VHF-COMMUNICATION

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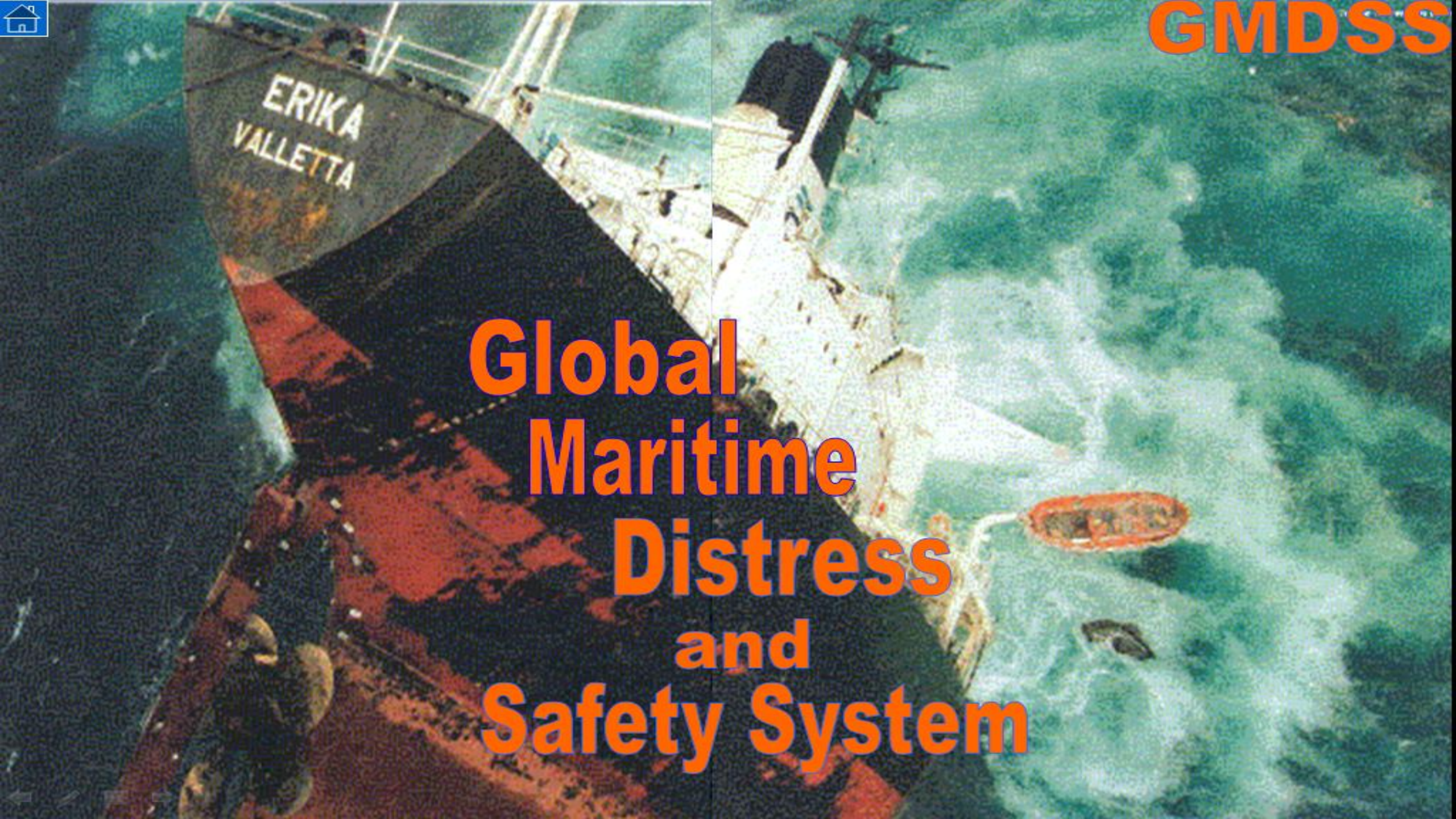

GMDSS

Global Maritime Distress and Safety System

G.M.D.S.S.
VHF/MF/HF Ch.16 simplex DSC
INMARSAT COSPAS/SARSAT
IMO SOLAS navtex EGC NAVWNG
EPIRB TELEX A1-A2-A3-A4 areas
SAR SART SMCP (SMV) IMLP
VTS mmsi MID MSI etc. etc.

