





SHORT RANGE CERTIFICATE

MARINE RADIO



COURSE CONTENT

- (1) Introduction to VHF Radio**
- (2) Types of VHF Radios**
- (3) Simplex and Duplex transmission**
- (4) VHF Radio functions**
- (5) Digital Selective Calling (DSC)**
- (6) VHF Radio Regulations**
- (7) Phonetic Alphabet and numerals**
- (8) Procedure words used in VHF Radio calls**
- (9) Components of GMDSS**



COURSE OBJECTIVE

To qualify the candidate to be a:

- **competent VHF Radio Operator**
short range certificate
- for **leisure vessels**



VHF RADIO

VHF: VERY HIGH FREQUENCY

CALLED BY THE ITU: VHF MARITIME MOBILE BAND

**TRANSMITTER
MARINE VHF: + RECEIVER
+ CHANNELS**

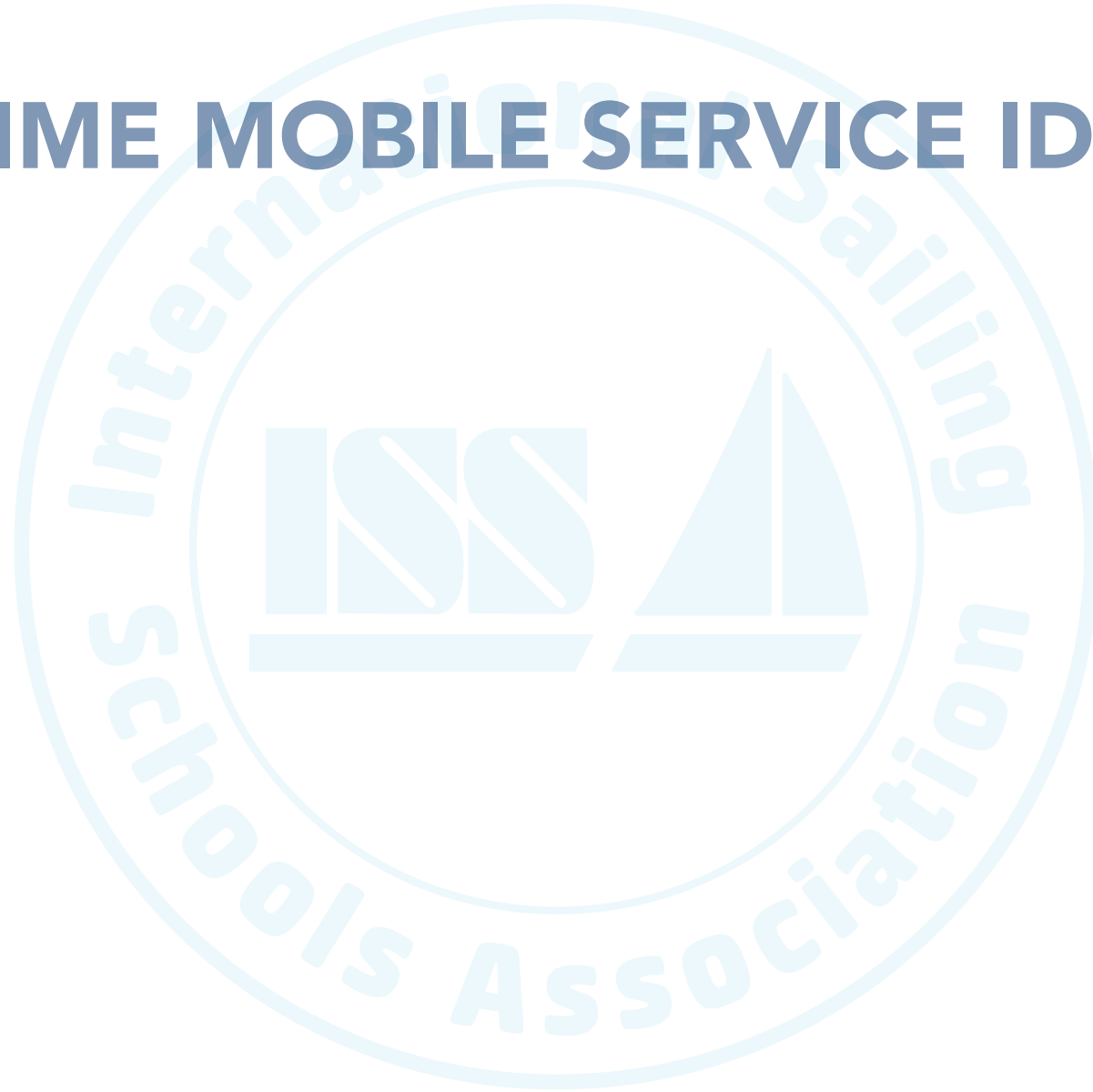
TRANSMISSION POWER: 1 / 5 / 6 / 25 WATTS

MAXIMUM RANGE: 60 NM



MMSI

MARITIME MOBILE SERVICE IDENTITY





MMSI

MARITIME MOBILE SERVICE IDENTITY

ALWAYS 9 DIGITS

1 2 3 4 5 6 7 8 9



MMSI

MARITIME MOBILE SERVICE IDENTITY

ALWAYS 9 DIGITS

C C C | 1 2 3 4 5 6

**COUNTRY
CODE**



MMSI

MARITIME MOBILE SERVICE IDENTITY

ALWAYS 9 DIGITS

C C C | 1 2 3 4 5 6

**COUNTRY | INDIVIDUAL
CODE | CODE**

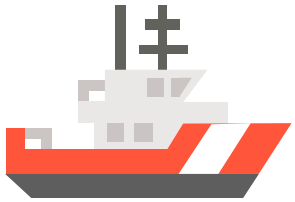


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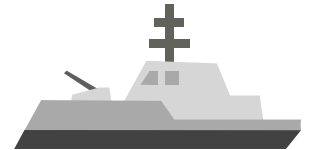
MARITIME MOBILE SERVICE IDENTITY

ALWAYS 9 DIGITS

C C C 1 2 3 4 5 6



0 C C C 1 2 3 4 5



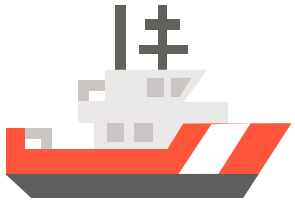


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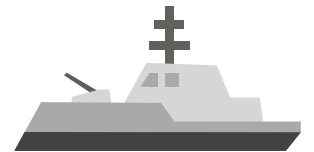
MARITIME MOBILE SERVICE IDENTITY

ALWAYS 9 DIGITS

C C C 1 2 3 4 5 6



0 C C C 1 2 3 4 5



0 0 C C C 1 2 3 4



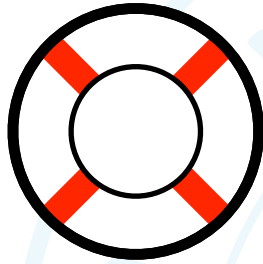


WHY USE THE VHF RADIO ?

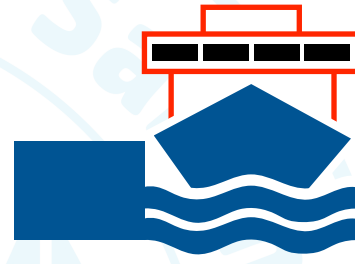




WHY USE THE VHF RADIO ?



