与设备要求

通过苏伊士运河船舶构造与设备要求见表 2。

表 2　通过苏伊士运河船舶构造与设备要求

序号	船舶构造与设备要求	Rules of Navigation, SUEZ CANAL	
1	系泊和锚泊	Art.19 Art.20 Art.23	Mooring Ropes Mooring Boats Bow Anchors
2	集装箱船的附加要求	Art.21	Spreaders (Slings)
3	引航员登离船设备	Art.24	Accommodation and Pilot Ladder
4	电气装置	Art.28 Art.29 Art.30 Art.31	Searchlights Overhead lights (Deck Lights) Bridge Wing Projectors Funnels
5	吃水标志	Art.35	Draught Marks
6	舱室与处所	Art.42	Accommodation
7	消防设备	Art.61	Fire Fighting

序号	船舶构造与设备要求	Rules of Navigation, SUEZ CANAL	
8	信号设备	Art.91 B & Appendix No.1	Visual Signals/Special signals used by vessels in ports and in the Canal

第 3 章　检验与发证

3.1　巴拿马运河船舶构造和设备要求的检验与发证

根据船上的具体布置、批准的图纸和试验结果进行船舶满足巴拿马运河当局《巴拿马运河航行规则》构造和设备要求的符合性检验，合格后签发“符合巴拿马运河船舶构造和设备要求的检验声明”以及检验报告。检验(符合)声明长期有效，当船舶有经过不符合《巴拿马运河航行规则》对船舶构造和设备要求的改建或《巴拿马运河航行规则》对船舶构造和设备要求有更新并有追溯性时检验(符合)声明自动失效。

3.2　苏伊士运河船舶构造和设备要求的检验与发证

根据船上的具体布置、批准的图纸和试验结果进行船舶满足苏伊士运河当局《苏伊士运河航行规则》构造和设备要求的符合性检验，合格后签发“符合苏伊士运河船舶构造和设备要求的符合声明”以及检验报告。检验(符合)声明长期有效，当船舶有经过不符合《苏伊士运河航行规则》对船舶构造和设备要求的改建或《苏伊士运河航行规则》对船舶构造和设备要求有更新并有追溯性时检验(符合)声明自动失效。

附件 1：　符合巴拿马运河船舶构造和设备要求的检验声明(Form SOC(ACP-CTR))

附件 2：　符合巴拿马运河船舶构造和设备要求的检验报告(Form ACP-CTRc)

附件 3：　符合苏伊士运河船舶构造和设备要求的符合声明(Form SOC(SCA-RN))

附件 4：　符合苏伊士运河船舶构造和设备要求的检验报告(Form RNc)

中 国 船 级 社

CHINA CLASSIFICATION SOCIETY

Form SOC(ACP-CTR)
No._____

DECLARATION OF SURVEY REGARDING COMPLIANCE WITH THE PANAMA CANAL SHIP ARRANGEMENT AND EQUIPMENT REQUIREMENTS

Name of Ship _____

Distinctive Number or Letters _____

Port of Registry _____

Gross Tonnage (ITC69) _____

IMO No. _____

CCS No. _____

Date on which keel was laid _____

This is to confirm that survey of the above vessel has been carried out - including examination of Drawings - upon request from the Yard and/or Owner in order to facilitate determination of the above Vessel's compliance with the Panama Canal Commission's(P.C.C), Vessel Arrangement and Equipment Requirements.

It should be noted that P.C.C is the only entity to evaluate, approve or disapprove vessels for transit, and it is their prerogative to require additional evidence / inspections of the vessel and equipment installed.

This declaration is not issued on behalf of Panama Canal Commission, but indicates compliance with CCS's understanding of their requirements.

It was found that – as far as could be seen – the vessel complies with the "ACP OP NOTICE TO SHIPPING" requirements w.r.t.: - Part 3, "Pilot Platforms and Shelters", Part4, "Navigation Bridge Features required for Transiting Vessels" , Part 2, "Protrusions", Part 7,"Deck Load Cargo", Part 8, "Construction, Number and Location of Chocks and Bitts", Part 9, "Mooring Lines, Anchors and Deck Machinery" , Part 10, "Boarding Facilities" and Part 23 "Pilot Accommodations on Board Transiting Vessels "- according to scope of work on the enclosed survey report as below.

