[Ref. 4]

45,000—18-5-03

DEPARTMENT.

Paper taken out of the Records from the charge of the Referencer.

Press / Miscellaneous / Routine No. 811-13, dated 17-9-1897

Date taken out.	For what purpose. Department.	C. No.	Year.	Initials of clerk taking the paper or of attender.	Date returned.	Initials of attender.
31/1/04	Mar	1208	07	[illegible]	29/1/07	[illegible]
30-9-06	Do	1246	05	[illegible]		
31/5/06	in 906/06			[illegible]	25-10-06	[illegible]
27/10-06	Mar	1714	06	[illegible]	6-11-06	
14-11-06	—	1848	06		16-1-07	[illegible]
28/1/07	Mar	71	07	[illegible]	12/3/07	[illegible]
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~		~~[illegible]~~		
30/10/30	Mar	9028	30	[illegible]	4-3-31	
14/10/38	[illegible]	12380	38	[illegible]	17/11/38	[illegible]
16 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19-1-48	
10/9/52	Mco	8200	52	[illegible]		

Marine (1897) Department.

G.O., No. 811-12-13 bis

DATED 17 September 1897

[Despatch Abstract.]

Cyclone Code: Approving the revised — as amended by Government and directing its publication in the Fort St. George Gazette for guidance in supersession of all previous editions.

Cyclone Code: Forwarding copy of Pro: approving the revised — as amended by Govt. and directing its publication in the Fort St. George Gazette for guidance in supersession of all previous editions.

Do. Do.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
	6298. Mar.		14.10.97				
	1016 &		11-12-97.				

C. No 1200 704

9-10-97
31-10-97

Government {1897} of Madras.

MARINE.

Recd. } 1897. *Enclosures*

Regd. *Spare copies*

G.O., Nos. 811, 812 & 813, 17th September 1897.

SEPTEMBER.

Cyclone Code

Forwarding copy of proceedings approving the revised — as amended by Government, and directing its publication in the *Fort St. George Gazette* for guidance in supersession of all previous editions.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

Read—the following papers :—

Letter from the Chairman, Harbour Trust Board, dated 24th June 1897, No. 114 C.
Endorsement thereon by the Presidency Port Officer, dated 8th July 1897, No. 422/254 G.
Letter from the Presidency Port Officer, dated 17th August 1897, No. 422/306 G.

Order—No. 811, Marine, dated 17th September 1897.

The revised Cyclone Code, as amended by Government, is approved, and will be published in the *Fort St. George Gazette* for guidance in supersession of all previous editions.

[Here enter Nos. 812 and 813, Marine, dated 17th September 1897.]

(True Extract.)

(Signed) D. McNEIL CAMPBELL, Colonel, R.E.,
Secretary to Government.

To the Presidency Port Officer.
" Chairman, Harbour Trust Board.
" Surgeon-General with Government.
" Commissioner of Police.
" Inspector-General of Police.
" Government Astronomer.
" Meteorological Reporter.
" Superintendent of Telegraphs, Madras Division.
" President, Madras Municipality.
" Public Department.
" Revenue Department.
" Public Works Department.
" Superintendent, Government Press, with notification.
Copy forwarded to the Deputy Adjutant-General, Madras Command, for the information of His Excellency the Lieutenant-General Commanding the Forces.

Endorsement—No. 812, Marine, dated 17th September 1897.

Copy forwarded to the Government of India, Military (Marine) Department.

(By order.)

(Signed) D. McNEIL CAMPBELL, Colonel, R.E.,
Secretary to Government.

Endorsement—No. 813, Marine, dated 17th September 1897.

Copy forwarded to the Meteorological Reporter to the Government of India.

(By order.)

(Signed) D. McNEIL CAMPBELL, Colonel, R.E.,
Secretary to Government.

Ed. A. F. Eccleston.

Appendix to G.O., No. 811, Marine, dated 17th September 1897.

MADRAS CYCLONE CODE.

CHAPTER I.

General Arrangements in connection with the hoisting of Storm Signals at Madras and Coast Ports.

1. The arrangements for the communication to the Presidency Port Officer, to the Deputy Port Conservator, Madras, and to the several coast Port officers, of information respecting the formation, growth and course of cyclonic storms, necessary for their guidance in hoisting the storm signals, are carried out by the Meteorological Reporters at Simla and Calcutta under the general direction of the Meteorological Reporter to the Government of India.

2. The Madras ports included in this storm-warning system are as follows:—

A.—Ports on the Coromandel Coast.

Gopalpur.	Cocanada.	Porto Novo.
Calingapatam.	Masulipatam.	Negapatam.
Bimlipatam.	Madras.	Pámban.
Vizagapatam.	Cuddalore.	Tuticorin.

B.—Ports on the Malabar Coast.

Cannanore.	Cochin.	Beypore.
Tellicherry.	Calicut.	Kundapur.
Mangalore.		

3. The Meteorological Reporter to the Government of Bengal (Calcutta) supplies the information and works the system for those ports classed as belonging to the Coromandel Coast, and the Assistant Meteorological Reporter for India (Simla) for the Malabar Coast ports as defined above. These officers also afford information respecting the first indications of bad weather in the Bay of Bengal and the Indian Ocean to the Presidency Port Officer, to the Deputy Port Conservator and to the Chief Engineer for Irrigation, Madras.

4. As soon as the existence and probable course of a cyclonic storm in the Bay of Bengal or the Indian Ocean has been ascertained by the Meteorological Reporter of Calcutta or Simla, the Deputy Port Conservator, Madras, Port officers of the ports likely to be affected by the storm and the Chief Engineer for Irrigation, Madras, will be informed and warned by the Reporter appointed to give such warnings to his port. The warning signal should usually be hoisted immediately after the receipt of this information. The Meteorological Reporter will continue to keep the Deputy Port Conservator, Madras, and Port officers of the warned ports acquainted with the growth, progress, course and other features of the storm, which will be useful as a guide to these officers in hoisting, when necessary, the danger signal. The danger signal should be hoisted as soon as the Deputy Port Conservator, Madras, or the Port officer, considers it advisable to warn the shipping that a cyclone is approaching either the port itself or the coast in the near vicinity. By these arrangements, the Meteorological Reporters will transmit information and warnings direct to the Presidency Port Officer and Deputy Port Conservator at Madras and the Port officers of Gopalpur, Bimlipatam, Vizagapatam, Cocanada, Masulipatam, Negapatam, Tuticorin, Mangalore, Cochin, Calicut and Tellicherry. At the remaining ports, viz., Calingapatam, Cuddalore, Porto Novo, Cannanore and Beypore, where the signals will be hoisted by the Port Conservators, the Port officers under whom they are immediately placed will instruct them by urgent telegram to hoist the warning and danger signals at the same time that they hoist them at their own ports. By this arrangement information respecting bad weather and direction relating to the hoisting of storm signals will be communicated to the—

Port Conservator of Calingapatam—By the Port Officer of Gopalpur.
Port Conservators of Cuddalore and Porto Novo—By the Port Officer of Negapatam.
Port Conservator of Beypore—By the Port Officer of Calicut.
Port Conservator of Cannanore—By the Port Officer of Tellicherry.
Port Conservator of Kundapur—By the Port Officer, Mangalore.

5. Copies of all telegrams despatched to the Deputy Port Conservator at Madras and to Port officers relating to the approach of cyclonic storms, will be sent at the same time to the Presidency Port Officer, Madras, in order that he may be kept fully acquainted with the weather information and instructions communicated by the Meteorological Reporters to the Port officers subordinate to him.