RESCUE SERVICES



HARBORS / MARINAS



BASCULE BRIDGES



LOCKS / SLUICES



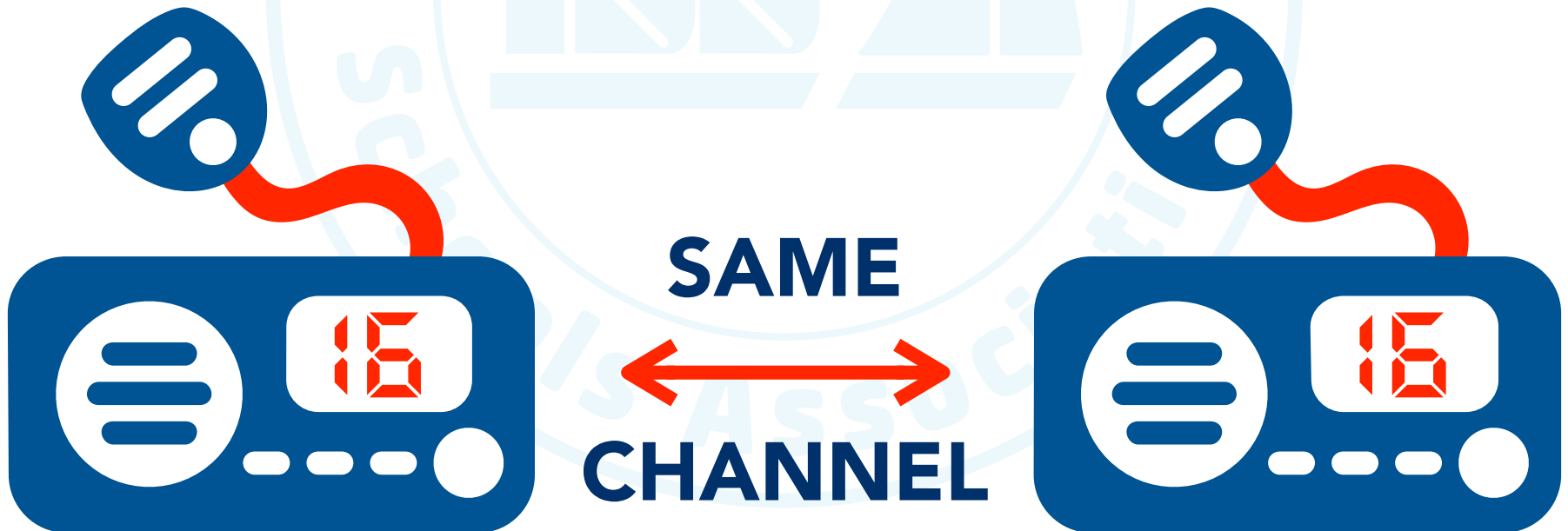
OTHER SHIPS



VHF RADIO

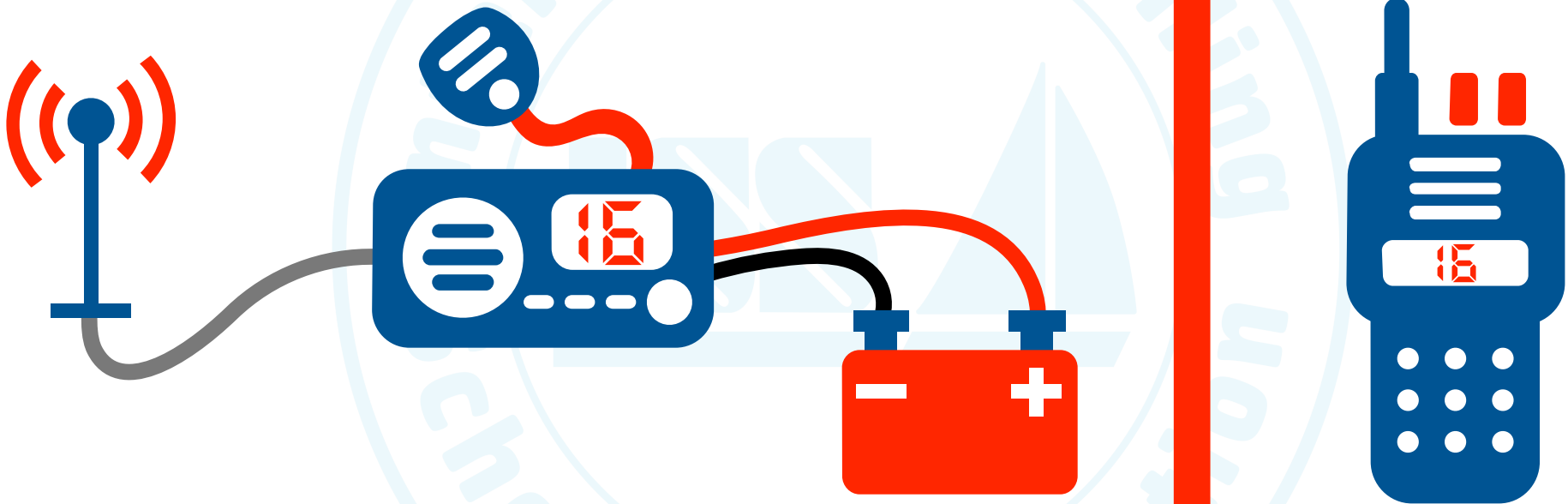
CHANNELS

1-28 & 60-88





TYPES OF VHF RADIOS



MORE RELIABLE
HIGHER RANGE
BIGGER DISPLAY

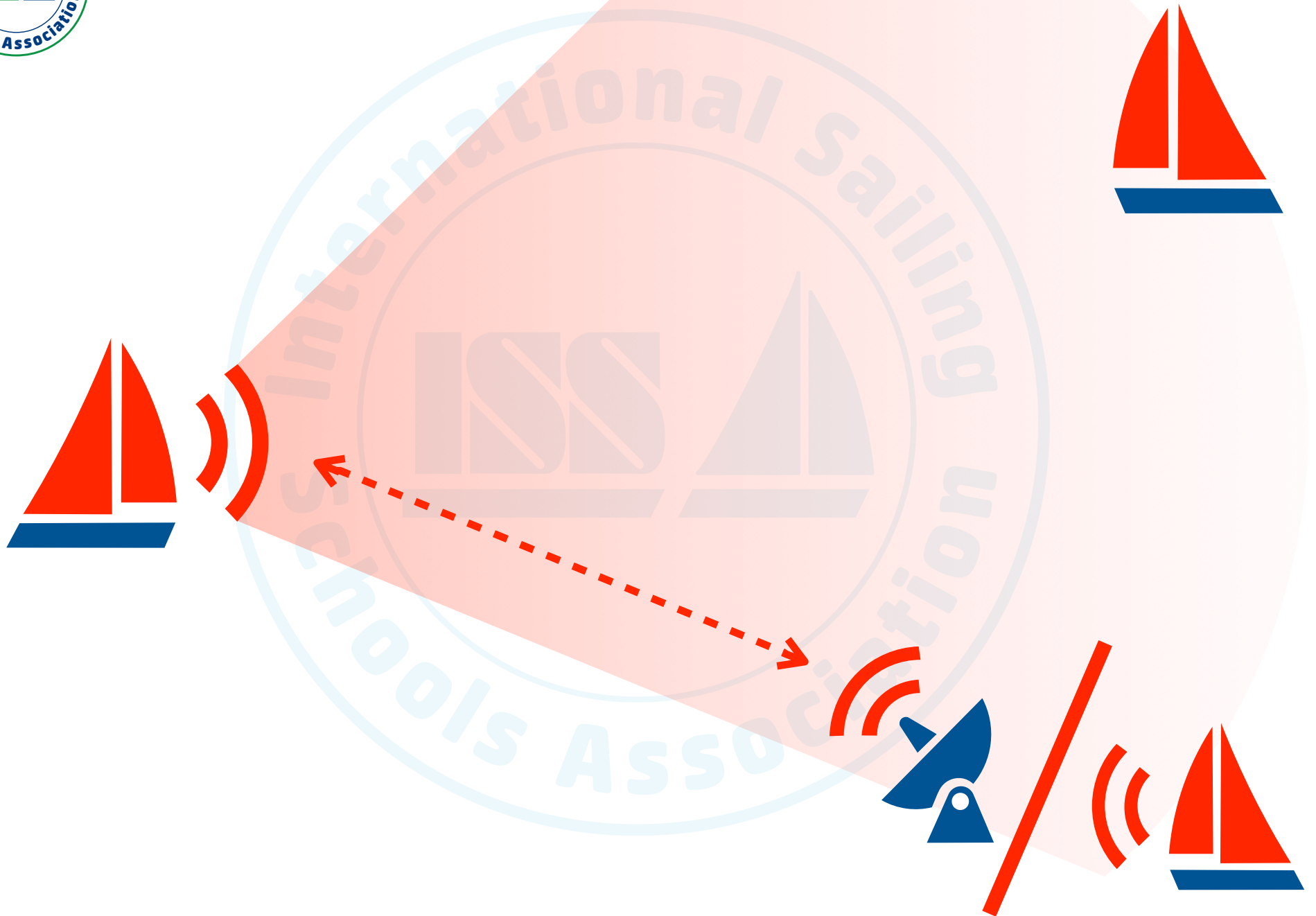


SIMPLEX AND DUPLEX



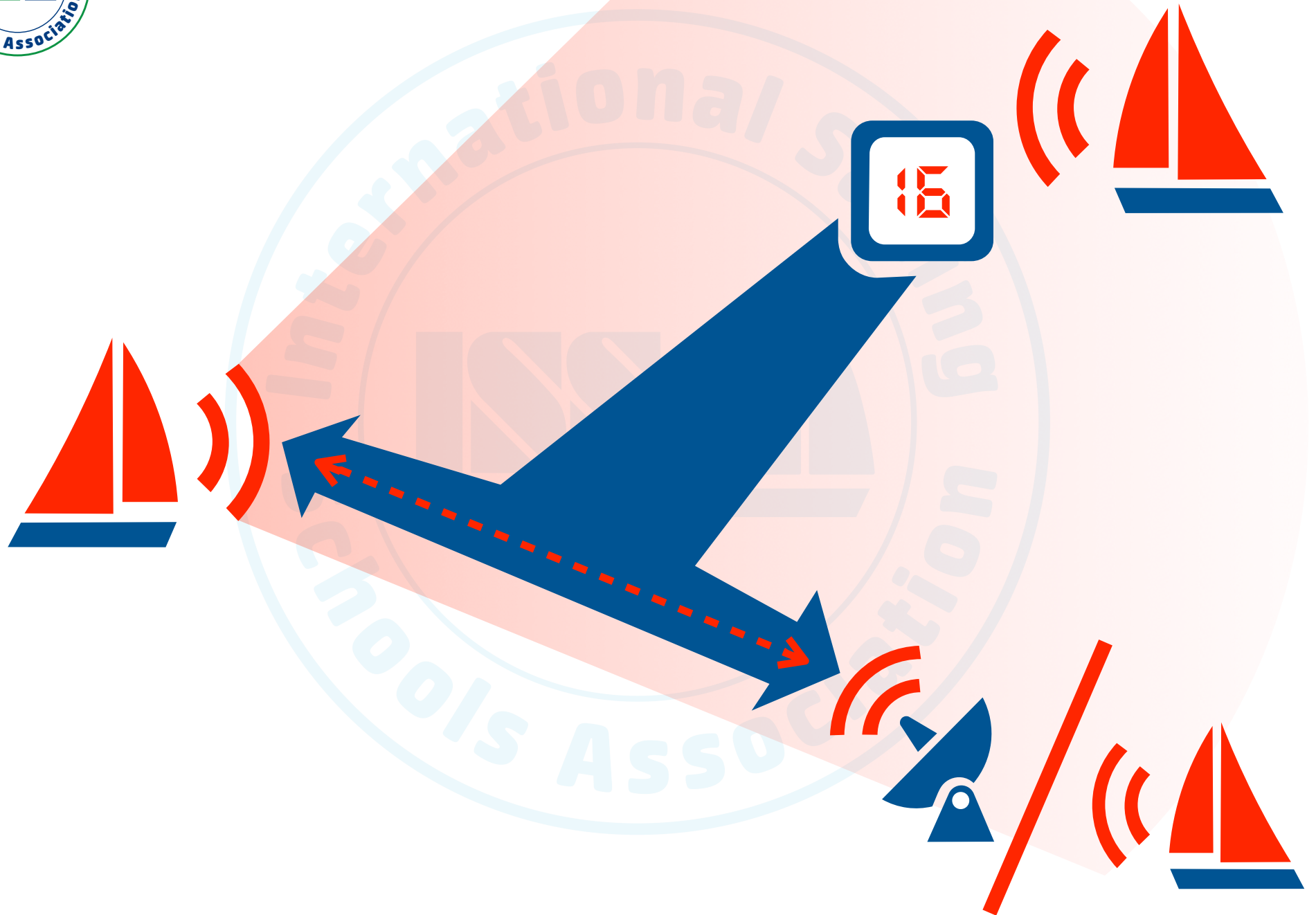


DUAL WATCH





DUAL WATCH





BASIC CHANNELS

16

START



END

60s

DISTRESS + URGENCY + SAFETY + CALLING



BASIC CHANNELS

70 **D**IGITAL
SELECTIVE
CALLING

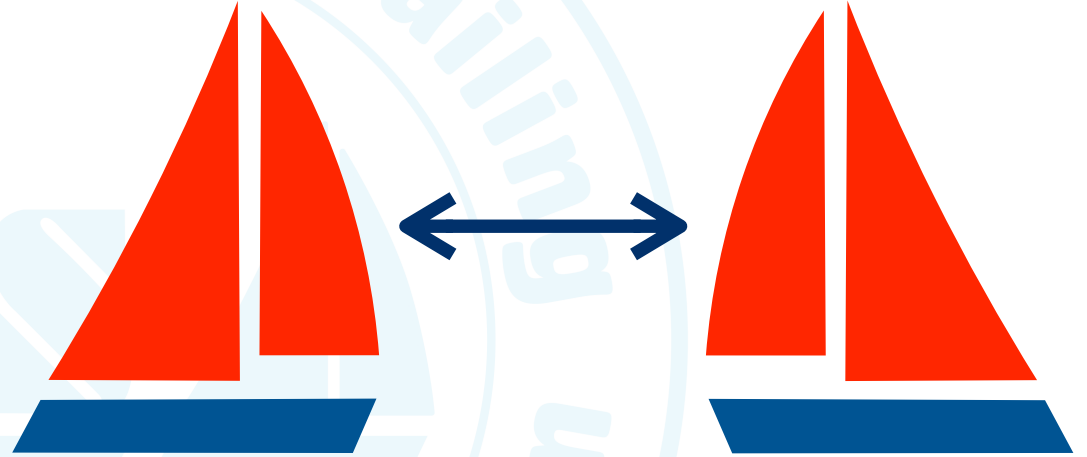


DISTRESS + URGENCY + SAFETY + CALLING



BASIC CHANNELS

13



**NAVIGATIONAL
SAFETY**





BASIC CHANNELS SUMMARY

16



70



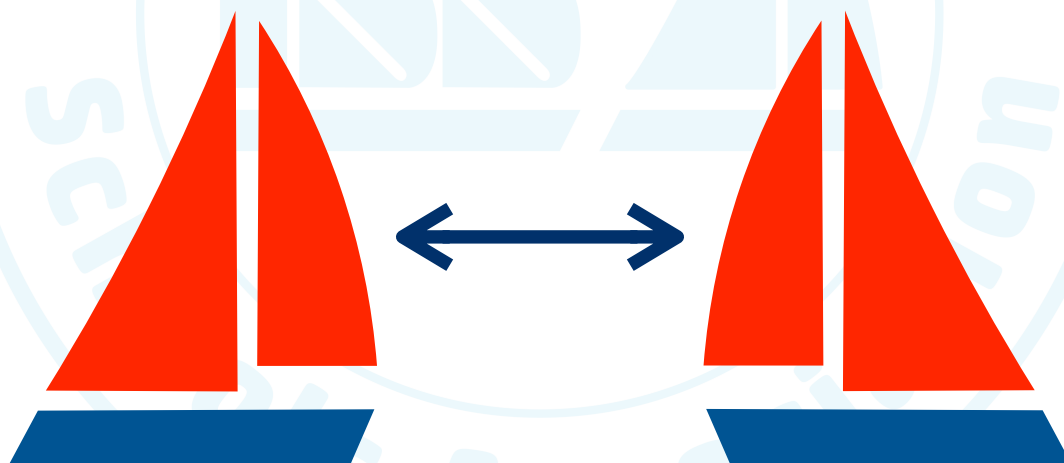
13





BASIC CHANNELS

6 8 7 2 7 7





BASIC CHANNELS

1 1 1 2 1 4

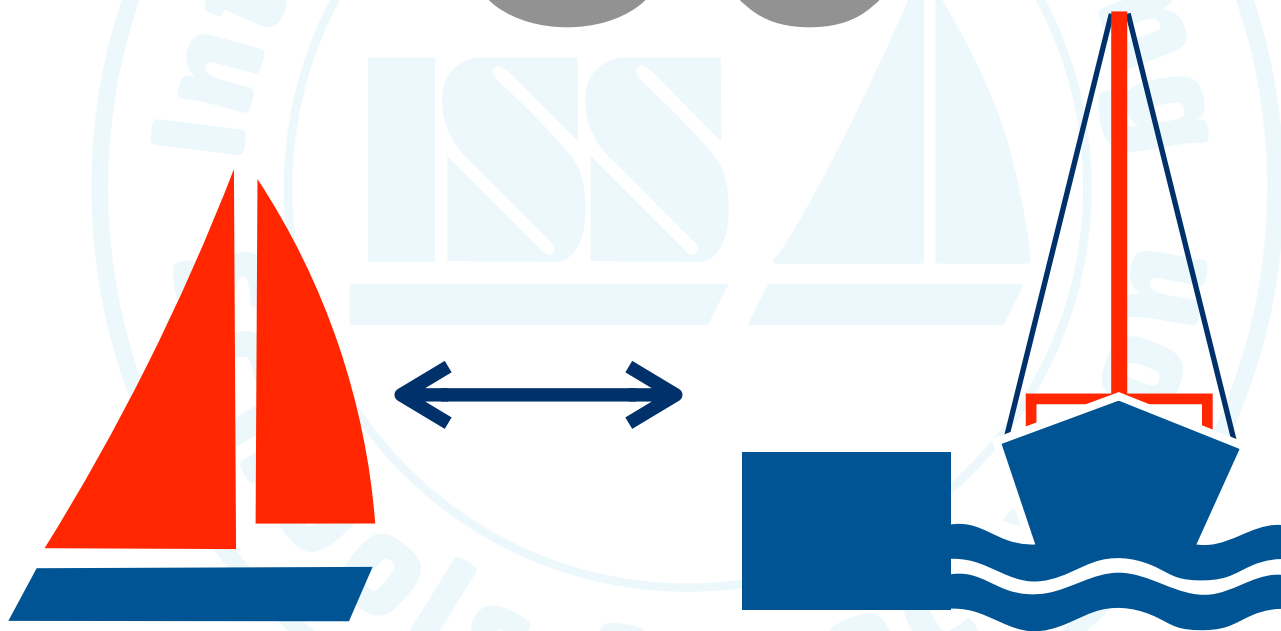


PORTS



BASIC CHANNELS

80



MARINAS

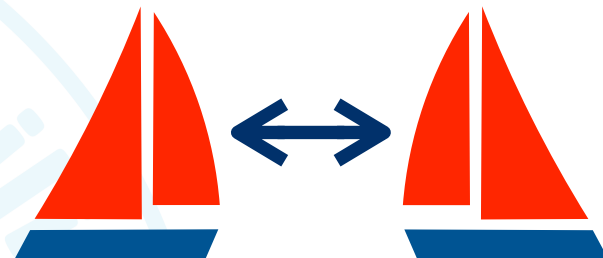


BASIC CHANNELS

16



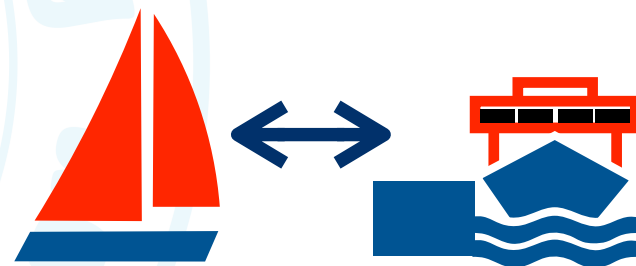
6	8
72	77



70



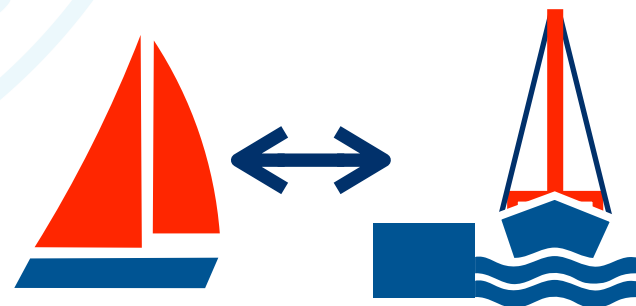
11
12 14



13

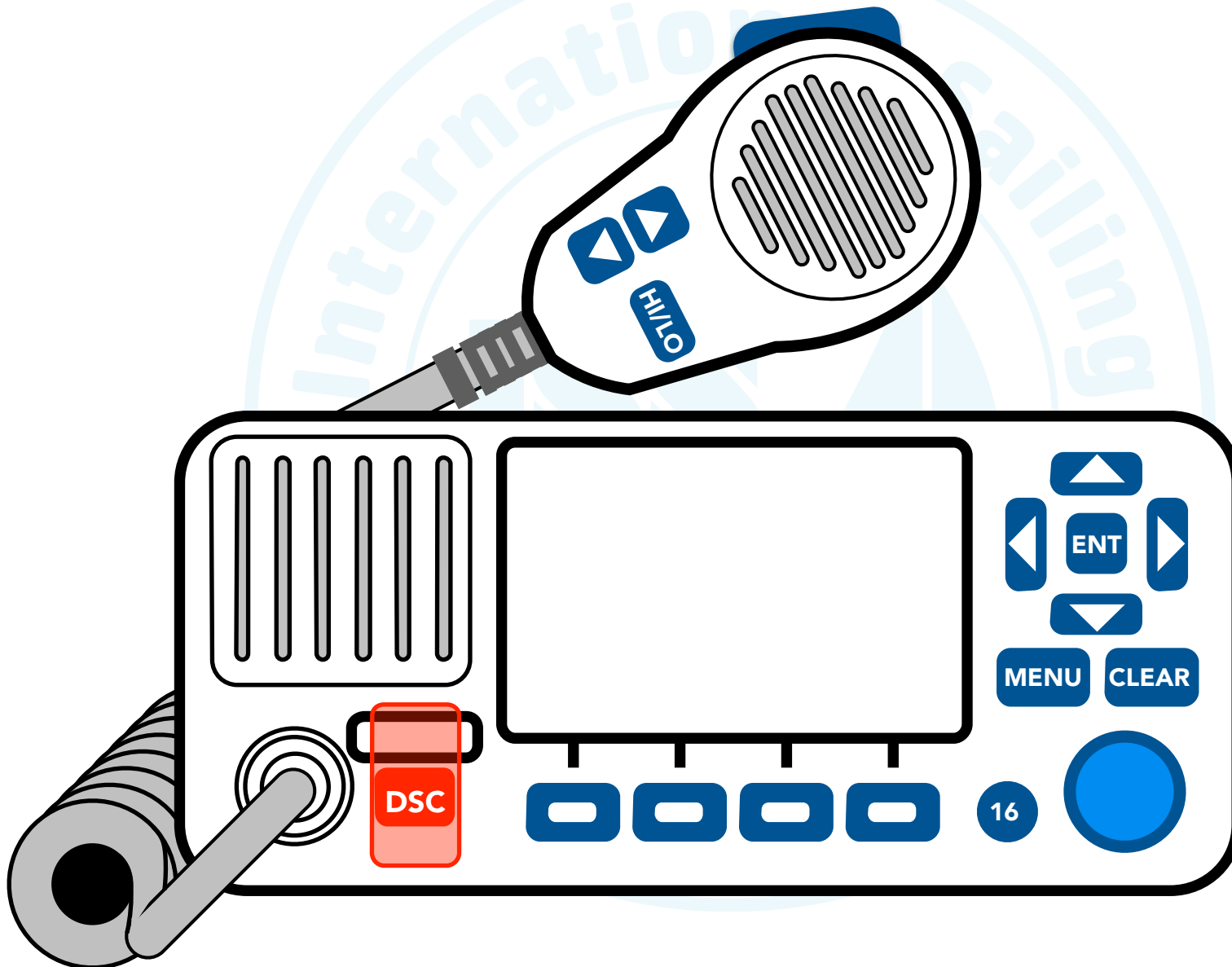


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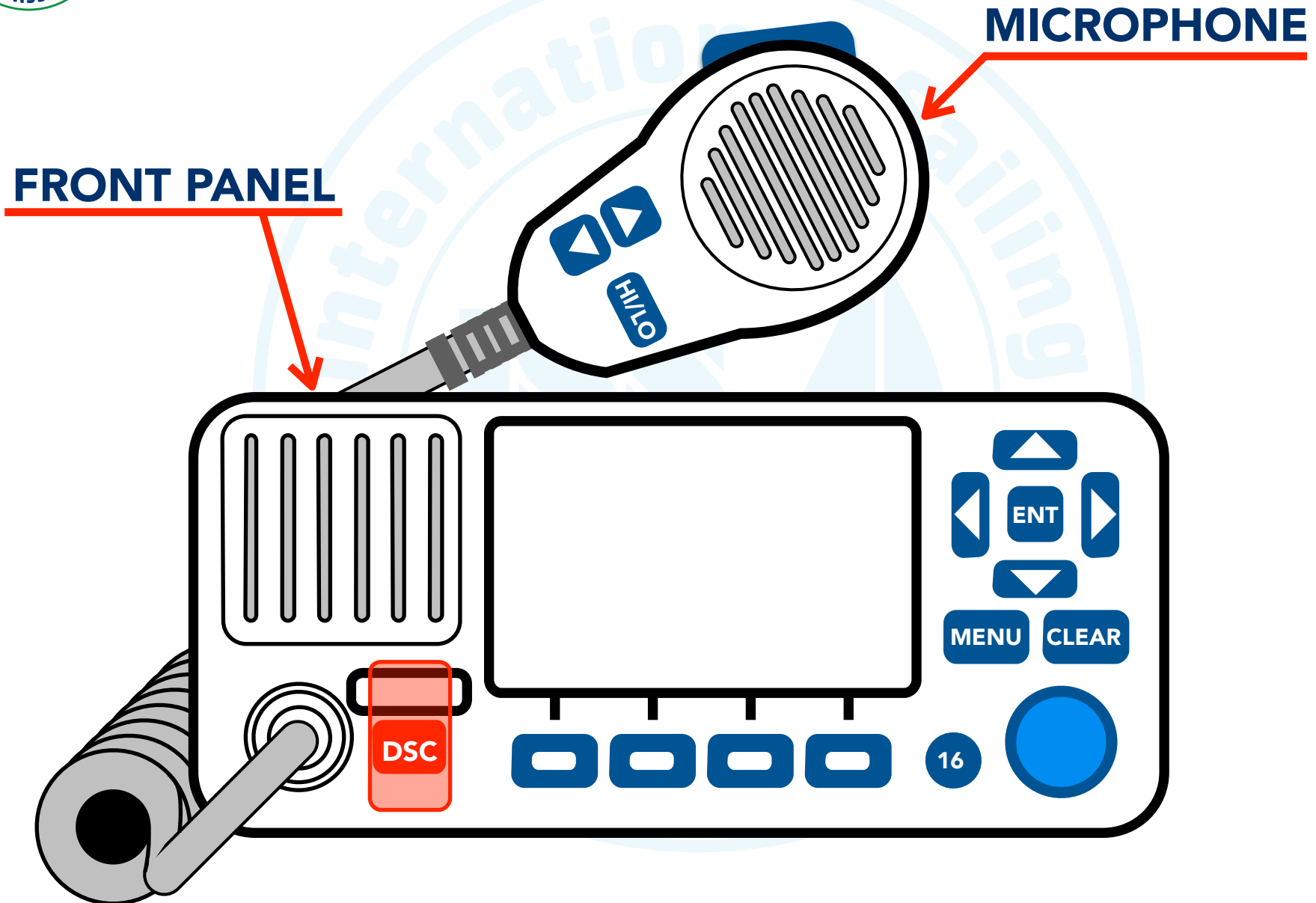




VHF RADIO FUNCTIONS



VHF RADIO FUNCTIONS





VHF RADIO FUNCTIONS

MICROPHONE

PRESS TO TRANSMIT (P.T.T.)