Remark:
A Panama Canal SOPEP(PCSOPEP) to be provided and submitted for its initial review by the ACP in advance of vessel's first arrival in Panama Canal Waters(applicable for vessels carrying 400 metric tons or more of oil as cargo and/or fuel).

Issued at _____ _____(_____)

Issued on _____ Surveyor to CHINA CLASSIFICATION SOCIETY

Rev.2.0 202307

附件 2

Form ACP-CTRc

SURVEY REPORT FORM FOR COMPLIANCE WITH REQUIRED SHIP ARRANGEMENT AND EQUIPMENTS FOR TRANSITING THE PANAMA CANAL

No.

The survey has been carried out upon request from the Yard and / or Owner. The Panama Canal Commission is the only entity authorized to evaluate, approve or disapprove vessels for Canal transit requirements.

Name of Ship _____

Port of Registry _____

IMO No. _____

Date on which keel was laid _____

Overall Length _____

Breadth(beam) _____

Height above waterline[1] _____

Draft[2] _____

1	Maximum height above waterline 57.91 m
2	Draft min. and draft max. value allowable for transiting

Items		
1	**General / Type of Vessel**	
1.1	PANAMAX : 289.6 meters in length by 32.31 meters in beam by up to 12.04 meters TFW draft (Passenger and container ships may be up to 294.13meters).	☐
1.2	PANAMAX PLUS : Panamax vessel with TFW draft above 12.04 up to 15.24 meters and approved for transit of new locks.	☐
1.3	Neo PANAMAX : All vessels with dimensions greater than Panamax and Panamax Plus that comply with the size and draft limitations for the new locks. 370.33 meters in length by 51.25meters in beam by 15.24meters TFW draft.	☐
1.4	OP notice to shipping used for survey No. N01-20XX	☐
1.5	List drawings used in connection with survey:	
	No. Title	Review date
	Towing and Mooring Arrangement	
	Wheelhouse Arrangement	
	Mast & Signals Arrangement	
	Pilot Platform and Shelters Arrangement	

	Pilot Transfer Arrangements	
	Plans and Documents demonstrating the maximum height above waterline is 57.91 m	
	Section Views showing the vessel inside the lock chamber pressed against both center and side walls, indicating clearances of protrusions from lock structures and equipment(If applicable)	
	Safety Passage Way Arrangement Plan for deck loading ship (If applicable)	
	Pilot Accommodation Arrangement Plan	
1.6	Vessel built in compliance with SOLAS and provided with SOLAS certificates.	☐
1.7	The protrusions are arranged as per the drawing	☐
2	**Wheelhouse**	
2.1	Windows of sufficient size and number to provide a clear view?	☐
2.2	Of clear safety glass?	☐
	Tinted windows, if any, movable?	☐
2.3	Centre window arranged?	☐
2.4	Equipped with an efficient, mechanically, operated rain wiper blade on the window at the normal bridge Conning Position 1. In the case of vessels with a center crane or other type of obstruction, blade type wipers shall be located on the windows at normal bridge Conning Positions 2 and 3. In case of enclosed bridge wings, blade type wipers shall be located also on the forward and aft windows at Conning Positions 4 and 5.	☐
2.4.1	Conning position No. 1 is located directly behind and close to the forward center wheelhouse window?	☐
2.4.2	Conning position No. 2 and No. 3 are located to port and stbd. of position No. 1respectively, and directly behind and close to the nearest window thereto that provides a clear unobstructed view ahead?	☐
2.4.3	Conning positions No. 4 and No. 5 are located at the extreme ends of the port and starboard bridge wings and must provide a clear and unobstructed view fore and aft of the vessel's sides. No equipment, instrumentation or inset navigation lights shall block the pilots approach to the forward and after portion of the bridge ends. Are the close approaches safeguarded?	☐
2.4.4	Is there at any position a minimum of 1 meter clearance from consoles or obstructions provided?	☐
2.4.5	For vessels equipped with bow/stern thrusters these should be provided with controls at the extreme ends of the bridge wings?	☐
2.4.6	In case of enclosed bridge wings:	
2.4.6.1	Is an opening type window fitted on the outward bulkhead of each bridge wing in order to allow the pilot to view the waterline all along the side of the vessel?	☐
2.4.6.2	When catwalks are fitted that extend to the maximum beam of the vessel: Is a wide door (of at least 0.915m width and 2.134m height) provided on the outward bulkhead of each bridge wing in order to allow the pilot to step out onto the catwalk and look over the railing to view the waterline all along the side of the vessel?	☐
3	**Bridge indicators**	
	All vessels over 45.72 m (150 feet) in length shall be provided with:	
3.1	**Rudder angle indicators as follows:**	
3.1.1	(a) On vessels less than 24.38 m (80 feet) in beam, at least one of such design and placement that it can be easily read by day or night from all normal conning positions and from the steering station.	☐
3.1.2	(b) On vessels 24.38 m (80 feet) or more in beam, at least one inside the wheelhouse and one on each bridge wing, of such design and placement so that at least one can be easily read by day or night from each conning position and from the steering station.	☐
3.1.3	(c) They shall show in degrees clearly and accurately the position and direction of the rudder or rudders. It shall be noted that indicators located aft of the conning positions will not be considered as meeting this requirement. Overhead rudder angle indicators located behind the pilot’s conning positions are not acceptable. Rudder angle indicators mounted on overhead panels should be located as close to the forward bulkhead as possible for most efficient viewing	☐