6. The duties of the Meteorological Reporters at Simla and Calcutta are confined solely to furnishing as definite, full, and early information as possible of the character, position, course, probable time of approach, and varying phases of cyclonic storms, to the Port officers of all ports to which the cyclone will probably cause dangerous weather and a high sea. The responsibility of hoisting and taking down the storm signals rests solely with the Port officers at coast ports, and at Madras with the Deputy Conservator of the Port. These officers will usually be guided mainly by the information received from the Meteorological Reporter, but if that information be insufficient or be delayed in transmission, or if telegraphic communication be suspended by breaks in the lines, they will then be guided by the indications of the barometer, force of the wind, state of the sea, and general aspect of the weather. The Deputy Conservator of the Port of Madras should also place himself in communication with the Meteorological Reporter to the Government of Madras or the Government Astronomer; both these officers should afford him full information.

7. The storm signals to be exhibited at the ports specified in paragraph 2, above, (with the exception of Porto Novo, Pámban, Tuticorin, Beypore and Kundapur) are those specified in Appendix A.

(*a*) At Porto Novo, Pámban, Tuticorin, Beypore and Kundapur the storm signals to be exhibited are those specified in Appendix B.

8. The Deputy Port Conservator at Madras and all Port officers noting the appearance of suspicious weather before the receipt of any telegrams from the Meteorological Reporter in connection (or co-operating) with them, should communicate the information without delay to that officer.

9. The Deputy Port Conservator at Madras and all Port officers receiving telegrams from the Meteorological Reporters during a storm should send a brief statement, after the cyclone has passed away, of the telegrams received from the reporters and of the exact times when they were delivered by the telegraph officers, &c., in order that the Meteorological department may exercise an effective check over this part of the working of the system and secure the necessary rapidity of telegraphic communication required for the proper working of the system.

CHAPTER II.

General Arrangements to be made at Madras on the "Warning" "Danger" or "Great Danger" Signals being displayed at the yard or Gaff of the Port Flagstaff.

1. These signals will be repeated at the Fort flagstaff.

2. All arrangements in connection with the safety of the shipping will be made by the Deputy Port Conservator upon whom solely the responsibility will rest.

3. When either of these storm signals is hoisted at or lowered from the flagstaff, the fact is to be communicated as soon as practicable by the Deputy Conservator of the Port to the undermentioned officials, viz.:—

The Secretary to Government, Marine Department, when in Madras.
The Private Secretary to His Excellency the Governor, should His Excellency be in Madras.
The Presidency Port Officer.
The Secretary, Harbour Trust Board.
The Commissioner of Police, through the Deputy Commissioner of Police.
The Executive Engineer, St. Thomas' Mount.
The Collector of Chingleput.
The Chief Commissariat Officer and Commissariat Storekeeper-General.
The Assistant Adjutant-General, Madras District, Fort St. George.
The President, Madras Municipality.
The Government Telephone Exchange.

4. The Government telephone exchange will be kept open day and night, whilst the signals are hoisted.

5. The life-saving apparatus of Port and Pier Traffic Departments will be kept ready for immediate use.

6. Should the Deputy Port Conservator require any assistance from the following departments, it will be given at once upon that officer applying for same:—

Police Boat establishment (on application to the Deputy Commissioner of Police).
Harbour Engineer and Pier Traffic establishments (on application to Chairman, Harbour Trust Board).

7. On the "Danger" signal being hoisted, the Commissioner of Police will place at the disposal of the Deputy Port Conservator two mounted orderlies, and keep fifty men available at the beach for duty.

CHAPTER III.

Wreck arrangements.

1. Should wreck occur, or the Deputy Conservator deem the same imminent, the following signal will be hoisted:—

By day—2 balls vertically. | By night—2 white lights vertically.

2. Should the Deputy Port Conservator consider that there will be danger to life, he will inform the following officers and departments:—

The Port Surgeon.	The Ordnance Department.
The Resident Surgeon, General Hospital.	The Commissariat and Transport Department.

3. Upon receipt of this information the Port Surgeon taking with him a portion of his establishment and medicines and surgical appliances will immediately proceed to the scene of wreck and render all assistance possible.

4. The Resident Surgeon, General Hospital, will make preparations to receive sick and wounded. The Ordnance Department will comply with any requisitions from the Deputy Port Conservator to provide tents for ship-wrecked people and men to pitch them.

5. The Commissariat and Transport Department will be prepared to comply with any requisitions from the Deputy Port Conservator to supply trollies, dandies, blankets, towels, brandy, water and other medical comforts, &c., and send a sufficient number of men to look after the trollies and to carry the dandies.

6. In the event of a working party being required from the troops in garrison they will be supplied by the Assistant Adjutant-General, Madras, upon application from the Deputy Port Conservator.

Police Department.

7. On the Inspector of Marine Police seeing the wreck signal, or being informed by the Deputy Conservator of the Port of imminent danger of wrecks occurring, he will promptly send intelligence to the Deputy Commissioner of Police, who will immediately increase that division to such an extent as may be practicable at the time.

8. The entire Police force pending the arrival of the Commissioner will be under the Deputy Commissioner, who will consult the Deputy Conservator of the Port on the spot as to where the services of his men are likely to be emergently required, and will issue whatever detailed orders may be requisite.

9. The Police will be mainly restricted to their own proper duties, *i.e.*, the maintenance of order; protecting personal or other property washed on shore; supervising the conveyance of the shipwrecked crews and passengers to the nearest shelter, and to hospital if necessary; bringing back the hammocks, doolies and sick-carts; guarding or removing the dead, &c. They are not to be employed in hauling ropes or recovering wreckage or cargo, save in emergent circumstances when other labour is not available.

10. The Commissioner of Police will see that duties are so apportioned as to enable the men to be relieved from the reserves as frequently as circumstances may render requisite.

11. All officers and men will be in uniform.

APPENDIX A.

Day Signals.

1. *Cautionary Signal.*

Bay of Bengal.

The square flag W of the International Code hoisted on the storm signal staff as a cautionary signal indicates the existence of disturbed squally weather in the Bay of Bengal which may be the first stage in the formation of a cyclonic storm, and which, if it develops, is likely to affect that part of the coast on which the port is situated.

The disturbed conditions may pass away without developing into a cyclonic storm, in which case the cautionary signal will be taken down as soon as it is certain that stormy weather will not shortly follow. If, however, the disturbed weather be the first indication of the probable formation or approach of a cyclonic storm, the cautionary signal will be followed by one of the ordinary storm signals indicating the probable position, character and track of the approaching storm.

Arabian Sea.

The square flag W of the International Code hoisted on the storm signal staff as a cautionary signal indicates the existence of disturbed weather off some part of the West Coast of India in the neighbourhood of the port or ports at which the signal is hoisted, or the advance of a cyclonic storm across the Peninsula from the Bay of Bengal which may hence shortly cross the Western Ghâts and give squally or stormy weather in the Arabian Sea.

The disturbed conditions may in either case pass away without giving stormy cyclonic weather to the West Coast ports or to the adjacent parts of the Arabian Sea, in which case the cautionary signal will be taken down as soon as it is certain that stormy weather will not shortly follow. If, however, the disturbed weather be the first indication of the probable formation or approach of a cyclonic storm, this cautionary signal will be followed by one of the ordinary stormy signals indicating the probable position, character and track of the approaching storm.

2. *Warning Signal.*



A ball indicates that a cyclonic storm has formed, which will probably advance to that part of the coast on which the port is situated, but is still at a considerable distance from it. The same signal will also be hoisted at the larger and more important ports on the West Coast of India to indicate that a storm has formed in the Arabian Sea at some distance from the coast and will shortly cross one or other of the tracks of vessels leaving these ports, but is not likely to give the ports bad weather. The Port Officers, when instructed to hoist the warning signal, will also be informed of the object of the signal so as to communicate its full purport to masters of vessels about to leave the port.

3. *Danger Signals.*



(1) A cone apex downwards indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast considerably to the south of the port.

(2) A cone apex upwards indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port, and that its centre will probably cross the coast considerably to the north of the port.