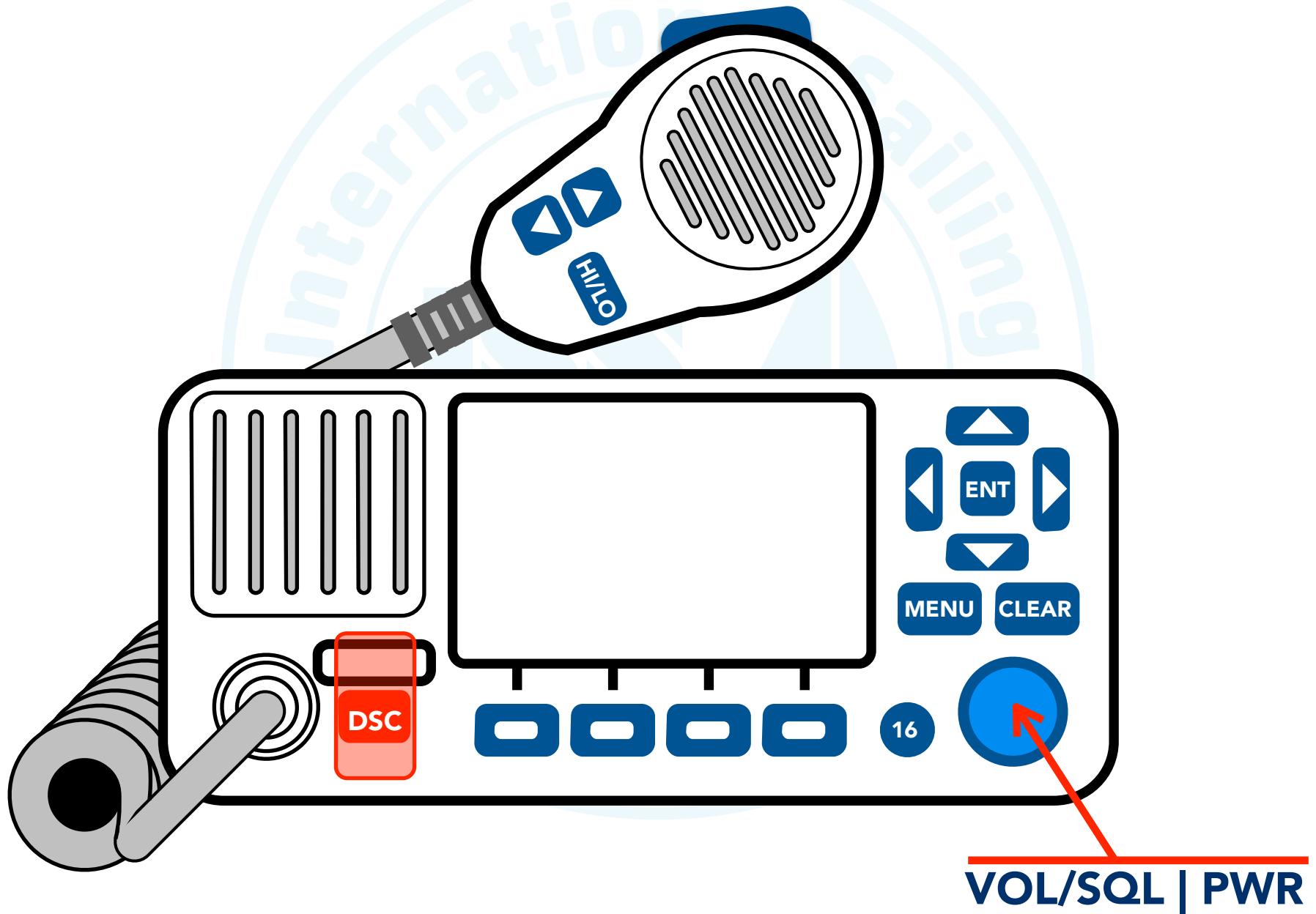
CHANNEL SELECTOR

**TRANSMIT POWER
HI / LO**





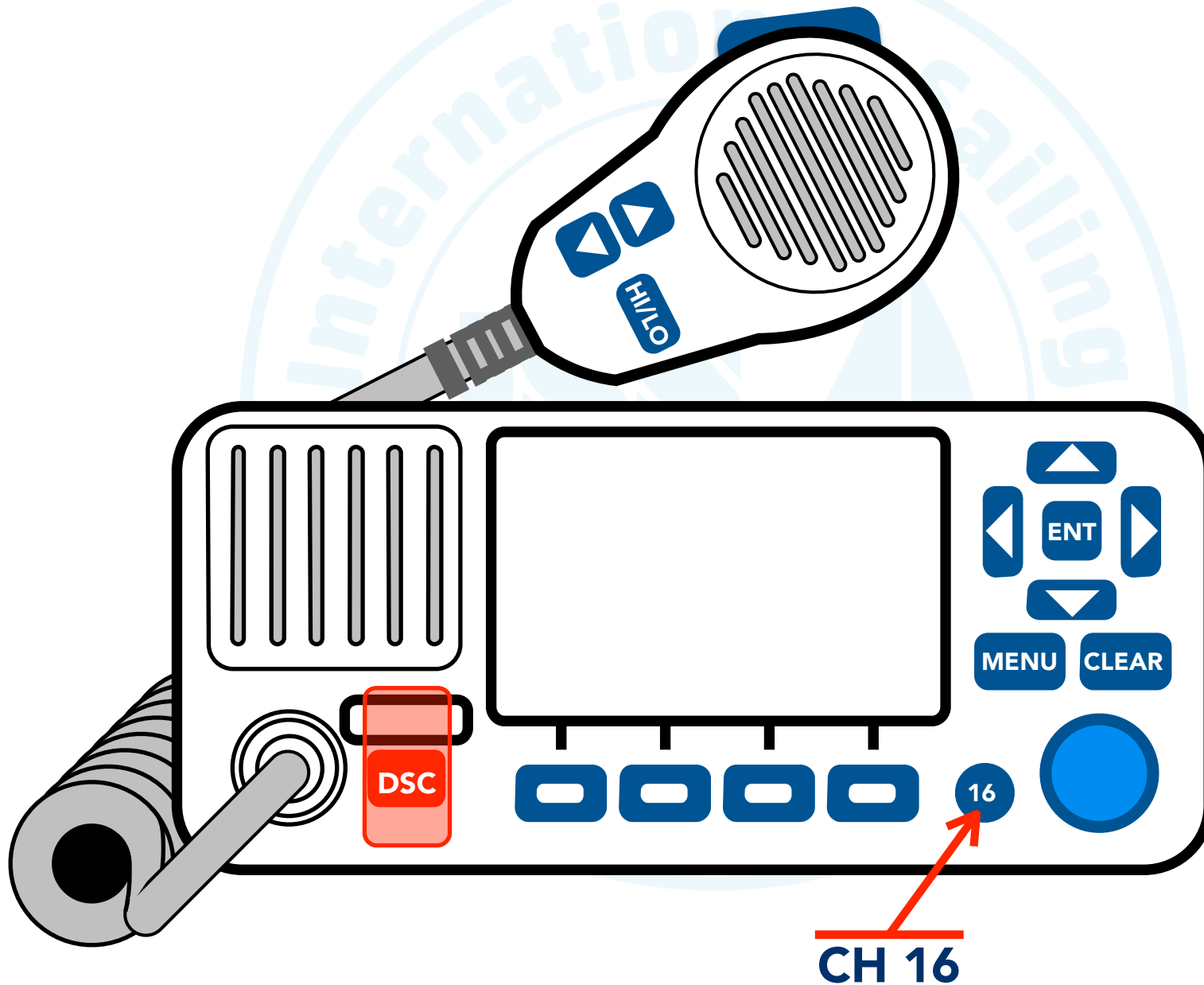
VHF RADIO FUNCTIONS



VOL/SQL | PWR

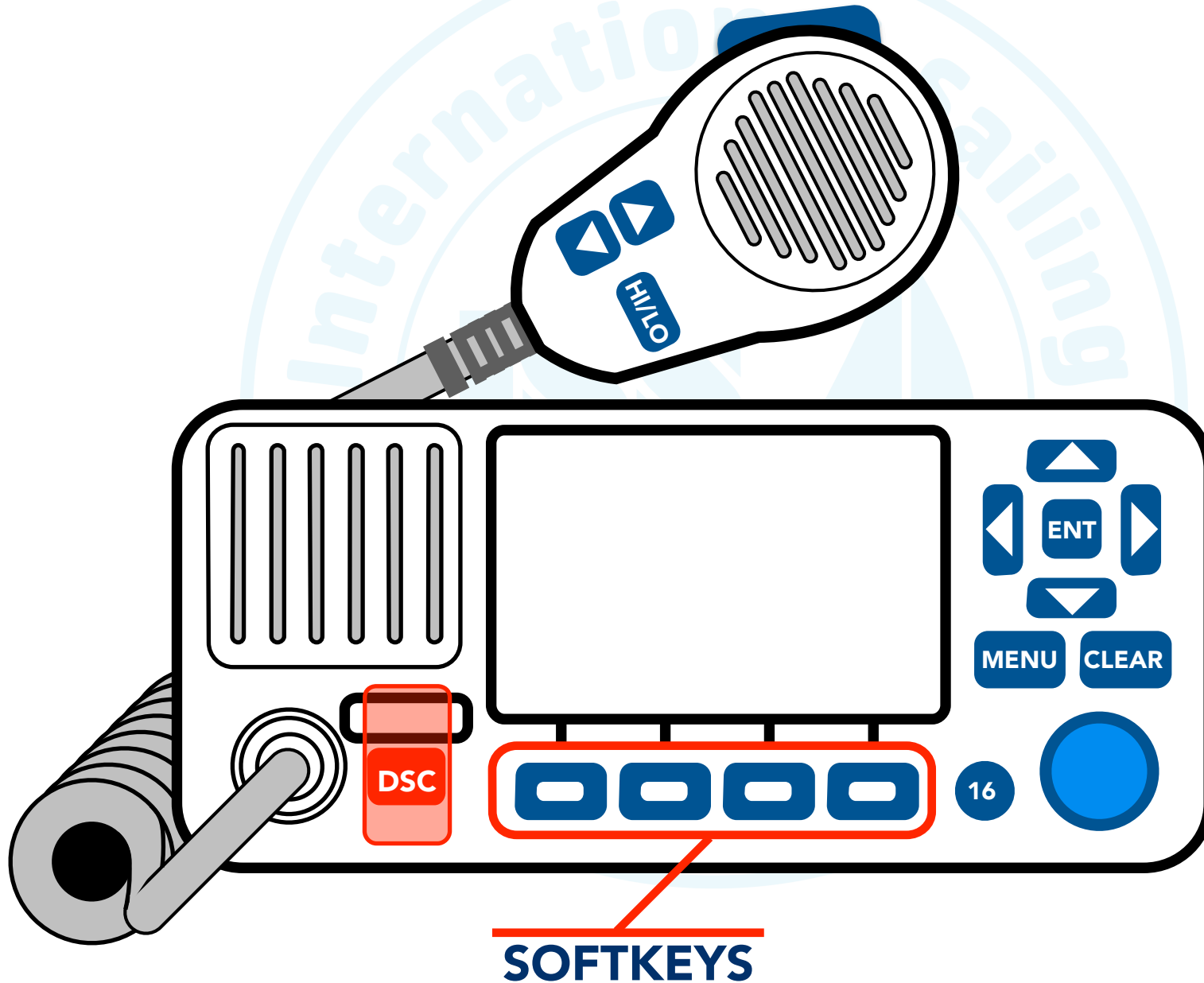


VHF RADIO FUNCTIONS



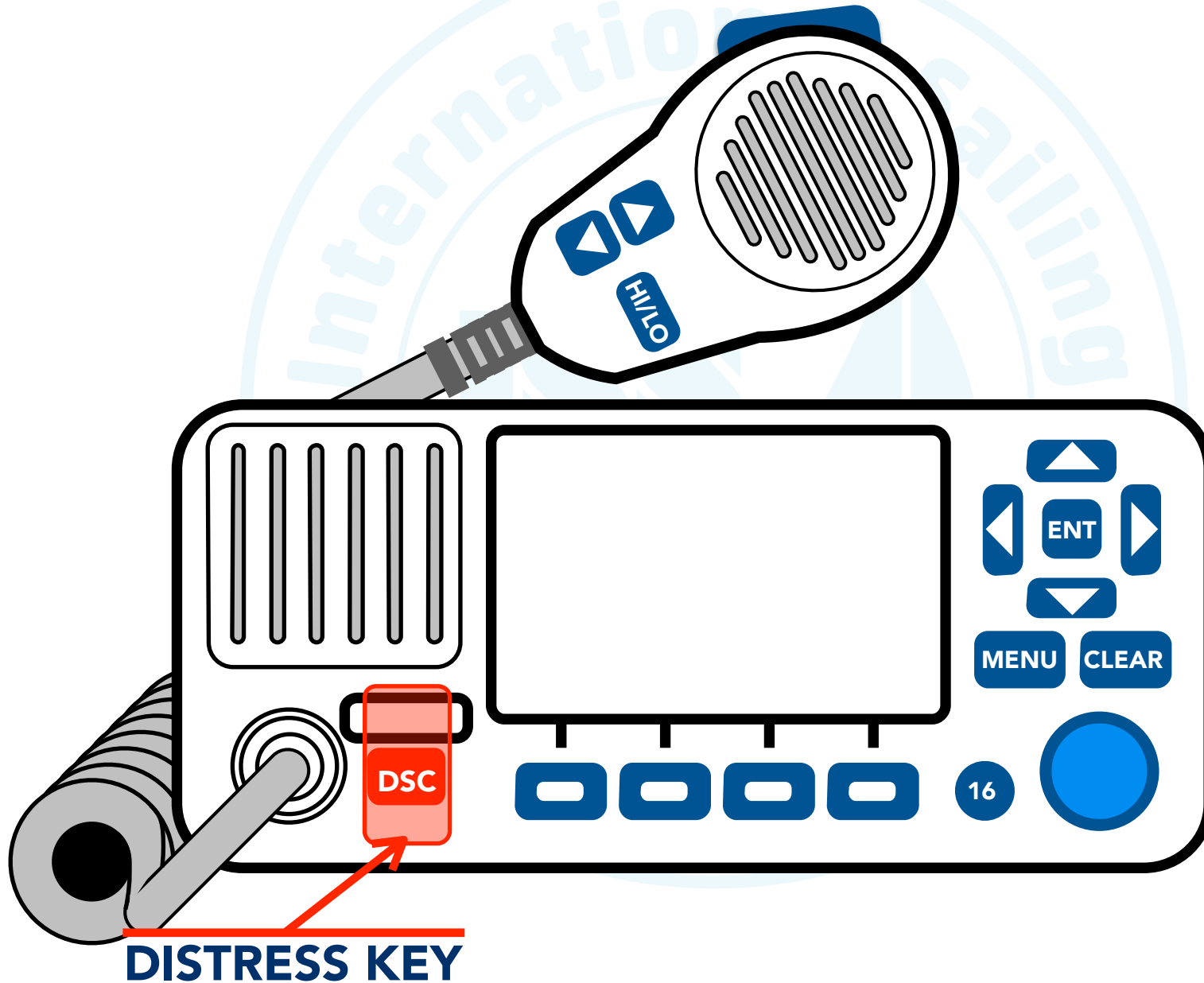


VHF RADIO FUNCTIONS



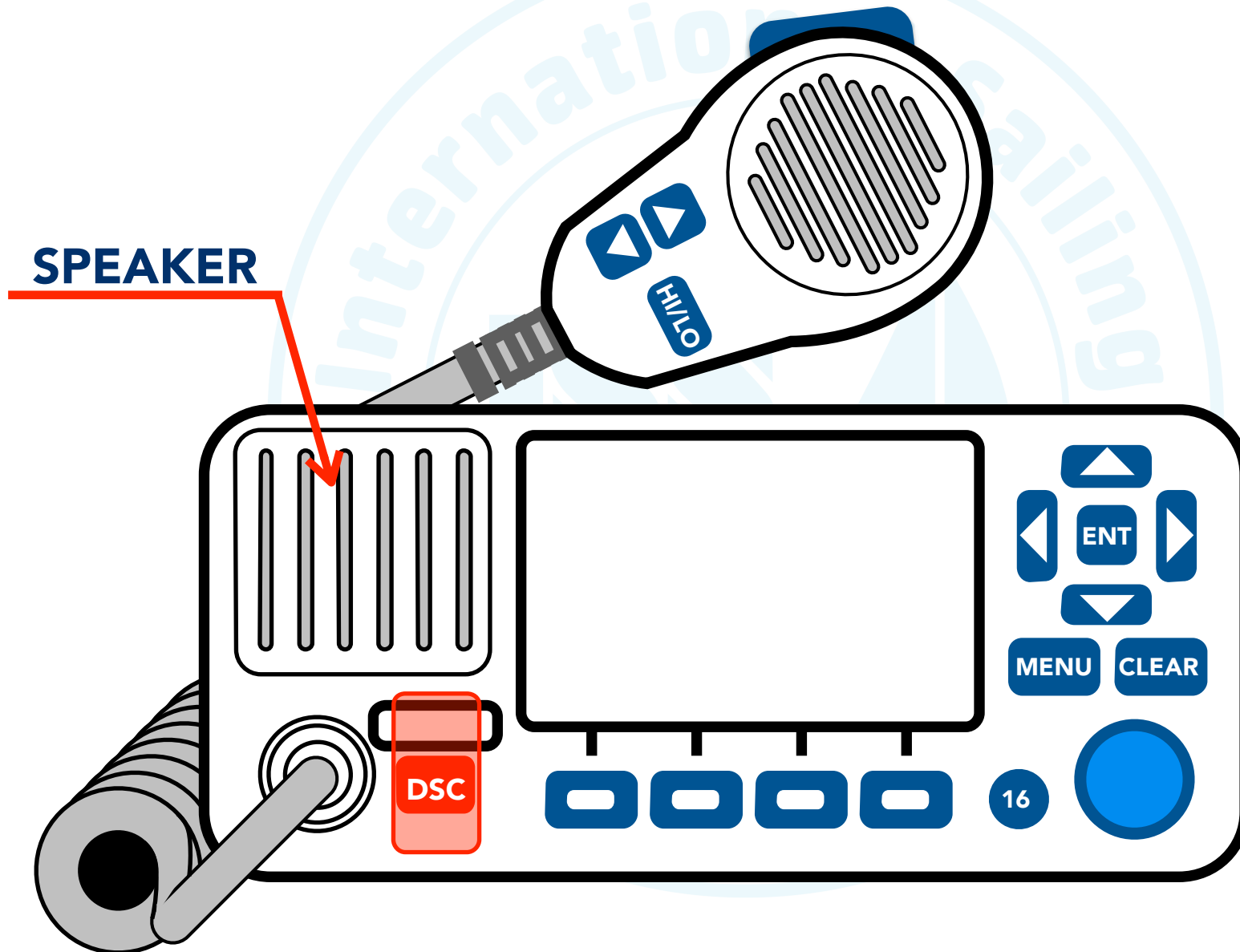


VHF RADIO FUNCTIONS



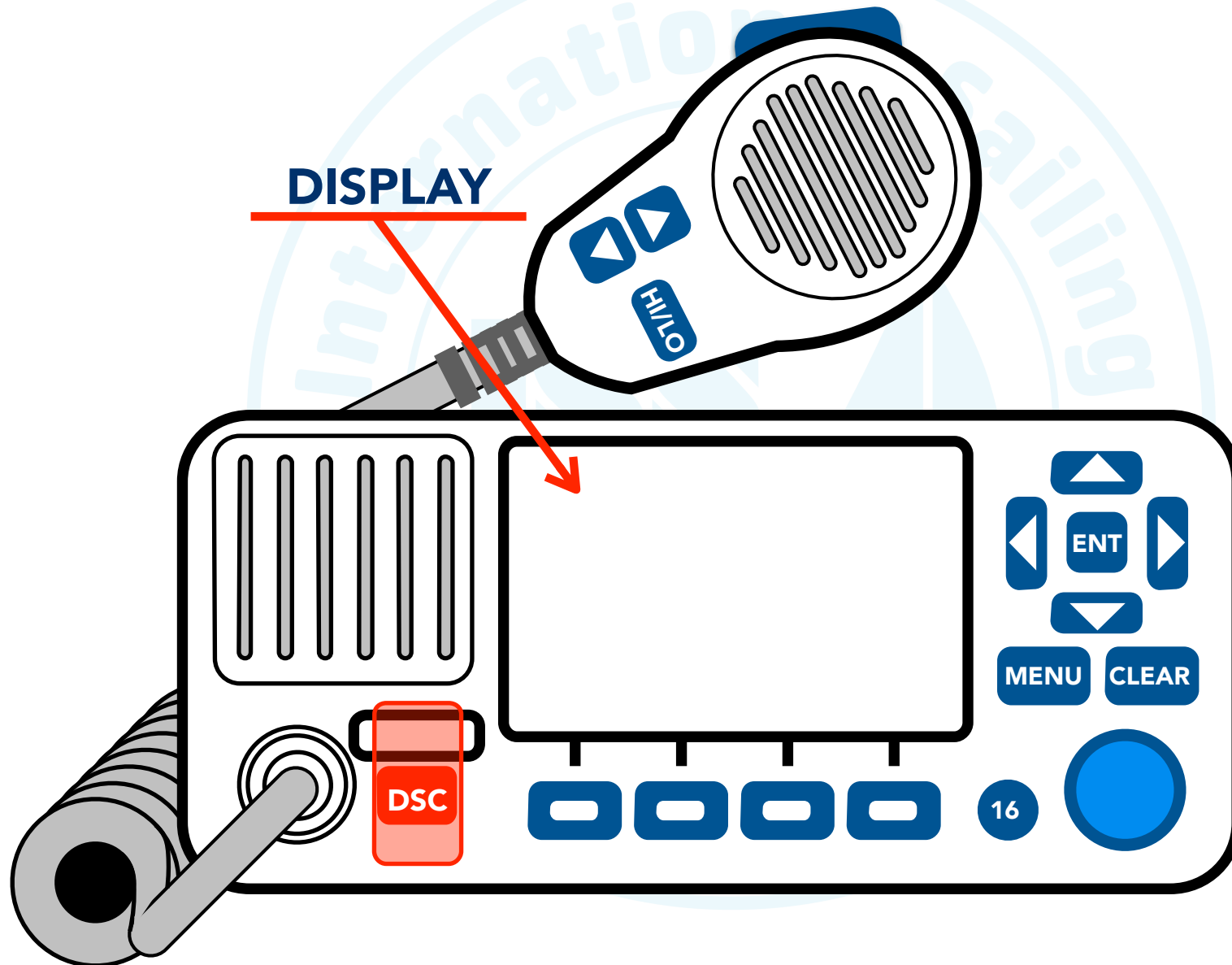


VHF RADIO FUNCTIONS

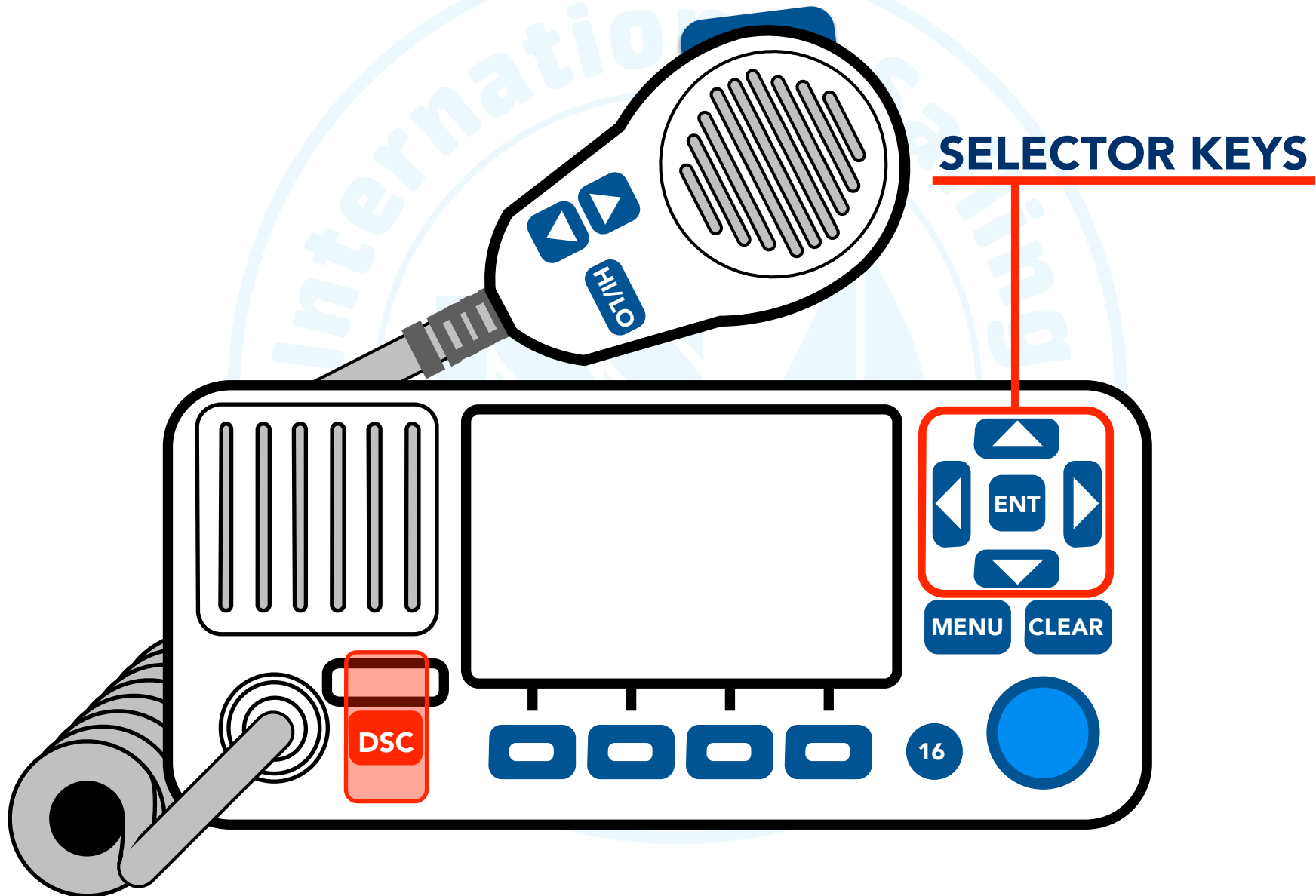




VHF RADIO FUNCTIONS

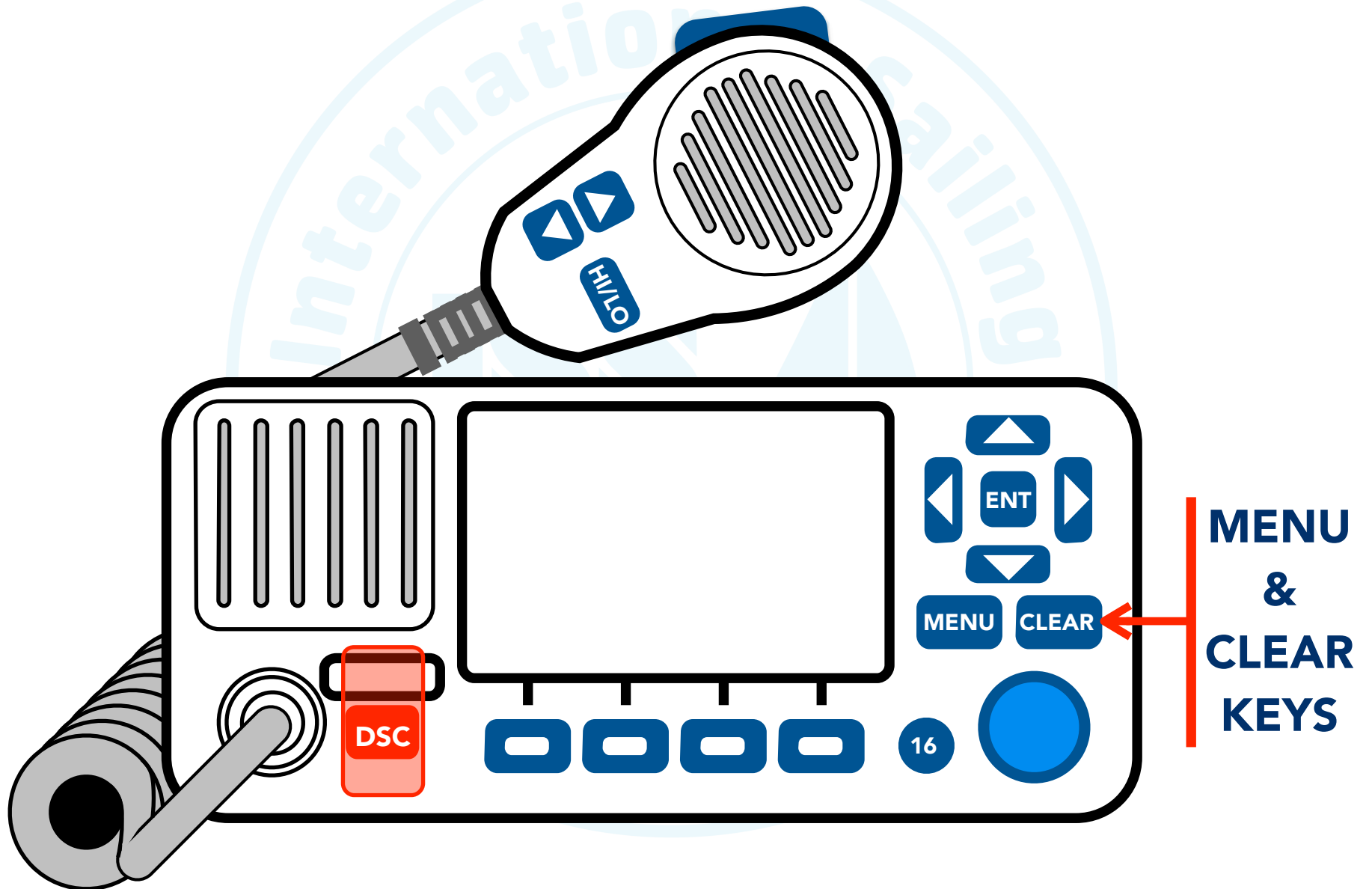


VHF RADIO FUNCTIONS

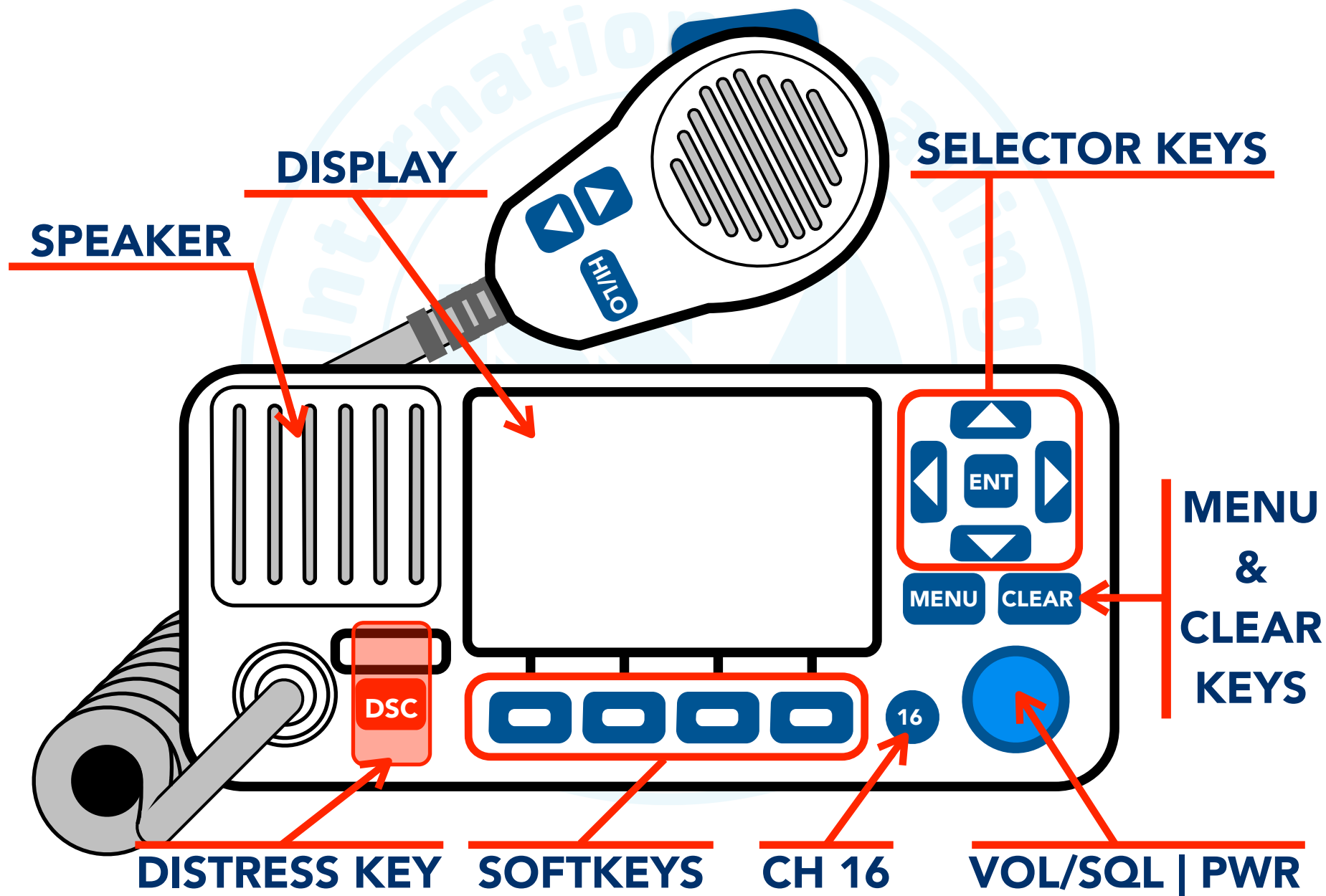




VHF RADIO FUNCTIONS



VHF RADIO FUNCTIONS





DSC

70

DIGITAL
SELECTIVE
CALLING



DISTRESS + URGENCY + SAFETY + CALLING



DSC

**ALERTS ON
VHF, MF AND HF
MARINE RADIO
SYSTEMS**

**INCREASED RANGE
AND QUALITY OF
TRANSMISSION**

DIGITAL
SELECTIVE
CALLING



DISTRESS + URGENCY + SAFETY + CALLING



DSC

**ALERTS ON
VHF, MF AND HF
MARINE RADIO
SYSTEMS**

**INCREASED RANGE
AND QUALITY OF
TRANSMISSION**

DIGITAL
SELECTIVE
CALLING



DISTRESS + URGENCY + SAFETY + CALLING
ONLY TO ESTABLISH CONTACT



ALERTS ON
VHF, MF AND HF
MARINE RADIO
SYSTEMS

INCREASED **RANGE**
AND **QUALITY** OF
TRANSMISSION

DSC

DIGITAL
SELECTIVE
CALLING

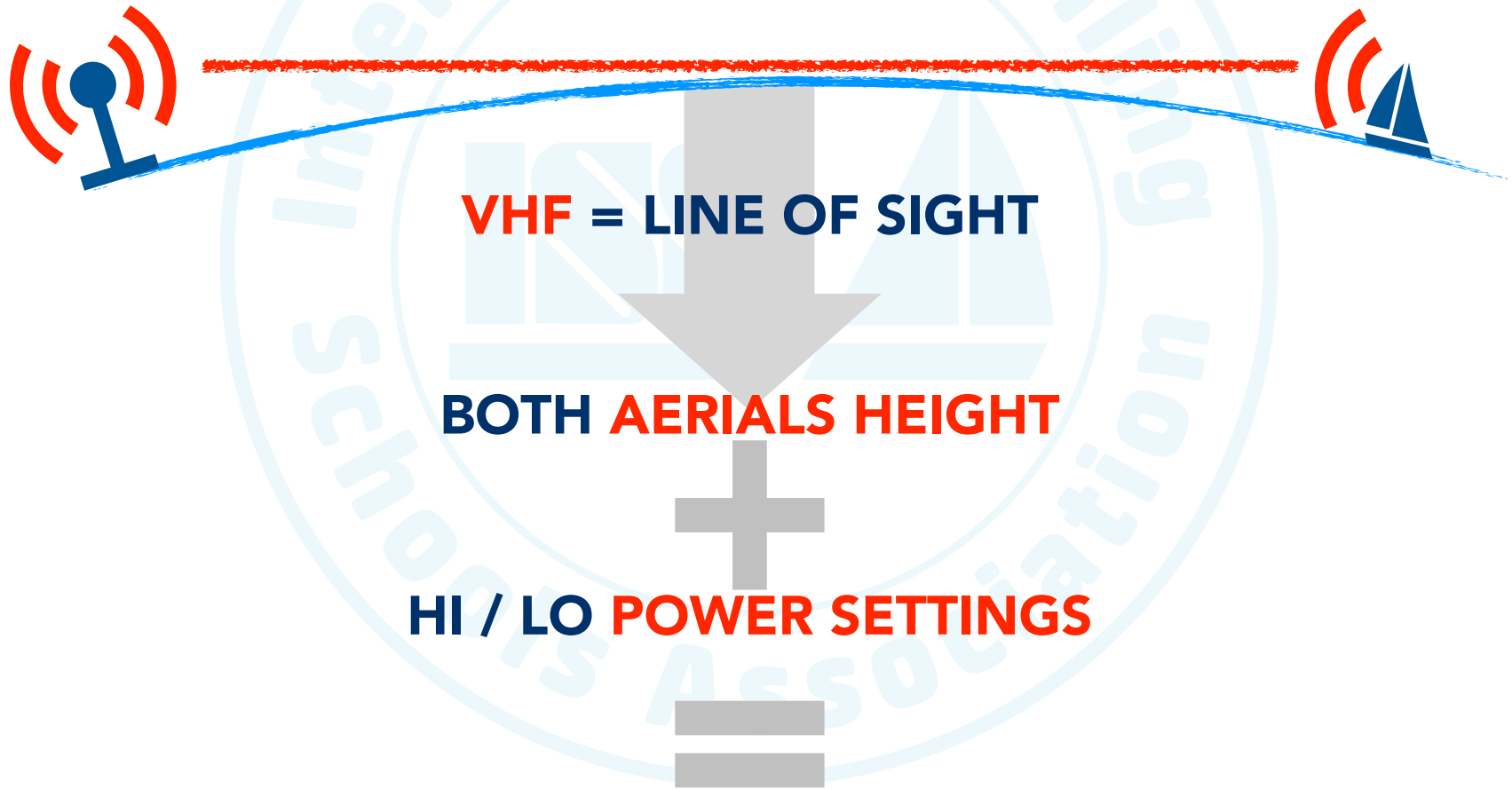


DISTRESS + URGENCY + SAFETY + CALLING
ONLY TO ESTABLISH CONTACT

- (1) ALL STATIONS**
- (2) GROUP STATIONS**
- (3) INDIVIDUAL STATIONS**



VHF RADIO RANGE



VHF = LINE OF SIGHT

BOTH AERIALS HEIGHT

HI / LO POWER SETTINGS

MAX ~60 NM



VHF RADIO REGULATIONS



INTERNATIONAL RADIO LANGUAGE



RADIO LICENSED BY THE VESSEL FLAG STATE



QUALIFIED OPERATOR



VHF RADIO REGULATIONS



TRANSMISSION **AUTHORIZED** BY THE CAPTAIN



ALWAYS **NAME** OR **CALL SIGN**



NO **FALSE** DISTRESS



VHF RADIO REGULATIONS



NO MUSIC



OBEY INSTRUCTIONS FROM COAST RADIO STATION



**FIRST LISTEN THAN TRANSFER
DO NOT DISTURB**



VHF RADIO REGULATIONS



SECRECY OF CORRESPONDENCE



NO SWEARING OR PROFANITY

16

MAINTAIN WATCH ON CH 16



VHF RADIO REGULATIONS



NO



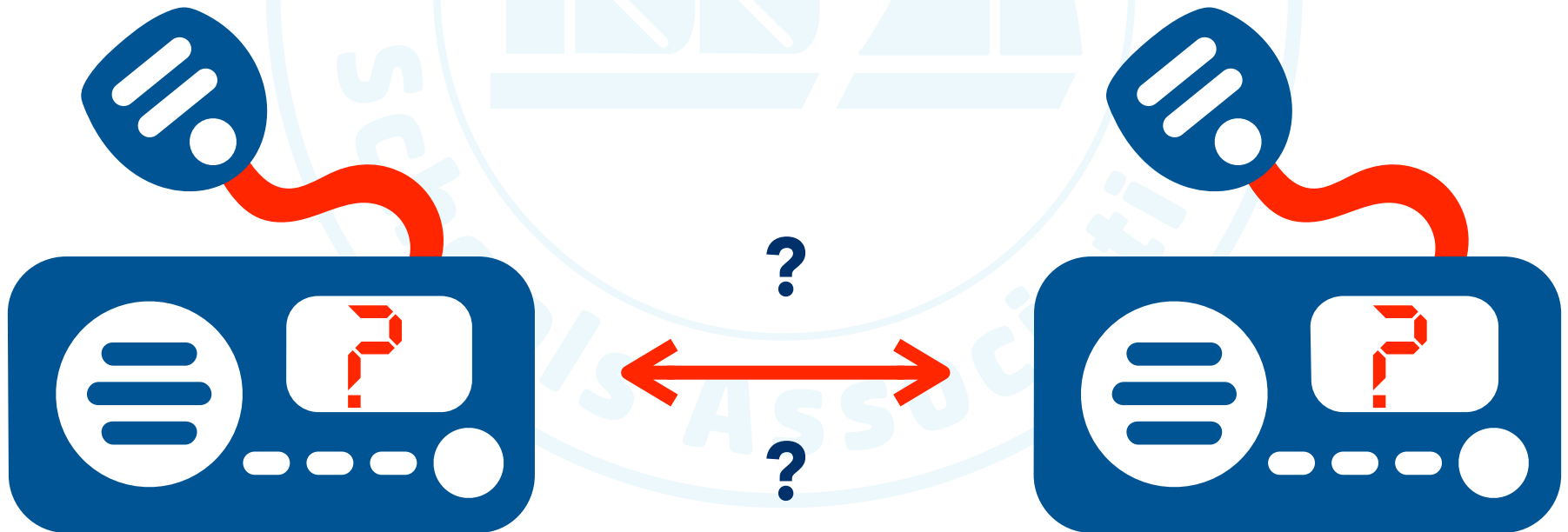
16



DO YOU REMEMBER ?