	by the pilot.	
3.2	**Propeller revolution tachometer indicators as follows:**	
3.2.1	(a) On vessels less than 24.38 m (80 feet) in beam, at least one for each propeller, of such design as to be easily read by day or night from all normal conning positions.	☐
3.2.2	(b) On vessels 24.38 m (80 feet) or more in beam, at least one for each propeller located inside the wheelhouse and one for each propeller located on each bridge wing, of such design and placement so that at least one can be easily read by day or night from each conning position.	☐
3.2.3	(c) Indicators shall show revolutions per minute clearly and shall accurately indicate the direction of the propeller or propellers. It shall be noted that indicators located aft of the conning positions will not be considered as meeting this requirement.	☐
3.2.4	(d) All vessels with variable pitch control indicators will have them so located as required in (a) and (b) of this subsection.	☐
3.3	**Controllable pitch propeller indicators as follows:**	
3.3.1	(a) On vessels less than 24.38 m (80 feet) in beam, at least one for each propeller, of such design as to be easily read by day or night from all normal conning positions.	☐
3.3.2	(b) On vessels 24.38 m (80 feet) or more in beam, at least one for each propeller located inside the wheelhouse and one for each propeller located on each bridge wing, of such design and placement so that at least one can be easily read by day or night from each conning position.	☐
3.4	(4) Indicators must be operational.	☐
4	**VHF radio**	
4.1	Equipped with at least Channels 12 (156.00 MHz), 13 (156.650 MHz) and 16 (156.800 MHz)?	☐
4.2	Operable from the navigational bridge and located near Conning Position No.1?	☐
5	**Whistle control**	
5.1	Within easy reach on the navigational bridge from Conning Position Nos. 1, 2 and 3(preferably on the forward bulkhead)?	☐
5.2	If beam over 15 meters, are additional controls provided within 1.5 meters of the extreme end of bridge wings at Conning Position Nos. 4 and 5?	☐
5.3	Is it possible to regulate precisely any required signals?	☐
6	**Bridge wings**	
6.1	Do bridge wings extend to the extreme breadth, and provide a clear passage of at least 1.0 meters wide from wheelhouse doors to extreme ends?	☐
6.2	If not, are portable or swing-out platforms provided?	☐
6.2.1	Portable or swing-out platform if any, extended to the full breadth, and be of size, strength and rigidity to hold two persons and equipped with horizontal handrails and a toe board with a minimum10.16cm height?	☐
6.3	A spotlight or searchlight capable of illuminating the side of the vessel at the waterline is required to be fitted at the extreme end of each bridge wing on all vessels whose maximum beam is 30 m (98.4 feet) and over. For all vessels, such lights should be of the hinged type and located on the after portion of the bridge wing to allow them to be swung out of the way behind the bridge wing when not in use, or mounted below the bulwark if fitted forward. The normal work position of the pilot on the bridge wing is at the forward outboard corner where he can look forward and down, as well as over the side and aft. Lights, bearing repeaters and other equipment must not interfere with the pilot's ability to do that.	☐
7	**Ladders**	
7.1	Accommodation ladder provided SOLAS V/23?	☐
7.2	The pilot ladder shall be certified by the manufacturer as complying with this regulation or with an international standard acceptable to the ACP.	☐
7.3	Ship side doors used for pilot transfer shall not open outward. The point of ingress or egress must be no less than 1.5 m (5 feet) above the surface of the water. The opening used for embarking or disembarking shall not be less than 1.5 m (5 feet) wide and 2.2 m (7.2 feet) tall.	☐
8	**Miscellaneous**	
8.1	If the vessel is over 100 meters in length, is a fixed blue steering light installed at or near the stem and visible from the bridge along the centerline and its height as close as possible to the height of eye level at the bridge?	☐
8.1.1	If direct view ahead at conning position No.1 is obscured two blue steering lights fitted ahead of conning positions Nos. 2 and 3.	☐
8.1.2	The wheelhouse position directly aft of the steering lights shall be marked with a small labeled plaque on the window sill which can be located in the dark by feel.	☐