(3) A drum indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast over or near to the port.

In order to indicate that a cyclonic storm in the sea area near a port is of great intensity, a ball is added to (and placed underneath) the corresponding danger signal.

4. *Great Danger Signals.*



(1) A cone apex downwards and ball below indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast considerably to the south of the port.

(2) A cone apex upwards and ball below indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast considerably to the north of the port.

(3) A drum with a ball below indicates that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast over or near to the port.

Night Signals.

1. *Cautionary Signal.*

None.

2. *Warning Signal.*



A red light (corresponding to day warning signal) indicates that a cyclonic storm has formed, which will probably advance to that part of the coast on which the port is situated, but is still at a considerable distance from it.

3. *Danger Signals.*



(1) A red light vertically above a white light corresponds to day signal No. 1 and indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast considerably to the south of the port



(2) A red light vertically below a white light corresponds to day signal No. 2 and indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast considerably to the north of the port.



(3) Two red lights in a vertical line correspond to day signal No. 3 and indicate that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast over or near to the port.

4. *Great Danger Signals.*



(1) Two red lights with a white light below arranged in a vertical line correspond to day great danger signal No. 1 and indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast considerably to the south of the port.

(2) Two red lights with a white light above in a vertical line correspond to day great danger signal No. 2 and indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast considerably to the north of the port.

(3) Three red lights in a vertical line correspond to day great danger signal No. 3 and indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast over or near to the port.

15-11-06

APPENDIX B.

DAY SIGNALS.

1. *Warning Signal.*



A ball indicates that a cyclonic storm has formed, which will probably advance to that part of the coast on which the port is situated, but is still at a considerable distance from it.

2. *Danger Signal.*



A drum indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast over or near to the port.

3. *Great Danger Signal.*



A drum with a ball below indicates that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast over or near to the port.

NIGHT SIGNALS.

1. *Warning Signal.*



A red light (corresponding to day warning signal) indicates that a cyclonic storm has formed, which will probably advance to that part of the coast on which the port is situated, but is still at a considerable distance from it.

2. *Danger Signal.*



Two red lights in a vertical line correspond to day signal No. 2 and indicate that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast over or near to the port.

3. *Great Danger Signal.*



Three red lights in a vertical line correspond to day great danger signal No. 3 and indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast over or near to the port.

Marine

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

Letter from the Chairman, H. D. Bd. No. 114 (C) dy 24th June 1897
Endorsement thereon by the Presy. Port officer No. 422/254 Gdy 8th July 1897
Letter from the Presy. Port officer No. 422/306 Gdy 17th Augt. 1897 &c

No. 811 Marine dy 17th September 1897

The revised Cyclone Code, as amended by Government, is approved, and will be published in the Fort St. George Gazette for guidance in supersession of all previous editions.

17/9/97

To the Presy. Port officer
" Chairman, H. D. Bd.
" Surgeon General with Govt.
" Commissioner of Police
" Inspector General of Police
" Government Astronomer
" Meteorological Reporter
" Superintendent of Telegraphs, Madras Division
" President Madras Municipality
" Public Dept. — Revenue Dept.
" Public Works Dept.
" Superintendent, Govt. Press with notification.

Copy to the Deputy Adjutant General, Madras Command, for the information of His Excellency the Lieutenant General Commanding the Forces.

(10—4,000—14-3-95.)

Copy

H. E. No. 812 Marine dy 17th Sep. 1897

Copy forwarded to the Government of India, Military (Marine) Department

17/9/97

7/12/97

H. E. No. 813 Marine dy 17th Sep. 1897

Copy forwarded to the Meteorological Reporter to the Government of India

17/9/97

7/12/97

RA

H. E. No. 812 Marine of 17th Sep. 1897

Copy forwarded to the Government of India, Military (Marine) Department

17/9/97

M

7/1/97

H. E. No. 813 Marine of 17th Sep. 1897

Copy forwarded to the Meteorological Reporter to the Government of India

17/9/97

M

7/1/97

R.S.

G.O. 811-13 Marine of 17 Sep 97

Await the return of the "Proof" of the Cyclone Code - sent to the P.S.O.

R.S.
13 Oct 97

SAW   for C. No 1313 Mar of 1897
urgent

Please get back from the Press, the revised Cyclone Code - Revised Code of Storm Signals has now come in, and it is necessary to see whether any change in the Cyclone Code will be required

R.S.
8 Oct 97

Enter C. Nos & despatch. Keep a copy with the present C. No -
R.S.

~~The~~ Same please.

G.O. 811 Mar / 17.9.97.   11/10/97

~~Telephone~~

~~To~~ S.A.W.

Origl. submitted. ~~Shall~~ I have telephoned to the press ~~to stop publication of the notification~~ and keep type standing. The issue of the order has been stopped.

R.R.
11/10/97.

CAW

Marine Pros. 8 11-12 &
17.9.97 forwarded
herewith.

Cr
11/10/97

Instructions
to be put in
Circular

Cdr
Submitted
to
12 Oct 97

S.A.W. For C No. 1313 dated 8/1877

Urgent

Please get back from
the Press, the revised
Cyclone Code. A revised
Code of Storm Signals
cannot come in, and
it is necessary to see
whether any change in
the Cyclone Code
will be required

(Sd) R P
8-10-97

Marine Department

Current Number 1151

(Revised Cyclone Code)

Note for orders.

The following are the instructions given to the Presidency Port officers in the office memo: No. 481 E., dated 29th July 1897 and the results thereof:—

Instructions.

(1) The changes proposed, and the reasons therefor should be explained

Results.

This is now done, and the reasons assigned are, generally as already surmised in this office.

(b) Vide Statement (appended) "D"

The omission of the provision for holding in readiness 2 mounted police orderlies and 50 policemen for duty is explained as warranted by the fact that the services of these men have not been required during the last ten years

But there has not been occasion during the last ten years, so far as I remember at Bombay to retain the provision

BPS

H.M. 10.9.97 R.P. 9.9.97

(a) To explain whether there are two sets of life-saving apparatus under separate control in the "Port Department."

(Para 6, Chapter III, present draft)

The words "Harbour Engineer and Pier Staffie "Establishments" are now substituted.

) Department.

RRENT No. 1157

From

The Presidency Port offic
Madras

No. 422/306 G

Dated 17 August 1897.

Received

Registered } 21-8-97

Enclosures 2.

Spare copies

SUBJECT.

Furnishing information in respect to changes proposed by the Chairman, Harbour Trust Board to the Cyclone Code.

(a) Flagged "A."

This instruction has not been carried into effect, and the rule as originally sent up is retained. The Presidency Port Officer explains why the existing elaborate arrangements are considered unnecessary here. The duties of the military authorities are reduced under the revised Code.

tion is sensible & may be introduced in the world could have given it before instead of the trouble of taking fresh?

BO 11/9/97 case

(2) To explain whether there are

BACK PAPERS.

No.	Date.
481 E dy 29-7-97 Heafield.	

FURTHER PAPERS.

No.	Date.

No.422/306-G

Presidency Port Office,
Madras, 14th August, 1897.

From

Commander H. A. Street, R.I.M.,
Presidency Port Officer,
MADRAS,

To

The Secretary to Government,
Marine Department,
CHEPAK.

Sir,

In accordance with the instructions contained in Marine Department Memorandum No.481 E dated 29th July 1897, I have the honour to supply the information required in connection with the changes proposed in the Cyclone Code.