VHF / DSC - COMMUNICATION

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Non-GMDSS vessels
(e.g. small vessels)

Announcement & acknowledgement on VHF

VHF / DSC - COMMUNICATION

Non-GMDSS vessels (e.g. small vessels)

Announcement & acknowledgement on VHF

GMDSS vessels

Announcement & acknowledgement by Digital Selective Calling (DSC)

VHF / DSC - COMMUNICATION

Non-GMDSS vessels
(e.g. small vessels)

GMDSS vessels

Announcement & acknowledgement on VHF

Announcement & acknowledgement by Digital Selective Calling (DSC)

Message by conversation on VHF

Priorities

Priorities

Distress "MAYDAY"

Urgency "PAN PAN"

Safety "SECURITE"

Routine

Ship’s radio-room.

RCC

. **DISTRESS ALERT:**

"Urgent!
There is serious
and immediate danger".

Ship's radio-room.

RCC

. **DISTRESS ALERT:**

"Urgent!
There is serious
and immediate danger".

. **URGENCY MESSAGE:**

"Urgent!
There is serious danger!"

Ship's radio-room.

RCC

. **DISTRESS ALERT:**
"Urgent!
There is serious
and immediate danger".

Ship's radio-room.

. **URGENCY MESSAGE:**
"Urgent!
There is serious danger!"

. **SAFETY MESSAGE:**
"Imminent risk for navigation".

RCC

. **DISTRESS ALERT:**
"Urgent!
There is serious
and immediate danger".

Ship's radio-room.

. **URGENCY MESSAGE:**
"Urgent!
There is serious danger!"

. **SAFETY MESSAGE:**
"Imminent risk for navigation".

. **ROUTINE MESSAGE:**
"... to ensure safe navigation".

RCC

Distress message announcement by non-GMDSS vessel:

"MAYDAY - 3 X
This is Vincente - PWCA
Vincente - PWCA
Vincente - PWCA:"

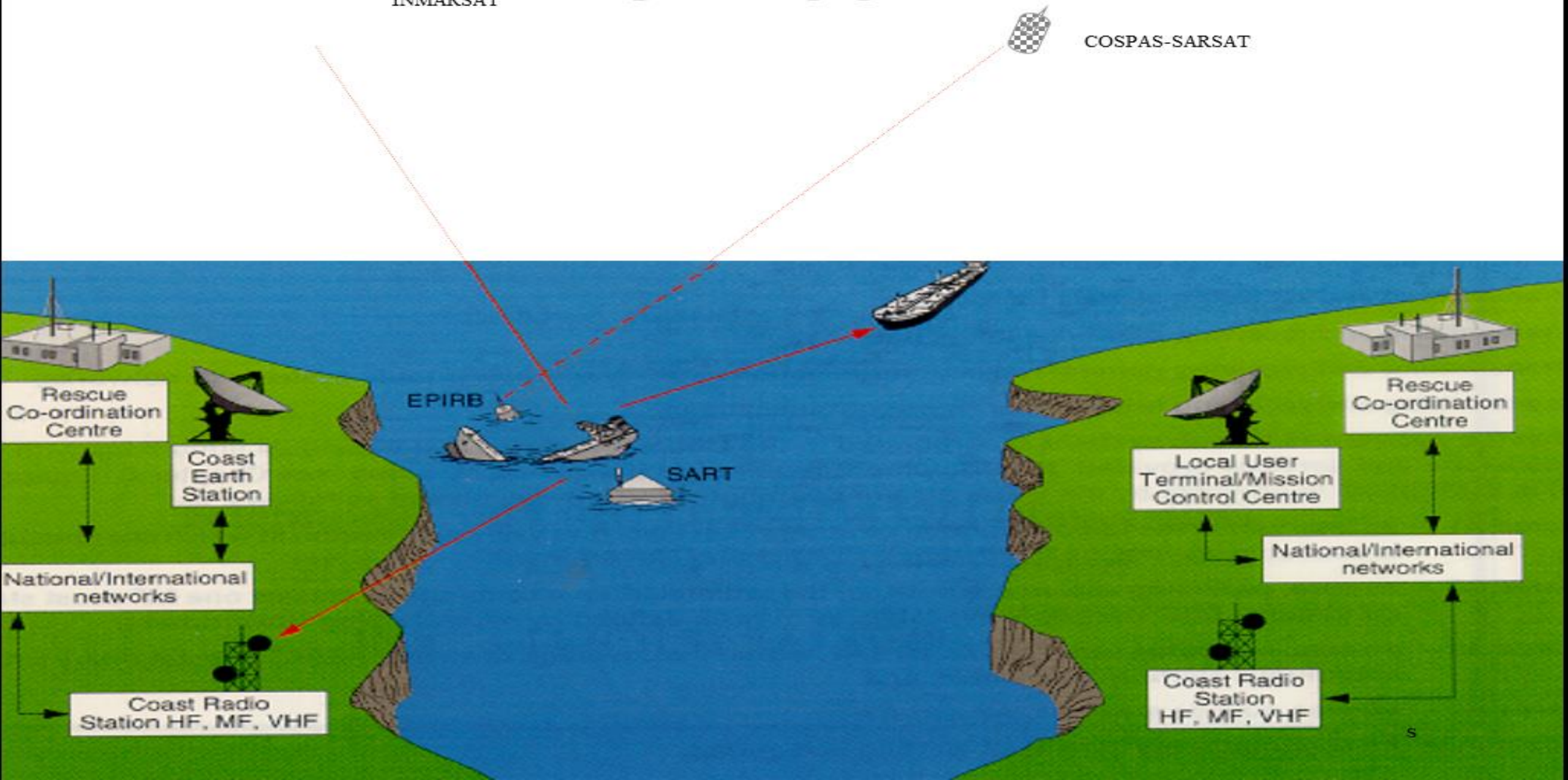
Urgency message announcement by non-GMDSS vessel:

“PAN PAN - 3 X
All stations - 3 X
This is Alcona - BUCE
Alcona - BUCE
Alcona - BUCE:”.

Safety message announcement by non-GMDSS vessel:

"SECURITE - 3 X
All stations - 3 X
This is Anticosti - V8SH
Anticosti - V8SH
Anticosti - V8SH:".

GMDSS


INMARSAT
COSPAS-SARSAT
Rescue Co-ordination Centre
Coast Earth Station
National/International networks
Coast Radio Station HF, MF, VHF
EPIRB
SART
Local User Terminal/Mission Control Centre
Rescue Co-ordination Centre
National/International networks
Coast Radio Station HF, MF, VHF

DSC-announcement (*GMDSS - vessels*).

R.C.C.

DSC-announcement (*GMDSS - vessels*).

A Distress Alert, Urgency Message or Safety Message is *announced* to *Rescue Coordination Centre* and all vessels in the *vicinity* through *"Digital Selective Calling"*.

R.C.C.

DSC-announcement (*GMDSS - vessels*).

A Distress Alert, Urgency Message or Safety Message is *announced* to *Rescue Coordination Centre* and all vessels in the *vicinity* through *"Digital Selective Calling"*.

R.C.C.

When the *DSC-acknowledgement* has been received from R.C.C., a *distress-*, *urgency-* or *safety message* is transmitted by VHF to all stations.

Received mayday

Pearl Head - VRSE

Ocean Queen - IRSL

R.C.C.

Received mayday

Any ship receiving a *distress alert* <u>*acknowledgement*</u> from a coastal station must transmit a *RECEIVED MAYDAY* to the distressed vessel.

Pearl Head - VRSE

Ocean Queen - IRSL

R.C.C.

Received mayday

Any ship receiving a *distress alert* <u>*acknowledgement*</u> from a coastal station must transmit a *RECEIVED MAYDAY* to the distressed vessel.

Pearl Head - VRSE

Ocean Queen - IRSL

R.C.C.

"MAYDAY
Pearl Head (3X) - VRSE
This is Ocean Queen (3X) - IRSL
RECEIVED MAYDAY".

Supplementary received-mayday

Pearl Head - VRSE

Ocean Queen - IRSL

Supplementary received-mayday

Pearl Head - VRSE

Ocean Queen - IRSL

Any vessel that is "*able to comply*"
(within "*short range*" of the distressed vessel)
must transmit a "*supplementary received-mayday*"
to the vessel in distress.