8.1.3	Suitable control switch located on bridge or forecastle or both?	☐
8.1.4	The control or rheostat switch for the steering light shall also have dimming capabilities in order to adjust the intensity of the light to different backgrounds or atmospheric conditions.	☐
8.2.1	For vessels with max. beam of 30 meters or more: Is a spotlight or a searchlight located on the after portion of the extreme end of each bridge wing or mounted below the bulwark if fitted forward?	☐
8.2.2	Are these lights capable of illuminating the side of vessel and able to be swung out of the way, behind the bridge wing, when not in use?	☐
8.2.3	The normal work position for the pilot is at the outboard corner where he can look forward and down as well as over the side and aft. Are there any lights, bearing repeaters or other equipment obstructing him from doing so?	☐
8.3	Ships of 150 gross tonnage (ITC69) and over shall be fitted with a standard magnetic compass and with a steering compass unless the information provided by the standard compass is made available and is clearly readable by the helmsman at Conning Position No.1.	☐
8.3.1	Means must be available for taking bearings, as nearly as practicable over an arc of the horizon of 360° .	☐
8.3.2	Residual deviation of the magnetic compass must be verified to be less than 7 degrees by swinging the vessel on various headings. Such verification by a recognized calibration authority must have been accomplished, and an accurate deviation table issued, within the previous 12-month period. If necessary, the compass must be adjusted to reduce the observed deviation to less than 7 degrees. Calibration cards issued and signed by the master will be accepted as long as the deviation is less than 6 degrees.	☐
8.3.3	Ships of less than 150 gross tonnage shall be fitted with a steering compass and have means for taking bearings.	☐
8.4	Ships of 500 gross tons (ITC69) and over shall be fitted with a gyro compass. The master gyro compass or a gyro repeater shall be clearly readable by the helmsman from the main conning position. On ships of 1,600 gross tonnage (ITC69) and over, a gyro repeater or gyro repeaters shall be provided and shall be suitably placed for taking bearings as nearly as practicable over an arc of the horizon of 360°. A gyro repeater shall be provided which shall be readily visible and useable by the pilot from Conning Position No.1.Maximum residual steady state gyro error shall not exceed 2°. The maximum divergence in reading between the master compass and repeaters under all operational conditions should not exceed plus or minus 0.5°.	☐
8.5	All vessels over 300 gross tons or over 20 meters LOA must be equipped with an AIS transponder that meets the standards set by the International Maritime Organization(IMO). With regard to combined and multiple units (tug-and-tows), only the tug will be required to be equipped with an AIS transponder.	☐
8.5.1	The AIS system installed onboard vessels shall be Class A AIS ship borne equipment according to IMO MSC 74 (69) Annex 3, “Recommendation on Performance Standards fora Universal Ship borne Automatic Identification Systems (AIS)”, as amended.	☐
8.5.2	The AIS equipment shall be type-approved according to standard IEC 61993-2.	☐
8.5.3	The AIS equipment shall be installed according to IMO "Guidelines for Installation of Ship borne Automatic Identification System (AIS)", including the installation of a Pilot Plug. The Pilot Plug shall be close to conning position No. 1 on the navigation bridge. This plug shall be labeled "AIS PILOT PLUG", and shall have nearby a USA standard (NEMA 5-15R)120V, AC, 3-prong power receptacle, to provide power to the pilot's laptop computer. This receptacle shall be connected to emergency power.	☐
8.5.4	In addition, the Panama Canal will make an exception with older ships that only have100VAC to 110VAC electrical service available on the bridge, instead of the required120VAC, as well as with those vessels that have a 2-prong USA standard electrical outlet, instead of the required 3-prong outlet. This lower voltage and type of outlet (NEMA 1-15R) will be acceptable; however, the Canal will not accept vessels with 220-240 VAC electrical service.	☐
8.5.5	All Neopanamax vessels intending to transit the Panama Canal must install a USA standard (NEMA5-5-15R) 120V, AC, 3-prong power receptacle close to the designated location of the RTK antenna, which is part of the Pilot Portable Unit (PPU) utilized by Panama Canal pilots. Vessels that cannot comply with the installation of the required power receptacle outside the wheelhouse due to the nature of their cargo are exempt from this compliance; however, these vessels must provide an extension cord and an alternate access to route the extension cord from a power receptacle inside the wheelhouse to the PPU antenna on the bridge wing. This will prevent the antenna power cable from being slashed and/or ruptured by the bridge wing doors.	☐