Changes	Reason
Chapter III.	
The word "Wreck" has been omitted.	Because the arrangements specified are connected with "Warning" & "Danger" Signals only.
Para 2- Reconstructed; to all intents and purposes is same as before.	Because the Deputy Port Conservator thought it advisable -The rearrangement seems unimportant.
Para 3- omitted.	Considered unnecessary as the proposal in para 6 meets the case.
Para 4 becomes para 3 of revised Code.	Because para 3 of old Code has been cancelled.
The Presidency Port Officer has been added to the Officials to whom information is to be given of hoisting or lowering of Storm Signals.	Necessary that this Officer should be informed.
Three Paras numbered respectively 4-5 & 6 have been	As the arrangements specified in Chapter III of old

Changes	Reason
been added, & specify arrangements to be made by the Government Telephone Exchange, Port Conservator's Establishment, & Deputy Commissioner of Police.	Old Code appeared to be in a great measure unnecessary and certainly in regard to keeping 2 mounted Police Orderlies & 50 men available for duty from the time the warning Signal is hoisted. The services of these men have never been required during the last 10 years.
Government Telephone Exchange	Under existing arrangements the Exchange has to be kept open till the storm signals are hauled down. The new rule only makes these arrangements a little clearer.
Port life apparatus Port Conservancy life apparatus.	(1 is under the Deputy Conservator & 1 under the Traffic Manager.
Chapter 111. Reconstructed to meet "Wreck" requirements solely.	Reconstructed so as to refer solely to "Wreck" arrangements, experience having shewn that the elaborate arrangements specified under the headings Ordnance Department. Commissariat and Transport. Department. Police Department. Medical Department. to be made on the hoisting of the warning signal are altogether unnecessary.

2. The rules in the present code in regard to the aid to be afforded by the Military Departments of Government have been restored unaltered as directed in para 5 of the Memorandum under reply, but I would point out that these rules were made at a time when the vessels calling at the port were mostly sailing ships, and little or no intimation of the approach of bad weather was obtainable, so that it was necessary to provide for casualities which experience had shown might be expected on a Cyclone occurring; but under existing conditions the information afforded by the Meteorological Department of the Government of India regarding the state of the weather in the bay, and the fact that sailing vessels have been superseded by Steamers which seldom, if ever, are not in a state to proceed to sea at short notice, renders it altogether unnecessary in my opinion to retain rules which, as I have stated above, were made to meet quite a different state of affairs. On the occasion of the Stranding of the S. S. "Secundra" inside of the harbour on the 27th November last, the "Wreck Signal" was hoisted, in accordance with the instructions contained in the Cyclone Code, and the several departments specified in the Code had to make just the same arrangements as would have been necessary in the case of a vessel stranded in a dangerous position outside of the harbour and having to be deserted by her crew. At no other port in India are there such elaborate arrangements in force for meeting Shipping Casualities, and I see no reason for Madras being the exception, for although the port is occasionally visited by Cyclonic Storms, information regarding the approach of such storms is afforded in sufficient time to enable vessels to take necessary precautions to ensure their safety, and the day has passed when the Roadstead was filled with Sailing Ships. I am convinced that there is no necessity for restoring the rules referred to in the first part of this paragraph, & respectfully submit that the opinion of the Deputy Port Conservator, who under existing arrangements works the Cyclone Code, may be safely accepted as to the aid he would like afforded by the Military, Medical & Police departments on the occasion of a casualty occurring. I, therefore, submit herewith, for consideration, a paper marked A which contains the arrangements which in the opinion of the Deputy Conservator and myself should be specified in the Cyclone Code.

I have the honor to be,

Sir,

Your Obedient Servant,

Hallett

Commader, R.I.M.,

Presidency Port Officer.

M370

RECEIVED
15 JUL 97
PORT TRUST

MARINE (1897) DEPARTMENT.

From

THE CHAIRMAN,
HARBOUR TRUST BOARD,
MADRAS.

No. 114 (c).

Dated 24*th June* 1897.

Despatched July,

Received

Spare copies three.

SUBJECT.

Submitting, for the approval of Government, draft revised Cyclone Code.

No. 114 (*c*).

FROM

J. N. ATKINSON, Esq., I.C.S.,
Chairman, Harbour Trust Board,
Madras.

TO

THE SECRETARY TO GOVERNMENT,
MARINE DEPARTMENT
(*Through the Presidency Port Officer, Madras*).

SIR,

I have the honour to submit, for the approval of Government, a revised Cyclone Code, which the Deputy Port Conservator has prepared in view of recent experience having suggested the desirability of simplification and alteration in various particulars.

I have the honour to be,
Sir,
Your most obedient servant,

J. N. Atkinson

MADRAS,
24th June 1897.

Chairman, Harbour Trust Board.

DRAFT.

MADRAS CYCLONE CODE.

CHAPTER I.

General arrangements in connection with the hoisting of Storm Signals at Madras and Coast Ports.

1. The arrangements for the communication to the Presidency Port Officer, to the Deputy Port Conservator, Madras, and to the several coast Port officers, of information respecting the formation, growth and course of cyclonic storms, necessary for their guidance in hoisting the storm signals, are carried out by the Meteorological Reporters at Simla and Calcutta under the general direction of the Meteorological Reporter to the Government of India.

2. The Madras ports included in this storm warning system are as follows:—

A.—Ports on the Coromandel Coast.

Gopalpur.	Cocanada.	Porto Novo.
Calingapatam.	Masulipatam.	Negapatam.
Bimlipatam.	Madras.	Pámban.
Vizagapatam.	Cuddalore.	Tuticorin.

B.—Ports on the Malabar Coast.

Cannanore.	Mangalore.	Calicut.
Tellicherry.	Cochin.	Beypore.

3. The Meteorological Reporter to the Government of Bengal (Calcutta) supplies the information and works the system for those ports classed as belonging to the Coromandel Coast, and the Assistant Meteorological Reporter for India (Simla) for the Malabar Coast ports as defined above. These officers also afford information respecting the first indications of bad weather in the Bay of Bengal and the Indian Ocean to the Presidency Port Officer, to the Deputy Port Conservator and to the Chief Engineer for Irrigation, Madras.

4. As soon as the existence and probable course of a cyclonic storm in the Bay of Bengal or the Indian Ocean has been ascertained by the Meteorological Reporter of Calcutta or Simla, the Deputy Port Conservator, Madras, Port officers of the ports likely to be affected by the storm and the Chief Engineer for Irrigation, Madras, will be informed and warned by the Reporter appointed to give such warnings to his port. The warning signal should usually be hoisted immediately after the receipt of this information. The Meteorological Reporter will continue to keep the Deputy Port Conservator, Madras, and Port officers of the warned ports acquainted with the growth progress, course and other features of the storm, which will be useful as a guide to these officers in hoisting, when necessary, the danger signal. The danger signal should be hoisted as soon as the Deputy Port Conservator, Madras, or the Port officer, considers it advisable to warn the shipping that a cyclone is approaching either the port itself or the coast in the near vicinity. By these arrangements, the Meteorological Reporters will transmit information and warnings direct to the Presidency Port Officer and Deputy Port Conservator at Madras and the Port officers of Gopalpur, Bimlipatam, Vizagapatam, Cocanada, Masulipatam, Negapatam, Tuticorin, Mangalore, Cochin, Calicut and Tellicherry. At the remaining ports, viz., Calingapatam, Cuddalore, Porto Novo, Cannanore and Beypore, where the signals will be hoisted by the Port Conservators, the Port officer under whom they are immediately placed will instruct them by urgent telegram to hoist the warning and danger signals at the same time that they hoist them at their own ports. By this arrangement information respecting bad weather and direction relating to the hoisting of storm signals will be communicated to the—

Port Conservator of Calingapatam—By the Port officer of Gopalpur.
Port Conservators of Cuddalore and Porto Novo—By the Port officer of Negapatam.
Port Conservator of Beypore—By the Port officer of Calicut.
Port Conservator of Cannanore—By the Port officer of Tellicherry.