Supplementary received-mayday

Pearl Head - VRSE

Ocean Queen - IRSL

Any vessel that is "*able to comply*"
(within "*short range*" of the distressed vessel)
must transmit a "*supplementary received-mayday*"
to the vessel in distress.

Pearl Head - VRSE

Ocean Queen -IRSL

R.C.C. Aveiro Radio

Distress relay on VHF ("mayday relay")

Any ship, knowing that a vessel in distress is not able to transmit a distress alert, must transmit a *distress alert relay*.

Pearl Head - VRSE

Ocean Queen -IRSL

R.C.C. Aveiro Radio

Distress relay on VHF ("mayday relay")

Any ship, knowing that a vessel in distress is not able to transmit a distress alert, must transmit a *distress alert relay*.

Pearl Head - VRSE

Ocean Queen -IRSL

R.C.C. Aveiro Radio

Distress relay on VHF ("mayday relay")

Communication:

Message on VHF

After announcement by DSC or VHF,
***communication by conversation* begins on VHF.**

Distress/Urgency/Safety

Distress -, urgency - and safety -messages on VHF must contain:

. The vessel's identification;
  9-digit Maritime Mobile Service Identity-Code
  (MMSI-Code);
  or Name and Call Sign;
. position of the vessel;
. the nature of distress or danger;
. number of persons on board;
. the assistance that is required;
. any other important information.

when things go wrong.....

MAYDAY on VHF...

(CLICK)

"Coastal response..."

(CLICK)

“MAYDAY: This is two three five - seven eight six - zero zero zero
Pearl Head - Victor Romeo Sierra Echo.
My position: three eight degrees one zero minutes North / zero one eight degrees one zero minutes East.
I am on fire: fire is in engine room and number-two hold. Vessel is sinking.
Crew must abandon vessel. I require assistance.
Number of crew on board: one eight; number of injured persons: eight; number of casualties: two.
Over”.

distress message

“MAYDAY: This is two three five - seven eight six - zero zero zero
Pearl Head - Victor Romeo Sierra Echo.
My position: three eight degrees one zero minutes North / zero one eight degrees one zero minutes East.
I am on fire: fire is in engine room and number-two hold. Vessel is sinking.
Crew must abandon vessel. I require assistance.
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Over”.

distress message

Urgency message

Urgency message

Safety message

“Securite, securite, securite; all stations, all stations, all stations;
this is 426 477 000 - tanker Vermont - CAPK
in posn. bearing 259 degr. from Falls Light, distance 1.5 miles;
time: August 6 - 1645 UTC.
Information: Buoy FL-1 in position 259 degrees from Falls Light,
distance 2 miles, missing. OUT”

Safety message

SEARCH & RESCUE

"Silence mayday"

"Silence mayday"

Radio silence **is imposed to all vessels when a SAR-operation is in progress.**

Search and Rescue (SAR)

Search and Rescue (SAR)

A Situation Report (short form- or full form SITREP) is transmitted to all vessels by RCC to indicate that a SAR-operation must be carried out.

Situation Report (SITREP) - short form.

- Priority;	*DISTRESS*
- Date and Time;	*September twelve* *time: 13.40 UTC;*
- From RCC: - To:	*San Juan Rescue Co-ordination Centre;* *All ships in vicinity of position* *37 degr. 15 min. N / 016 degr. 10 min. E;*
- SAR SITREP number	*Search and Rescue Situation Report number one;*
- Identity of casualty (Name, call sign, Flagstate)	*211 687 000 Pearl Head-VRSE* *Bulgarian registration*
- Position (Latitude / longitude)	*In position* *37 degr. 15 min. N / 016 degr. 10 min. E;*
- Situation: Message: Date and time; Nature of Distress;	*Distress;* *September twelve* *13.43 UTC* *Pearl Head on fire;*
- Number of Persons at risk;	*16*
- Assistance that is required;	*Fire fighting assistance and SAR.*
- Co-ordinating Centre:	*San Juan Rescue Co-ordination Centre.*

Search and Rescue (SAR)

M.V. Vendor acting as On-Scene Co-ordinator

M.V. Pearl Head in distress.