8.6	Recommend pull in capacity of deck machinery to be verified on board.	☐
8.6.1	All mooring winches shall be capable of retrieving the lines used for pulling the locomotive wires onboard at a rate of 120 feet (37 meters) per minute.	☐
8.6.2	Anchors shall be retrieved at a rate of 3 minutes per shot.	☐
8.7.1	Does anything extend beyond any portion of the hull of the vessel, whether permanent or temporary?	☐
8.7.2	If yes, please specify :	
8.8	Winches fore and aft are capable of retrieving wires with a minimum speed of 37 meters/minute?	☐
8.9	Are a total of 12 mooring lines (6 forward/ 6 aft) each of length at least 200 meters and with an eye of at least 1.5 meters spliced in one end? Wire ropes not accepted.	☐
8.10	Notwithstanding that the propulsion is controlled from the bridge or the engine room, the maximum allowable response time of the propulsion system from stop to ahead or from stop to astern shall not exceed 10 seconds.	☐
9	**Construction, number and location of chocks and bitts**	
9.1	For vessel less than 60.96 meters in length and not exceeding 15.24 meters in beam:	
9.1.1	Is there double chock at the stem and stern?	☐
	or two single chocks at the stem and stern, placed port and starboard, not more than 2.5 meters abaft the stem or 3.0 meters forward of the stern, and not more than 3.0 meters off the center line?	☐
9.2	For vessel 60.96 meters to 121.92 meters in length and not exceeding 22.86 meters in beam	
9.2.1	Is there a double chock at the stem and stern?	☐
	or two single chocks at the stem and stern, placed port and starboard, not more than 2.5 meters abaft the stem or 3.0 meters forward of the stern, and not more than 3.0 meters off the center line?	☐
9.2.2	and in addition two single chocks, placed port and starboard, 9 to 16 meters abaft the stem and 9 to 16 meters forward of the stern?	☐
9.3	For vessel121.92 meters to 173.74 meters in length and not exceeding 22.86 meters in beam:	
9.3.1	Is there a double chock at the stem and stern?	☐
	or two single chocks at the stem and stern, placed port and starboard, not more than 2.5 meters abaft the stem or 3.0 meters forward of the stern, and not more than 3.0 meters off the center line?	☐
9.3.2	and in addition a double chock, placed port and starboard, 12 to 16 meters abaft the stem, and a single chock, placed port and starboard, 24 to 28 meters abaft the stem.	☐
9.3.3	and a single chock placed port and starboard, 12 to 16 meters forward of the stern?	☐
9.4	For vessel over 173.74 meters long, or 22.86 meters in beam or over, is there:	☐
9.4.1	A double chock at the stem and stern?	☐
	or two double chocks at the bow and stern, port and starboard, not more than 8 feet (2.5 m) abaft the stem or 10 feet (3 m) forward of the stern and not more than 10 feet (3 m) off the center line.	☐
9.4.2	a double chock, port and starboard, 12 to 16 meters abaft the stem and a single chock, port and starboard, 24 to 28 meters abaft the stem.	☐
9.4.3	A double chock, port and starboard, 12 to 16 meters forward of the stern and a single chock, port and starboard, 24 to 28 meters forward of the stern?	☐
9.4.4	Vessels with unusually high freeboard, large flared bows and/or sterns such as Container/car carriers are required to provide single closed chocks, further aft than those above for tugs, or to fit recessed tug bits.	☐
9.5	For vessels with a maximum beam of 27.73 meters or more, two additional single chocks on the stern, symmetrically spaced 3 to 6 meters from the centerline.	☐
9.6	For vessel over 274.32 meters in length with maximum beam of 27.73 meters or more is extending to the stern： Are double chocks (SET 4)required on port and starboard, 12 to 16 m forward of the stern, 13 meters or more above the waterline at FW draft?	☐
9.7	The single and double chocks are of a type approved for Panama Canal use.	☐