5. Copies of all telegrams despatched to the Deputy Port Conservator at Madras and to Port officers relating to the approach of cyclonic storms, will be sent at the same time to the Presidency Port Officer, Madras, in order that he may be kept fully acquainted with the weather information and instructions communicated by the Meteorological Reporters to the Port officers subordinate to him.

6. The duties of the Meteorological Reporters at Simla and Calcutta are confined solely to furnishing as definite, full, and early information as possible of the character, position, course, probable time of approach, and varying phases of cyclonic storms, to the Port officers of all ports to which the cyclone will probably cause dangerous weather and a high sea. The responsibility of hoisting and taking down the storm signals rests solely with the Port officers at coast ports, and at Madras with the Deputy Conservator of the Port. These officers will usually be guided mainly by the information received from the Meteorological Reporter, but if that information be insufficient or be delayed in transmission, or if telegraphic communication be suspended by breaks in the lines, they will then be guided by the indications of the barometer, force of the wind, state of the sea, and general aspect of the weather. The Deputy Conservator of the Port of Madras should also place himself in communication with the Meteorological Reporter to the Government of Madras or the Government Astronomer; both these officers should afford him full information.

7. The storm signals to be employed are of two kinds—one for day use and the second for use at night. They are as follows:—

1st—Day Signals.

No. I.—Bad weather or warning signal—A ball.
„ II.—Storm or danger signal—A drum.
„ ~~III.—Wreck signal—A cone after down~~

2nd—Night Signals.

No. I.—Bad weather or warning signal—Three white lights arranged in a vertical line.
„ II.—Storm or danger signal—Two white lights arranged in a vertical line.
„ ~~III.—Wreck signal—A red light.~~

(*a*) The ball or three white lights when hoisted indicates that a cyclonic storm has formed, which will probably advance to that part of the coast in which the port is situated, but is still at a considerable distance from it.

(*b*) The drum or two white lights when hoisted indicates that a storm is approaching the coast on which the port is situated, and will shortly cross it.

8. According as the storm is expected to strike the coast to the northward or southward of the port or to pass over the port itself, the storm signal will be hoisted either at the north or south arm of the yard of the Port office flagstaff or at the gaff of the flagstaff.

9. The intensity of the storm will be indicated during daylight by additional balls of a size half the diameter of the ball used as a warning signal, hoisted to the same yard-arm as the warning or danger signal, but between it and the flagstaff in the case of a storm to the north or south of the port, and by these balls being hoisted over the warning or danger signal when the storm is expected to pass over the port; thus, one small ball will indicate a storm of slight intensity, two small balls a storm of considerable intensity.

10. In order to facilitate and expedite the working of these arrangements, the Telegraph Department has granted the privilege of "Precedence urgency" to telegrams referring to stormy weather and the hoisting of storm signals between the Meteorological Reporter of Calcutta and the following officers and Meteorological Superintendents:—

Cocanada.	Masulipatam.	Negapatam.
Gopalpur.	Madras.	Vizagapatam.

The names of other officers will be added to this list as found necessary for the proper working of the system.

11. The Deputy Port Conservator at Madras and all Port officers noting the appearance of suspicious weather before the receipt of any telegrams from the Meteorological Reporter in connection (or co-operating) with them, should communicate the information without delay to that officer.

12. The Deputy Port Conservator at Madras and all Port officers receiving telegrams from the Meteorological Reporters during a storm should send a brief statement, after the cyclone has passed away, of the telegrams received from the Reporters and of the exact times when they were delivered by the Telegraph officers, &c., in order that the Meteorological Department may exercise an effective check over this part of the working of the system and secure the necessary rapidity of telegraphic communication required for the proper working of the system.

Chapter II.

General arrangements to be made at Madras upon the "warning" or "danger" signals being displayed at the gaff of the Port flagstaff, that is, when the storm is expected to pass over the port itself.

1. These signals will be repeated at the Fort flagstaff.

2. All arrangements in connection with the safety of the shipping will be made by the Deputy Port Conservator upon whom solely the responsibility will rest.

3. When either of these storm signals are hoisted at or lowered from the gaff of the Port flagstaff, the fact is to be communicated as soon as practicable by the Deputy Port Conservator to the undermentioned officials, viz:—

The Secretary to Government, Marine Department, when in Madras.
The Private Secretary to His Excellency the Governor, should His Excellency be in Madras.
The Presidency Port Officer.
The Secretary, Harbour Trust Board.
The Commissioner of Police, through the Deputy Commissioner of Police.
The Executive Engineer, St. Thomas' Mount.
The Collector of Chingleput.
The Chief Commissariat Officer and Commissariat Storekeeper-General.
The Assistant Adjutant-General, Madras District, Fort St. George.
The President, Madras Municipality.
The Government Telephone Exchange.
The Chief Superintendent of Telegraphs.

4. The Government telephone exchange will be kept open day and night, whilst the signals are hoisted, and the staff be temporarily strengthened by the Supt. of Telegraphs.

5. The port life-saving apparatus will be kept ready for use, as also that of the Port Conservancy establishment.

6. Should the Deputy Port Conservator require any assistance from the following departments, it will be given at once upon that officer applying for same:—

Police Boat establishment (on application to the Deputy Commissioner of Police).
~~Port Conservancy establishment~~.
Madras Harbour Trust Board.

Chapter III.

Wreck arrangements.

1. Should wreck occur, or the Deputy Conservator deem the same imminent, ~~the following signal will be hoisted:—~~ he will hoist the Wreck Signal. stet

~~By day a cone, apex down. | By night a red light.~~

2. Should the Deputy Port Conservator consider that there will be danger to life, he will inform the following officers and departments:—

The Port Surgeon.	The Ordnance Department.
The Resident Surgeon, General Hospital.	The Commissariat and Transport Department.

3. Upon receipt of this information the Port Surgeon taking with him a portion of his establishment and medicines and surgical appliances will immediately proceed to the scene of wreck and render all assistance possible.

4. The Resident Surgeon, General Hospital, will make preparations to receive sick and wounded. The Ordnance Department will comply with any requisitions from the Deputy Port Conservator to provide tents for ship-wrecked people and men to pitch them.

5. The Commissariat and Transport Department will be prepared to comply with any requisitions from the Deputy Port Conservator to supply trollies, dandies, blankets, towels, brandy, water and other medical comforts, &c., and send a sufficient number of men to look after the trollies and to carry the dandies.

6. In the event of a working party being required from the troops in garrison they will be supplied by the Assistant Adjutant-General, Madras, upon application from the Deputy Port Conservator.

Police Department.

7. On the Inspector of Marine Police seeing the wreck signal, or being informed by the Deputy Conservator of the Port of imminent danger of wrecks occurring, he will promptly send intelligence to the Deputy Commissioner of Police, who will immediately increase that division to such an extent as may be practicable at the time.

8. The entire Police force pending the arrival of the Commissioner will be under the Deputy Commissioner, who will consult the Deputy Conservator of the Port on the spot as to where the services of his men are likely to be emergently required, and will issue whatever detailed orders may be requisite.

9. The Police will be mainly restricted to their own proper duties, *i.e*, the maintenance of order; protecting personal or other property washed on shore; supervising the conveyance of the shipwrecked crews and passengers to the nearest shelter, and to hospital if necessary; bringing back the hammocks, doolies and sick-carts; guarding or removing the dead, &c. They are not to be employed in hauling ropes or recovering wreckage or cargo, save in emergent circumstances when other labour is not available.

10. The Commissioner of Police will see that duties are so apportioned as to enable the men to be relieved from the reserves as frequently as circumstances may render requisite.

11. All officers and men will be in uniform.

Extract of Proceedings of the Trustees of the Harbour of Madras, at a meeting held at the offices of the Board on Friday the 18th day of June 1897.

* * * * * *

2. Read letter from the Deputy Port Conservator, No. 1052, dated 4th June 1897, submitting suggestions for simplifying the present Cyclone Code.