CHANNELS

?-? & ?-?





DO YOU REMEMBER ?

16

START



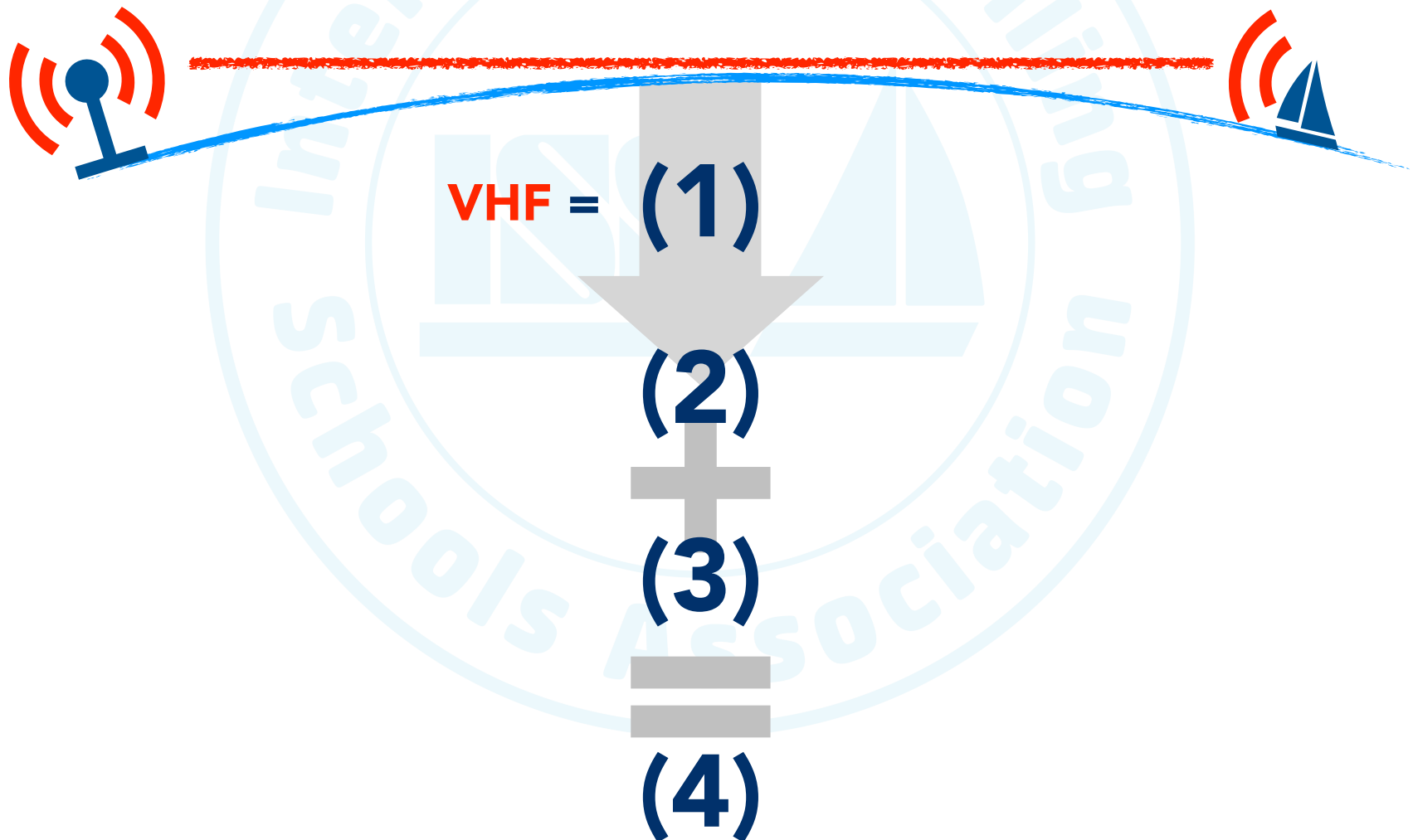
END

(1)

(2) + (3) + (4) + (5)



DO YOU REMEMBER ?



PHONETIC ALPHABET

APLHA



BRAVO



CHARLIE



DELTA



ECHO



FOXTROT



GOLF



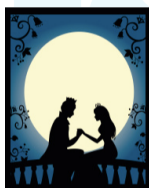
HOTEL



INDIA



JULIET



KILO



LIMA



MIKE



NOVEMBER



OSCAR



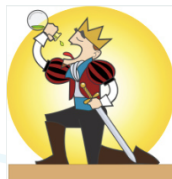
PAPA



QUEBEC



ROMEIO



SIERRA



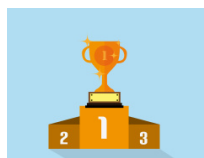
TANGO



UNIFORM



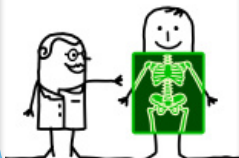
VICTOR



WHISKEY



X-RAY



YANKEE



ZULU





NUMERALS

ONE 1 TWO 2 THREE 3

FOUR 4 FIVE 5 SIX 6

SEVEN 7 EIGHT 8 **NINER** 9

ZERO 0



RADIO PROCEDURE WORDS

OVER

@ THE END OF



INVITATION TO REPLY

OUT

THE END

NO REPLY REQUIRED

RECEIVED

CONFIRMATION

OF RECEIVING



RADIO PROCEDURE WORDS

SAY AGAIN

REPEAT
YOUR



I SAY AGAIN

I REPEAT
MY



I SPELL

SPELL USING PHONETIC ALPHABET



RADIO PROCEDURE WORDS

CORRECTION **I MADE A MISTAKE**
+ REPEAT AGAIN

CORRECT **CONFIRMATION THAT** 
REPEATED RIGHT

WRONG **INFORMATION THAT** 
REPEATED WRONG



RADIO PROCEDURE WORDS

ALL AFTER **REPEAT AGAIN ALL**
AFTER THIS PHRASE

ALL BEFORE **REPEAT AGAIN ALL**
BEFORE THIS PHRASE

RADIO CHECK **DO YOU**
HEAR ME ?



RADIO PROCEDURE WORDS

READ BACK **YES**
I HEAR YOU

STATION CALLING
WHEN YOU ARE UNSURE OF THE NAME AND ID

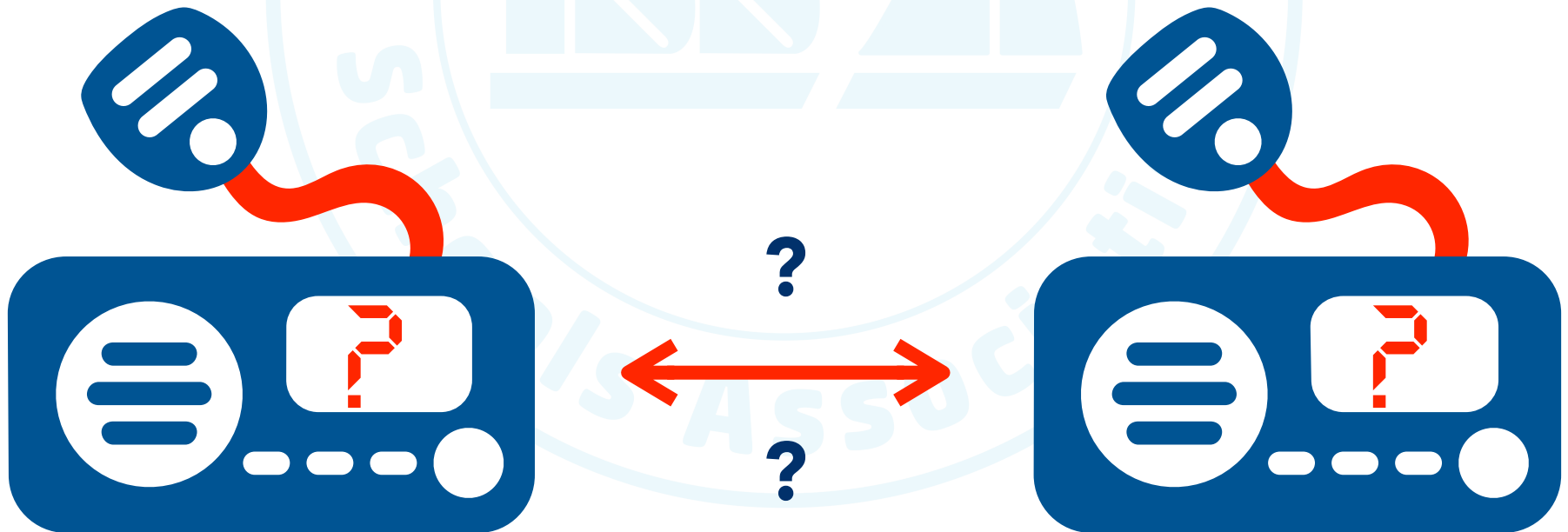
THIS IS **ALWAYS**
BEFORE YOUR STATION NAME



DO YOU REMEMBER ?

CHANNELS

?-? & ?-?





DO YOU REMEMBER ?

16

START



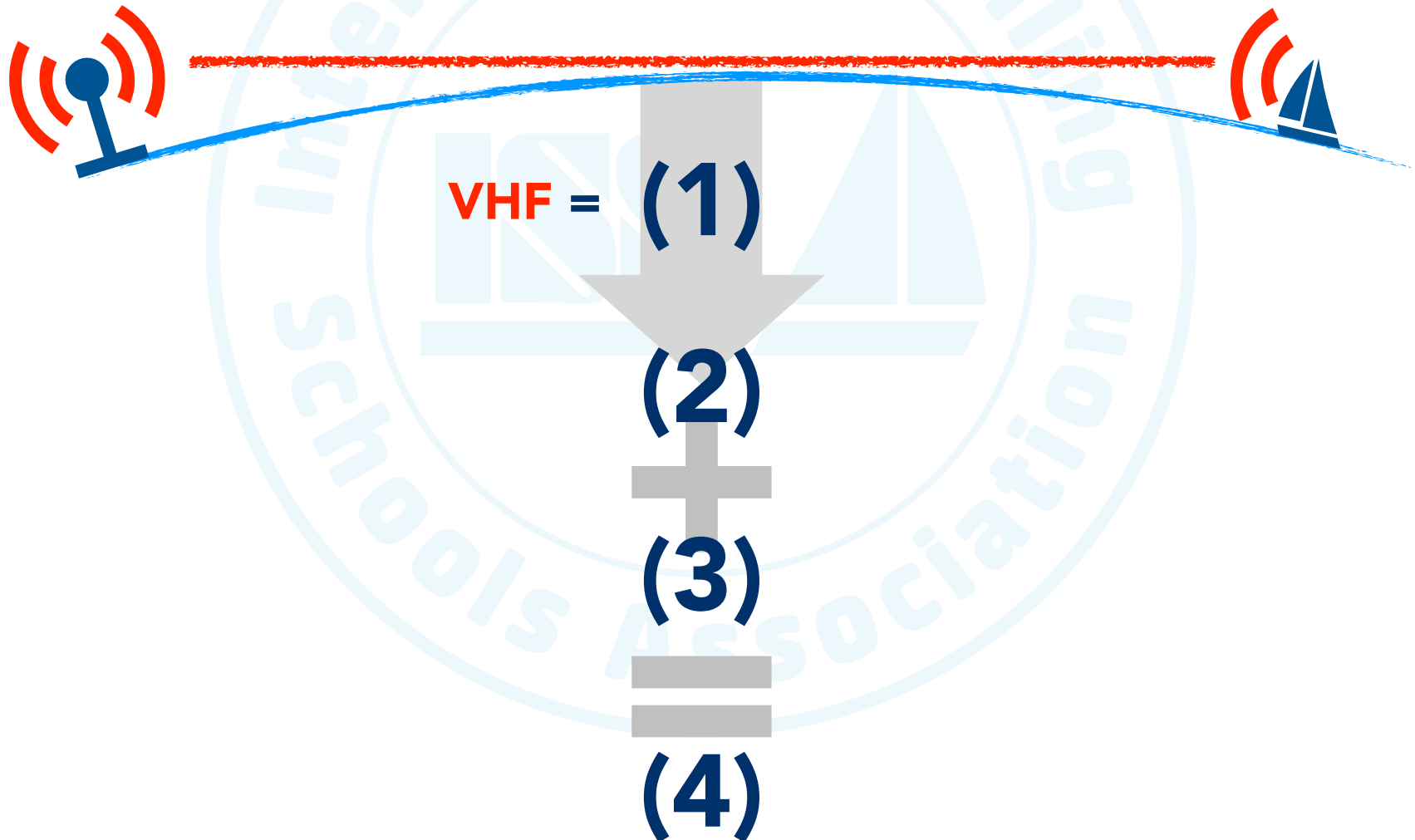
END

(1)

(2) + (3) + (4) + (5)

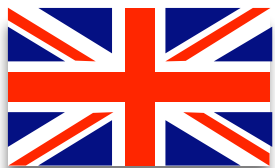


DO YOU REMEMBER ?



DO YOU REMEMBER ?

(1)



(2)



(3)



(4)



(5)



(6)



(7)



(8)



(9)



(10)



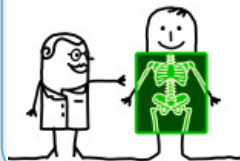
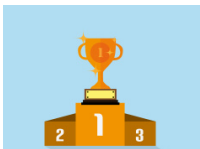
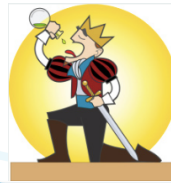
(11)



(12)

16

DO YOU REMEMBER ?





RADIO PROCEDURE WORDS

TYPES OF CALLS

- 1. MAYDAY**
- 2. MAYDAY RELAY**
- 3. SEELONCE MAYDAY**
- 4. SEELONCE FEENEE**
- 5. PAN PAN**
- 6. SECURITE**
- 7. ROUTINE CALLS**



RADIO PROCEDURE WORDS

MAYDAY

USED ONLY FOR

DISTRESS & EMERGENCY

PURPOSES

CREW IN

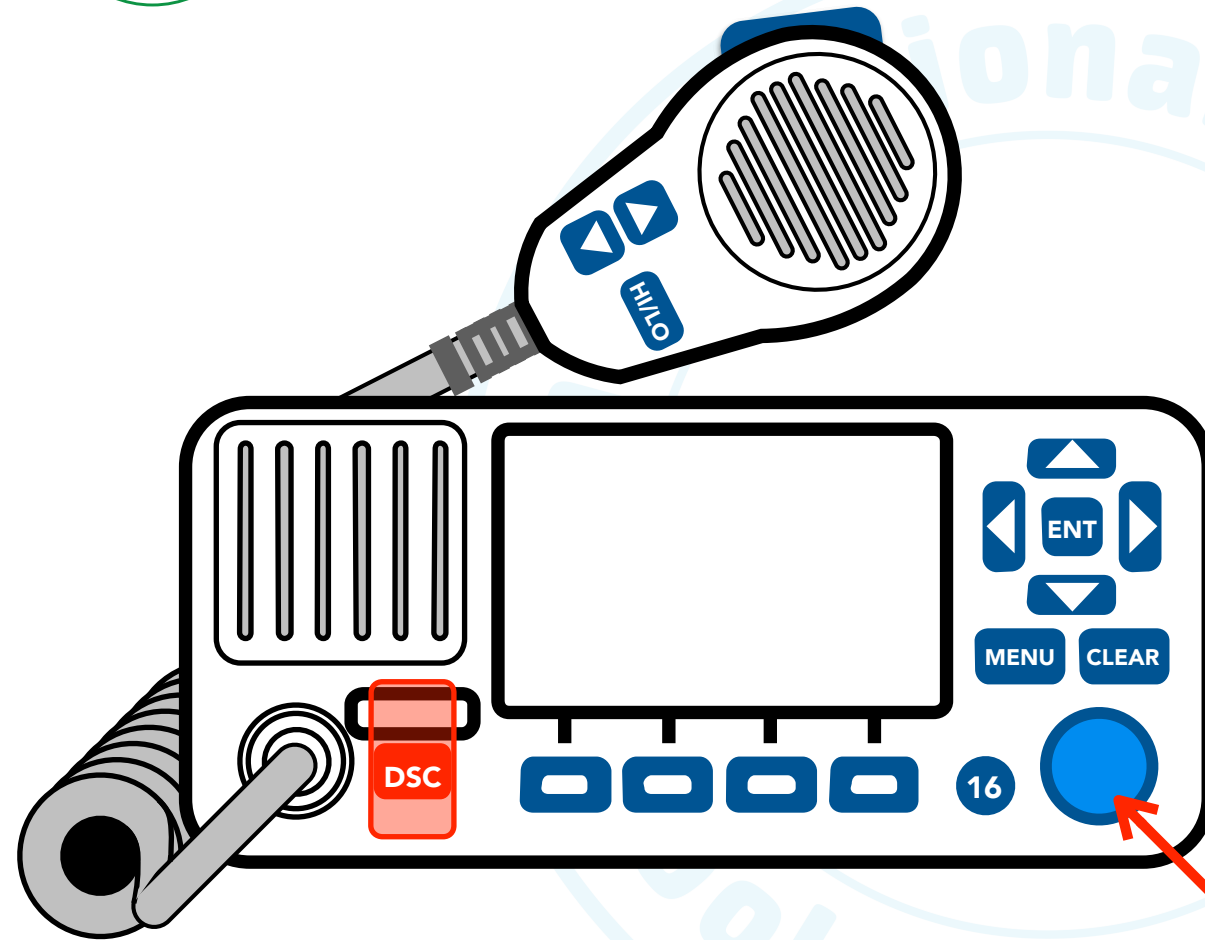
GRAVE & IMMINENT

DANGER



RADIO PROCEDURE WORDS

PROCEDURE BEFORE MAYDAY CALL



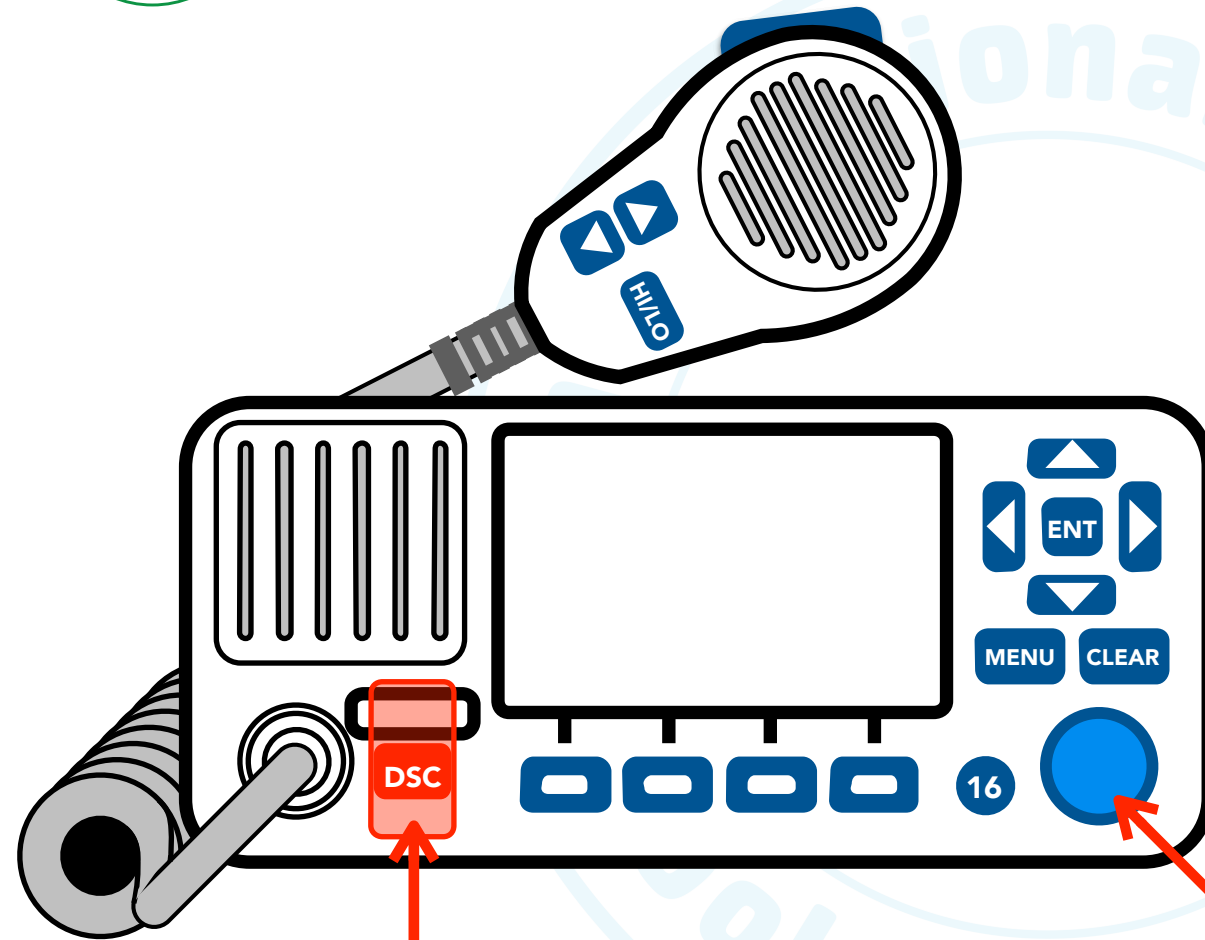
(1)