9.7.1	Single chock -shall have a throat opening of not less than 650 square cm (100 square inches) in area, preferred dimensions are 12 x 9 inches (305 x 230 mm) and SWL 100, 000 pounds (45.36t) / 445kN.	☐
9.7.2	Double chock -shall have a throat opening of not less than 900 square cm (140 square inches) in area, preferred dimensions are 14 x10 inches (355 x 255 mm) and SWL 140,000 pounds (64t) / 628kN.	☐
9.8	Each single chock is accompanied by a bitt capable of withstanding a strain of 45.36t/ 445kN.	☐
9.9	Each double chock located at the stem or stern have two pairs of heavy bitts with each bitt of each pair capable of withstanding a strain of 64t/628kN.	☐
9.10	Other double chocks shall have a pair of accompanying heavy bitts with each bitt capable of withstanding a strain of 64t/628kN.	☐
9.10.1	All chocks for towing wires shall be of heavy closed construction and shall have a convex bearing surface with a radius of not less than 180 mm (7 inches). The convex surface shall extend so that a wire from the bitt, or from the locks locomotive through the chock, shall be tangent to the 180 mm (7 inches) radius at any angle up to 90 degrees with respect to a straight line through the chock.	☐
9.10.2	No part of the vessel which is in contact by the towing wires，at any angle, have a radius of less than 180 mm.	☐
9.10.3	If use the existing roller chocks that not less than 15 meters (49 feet) above the waterline at the vessel's maximum Panama Canal draft and provided they are in good condition, they should meet all of the requirements for solid chocks as specified in 9.7.1, 9.7.2, 9.10.1 and 9.10.2.	☐
9.11	Where recessed tug bollards are installed in the hull.	☐
9.11.1	Are the recessed hull bits not less than 3.7 meters and not more than 4.6 meters above the vessels waterline?	☐
9.11.2	Are they installed as far forward as possible, both port and starboard sides, where the bow flare does not exceed 25 degrees as measured from the vertical line of the vessel's side?	☐
9.11.3	Vessels that have an appreciative variation in draft. Are two sets of recessed hull bitts so arranged that one bitt is located above the other?	☐
9.12	**NEO PANAMAX and PANAMAX PLUS VESSELS**	
9.12.1	A double chock at the stem and stern? (mooring) (For vessels with a length above 294.13m or breath above 32.31m)	☐
	Or one double chock-at the stem and stern, port and starboard, not more than 2.5 meters abaft the stem or 3.0 meters forward of the stern (not applicable to vessels with transom sterns), and not more than 3.0 meters off the center line. (For vessels with a length above 294.13m or breath above 32.31m)	☐
9.12.2	A double chock and one pair of accompanying heavy bitts, port and starboard, 2.5 to 24 meters abaft the stem (SET 1 mooring),and each bitt shall be capable of withstanding a SWL of 64 t (628 kN) in mooring operations.(For vessels with a length above 294.13m or breath above 32.31m)	☐
9.12.3	A double chock and one pair of accompanying heavy bitts, port and starboard, 3 to 24meters forward of the stern (SET 4 mooring),and each bitt shall be capable of withstanding a SWL of 64 t (628 kN) in mooring operations. (For vessels with a length above 294.13m or breath above 32.31m)	☐
9.12.4	A double chock and one pair of accompanying heavy bitts (preferred diameter 500mm) port and starboard 3-14 meters off centerline at the bow and stern (towing), and each bitt shall be capable of withstanding the stress caused by a SWL of 90 t (883kN).	☐
9.12.5	A double chock and one pair of accompanying heavy bitts port and starboard 24-70meters abaft of stem (SET2 towing), and each bitt capable of withstanding a SWL of 90 t (883kN).	☐
9.12.6	A double chock and one pair of accompanying heavy bitts port and starboard 24-60 meters forward of stern (SET3 towing), and each bitt capable of withstanding a SWL of 90 t (883kN).	☐
9.12.7	The rest of the chock locations for use in mooring operations shall be accompanied by one pair of heavy bitts meeting the minimum SWL of 64 t (628 kN).	☐
9.12.8	Double chock -shall have a throat opening area of not less than 900 square centimeters, preferred dimension are 14 x 10 inches (355 x 255 mm) and SWL 90 t /883kN in towing operations and a minimum SWL 64t / 628kN in mooring operations from any direction.	☐
9.12.9	Vessels with large flared bows, pronounced counters or unusually high freeboards, such as LNG carriers, container vessels, cruise vessels or vehicle carriers, will be required to provide closed chocks located further aft/forward, respectively, than those required for SET2/SET3 above for correct positioning of assisting tugs. These vessels may be required to fit recessed tug bollards	☐