Read minute by a Trustee.

Resolved that the proposals of the Deputy Port Conservator be approved and submitted to Government.

* * * * * *

(True Extract.)

(Signed) C. PINSENT,
Secretary, Harbour Trust Board.

P.T.O.

No.422/254 Gp

Forwarded, observing that the procedure which had to be followed on the stranding of the S.S."Secundra" in side of the Madras Harbour on 27th November last pointed to the necessity of simplifying the Cyclone Code, and that the draft Code now submitted, which has been drawn up on my suggestion, contains all that is necessary in my opinion.

Presidency Port Office,
Madras, 8" July, 1897.

Commander, R.I.M.,
Presidency Port Officer.

A.

Alterations and additions as revised by the Harbour Trust Board

Appendix to G.O. No. 1st June 97 (1586)

~~NOTIFICATION.~~

~~*Fort St. George, April 11, 1895.*~~

~~No. 23.—The following is published for information and guidance in supersession of all previous Cyclone Codes:—~~

MADRAS CYCLONE CODE.

CHAPTER I.

General Arrangements in connection with the hoisting of Storm Signals at Madras and Coast Ports.

1. The arrangements for the communication to the Presidency Port Officer, to the Deputy Port Conservator, Madras, and to the several coast Port officers, of information respecting the formation, growth and course of cyclonic storms, necessary for their guidance in hoisting the storm signals, are carried out by the Meteorological Reporters at Simla and Calcutta under the general direction of the Meteorological Reporter to the Government of India.

2. The Madras ports included in this storm-warning system are as follows:—

A.—Ports on the Coromandel Coast.

Gopalpur.	Madras.
Calingapatam.	Cuddalore.
Bimlipatam.	Porto Novo.
Vizagapatam	Negapatam.
Cocanada.	Pamban.
Masulipatam.	Tuticorin.

B.—Ports on the Malabar Coast.

Cannanore.	Cochin.
Tellicherry.	Calicut.
Mangalore.	Beypore.

3. The Meteorological Reporter to the Government of Bengal (Calcutta) supplies the information and works the system for those ports classed as belonging to the Coromandel Coast, and the Assistant Meteorological Reporter for India (Simla) for the Malabar Coast ports as defined above. These officers also afford information respecting the first indications of bad weather in the Bay of Bengal and the Indian Ocean to the Presidency Port Officer, to the Deputy Port Conservator and to the Chief Engineer for Irrigation, Madras.

4. As soon as the existence and probable course of a cyclonic storm in the Bay of Bengal or the Indian Ocean has been ascertained by the Meteorological Reporter of Calcutta or Simla, the Deputy Port Conservator, Madras, Port officers of the ports likely to be affected by the storm and the Chief Engineer for Irrigation, Madras will be informed and warned by the Reporter appointed to give such warnings to his port. The warning signal should usually be hoisted immediately after the receipt of this information. The Meteorological Reporter will continue to keep the Deputy Port Conservator, Madras, and Port officers of the warned ports acquainted with the growth, progress, course and other features of the storm, which will be useful as a guide to these officers in hoisting, when necessary, the danger signal. The danger signal should be hoisted as soon as the Deputy Port Conservator, Madras, or the Port officer, considers it advisable to warn the shipping that a cyclone is approaching either the port itself or the coast in the near vicinity. By these arrangements, the Meteorological Reporters will transmit information and warnings direct to the Presidency Port Officer and Deputy Port Conservator at Madras and the Port officers of Gopalpur, Bimlipatam, Vizagapatam, Cocanada, Masulipatam, Negapatam, Tuticorin, Mangalore, Cochin and Tellicherry and Calicut. At the remaining ports, viz., Calingapatam, Cuddalore, Porto Novo, Cannanore, Tellicherry and Beypore, where the signals will be hoisted by the Port Conservators, the Port officer under whom they are immediately placed will instruct them by urgent telegram to hoist the warning and danger signals at the same time that they hoist them at their own ports. By this arrangement information respecting bad weather and direction relating to the hoisting of storm signals will be communicated to the—

Port Conservator of Calingapatam—By the Port Officer of Gopalpur.
Port Conservators of Cuddalore and Porto Novo—By the Port Officer of Negapatam.
Port Conservators of ~~Cannanore, Tellicherry and~~ Beypore—By the Port Officer of Calicut.
Port Conservator of Cannanore.—By the Port Officer of Tellicherry.

5. Copies of all telegrams despatched to the Deputy Port Conservator at Madras and to Port officers relating to the approach of cyclonic storms, will be sent at the same time to the Presidency Port Officer, Madras, in order that he may be kept fully acquainted with the weather information and instructions communicated by the Meteorological Reporters to the Port officers subordinate to him

4. The duties of the Meteorological Reporters at Simla and Calcutta are confined solely to furnishing as definite, full, and early information as possible of the character, position, course, probable time of approach, and varying phases of cyclonic storms, to the Port officers of all ports to which the cyclone will probably cause dangerous weather and a high sea. The responsibility of hoisting and taking down the storm signals rests solely with the Port officers at coast ports, and at Madras with the Deputy Conservator of the Port. These officers will usually be guided mainly by the information received from the Meteorological Reporter, but if that information be insufficient or be delayed in transmission, or if telegraphic communication be suspended by breaks in the lines, they will then be guided by the indications of the barometer, force of the wind, state of the sea, and general aspect of the weather. The Deputy Conservator of the Port of Madras should also place himself in communication with the Meteorological Reporter to the Government of Madras or the Government Astronomer; both these officers should afford him full information.

5. The storm signals to be employed are of two kinds—one for day use and the second for use at night. They are as follows:—

1st—Day Signals.

No. I.—Bad weather or warning signal—A ball.
„ II.—Storm or danger signal—A drum.

2nd—Night Signals.

No. I.—Bad weather or warning signal—Three white lights arranged in a vertical line.
„ II.—Storm or danger signal—Two white lights arranged in a vertical line.

(a) The ball or three white lights when hoisted indicates that a cyclonic storm has formed which will probably advance to that part of the coast in which the port is situated but is still at a considerable distance from it.

(b) The drum or two white lights when hoisted indicates that a storm is approaching the coast on which the port is situated, and will shortly cross it.

6. According as the storm is expected to strike the coast to the northward or southward of the port or to pass over the port itself, the storm signal will be hoisted either at the north or south arm of the yard of the Port office flagstaff or at the gaff of the flagstaff.

7. The intensity of the storm will be indicated during daylight by additional balls of a size half the diameter of the ball used as a warning signal, hoisted to the same yard-arm as the warning or danger signal but between it and the flagstaff in the case of a storm to the north or south of the port, and by these balls being hoisted over the warning or danger signal when the storm is expected to pass over the port; thus, one small ball will indicate a storm of slight intensity, two small balls a storm of considerable intensity.

8. In order to facilitate and expedite the working of these arrangements, the Telegraph Department has granted the privilege of "Precedence urgency" to telegrams referring to stormy weather and the hoisting of storm signals between the Meteorological Reporter of Calcutta and the following officers and Meteorological Superintendents:—

Cocanada.	Madras.
Gopalpur.	Negapatam.
Masulipatam.	Vizagapatam.

The names of other officers will be added to this list as found necessary for the proper working of the system.

9. The Deputy Port Conservator at Madras and all Port officers noting the appearance of suspicious weather before the receipt of any telegrams from the Meteorological Reporter in connection (or co-operating) with them, should communicate the information without delay to that officer.

10. The Deputy Port Conservator at Madras and all Port officers receiving telegrams from the Meteorological Reporters during a storm should send a brief statement, after the cyclone has passed away, of the telegrams received from the reporters and of the exact times when they were delivered by the telegraph officers, &c., in order that the Meteorological department may exercise an effective check over this part of the working of the system and secure the necessary rapidity of telegraphic communication required for the proper working of the system.