Search and Rescue (SAR)

M.V. Pearl Head in distress.

M.V. Vendor acting as On-Scene Co-ordinator

A Situation Report (SITREP) is transmitted by the *OSC* to inform the SAR-Mission Co-ordinator (*SMC*) at *RCC* .

Search and Rescue (SAR)

Search and Rescue (SAR)

A SITREP is transmitted by assisting vessels and helicopters to inform the *OSC*.

"Silence fini"

"Silence fini"

The termination of radio-silence is indicated with *"Silence Fini"*.

Routine communication

Routine communication
ship to coastal station
intership
intraship

Announcement (*by non-GMDSS vessels*).

M.V. Anticosti - V8SH

VTS Halifax Radio

Announcement (*by non-GMDSS vessels*).

Intership communication and communication between ship and coastal station is announced on VHF.

M.V. Anticosti - V8SH

VTS Halifax Radio

Announcement (*by non-GMDSS vessels*).

Intership communication and communication between ship and coastal station is announced on VHF.

M.V. Anticosti - V8SH

VTS Halifax Radio

"Address" and "Identify"

Address and Identify

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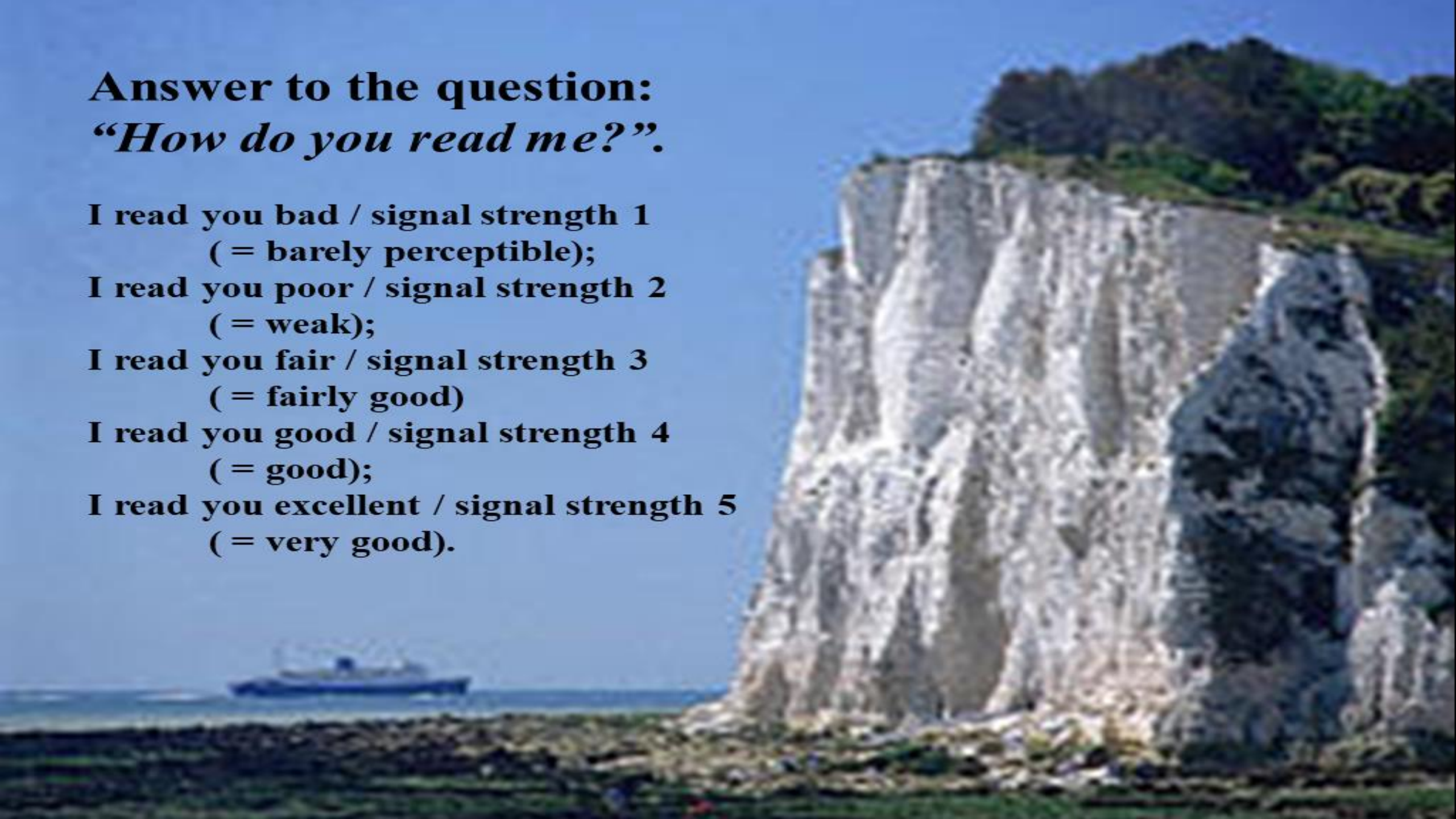
If conditions for establishing contact are unknown or expected to be bad, addressing and identification must be done three times.