	into the hull in lieu of the chocks so that tugs can work without coming in contact with the flare or counter and without requiring extra-long lines and/or inefficient leads. Recessed bitts shall meet the 90 tons (883kN) SWL required above.	
9.12.10	All vessels wishing to transit the new locks will be required to have mooring winches in operation and fitted with manila or synthetic mooring lines before every transit to be used during mooring operations at the new locks.	☐
9.12.11	If use the existing roller chocks that not less than 15 meters (49 feet) above the waterline at the vessel's maximum Panama Canal draft and provided they are in good condition, they should meet all of the requirements for solid chocks as specified in 9.10.1, 9.10.2 and 9.12.8.	☐
10	**Requirements for Pilot Platforms and Shelters on Certain Vessels**	
	As required by the ACP Navigation Regulations, Article 64, suitable platforms and shelters must be provided by certain vessels for assisting pilots. Control pilots will position assisting pilots where they can best contribute to vessel control, which may be at any of the existing pilot platform locations: (1) Vessels with the bridge in the extreme after part of the vessel (assisting pilot platforms will normally be forward). (2) Vessels with the bridge in the extreme forepart of the vessel (assisting pilot platforms will normally be aft).	
10.1	Platforms must afford suitable shelter to protect assisting pilots from rain and sun.	☐
10.2	Each platform is to be erected directly over the furthest point forward of the extreme beam at the waterline and not more than six inches inboard from the outside of the vertical plane of the shell plating. For vessels where the bridge is located forward, these pilot platform shelters will be required to be erected directly over that position which is the furthest point aft of the extreme beam at the waterline and not more than six inches inboard from the outside surface of the vertical plane of the shell plating.	☐
10.3	For all vessels whose extreme beam is 24.38 m or more:	
	Provide bridge wing shelter platforms for the protection of control pilots at Conning Positions No. 4 and 5. Alternate arrangements, including portable shelters, which provide equivalent or better protection and visibility, may be acceptable.	☐
10.4	The deck of pilot platforms shall be made of wood or other material with non-skid surface, sufficient to dry footing at all times. Overhead awning should be rigged to avoid spilling water inside the framework of the shelter during rain.	☐
11	**Deck Load Cargo**	
11.1	The vessel carrying a deck load shall have it so stowed as to be sufficiently clear to provide safe and clean, working space around all chocks, bitts, and other gear used in transiting and so arranged as to not obstruct any direct lead from chock to bitts.	☐
11.2	Deck cargo shall be so stowed to provide safe passage to and from necessary working areas. If access to working spaces is necessary over a deck load, as with lumber, a catwalk will normally be required, unless a leveled, continuous surface free of encumbrances such as lashings is already provided. When catwalks are required they shall be at least 91.5 cm (3 feet) in width and provided with adequate guard rails. Where the deck cargo is sufficiently level for gangway purposes without a catwalk, the guard rails, or life lines, spaced not more than 30.5 cm (12 inches) apart vertically, must be provided on each side of the deck cargo to a height of at least 1.20 meters (4 feet) above the cargo.	☐
11.3	If deck access is provided on deck adjacent to deck cargo, a leveled continuous passage at least 91.5 cm (3 feet) in width shall be provided. This access shall be unencumbered by shoring, lashings or other obstacles deemed hazardous to normal passage. Height over passageway may not be less than 2.134 meters (7 feet).	☐
11.4	When personnel are required to traverse over deck cargo, ladders adequate for safe access must be provided between the deck and top of deck cargo. Such ladder must be provided with guardrails or safety lines as previously described for catwalks.	☐
11.5	Deck cargo shall be stowed securely to prevent any shifting or displacement during access to working spaces by personnel.	☐
11.6	Vessels may transit the Panama Locks with deck cargo protruding over one side only, not to exceed 4.572 meters (15 feet); but the maximum beam, including protrusions, must not exceed 25.90 meters (85 feet).	☐
11.7	An adequate bulwark or railing shall be provided between deck cargo and the ship's side.	☐
11.8	All sharp edges and projections on deck cargo adjacent to normal accesses shall be adequately protected to prevent injury to personnel.	☐
11.9	Sufficient lighting shall be provided by the vessel to illuminate deck accesses and working	☐

	spaces during hours of darkness.	
12	The pilots shall be provided with a cabin that is clean, serviceable, darkened and equivalent to an officer′s cabin. These cabins should have a private working toilet facility.	☐