MAKE SURE THE RADIO IS ON



RADIO PROCEDURE WORDS

PROCEDURE BEFORE MAYDAY CALL



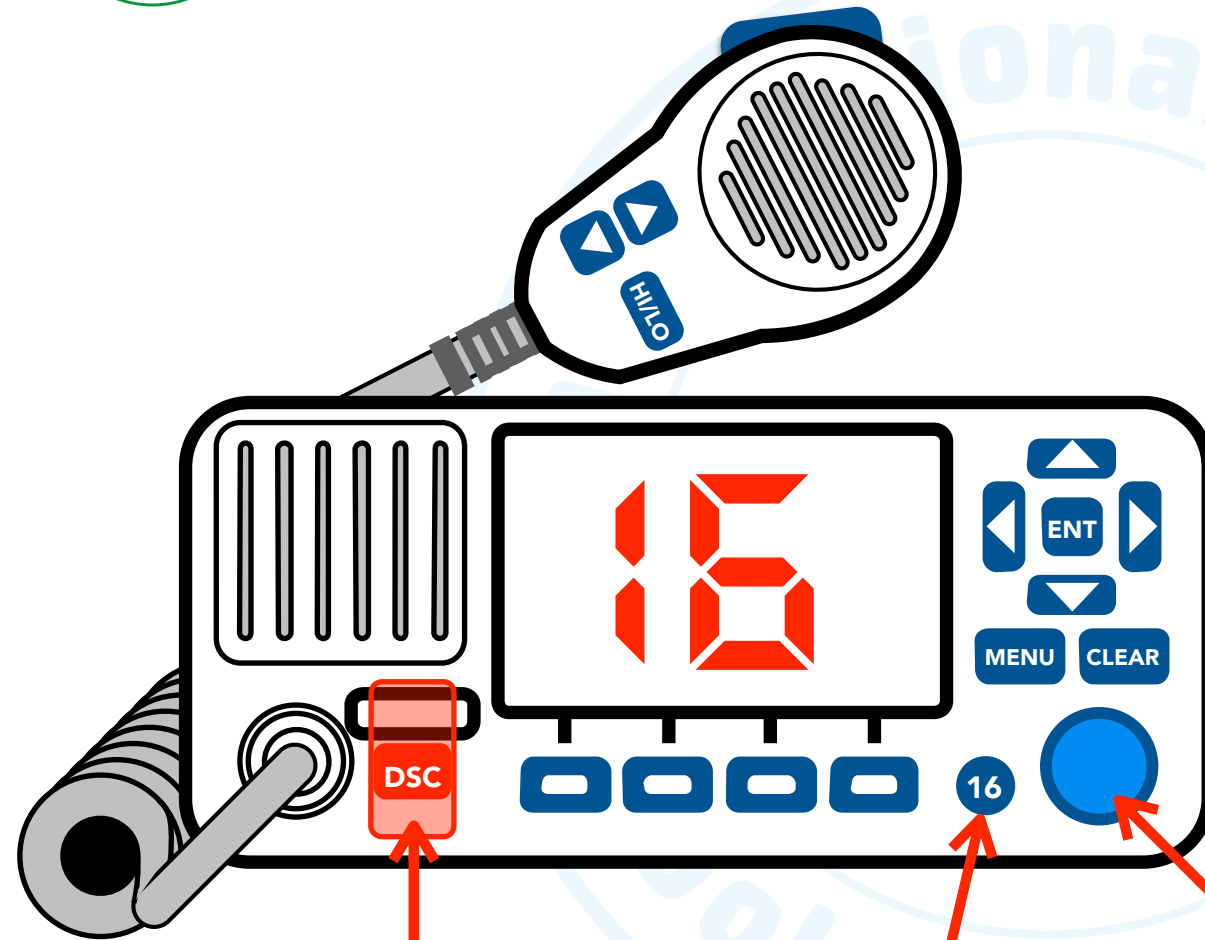
(2)
SEND DISTRESS
ALERT

(1)
MAKE SURE THE RADIO IS ON



RADIO PROCEDURE WORDS

PROCEDURE BEFORE MAYDAY CALL



(2)
SEND DISTRESS
ALERT

(3)
SWITCH TO CH 16

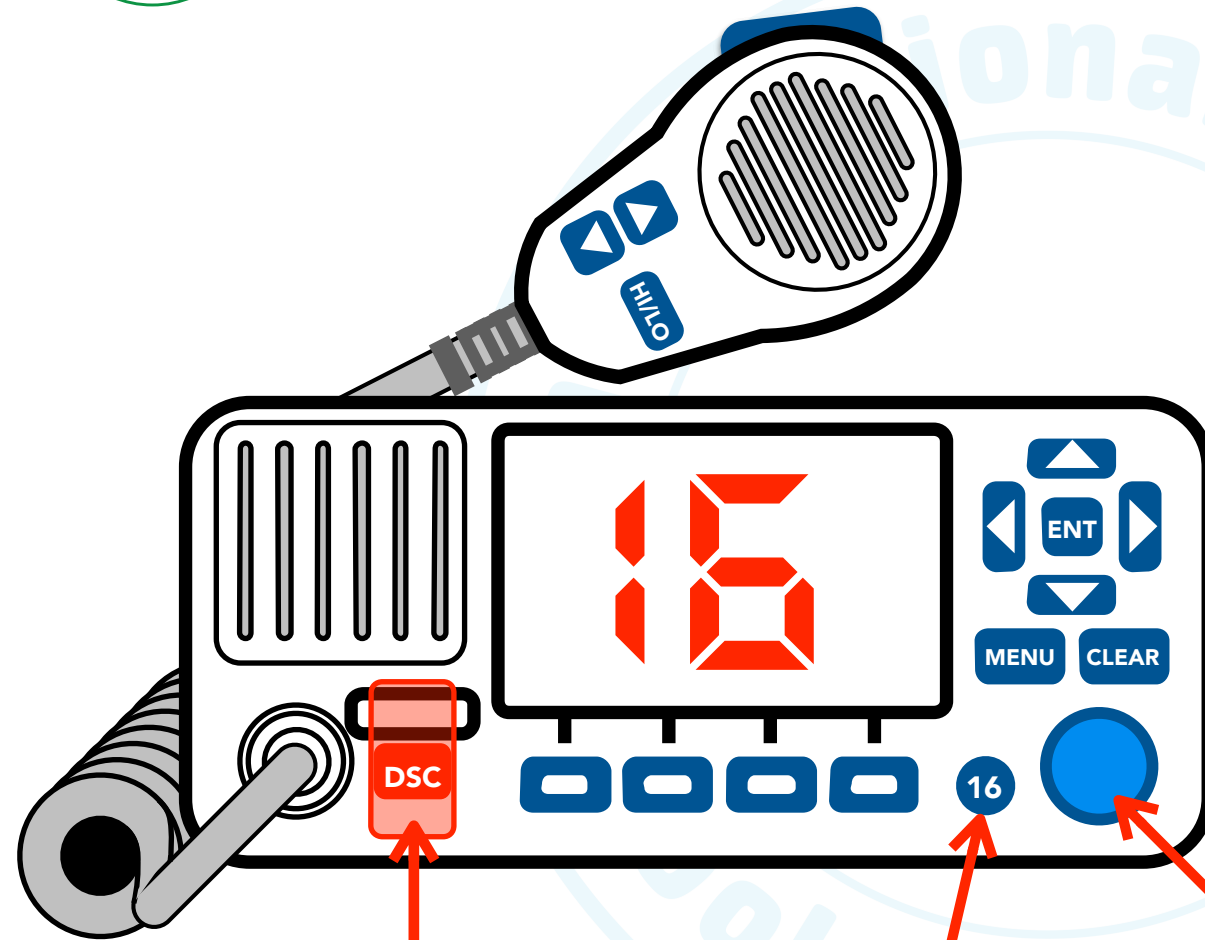
(1)
MAKE SURE THE RADIO IS ON



RADIO PROCEDURE WORDS

PROCEDURE BEFORE MAYDAY CALL

THINK (4)



(2)
**SEND DISTRESS
ALERT**

(3)
SWITCH TO CH 16

(1)
MAKE SURE THE RADIO IS ON



RADIO PROCEDURE WORDS

PROCEDURE BEFORE MAYDAY CALL

(5)

PRESS & HOLD P.T.T

(4)

THINK

(1)

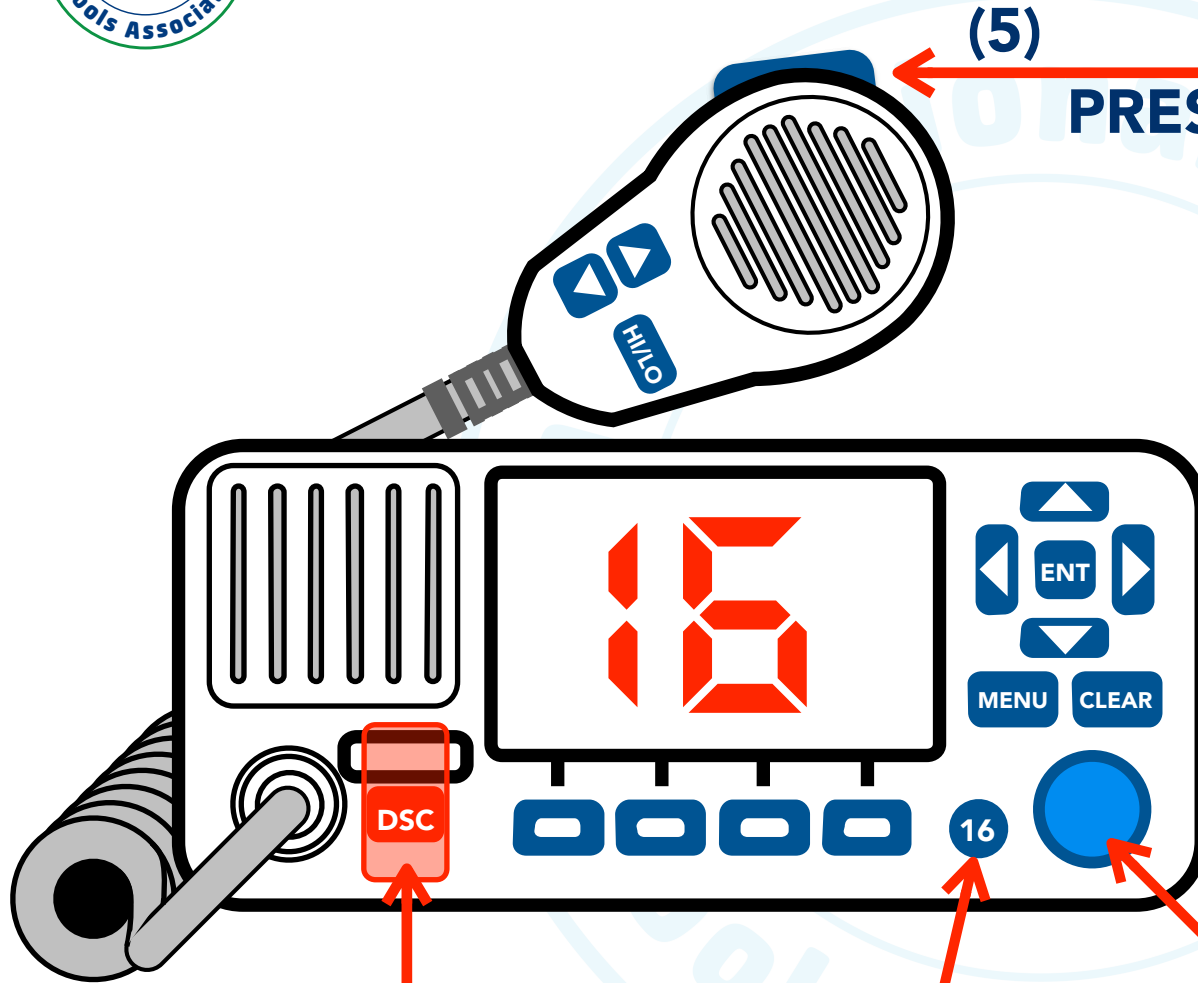
MAKE SURE THE RADIO IS ON

(3)

SWITCH TO CH 16

(2)

**SEND DISTRESS
ALERT**





RADIO PROCEDURE WORDS

PROCEDURE BEFORE MAYDAY CALL

(5)

PRESS & HOLD P.T.T

(4)

(6)

THINK
SPEAK

(1)

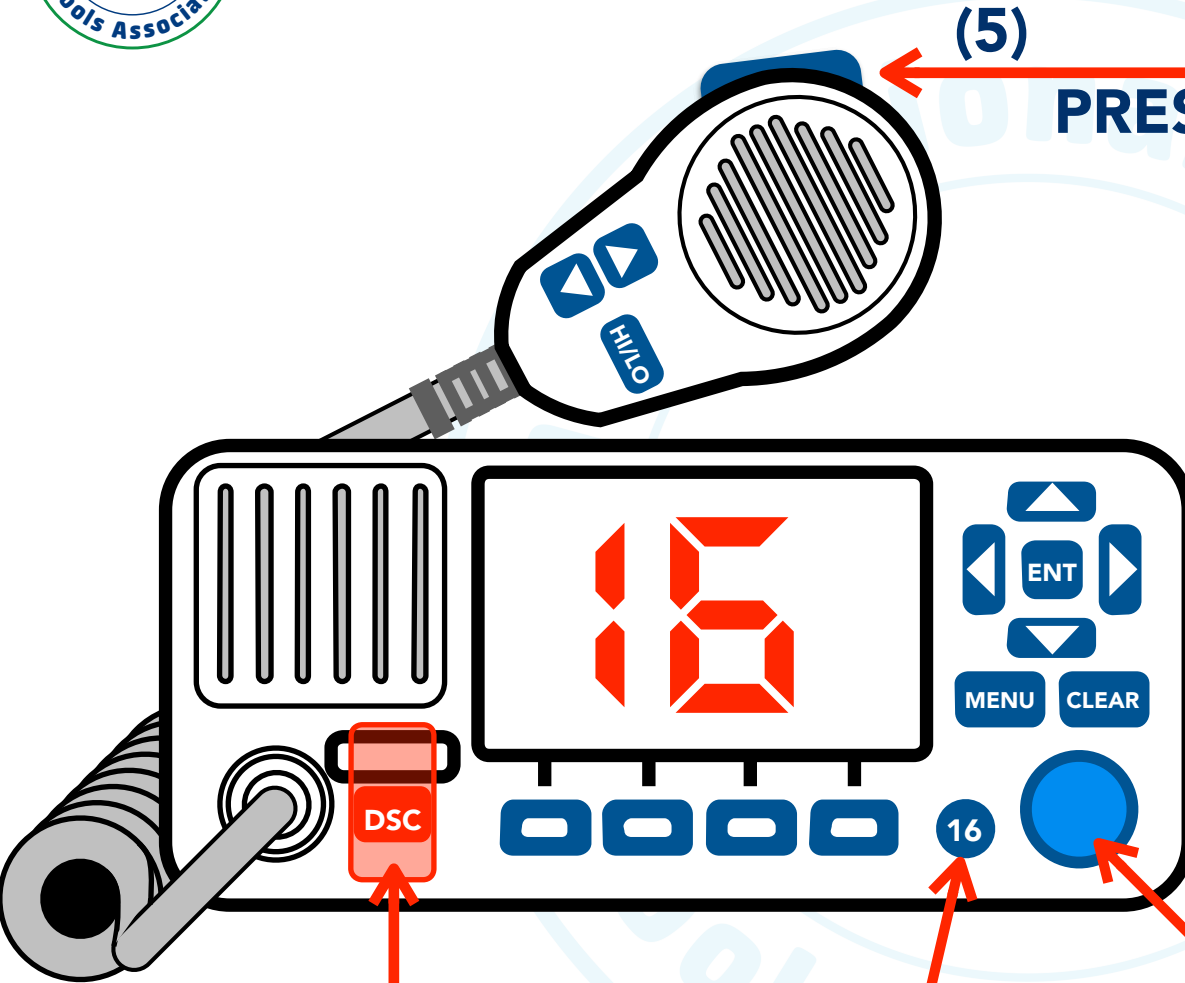
MAKE SURE THE RADIO IS ON

(3)

SWITCH TO CH 16

(2)

**SEND DISTRESS
ALERT**





RADIO PROCEDURE WORDS

PROCEDURE BEFORE MAYDAY CALL

(5)

PRESS & HOLD P.T.T

(4)

(6)

(7)

THINK
SPEAK
LISTEN

(1)

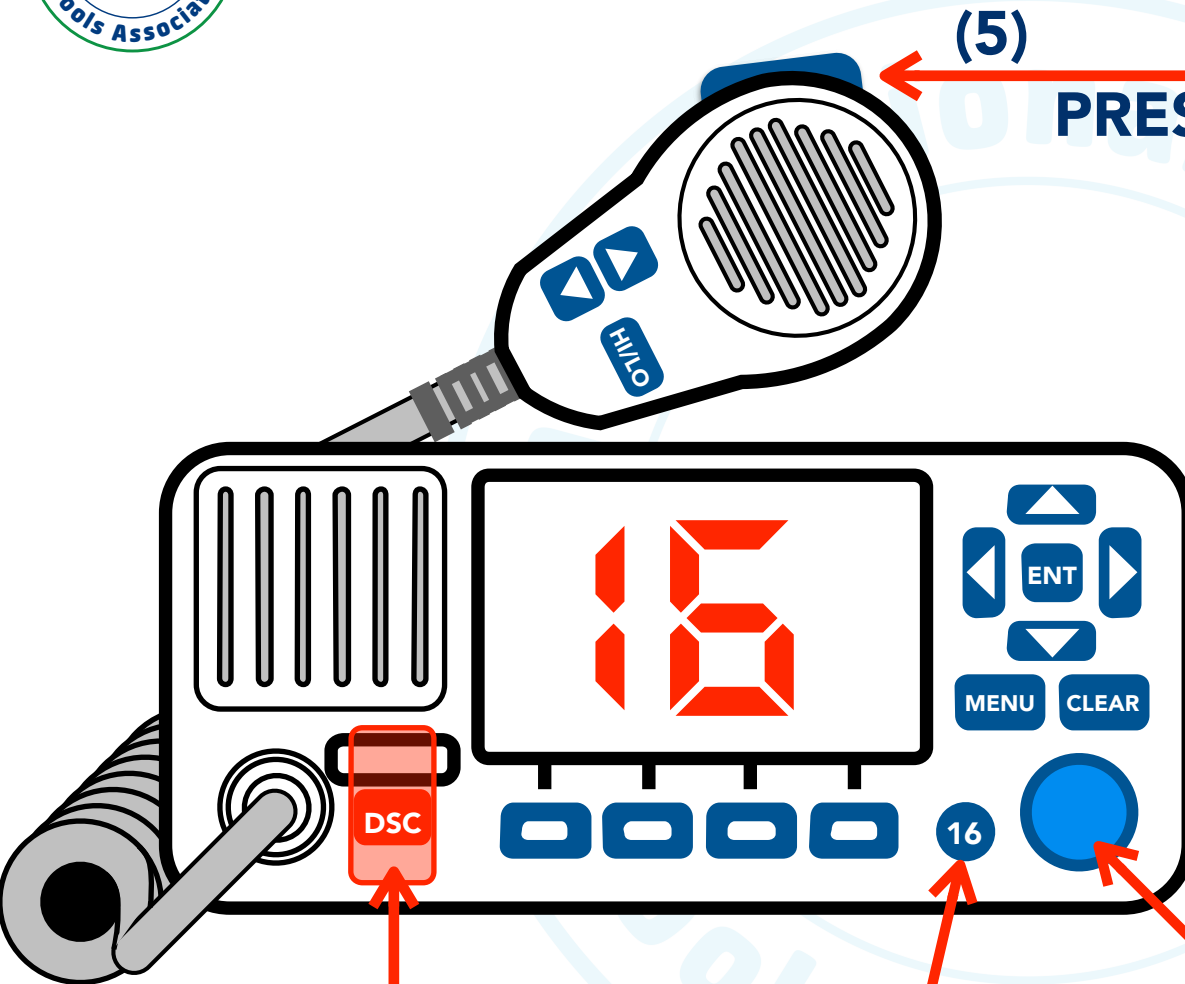
MAKE SURE THE RADIO IS ON

(3)

SWITCH TO CH 16

(2)

**SEND DISTRESS
ALERT**





RADIO PROCEDURE WORDS

PROCEDURE BEFORE MAYDAY CALL

(5)

PRESS & HOLD P.T.T

(4)

(6)

(7)

(8)

THINK
SPEAK
LISTEN
REPEAT

(1)

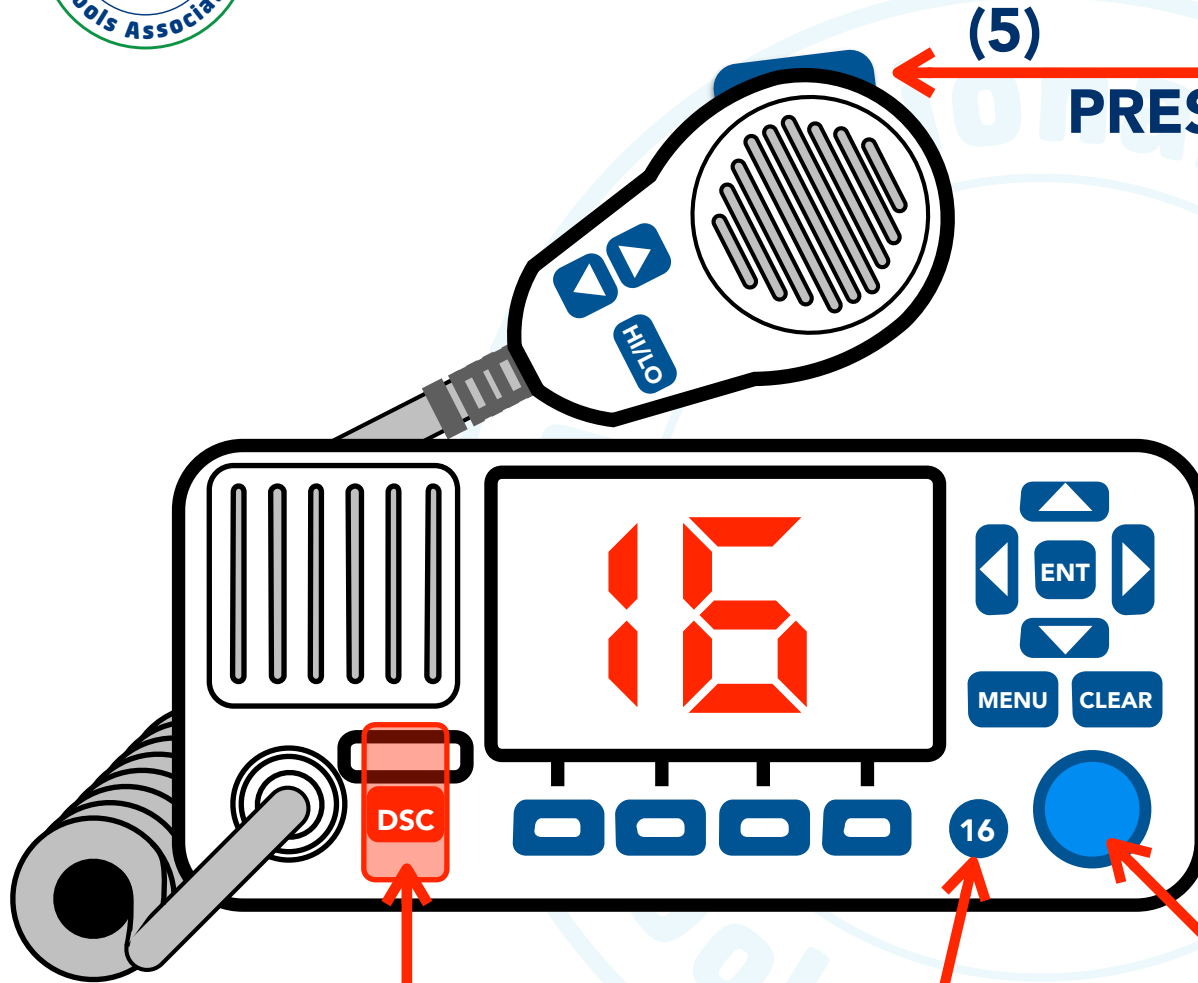
MAKE SURE THE RADIO IS ON

(3)

SWITCH TO CH 16

(2)