CHAPTER II.

GENERAL ARRANGEMENTS TO BE MADE AT MADRAS ON THE "WARNING," "DANGER," AND "WRECK" SIGNALS BEING DISPLAYED AT THE GAFF OF THE PORT OFFICE FLAGSTAFF.

1. These signals will be repeated at the Fort Flagstaff.

2. During the period of the display of any one of these signals, all arrangements in connection with the safety of the shipping in the port will be made by the Deputy Conservator of the Port.

3. The Chairman, Harbour Trust Board, will arrange that on such occasions the services of the Port Conservancy establishment shall be at the disposal of the Deputy Conservator of the Port.

4. Whenever any one of the storm signals is hoisted or lowered, the fact is to be communicated as soon as practicable by the Deputy Conservator of the Port to the undermentioned officials, viz.:—

The Chief Secretary to Government, when in Madras.
The Private Secretary to His Excellency the Governor, should His Excellency be in Madras.
The Chairman, Harbour Trust Board.
The Commissioner of Police, through the Deputy Commissioner of Police.
The Executive Engineer, St. Thomas' Mount.
The Collector of Chingleput.
The Chief Commissariat Officer and Commissariat Storekeeper-General.
The Assistant Adjutant-General, Madras District, Fort St. George.
The Government Telephone Exchange.

4. The Government telephone exchange will be kept open day and night, whilst the signals are hoisted.

5. The port life-saving apparatus will be kept ready for use, as also the Port Conservancy establishment.

6. Should the Deputy Port Conservator require any assistance from the following departments, it will be given at once upon that officer applying for same:—

Police Boat establishment (on application to the Deputy Commissioner of Police).
Port Conservancy establishment.

CHAPTER III.

Wreck arrangements.

1. Should wreck occur, or the Deputy Conservator deem the same imminent, the following signal will be hoisted:—

By day a cone—apex down. | By night a red light.

2. Should the Deputy Port Conservator consider that there will be danger to life, he wil inform the following officers and departments:—

The Port Surgeon.	The Ordnance Department.
The Resident Surgeon, General Hospital.	The Commissariat and Transport Department.

Upon receipt of this information the Port Surgeon taking with him a portion of his establishment and medicines and surgical appliances will immediately proceed to the scene of wreck and render all assistance possible.

The Resident Surgeon, General Hospital, will make preparations to receive sick and wounded. The Ordnance Department will comply with any requisitions from the Deputy Port Conservator to provide tents for ship-wrecked people and men to pitch them.

The Commissariat and Transport Department will be prepared to comply with any requisitions from the Deputy Port Conservator to supply trollies, dandies, blankets, towels, brandy, water and other medical comforts, &c., and send a sufficient number of men to look after the trollies and to carry the dandies.

6. In the event of a working party being required from the troops in garrison they will be supplied by the Assistant Adjutant-General, Madras, upon application from the Deputy Port Conservator.

By Night.—A red light at the mast head of the flagstaff; also a blue light burnt from the top of the Deputy Conservator's office and repeated from the lantern of the lighthouse;

and upon this each of the undermentioned Departments shall make the arrangements detailed below:—

A.—Port Department.

The Port life-saving apparatus to be taken to the beach and kept in readiness for being worked under arrangements to be made by the Deputy Conservator of the Port.

When hawsers are necessarily left attached to wrecks, the Deputy Conservator of the Port will inform the Police of the fact.

B.—Ordnance Department.

1. The Ordnance Officer in charge of the Arsenal will, in cases of wreck, promptly comply with emergent requisitions from the Deputy Conservator of the Port for tents for the shelter of shipwrecked people without waiting for sanction from any superior authority. Should the officer in charge be absent from the Arsenal, the same power may be exercised by the Warrant Officer in charge of Camp Equipage.

P.T.O.

4. The duties of the Meteorological Reporters at Simla and Calcutta are confined solely to furnishing as definite, full, and early information as possible of the character, position, course

2nd—Night Signals.

No. I.—Bad weather or warning signal—Three white lights arranged in a vertical line.

" II.—Storm or danger signal—Two white lights arranged in a vertical line.

The ball or three white lights when hoisted indicates that a cyclonic storm has formed, which will probably advance to that part of the coast in which the port is situated, but is still at a considerable distance from it.

The drum or two white lights when hoisted indicates that a storm is approaching the coast on which the port is situated, and will shortly cross it.

5. Whenever any one of the storm signals is hoisted or lowered, the fact is to be communicated as soon as practicable by the Deputy Conservator of the Port to the undermentioned officials, viz.:—

The Chief Secretary to Government, when in Madras.
The Private Secretary to His Excellency the Governor, should His Excellency be in Madras.
The Chairman, Harbour Trust Board.
The Commissioner of Police, through the Deputy Commissioner of Police.
The Executive Engineer, St. Thomas' Mount.
The Collector of Chingleput.
The Chief Commissariat Officer and Commissariat Storekeeper-General.
The Assistant Adjutant-General, Madras District, Fort St. George.
The Government Telephone Exchange.

CHAPTER III.

Special Arrangements to be made at Madras by the various Departments.

Section 1.—*On the Warning Signal being hoisted at the Gaff of the Port Office Flagstaff.*

The Government Telephone Exchange will be kept open until the storm signals are hauled down.

A.—Port Department.

The port life-saving apparatus to be prepared for immediate use.

Section 2.—*On the Danger Signal being hoisted at the Gaff of the Port Office Flagstaff.*

A.—Port Department.

The services of the Preventive establishment will be placed by the Chairman of the Harbour Trust Board at the disposal of the Deputy Conservator of the Port.

B.—Police Department.

The Commissioner of Police will place the Police Boat establishment at the disposal of the Deputy Conservator; also two mounted orderlies and keep fifty men available at the beach for duty.

C.—Commissariat and Transport Department.

1. From 1st April to 30th June and from 15th September to 31st January a certain number of transport attendants will be detailed daily for duty in case of need, and these men will remain at the Transport depôt day and night during these periods.

2. Four trollies drawn by mules or bullocks, together with six ambulance carts or tongas with cattle, will be kept day and night at the Transport stables, North Beach, and will be supplied on the requisition of the Deputy Conservator by the officer or non-commissioned officer in charge of the station.

Section 3.—*Wreck Arrangements.*

When the Deputy Conservator of the Port deems that imminent danger of wreck has arisen, he will order the following signal to be made and will inform the Port Surgeon, Resident Surgeon, General Hospital, and Surgeon, 1st District:—

By Day.—A cone apex downwards.

By Night.—A red light at the mast head of the flagstaff; also a blue light burnt from the top of the Deputy Conservator's office and repeated from the lantern of the lighthouse;

and upon this each of the undermentioned Departments shall make the arrangements detailed below:—

A.—Port Department.

The Port life-saving apparatus to be taken to the beach and kept in readiness for being worked under arrangements to be made by the Deputy Conservator of the Port.

When hawsers are necessarily left attached to wrecks, the Deputy Conservator of the Port will inform the Police of the fact.

B.—Ordnance Department.

1. The Ordnance Officer in charge of the Arsenal will, in cases of wreck, promptly comply with emergent requisitions from the Deputy Conservator of the Port for tents for the shelter of shipwrecked people without waiting for sanction from any superior authority. Should the officer in charge be absent from the Arsenal, the same power may be exercised by the Warrant Officer in charge of Camp Equipage.

P.T.O.

C.—Commissariat and Transport Departments.

1. On intimation being received from the Deputy Conservator of the Port of imminent danger to shipping, or on the "Wreck signal" being hoisted, two trollies drawn by mules or bullocks will immediately proceed under a Staff Sergeant to the pier and be at the disposal of the Deputy Conservator of the Port to convey rocket apparatus, &c.