Address and Identify

If conditions for establishing contact are unknown or expected to be bad, addressing and identification must be done three times.

When conditions are good, the best way is to address once and identify twice.



Answer to the question:
"How do you read me?".

I read you bad / signal strength 1
(= barely perceptible);
I read you poor / signal strength 2
(= weak);
I read you fair / signal strength 3
(= fairly good)
I read you good / signal strength 4
(= good);
I read you excellent / signal strength 5
(= very good).

"Urgent" message

In case of an urgent message
(note: not an URGENCY message!)
"how do you read me"
is left out.

DSC-announcement (*GMDSS - vessels*).

Intership communication and communication between ship and coastal station is *announced* through Digital Selective Calling.

VTS

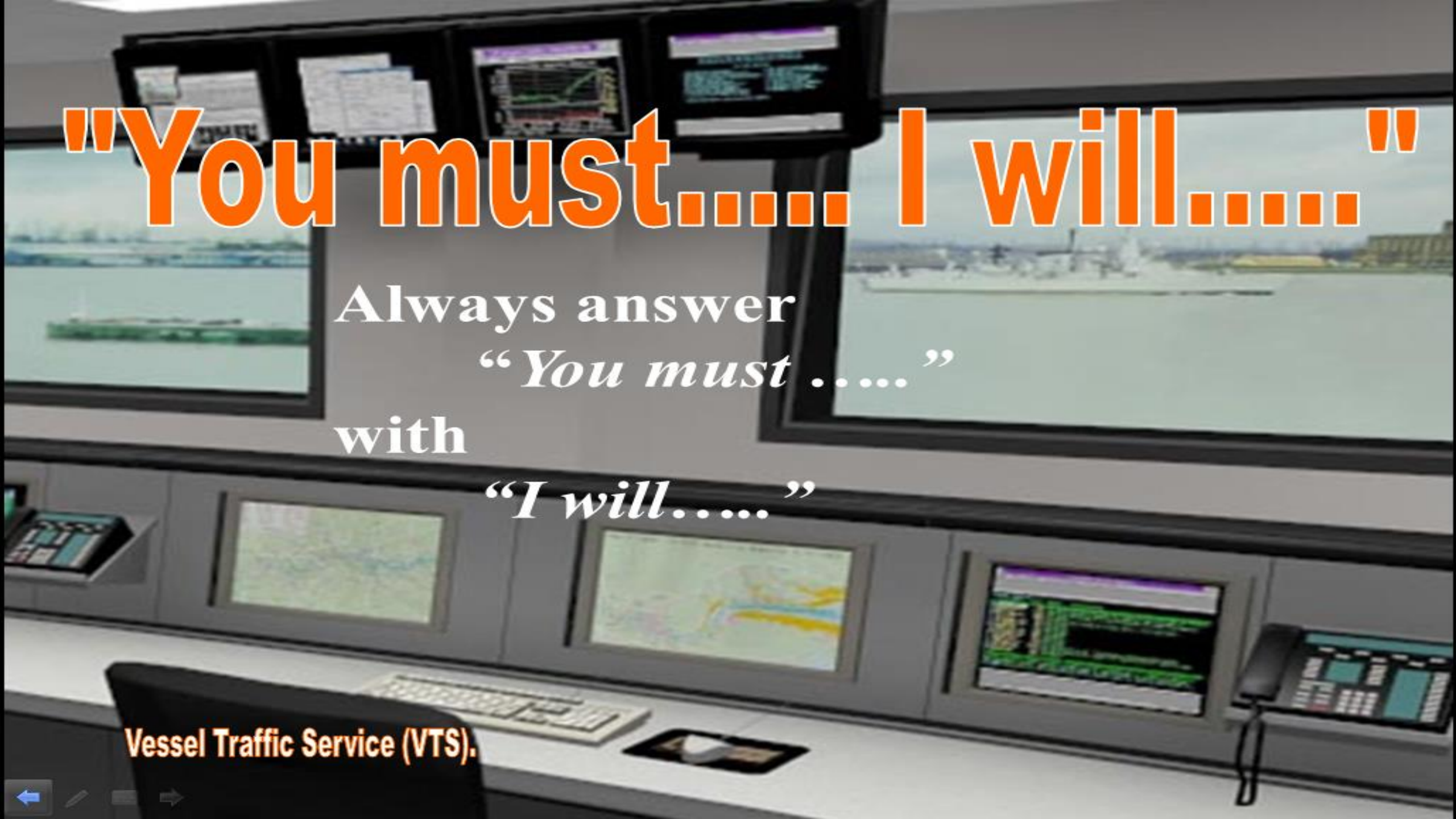
DSC-announcement (*GMDSS - vessels*).