**SEND DISTRESS
ALERT**





RADIO PROCEDURE WORDS

MAYDAY CALL

**MAYDAY
CALL**

MAYDAY, MAYDAY, MAYDAY

THIS IS NAME x3

MY MMSI IS: 123456789

MAYDAY NAME

MY POSITION IS 38° 50.5' N & 001° 25,3' E

TIME 1207 UTC

MAYDAY



NATURE OF DISTRESS

IMMEDIATE ASSISTANCE REQUIRED

WE HAVE # OF PEOPLE ON BOARD

ANY OTHER USEFUL INFORMATION

OVER



RADIO PROCEDURE WORDS

MAYDAY CALL

**MAYDAY
CALL**

MAYDAY, MAYDAY, MAYDAY

THIS IS VENUS, VENUS, VENUS

MY MMSI IS: 261345467

MAYDAY VENUS

MY POSITION IS 38° 50.5' N & 001° 25,3' E

TIME 1207 UTC

MAYDAY



FIRE ON BOARD

IMMEDIATE ASSISTANCE REQUIRED

WE HAVE 10 PEOPLE ON BOARD

OUR EXTINGUISHERS ARE NOT WORKING

OVER



RADIO PROCEDURE WORDS

STANDARD PROCEDURE CALL

PROCEDURE WORD x3

THIS IS NAME x3

MY MMSI IS x1

POSITION + UTC or local time

MESSAGE

OVER



RADIO PROCEDURE WORDS

REPLY TO MAYDAY CALL

MAYDAY

VENUS, VENUS, VENUS

**THIS IS COAST GUARD,
COAST GUARD,
COAST GUARD**

RECEIVED MAYDAY

OVER



RADIO PROCEDURE WORDS

MAYDAY RELAY

VESSEL CANNOT SEND A DISTRESS MESSAGE ITSELF

THE MESSAGE IS NOT HEARD

YOU ARE TOO FAR TO PROVIDE ASSISTANCE

**IF NO STATION
ANSWERS
MAYDAY CALL**



FWD





RADIO PROCEDURE WORDS

MAYDAY RELAY

RECORD THE CALL AND TIME IN VESSEL'S LOG

**KEEP WATCH ON CH 16 FOR A COAST STATION TO
ACKNOWLEDGE**

**IF NO STATION
ANSWERS
MAYDAY CALL**


4 min



FWD





RADIO PROCEDURE WORDS

MAYDAY RELAY

MAYDAY RELAY, MAYDAY RELAY, MAYDAY RELAY

THIS IS GIZMO, GIZMO, GIZMO

**WE RECEIVED A DISTRESS CALL FROM A VESSEL BY
NAME OF VENUS AT 1207 UTC**

VENUS IN POSITION 38° 50.5' N & 001° 25,3' E

VENUS HAS FIRE ON BOARD

10 PEOPLE ON BOARD

THEIR EXTINGUISHERS ARE NOT WORKING

REQUIRE IMMEDIATE ASSISTANCE

OVER



RADIO PROCEDURE WORDS

MAYDAY RELAY

MAYDAY RELAY, MAYDAY RELAY, MAYDAY RELAY

THIS IS GIZMO, GIZMO, GIZMO

IN POSITION $38^{\circ}49.5'$ N & $001^{\circ}26,5'$ E

TIME 1207 UTC

**RED ROCKET FLARE IS OBSERVED ON BEARING
 320° FOR A DISTANCE OF ALMOST 2 NM FROM
OUR POSITION**

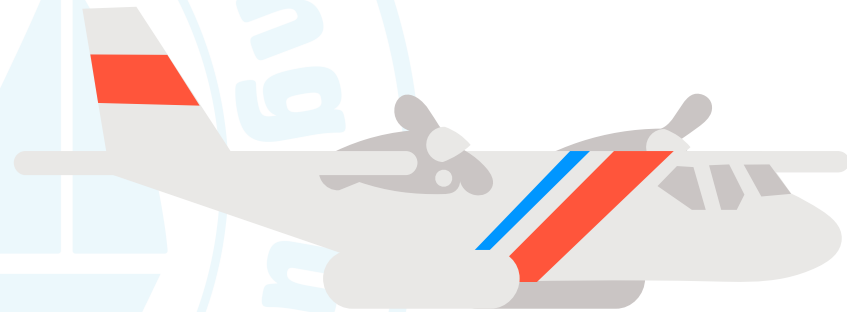
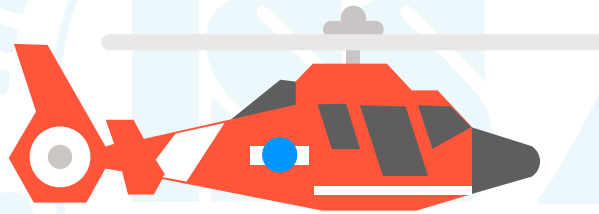
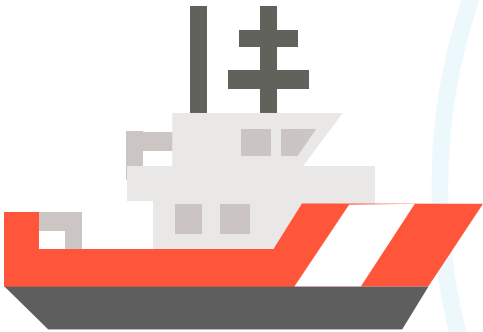
OVER



RADIO PROCEDURE WORDS

SEE LONCE MAYDAY

USED BY



TO ANNOUNCE RADIO SILENCE



RADIO PROCEDURE WORDS

SEELONCE MAYDAY

MAYDAY

ALL STATIONS, ALL STATIONS, ALL STATIONS

**THIS IS COAST GUARD,
COAST GUARD,
COAST GUARD**

MAYDAY VENUS

TIME 1300 UTC

SEELONCE MAYDAY

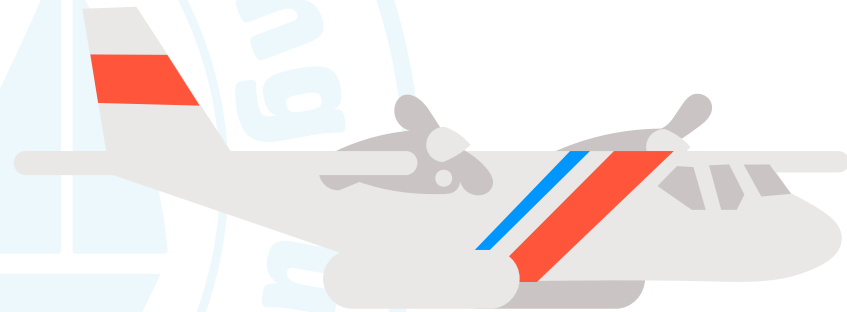
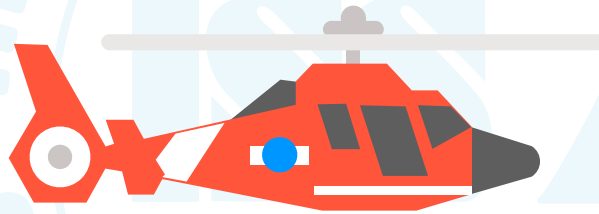
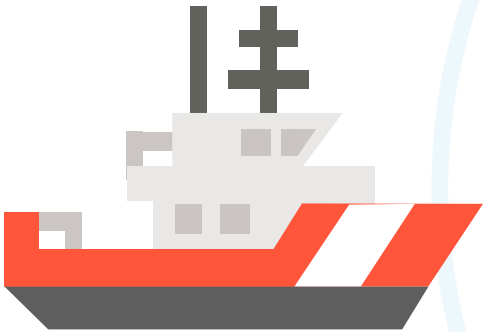
OUT



RADIO PROCEDURE WORDS

SEELONCE FEENEE

USED BY



TO END THE RADIO SILENCE



RADIO PROCEDURE WORDS

SEELONCE FEENEE

MAYDAY

ALL STATIONS, ALL STATIONS, ALL STATIONS

**THIS IS COAST GUARD,
COAST GUARD,
COAST GUARD**

MAYDAY VENUS

TIME 1530 UTC

SEELONCE FEENEE

OUT



RADIO PROCEDURE WORDS

CANCELLING DISTRESS ALERT

ALL STATIONS, ALL STATIONS, ALL STATIONS

THIS IS VENUS, VENUS, VENUS

A DISTRESS MESSAGE SENT BY ERROR

CANCEL DISTRESS ALERT SENT AT TIME 1230 UTC

OUT



RADIO PROCEDURE WORDS

PAN PAN

USED ONLY FOR

URGENCY

PURPOSES

VESSEL HAS A PROBLEM

BUT NO

GRAVE & IMMINENT

DANGER YET



RADIO PROCEDURE WORDS

PAN PAN

PAN PAN, PAN PAN, PAN PAN

ALL STATIONS, ALL STATIONS, ALL STATIONS

THIS IS VENUS, VENUS, VENUS

MY POSITION IS 38° 50.5' N & 001° 25,3' E

MY ENGINE IS BROKEN DOWN

URGENT ASSISTANCE REQUIRED

OVER



RADIO PROCEDURE WORDS

SECURITE

USED ONLY FOR

SAFETY

PURPOSES

**IMPORTANT INFORMATION
CONCERNING SAFETY**





RADIO PROCEDURE WORDS

SECURITE

SECURITE, SECURITE, SECURITE

ALL STATIONS, ALL STATIONS, ALL STATIONS

THIS IS COAST GUARD,

COAST GUARD,

COAST GUARD

IMPORTANT WEATHER UPDATES.

LISTEN ON CHANNEL 14

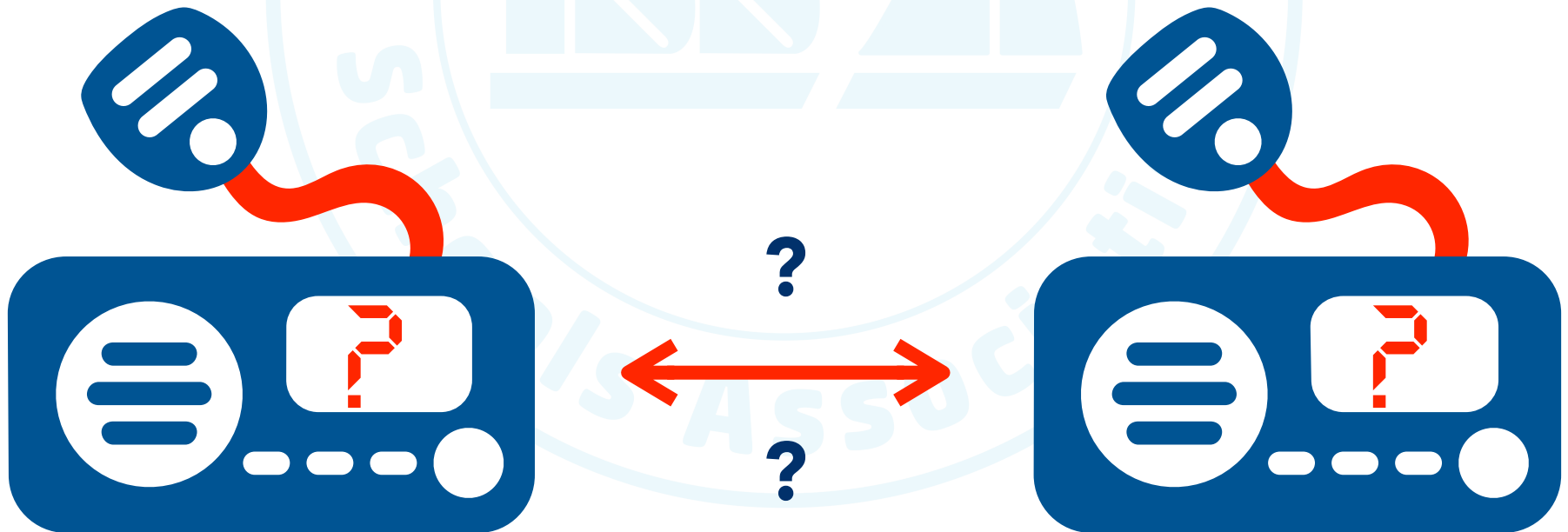
OUT



DO YOU REMEMBER ?

CHANNELS

?-? & ?-?





DO YOU REMEMBER ?

16

START



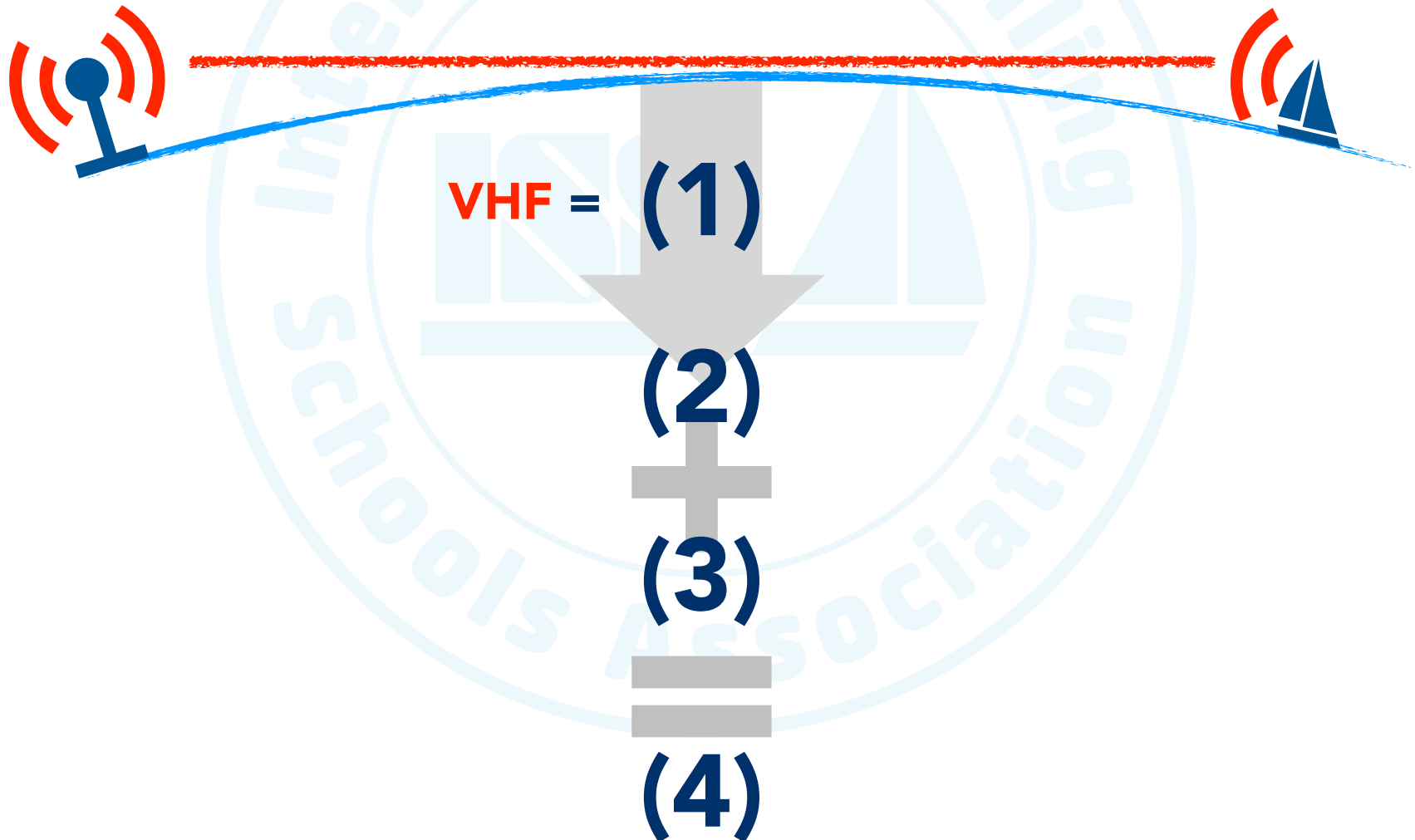
END

(1)

(2) + (3) + (4) + (5)



DO YOU REMEMBER ?





DO YOU REMEMBER ?

(1)



(4)



(7)



(10)



(2)



(5)



(8)



(11)



(3)



(6)



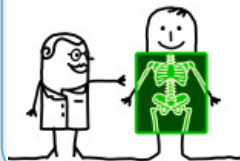
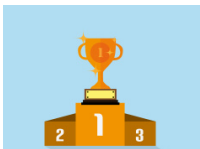
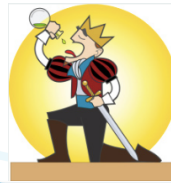
(9)



(12)

16

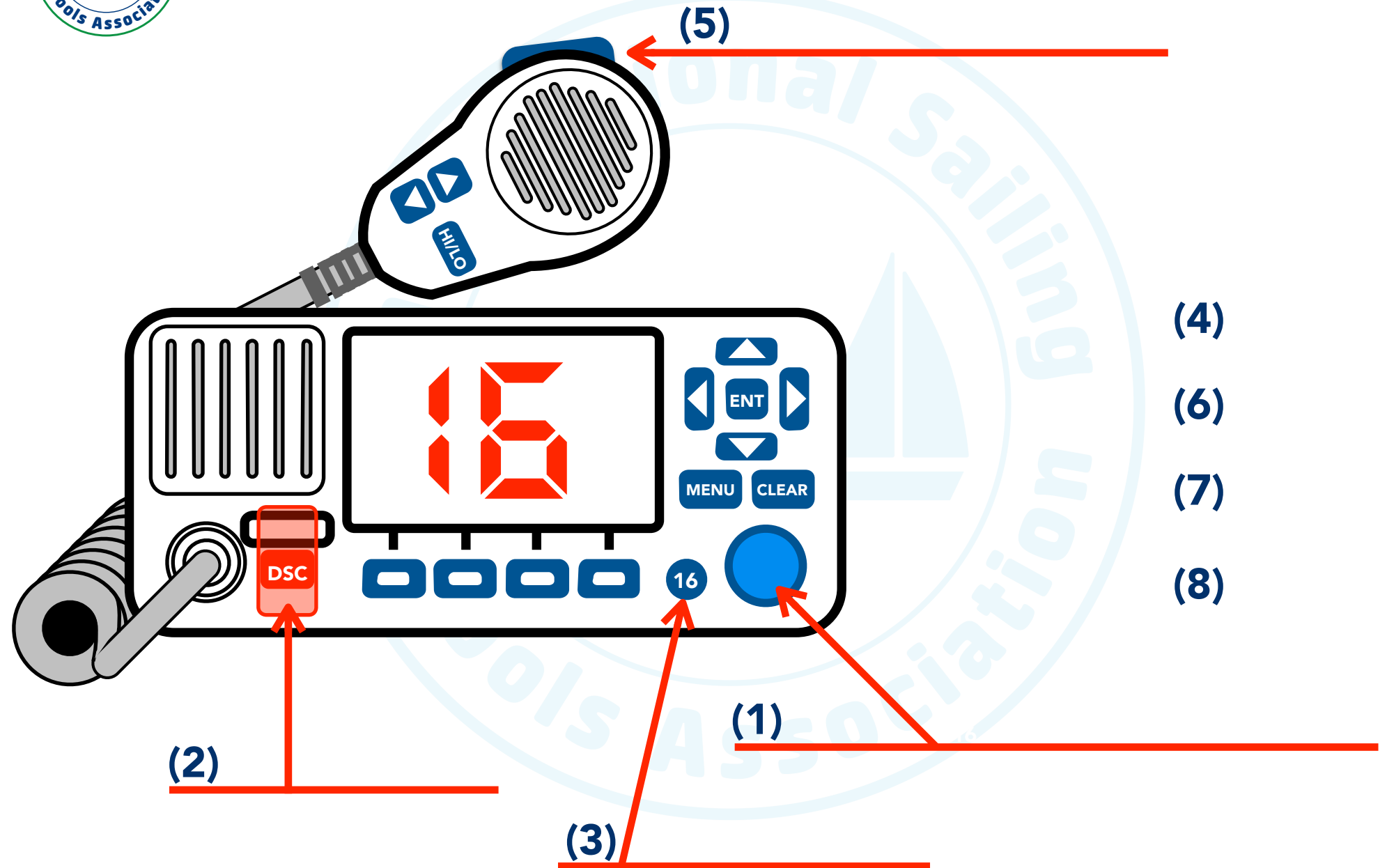
DO YOU REMEMBER ?





BEFORE MAYDAY CALL

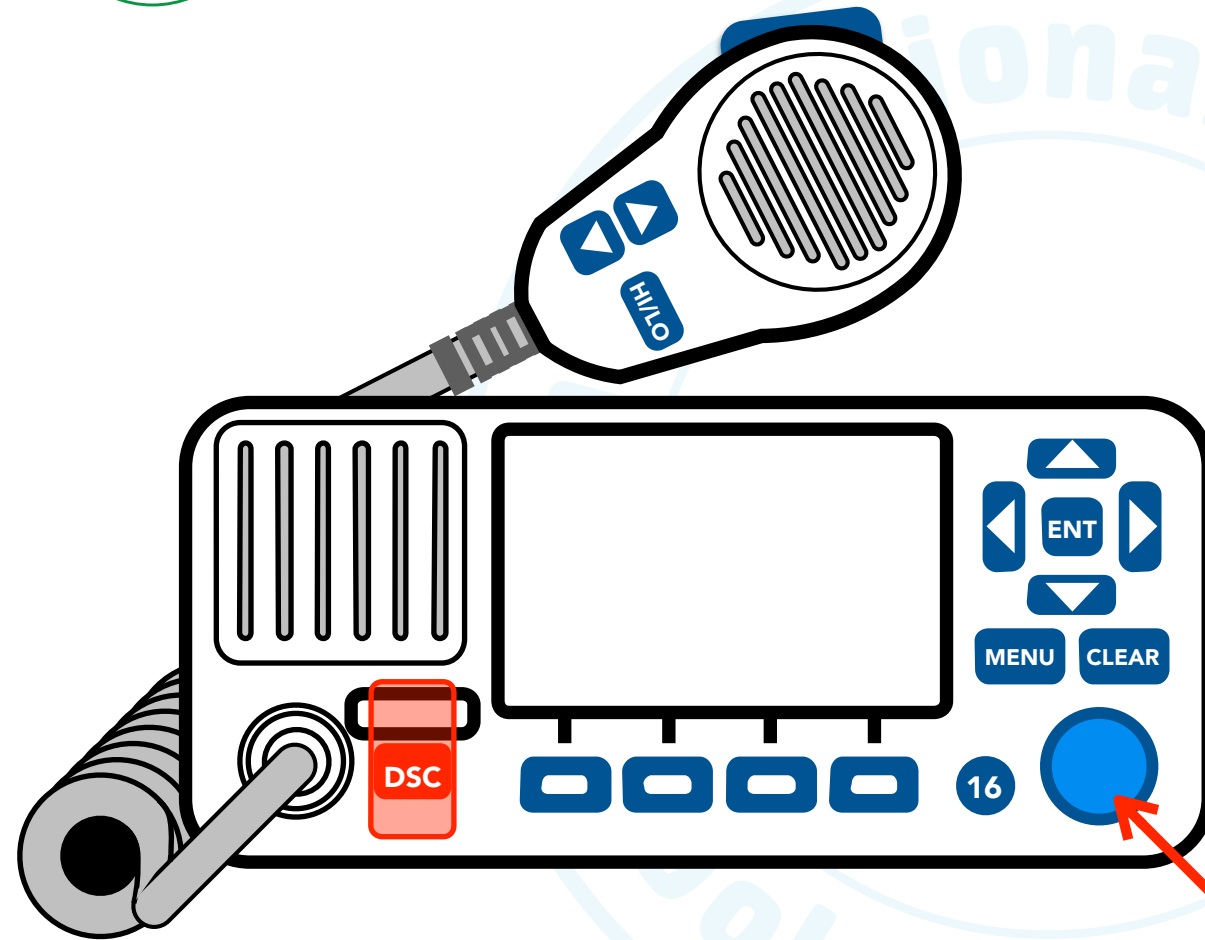
DO YOU REMEMBER ?