2. Two other trollies, drawn by mules or bullocks, each under care of a warrant or non-commissioned officer if available and each containing an assortment (which will be always held in readiness in waterproof covers or cases) of blankets, towels, flannel banians, flannel drawers, biscuits, brandy, water and drinking vessels, will be taken in the first place to the Port Office, and thence as directed by the Deputy Conservator of the Port to the scene of shipwreck, where the contents will, if required, be issued and used for the relief of shipwrecked persons under the orders of the directing Medical or Port Department officers present.

3. The Chief Commissariat Officer will despatch to the Port office one mate and 24 bearers with doolies, muncheels or dandies to be placed at the disposal of the directing Medical or Port Department officer present.

N.B.—In the event of a working party being required from the troops in garrison, application is to be made by the Deputy Conservator to the Assistant Adjutant-General, Madras District.

D.—Police Department.

1. On the Inspector of Marine Police seeing the wreck signal, or being informed by the Deputy Conservator of the Port of imminent danger of wrecks occurring, he will promptly send intelligence to the Deputy Commissioner of Police, who will immediately increase that division to such an extent as may be practicable at the time.

2. The entire Police force pending the arrival of the Commissioner will be under the Deputy Commissioner, who will consult the Deputy Conservator of the Port on the spot as to where the services of his men are likely to be emergently required, and will issue whatever detailed orders may be requisite

3. The Police will be mainly restricted to their own proper duties, *i.e.*, the maintenance of order; protecting personal or other property washed on shore; supervising the conveyance of the shipwrecked crews and passengers to the nearest shelter, and to hospital if necessary; bringing back the hammocks, doolies and sick-carts; guarding or removing the dead, &c. They are not to be employed in hauling ropes or recovering wreckage or cargo, save in emergent circumstances when other labour is not available.

4. The Commissioner of Police will see that duties are so apportioned as to enable the men to be relieved from the reserves as frequently as circumstances may render requisite.

5. All officers and men will be in uniform.

E.—Medical Department.

1. On receipt of intimation of the wreck signal from the Deputy Conservator, the Fort Surgeon, taking with him a portion of his establishment and medicines and surgical appliances, will forthwith proceed to the beach, and, in consultation with the Deputy Conservator, will distribute them to the various scenes of wreck or apprehended wreck, as occasion may require.

2. The Resident Surgeon of the General Hospital will remain at the institution, and the Surgeon, 1st District, at the Monegar Choultry, to receive and afford medical aid to all such as may be sent there from the beach for treatment.

J. F. PRICE,
Chief Secretary.

17 Sept 97

Encl 2 in 1157/97

APPENDIX A.

DAY SIGNALS.

I. Cautionary Signal.

Bay of Bengal.

The square flag W of the International Code hoisted on the storm signal staff as a cautionary signal indicates the existence of disturbed squally weather in the Bay of Bengal which may be the first stage in the formation of a cyclonic storm, and which, if it develops, is likely to affect that part of the coast on which the port is situated.

The disturbed conditions may pass away without developing into a cyclonic storm, in which case the cautionary signal will be taken down as soon as it is certain that stormy weather will not shortly follow. If, however, the disturbed weather be the first indication of the probable formation or approach of a cyclonic storm, the cautionary signal will be followed by one of the ordinary storm signals, indicating the probable position, character and track of the approaching storm.

Arabian Sea.

The square flag W of the International Code hoisted on the storm signal staff as a cautionary signal indicates the existence of disturbed weather off some part of the West Coast of India in the neighbourhood of the port or ports at which the signal is hoisted; or the advance of a cyclonic storm across the Peninsula from the Bay of Bengal which may hence shortly cross the Western Ghats and give squally or stormy weather in the Arabian Sea.

The disturbed conditions may in either case pass away without giving stormy cyclonic weather to the West Coast ports or to the adjacent parts of the Arabian Sea, in which case the cautionary signal will be taken down as soon as it is certain that stormy weather will not shortly follow. If, however, the disturbed weather be the first indication of the probable formation or approach of a cyclonic storm, this cautionary signal will be followed by one of the

ordinary stormy signals, indicating the probable position, character and track of the approaching storm.

II. Warning Signal.

A ball indicates that a cyclonic storm has formed, which will probably advance to that part of the coast on which the port is situated, but is still at a considerable distance from it. The same signal will also be hoisted at the larger and more important ports on the West Coast of India to indicate that a storm has formed in the Arabian Sea at some distance from the coast and will shortly cross one or other of the tracks of vessels leaving these ports, but is not likely to give the ports bad weather. The port officers, when instructed to hoist the warning signal, will also be informed of the object of the signal so as to communicate its full purport to masters of vessels about to leave the port.

III. Danger Signals.

(1) A cone apex downwards indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast considerably to the south of the port.

(2) A cone apex upwards indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port, and that its centre will probably cross the coast considerably to the north of the port.

(3) A drum indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast over or near to the port.

In order to indicate that a cyclonic storm in the sea area near a port is of great intensity, a ball is added to (and placed underneath) the corresponding danger signal.

IV. Great Danger Signals.

(1) A cone apex downwards and ball below indicate that a cyclonic storm

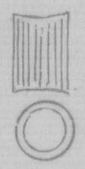


of great intensity is affecting the port and that its centre will probably cross the coast considerably to the south of the port.

(2) A cone apex upwards and ball below indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast considerably to the north of the port.



(3) A drum with a ball below indicates that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast over or near to the port.



NIGHT SIGNALS.

I. Cautionary Signal.

None.

II. Warning Signal.

A red light (corresponding to day warning signal) indicates that a cyclonic storm has formed, which will probably advance to that part of the coast on which the port is situated, but is still at a considerable distance from it.



III. Danger Signals.

(1) A red light vertically above a white light corresponds to day signal No.1 and indicates that a cyclonic storm (probably) of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast considerably to the south of the port.



(2) A red light vertically below a white light corresponds to day signal No. 2 and indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port , and that its centre will probably cross the coast considerably to the north of the port.



(3) Two red lights in a vertical line correspond to day signal No.3 &

indicate



indicate that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast over or near to the port.

IV. Great Danger Signals.

(1) Two red lights with a white light below arranged in a vertical line



correspond to day great danger signal No.1 and indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast considerably to the south of the port.

(2) Two red lights with a white light above in a vertical line correspond to day great danger signal No.2 and indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast considerably to the north of the port.



(3) Three red lights in a vertical line correspond to day great danger signal No. 3 and indicate that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast over or near to the port.



A P P E N D I X B.

DAY SIGNALS.

I. Warning Signal.



A ball indicates that a cyclonic storm has formed, which will probably advance to that part of the coast on which the port is situated, but is still at a considerable distance from it.

II. Danger Signal.



A drum indicates that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast over or near to the port.

III. Great Danger Signal.



A drum with a ball below indicates that a cyclonic storm of great intensity is affecting the port and that its centre will probably cross the coast over or near to the port.

NIGHT SIGNALS.

I. Warning Signal.



A red light (corresponding to day warning signal) indicates that a cyclonic storm has formed, which will probably advance to that part of the coast on which the port is situated, but is still at a considerable distance from it.

II. Danger Signal.



Two red lights in a vertical line correspond to day signal No.2 and indicate that a cyclonic storm (probably of slight to moderate intensity) is affecting the port and that its centre will probably cross the coast over or near to the port.

III. Great Danger Signal.

Three red lights in a vertical line correspond to day great danger signal

nal No. 3 and indicate that a cyclonic storm of gre
intensity is affecting the port and that its centre wi
probably cross the coast over or near to the port.

Marine Dept.

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Notification

The following Cyclone Code has been approved by Government and is published for guidance in supersession of all previous editions.

(N.E. Code)

17/8/91

R.S.