X applicable and in order O outstanding recommendation — not applicable

Issued at _____ (_____)

Issued on Surveyor to CHINA CLASSIFICATION SOCIETY

Rev.2.0 202307

附件 3

中 国 船 级 社

CHINA CLASSIFICATION SOCIETY

Form SOC(SCA-RN)
No._____

STATEMENT OF COMPLIANCEWITH THE SUEZ CANAL SHIP ARRANGEMENT AND EQUIPMENT REQUIREMENTS

Name of Ship _____

Distinctive Number or Letters _____

Port of Registry _____

Suez Canal Gross Tonnage _____

IMO No. _____

CCS No. _____

Date on which keel was laid _____

This is to confirm that
At the request of the _____, the undersigned surveyor to this Society did attend on board the vessel at _____on_____for the purpose of examining the equipment and arrangements to verify compliance with the Suez Canal Rules of Navigation.

It was found that the vessel complies with the above rules according to scope of work on the enclosed survey report (Form RNc) No._____

Note:
This statement is not issued on behalf of the Suez Canal Authority, but indicates compliance with CCS's understanding of Suez Canal Rules of Navigation. It is the prerogative of the Suez Canal Authority whether to accept this statement or to require additional evidence/ inspection of the arrangements installed.

Issued at _____ _____(_____)

Issued on _____ Surveyor to CHINA CLASSIFICATION SOCIETY

Rev.2.0 202307

附件 4

Form RNc
No._____

CHINA CLASSIFICATION SOCIETY

SURVEY REPORT FORM FOR COMPLIANCE WITH REQUIRED SHIP ARRANGEMENT AND EQUIPMENTS FOR TRANSITING THE SUEZ CANAL

No.	Vessel Name：	CCS No.
		Note
1	Can suitable accommodation (officer standard) be put at pilot's disposal?	☐
2	Can a sheltered place be provided for 3-6 mooring-boat men?	☐
3	And for the 2 shore electricians for the projector?	☐
4	Lifting appliance for hoisting/lowering mooring-boats of 3 tons weight including crewmembers is provided. (Handling of boats to be carried out well clear from the propellers)	☐
5	At least 6 floating mooring ropes are provided. The number may be reduced to 4 on ships with tension mooring wires (Synthetic ropes likely to produce sparks forbidden on oil and gas tankers)	☐
6	One fire wire rope fore and aft for use by tugboat in case of emergency is provided.	☐
7	An approved accommodation ladder is provided.	☐
8	An approved searchlight with certificate stating compliance with the Suez Canal Authority Regulations is provided. (Gas tankers must have their own searchlights)	☐
9	Electric cables and connection for the searchlight are permanently fixed, insulated and gastight.	☐
10	At the end of cables, is a fixed and gastight socket installed close to the searchlight?	☐
11	Is the number of generators and their individual power output sufficient to ensure uninterrupted supply to the searchlight in the event of stoppage of one of the generators?	☐
12	Rudder angle indicator and engine rpm indicator so located and illuminated as to be easily visible by the pilot.	☐

13	Are overhead lights (deck lights) fitted, visible all round the horizon with a minimum of range of 200 meters?	☐
14	Bridge wing projector on either side to show the canal banks clearly. Power about 4 lux and minimum 200 meters range.	☐
15	Red Suez stern light available?	☐
16	The vessel is equipped with the signal lights required for transit through the canal.	☐
17	Two classed anchors located forwarded of the collision bulkhead fitted with own chain or wire cable, and capable of being released, and hoisted by means of a windlass. (in lieu of the above, vessels of less than 1500 SCGT must be equipped with one working anchor)	☐
18	Lights to illuminate the funnels to facilitate the identification of the vessel by night.	☐
Note	“×”— Applicable and in order “O”— Outstanding recommendation “—” Not applicable	☐

Rev.2.0 202307