RADIO PROCEDURE WORDS

ROUTINE CALLS



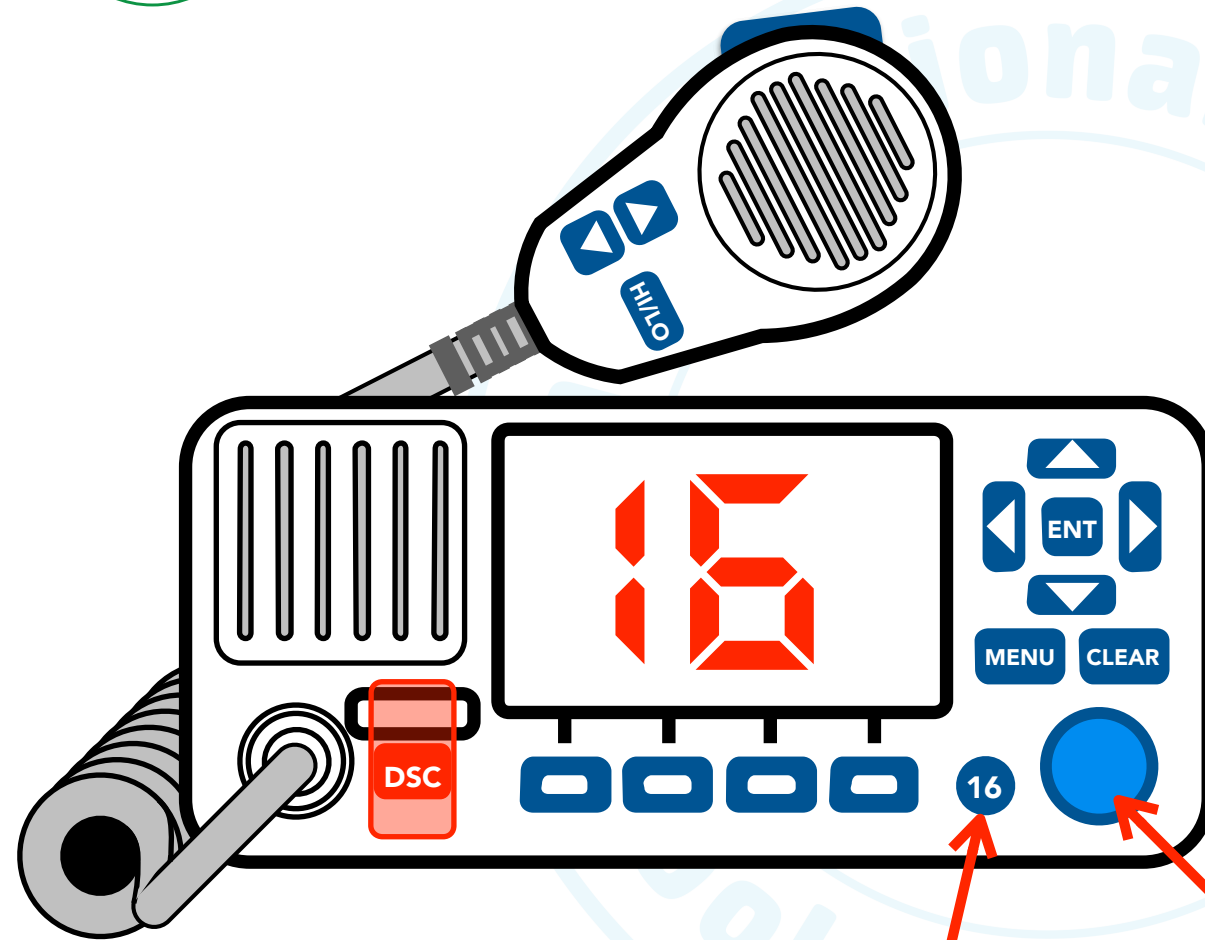
(1)

MAKE SURE THE RADIO IS ON



RADIO PROCEDURE WORDS

ROUTINE CALLS



(1)

MAKE SURE THE RADIO IS ON

(2)

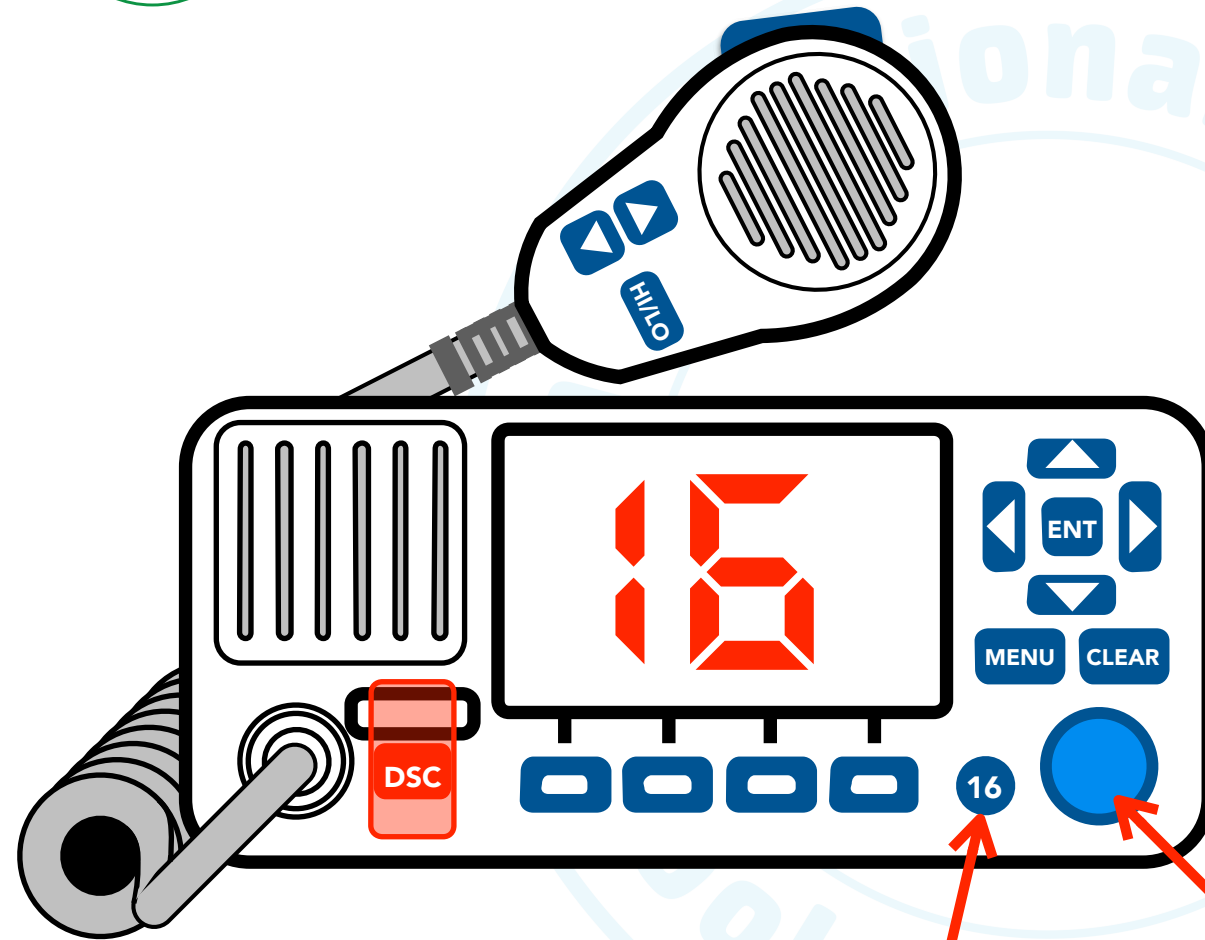
SWITCH TO CH 16



RADIO PROCEDURE WORDS

ROUTINE CALLS

LISTEN⁽³⁾



(1)

MAKE SURE THE RADIO IS ON

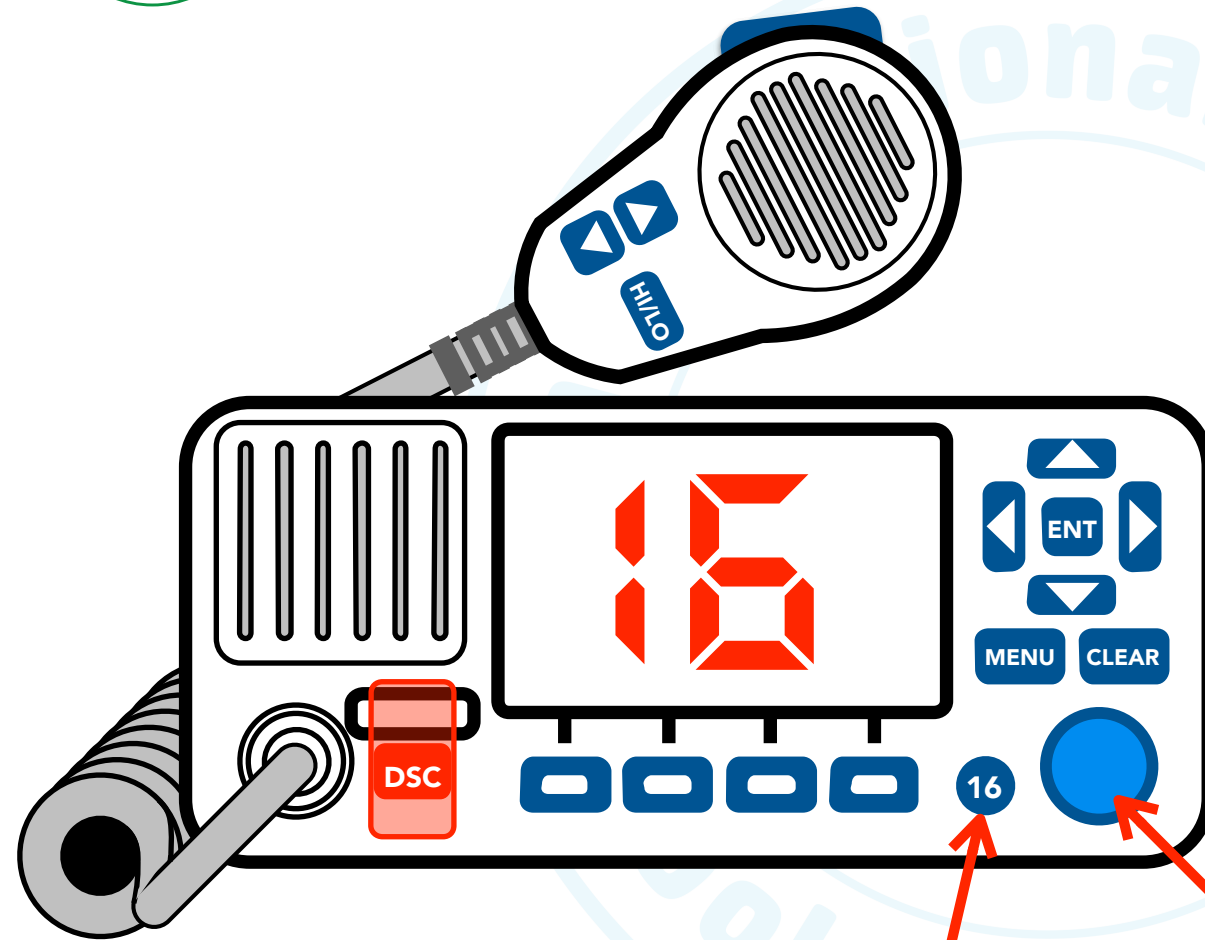
(2)

SWITCH TO CH 16



RADIO PROCEDURE WORDS

ROUTINE CALLS



LISTEN
PLAN

(3)

(4)

(1)

MAKE SURE THE RADIO IS ON

(2)

SWITCH TO CH 16



RADIO PROCEDURE WORDS

ROUTINE CALLS

(5)

PRESS & HOLD P.T.T

(3)

(4)

LISTEN
PLAN

(1)

MAKE SURE THE RADIO IS ON

(2)

SWITCH TO CH 16



RADIO PROCEDURE WORDS

ROUTINE CALLS

(5)

PRESS & HOLD P.T.T

(3)

(4)

(6)

LISTEN
PLAN
SPEAK

(1)

MAKE SURE THE RADIO IS ON

(2)

SWITCH TO CH 16



RADIO PROCEDURE WORDS

ROUTINE CALLS

(5)

PRESS & HOLD P.T.T

(3)

(4)

(6)

(7)

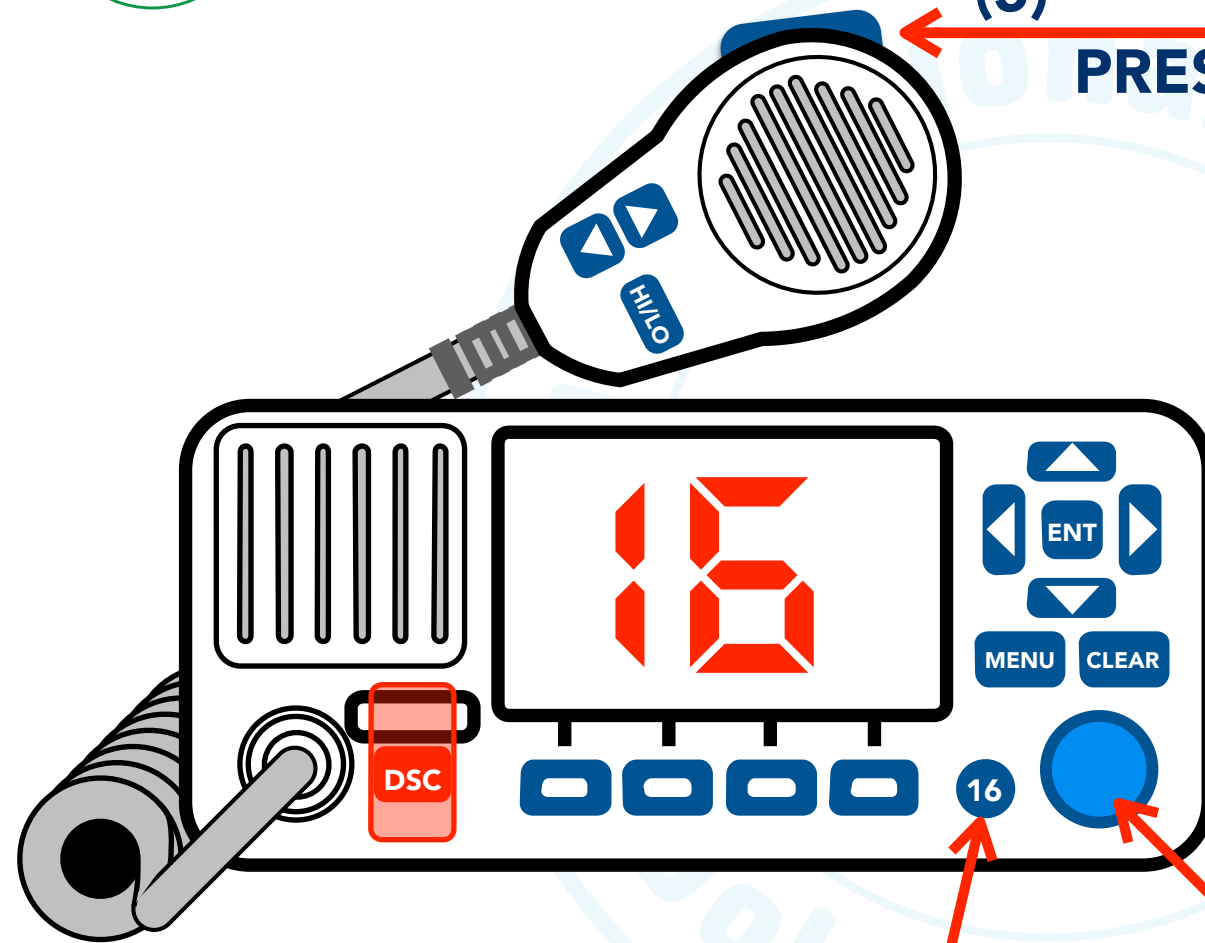
(1)

MAKE SURE THE RADIO IS ON

(2)

SWITCH TO CH 16

THE END





RADIO PROCEDURE WORDS

RECEIVING CALL FROM UNKNOWN STATION

**IF YOU WERE UNABLE TO HEAR THE NAME OF
THE STATION THAT WAS CALLING YOU:**

STATION CALLING VENUS,

STATION CALLING VENUS,

THIS IS VENUS

SAY AGAIN

OVER



RADIO PROCEDURE WORDS

TYPES OF CALLS

1. **MAYDAY - DISTRES+EMERGENCY**
2. **MAYDAY RELAY**
3. **SEELONCE MAYDAY**
4. **SEELONCE FEENEE**
5. **PAN PAN - URGENCY**
6. **SECURITE - SAFETY**
7. **ROUTINE CALLS**