Intership communication and communication between ship and coastal station is *announced* through Digital Selective Calling.

VTS

When the *DSC-acknowledgement* has been received, communication by VHF will begin.

REMEMBER:
Always
ADDRESS AND IDENTIFY
after you have heard the word
"OVER".


"You must..... I will....."
Always answer
"You must ....."
with
"I will....."
Vessel Traffic Service (VTS).

General

"Mistake .....correction"

"Mistake ….. correction"
is used when incorrect information has been given.

"Mistake .....correction"

"Mistake ..... correction"
is used when incorrect information has been given.

"Repeat"

**"Repeat" (or "I say again")
is used when an *important* message
or part of a messages is repeated.**

"Say again"

“Say again” is used when a message or part of a message has not been clearly understood.

SMCP

In VHF-communication the IMO <u>Standard Marine Communication Phrases</u> must always be used to keep the conversation short.

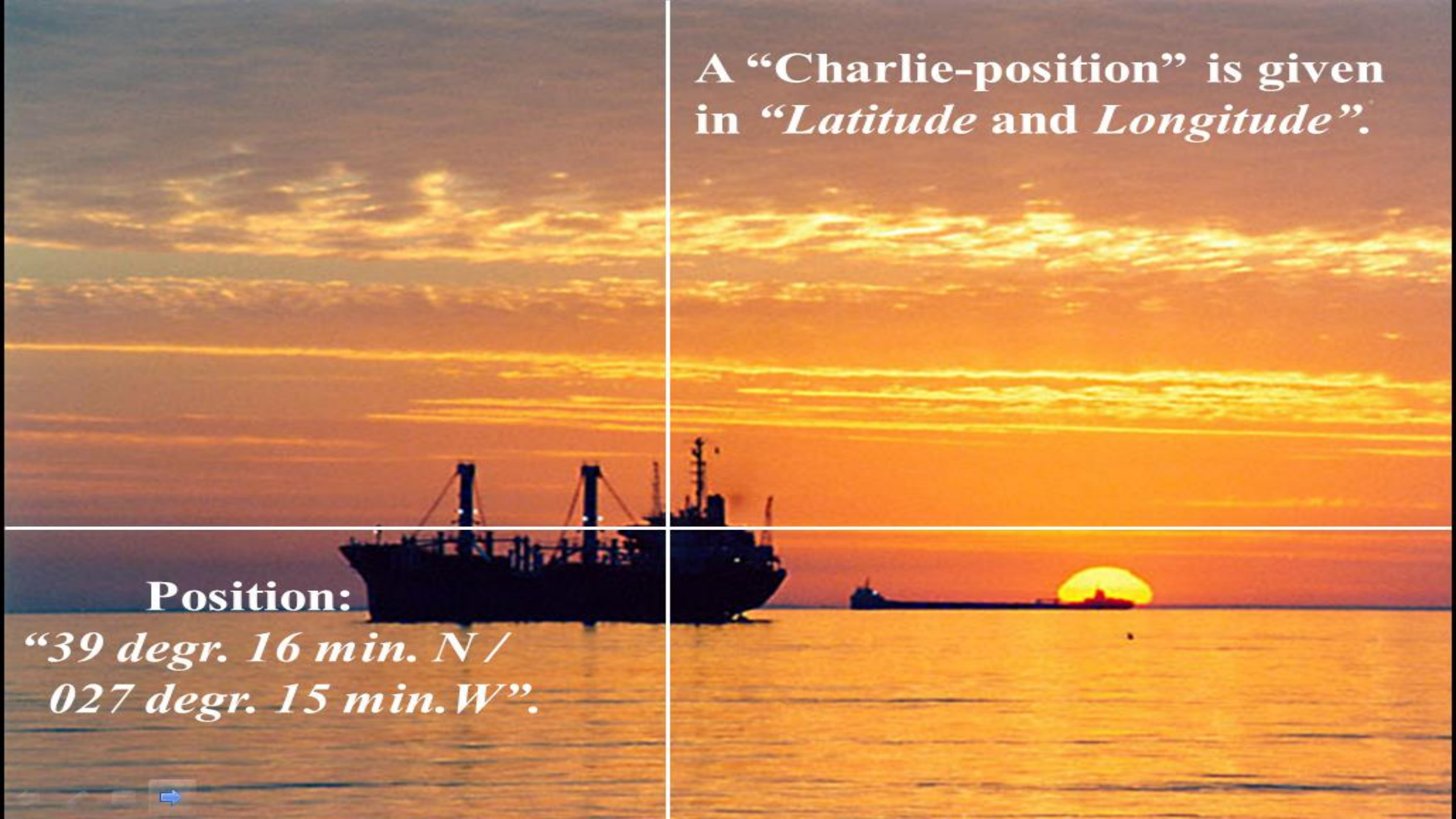
IMO Ship Reporting System

Coastal stations often ask for a MARITME and POSITION REPORT of your ship. For this *MAREP/POSREP* the *Standard Marine Alphabet* is used.

MAREP / POSREP

ALFA – VESSEL'S NAME + CALL SIGN;
BRAVO – DAY OF MONTH AND TIME (UTC/Z / ZONE / LOCAL TIME);
CHARLIE – POSITION (LONGITUDE / LATITUDE);
DELTA – POSITION (AS BEARING AND DISTANCE FROM FIXED POINT.);
ECHO – TRUE COURSE;
FOXTROT – SPEED (IN KNOTS);
GOLF – LAST PORT OF DEPARTURE;
HOTEL – TIME AND POINT OF ENTRY INTO THE SYSTEM;
INDIA – DESTINATION (+ ETA);
JULIET – DEEP SEA OR LOCAL PILOT ON BOARD;
KILO – TIME OF EXIT FROM THE SYSTEM;
LIMA – INTENDED TRACK;
MIKE – VHF-CHANNELS GUARDED;
NOVEMBER – TIME OF NEXT REPORT;

OSCAR – DRAFT;
PAPA – CARGO (TYPE AND QUANTITY);
QUEBEC – ANY DEFECTS OR LIMITATION;
ROMEO – ANY POLLUTANTS OR DANGEROUS GOODS;
SIERRA – WEATHER CONDITIONS;
TANGO – SHIP'S REPRESENTATIVE OR OWNER;
UNIFORM – SIZE AND TYPE OF VESSEL;
VICTOR – MEDICAL PERSONEL;
WHISKEY – NUMBER OF PERSONS ON BOARD;
X-RAY – ANY OTHER USEFUL INFORMATION.
YANKEE – REQUEST TO RELAY REPORT TO OTHER SYSTEM (E.G. AMVER);
ZULU – END OF REPORT.


A “Charlie-position” is given in “*Latitude* and *Longitude*”.
Position:
“39 degr. 16 min. N / 027 degr. 15 min.W”.

A "Delta-position" is a bearing and distance-indication from a fixed point. It is *preceded* by the word "*bearing*".

Position:

"Bearing 158 degr. from the Bassurelle, distance 1.5 miles".