GMDSS

GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM



GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM

GMDSS COMPONENTS

DSC - DISTRESS SELECTIVE CALLING

EPIRB - EMERGENCY POSITION-INDICATING RADIO BEACON

SART - SEARCH AND RESCUE TRANSPONDER

NAVTEX - AUTOMATED MSI DISTRIBUTION

INMARSAT - LONG RANGE DATA BROADCAST

HF RADIO WITH DSC - LONG RANGE RADIO

AIS - AUTOMATIC IDENTIFICATION SYSTEM



GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM

GMDSS

4 AERAS

A1

A2

A3

A4

20-30 NM

100 - 150 NM

BETWEEN
76° N
&
76° S

NORTH
&
SOUTH
POLES



A1



GMDSS AREAS

A2

A1

A1

A1

A1

A2

A

A1

A2

A1

1

A1

A1

A2

A2

A1

A1

A1



DSC

70

DIGITAL
SELECTIVE
CALLING



DISTRESS + URGENCY + SAFETY + CALLING



DSC

**ALERTS ON
VHF, MF AND HF
MARINE RADIO
SYSTEMS**

**INCREASED RANGE
AND QUALITY OF
TRANSMISSION**

DIGITAL
SELECTIVE
CALLING



DISTRESS + URGENCY + SAFETY + CALLING



DSC

**ALERTS ON
VHF, MF AND HF
MARINE RADIO
SYSTEMS**

**INCREASED RANGE
AND QUALITY OF
TRANSMISSION**

DIGITAL
SELECTIVE
CALLING



DISTRESS + URGENCY + SAFETY + CALLING
ONLY TO ESTABLISH CONTACT



ALERTS ON
VHF, MF AND HF
MARINE RADIO
SYSTEMS

INCREASED **RANGE**
AND **QUALITY** OF
TRANSMISSION

DSC

DIGITAL
SELECTIVE
CALLING



DISTRESS + URGENCY + SAFETY + **CALLING**
ONLY TO ESTABLISH CONTACT

- (1) ALL STATIONS**
- (2) GROUP STATIONS**
- (3) INDIVIDUAL STATIONS**



EPIRB

SENDS SIGNALS CONTINUOUSLY FOR



48 h

BATTERY LIFETIME



5 years

HAS TO BE TESTED ONCE



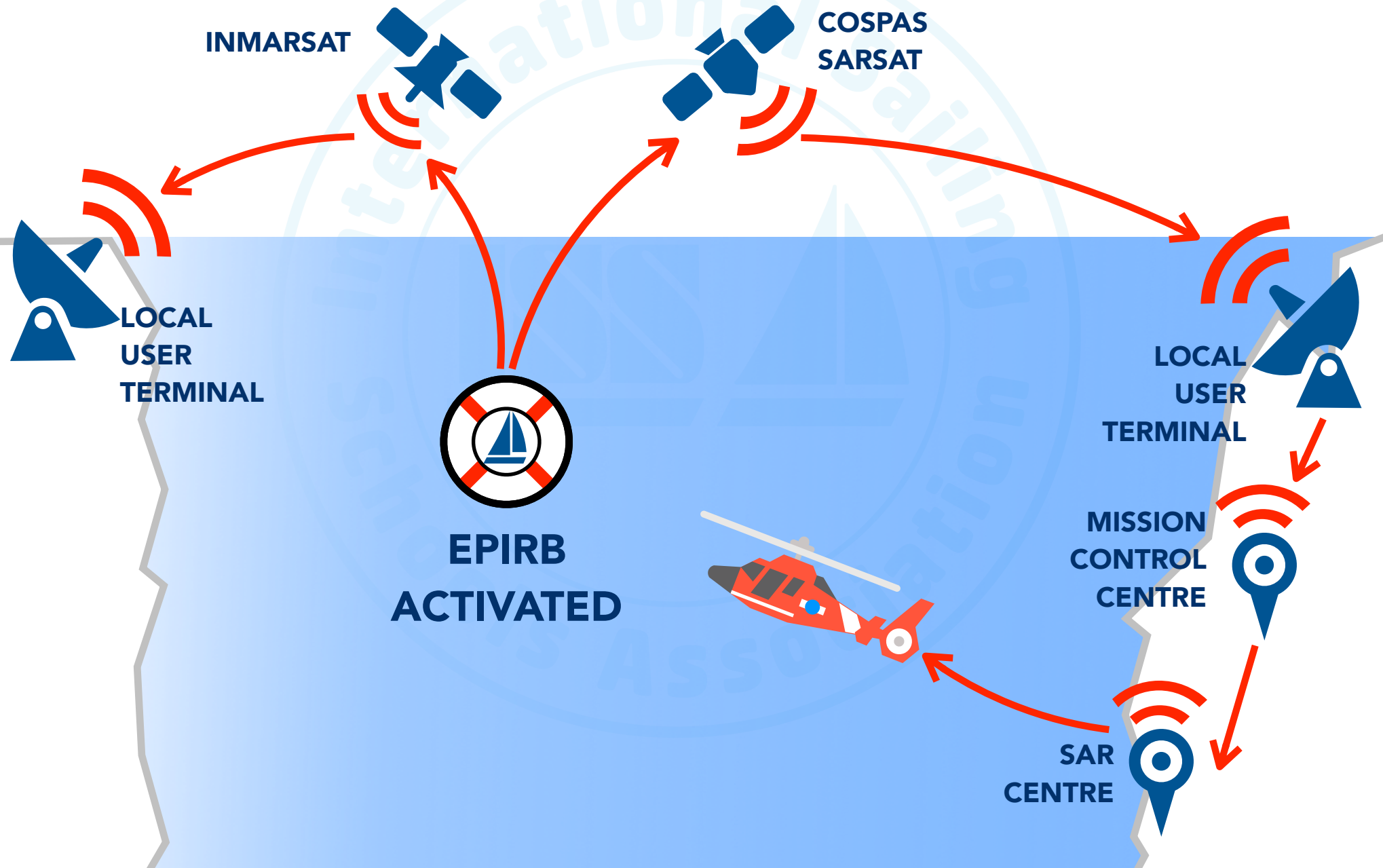
month

PLB - PERSONAL LOCATOR BEACON



GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM

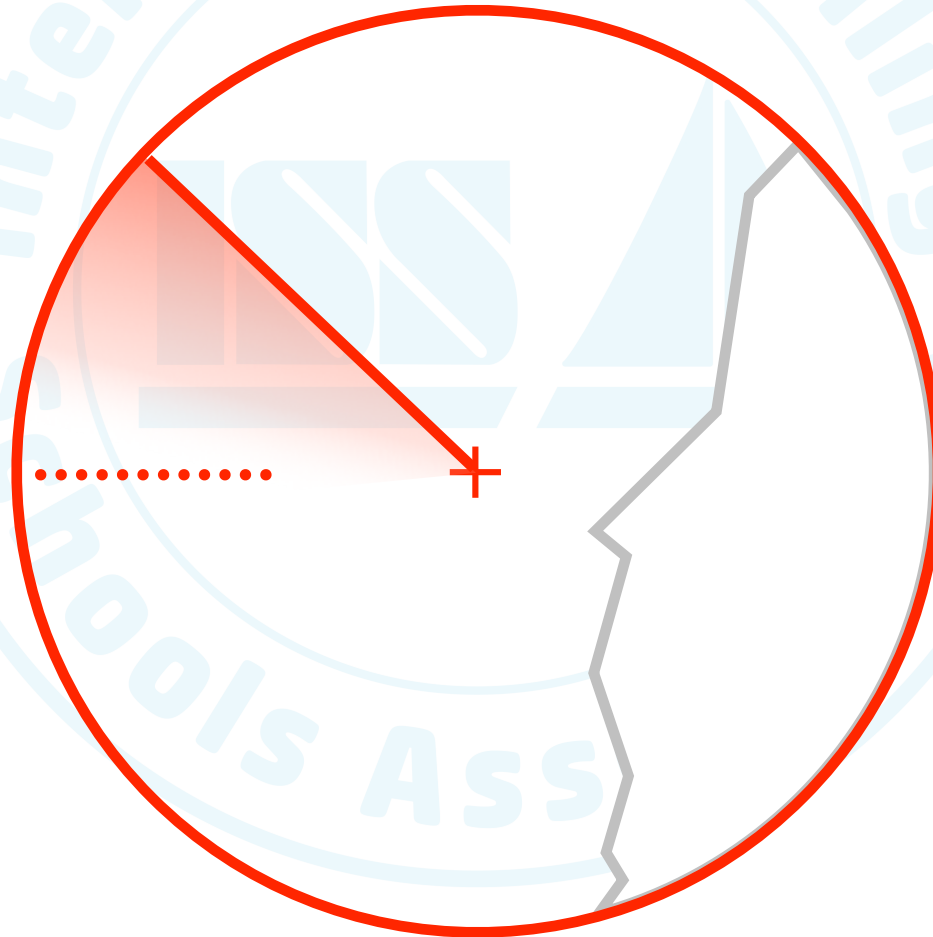
GMDSS COMPONENTS





SART

RADAR SART OR GPS BASED AIS SART
VISIBLE ON RADAR FROM APPROXIMATELY 8 NM





SART

RADAR SART WORKS ON STAND BY



96 h

FULL TRANSMISSION



8 h

BATTERY LIFETIME



5 years

HAS TO BE TESTED ONCE



month



NAVTEX

AUTOMATED SYSTEM FOR INSTANTLY DISTRIBUTING

MSI **MARITIME SAFETY INFORMATION**

NAVIGATIONAL WARNINGS

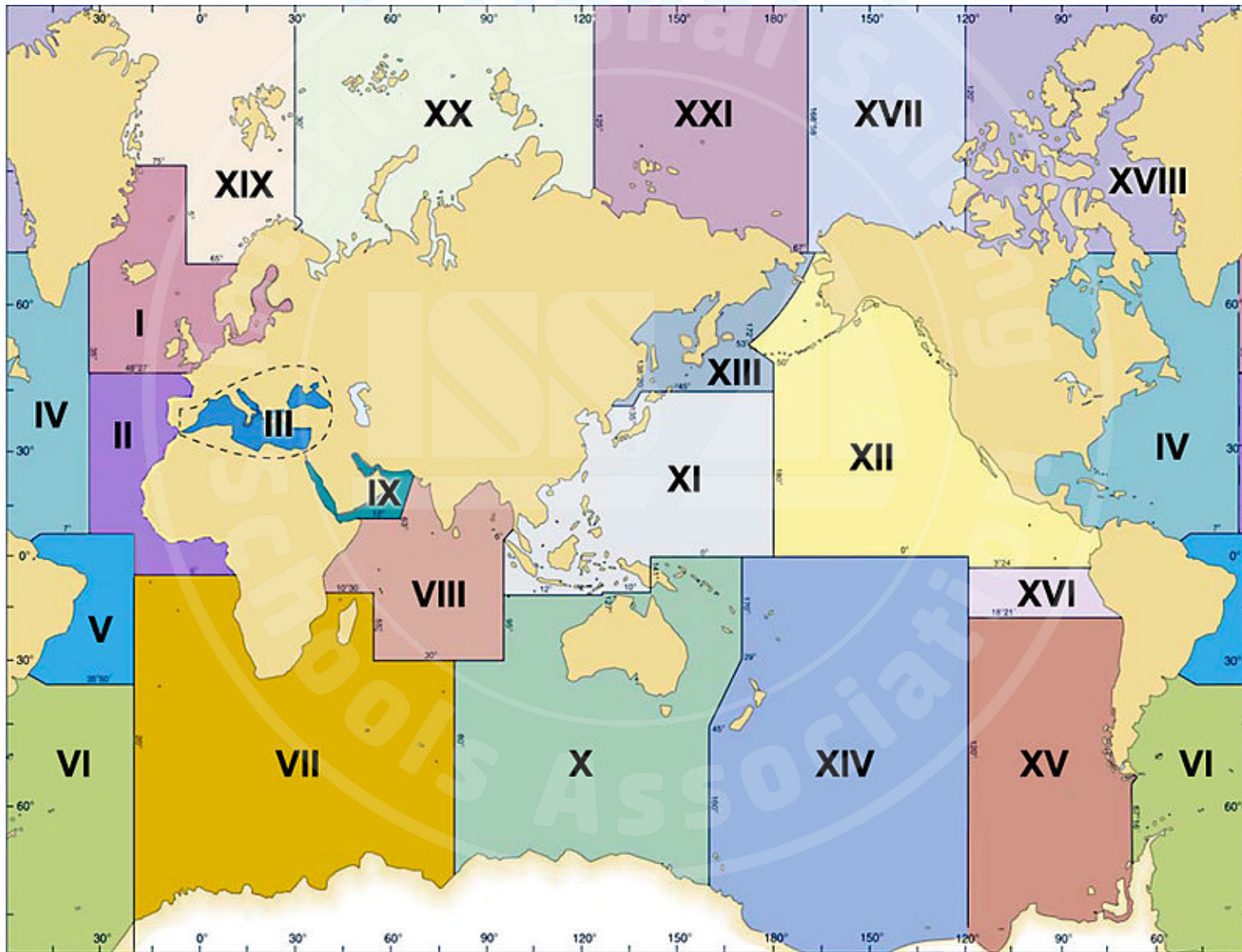
WEATHER FORECASTS

WEATHER WARNINGS

SAR NOTICES

518 kHz for 
490 kHz for local language

NAVTEX NAVAREAS

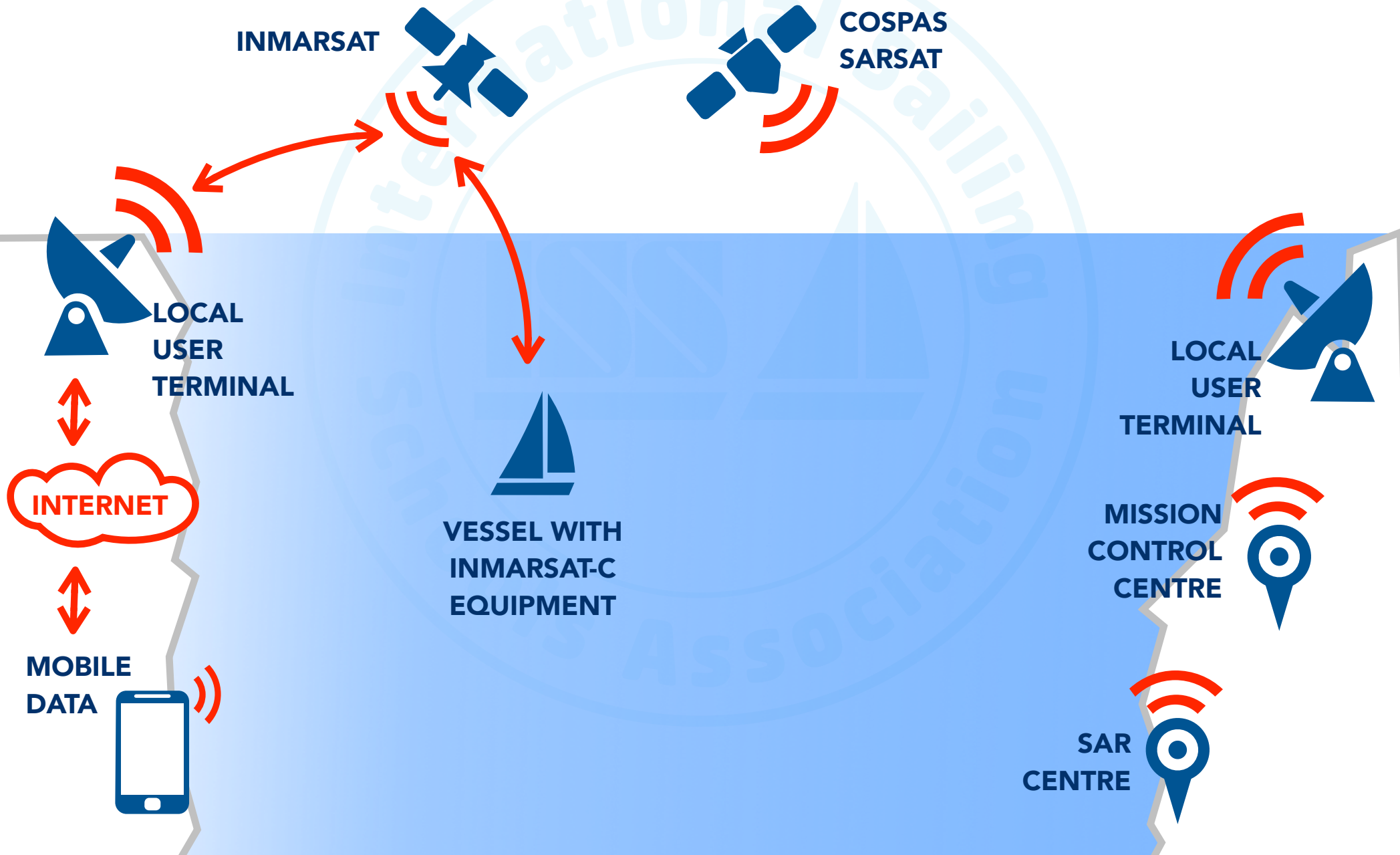




GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM

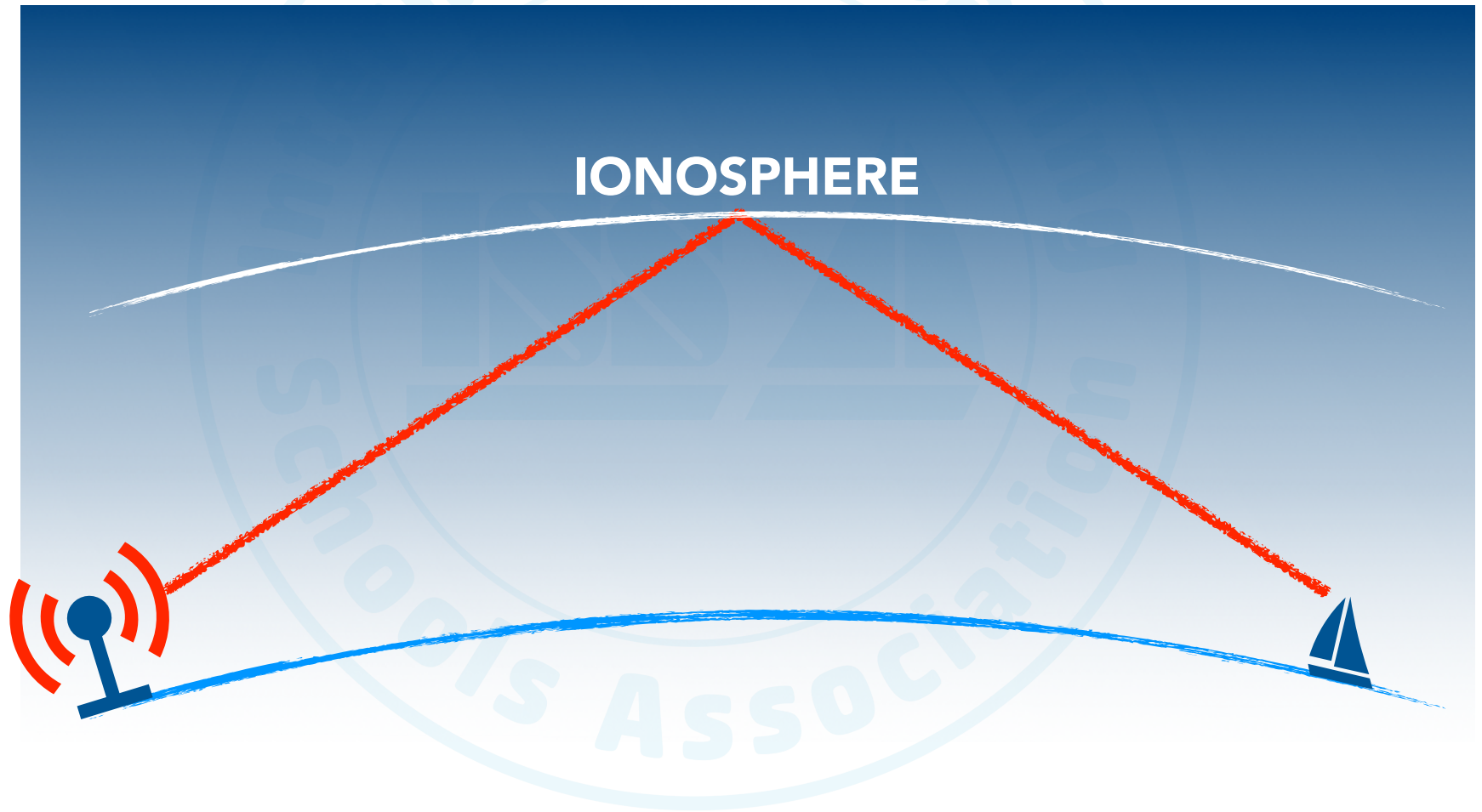
INMARSAT

SAFETY INFORMATION NOT COVERED BY NAVTEX





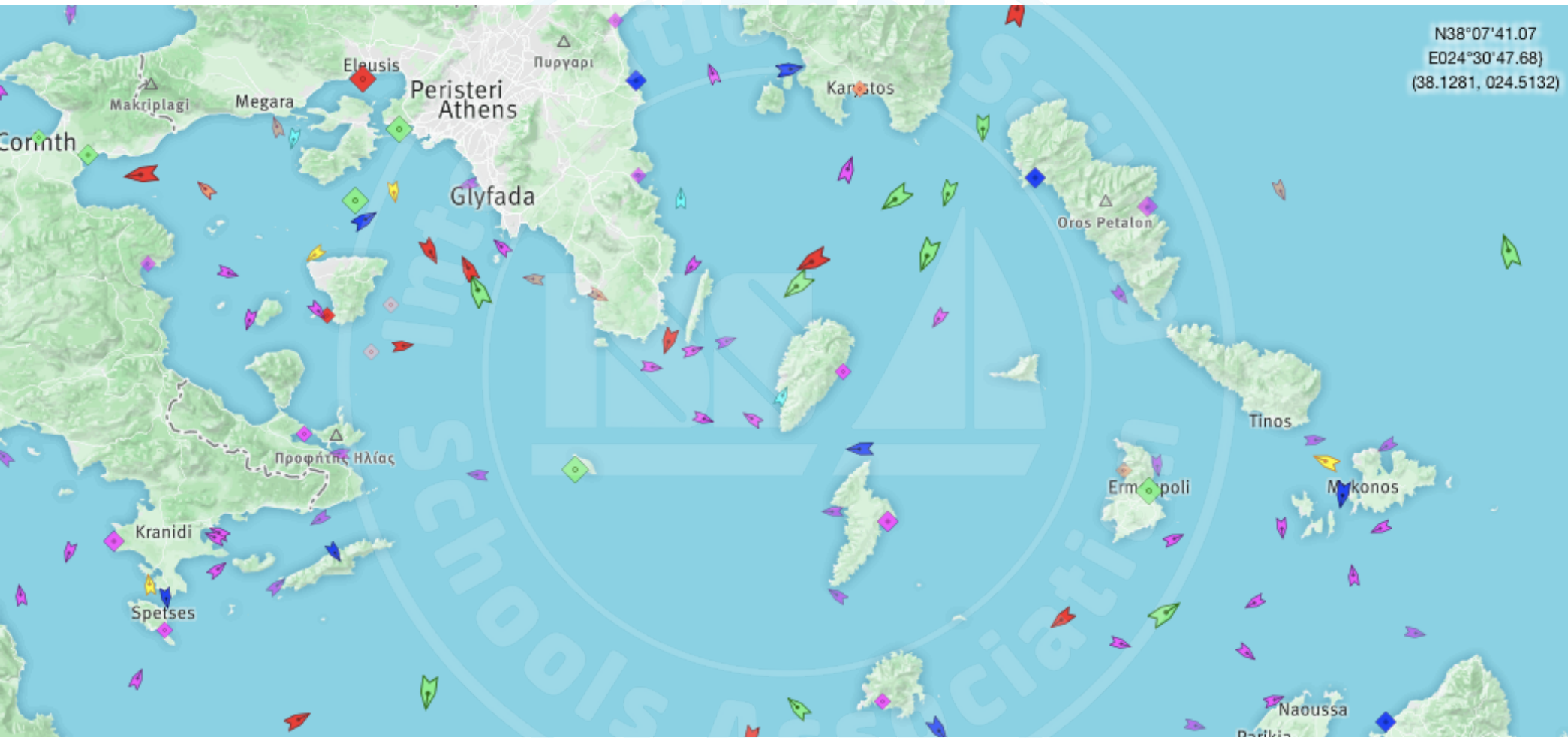
HF RADIO





AUTOMATIC IDENTIFICATION SYSTEM

AIS





AUTOMATIC IDENTIFICATION SYSTEM

AIS



BLUE STAR PATMOS
Ro-Ro/Passenger Ship

© Elliniki Aktoploia
MarineTraffic.com

☰

Add to Fleet

Vessel Details

GR PAS

GR PIR

ATD: 2016-08-30 07:58

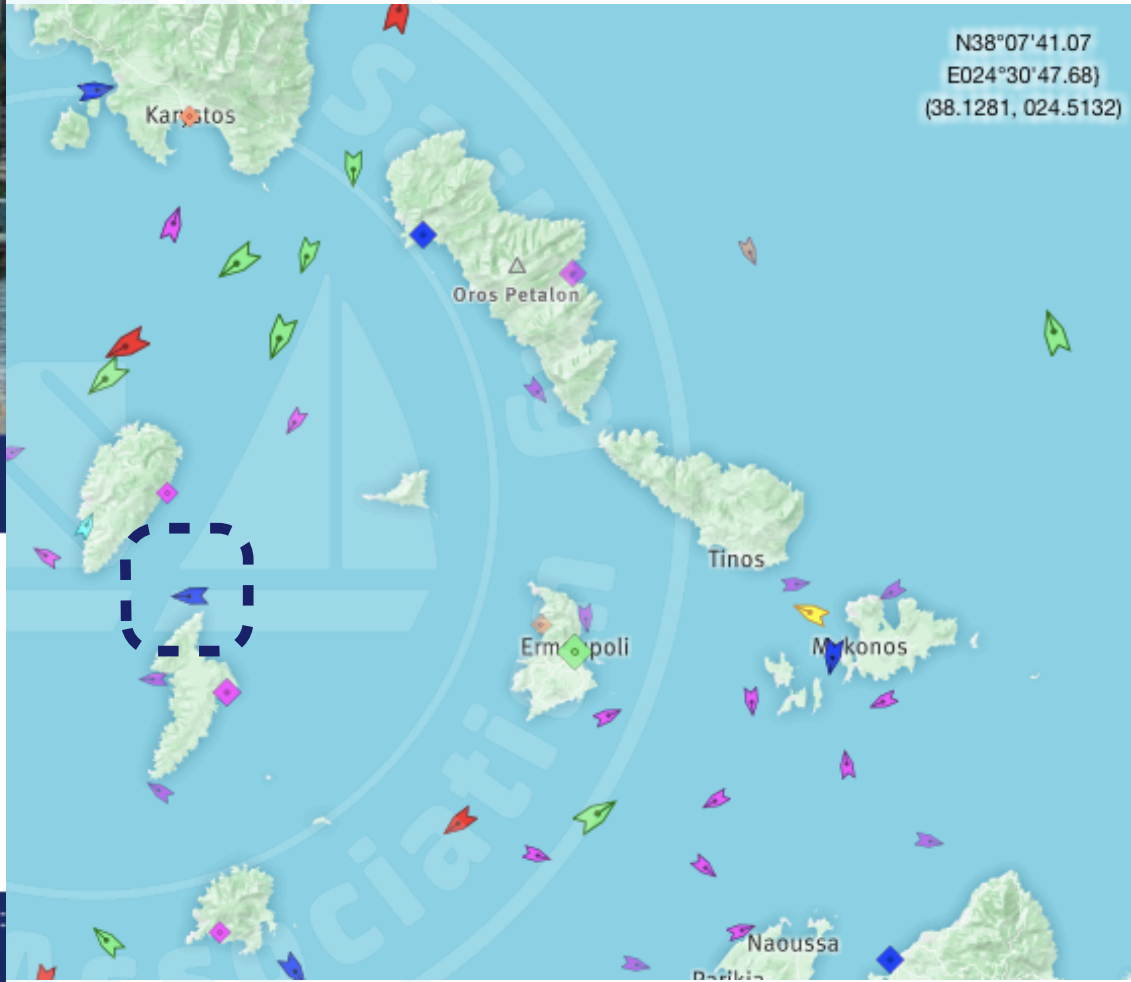
ETA: 2016-08-30 12:00

Status:
Underway using Engine

Speed/Course:
24.5kn / 269°

Draught:
6m

Received: **2 min ago** (AIS Source: [1595](#) in-karystos.gr)



N38°07'41.07
E024°30'47.68}
(38.1281, 024.5132)

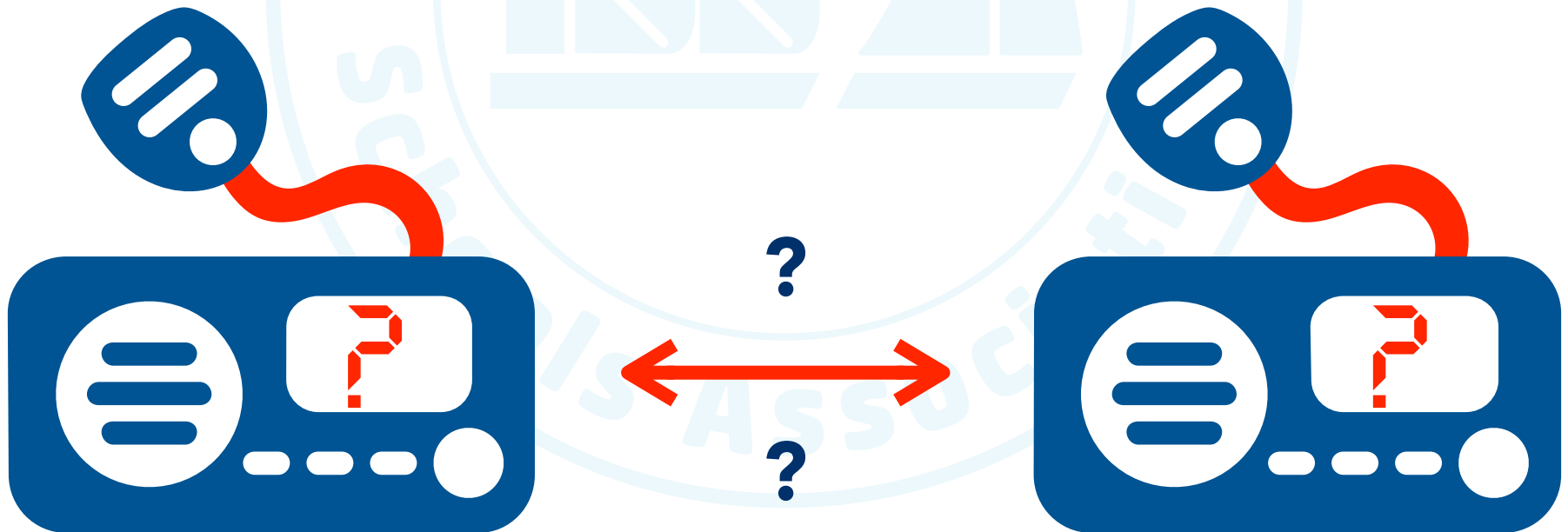
www.marinetraffic.com



DO YOU REMEMBER ?

CHANNELS

?-? & ?-?





DO YOU REMEMBER ?

16

START



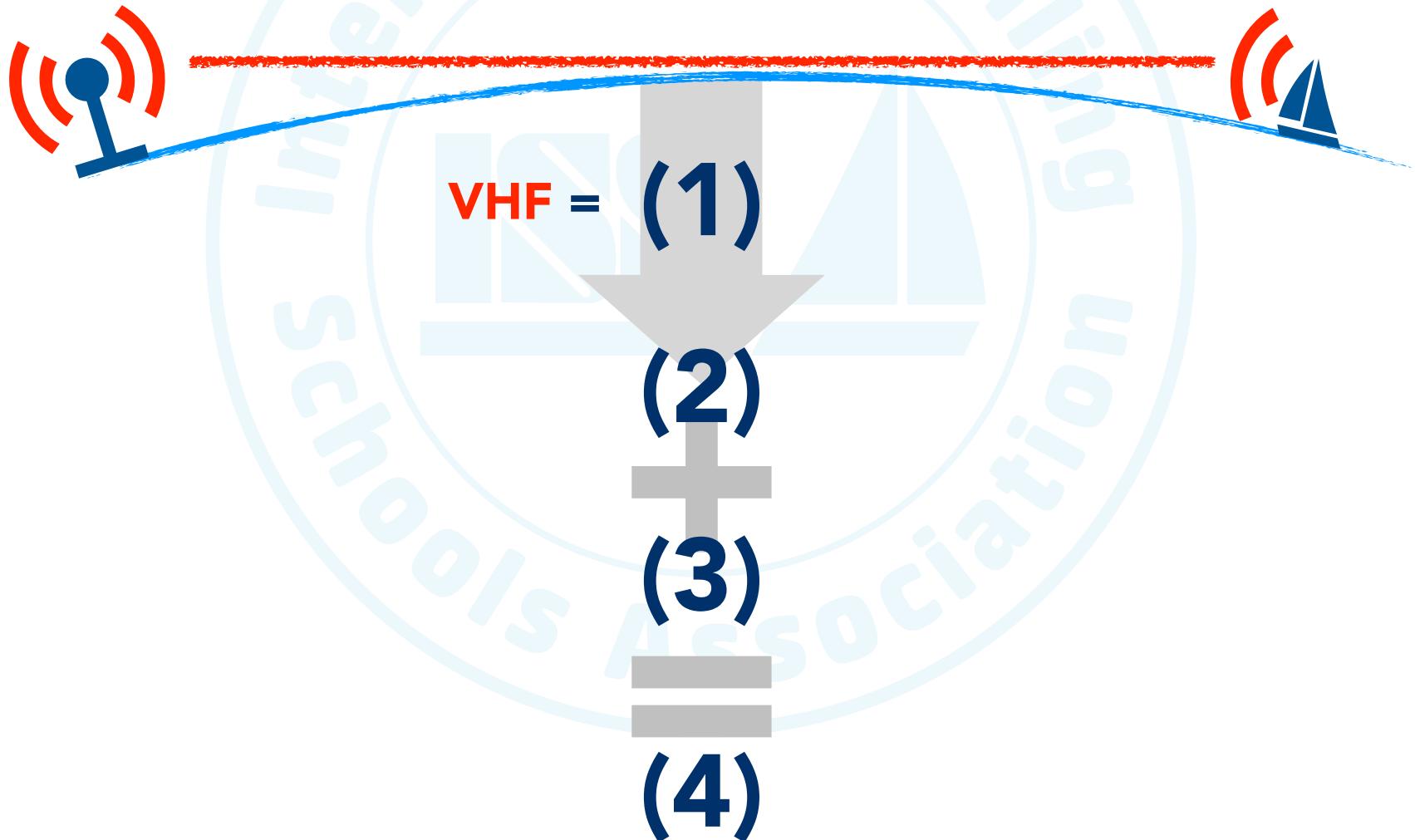
END

(1)

(2) + (3) + (4) + (5)

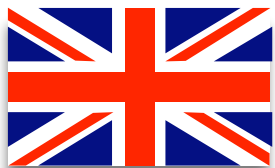


DO YOU REMEMBER ?



DO YOU REMEMBER ?

(1)



(2)



(3)



(4)



(5)



(6)



(7)



(8)



(9)



(10)



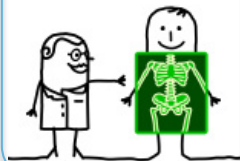
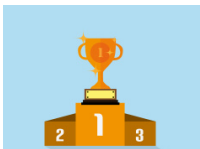
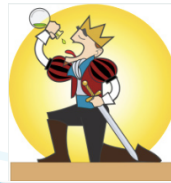
(11)



(12)

16

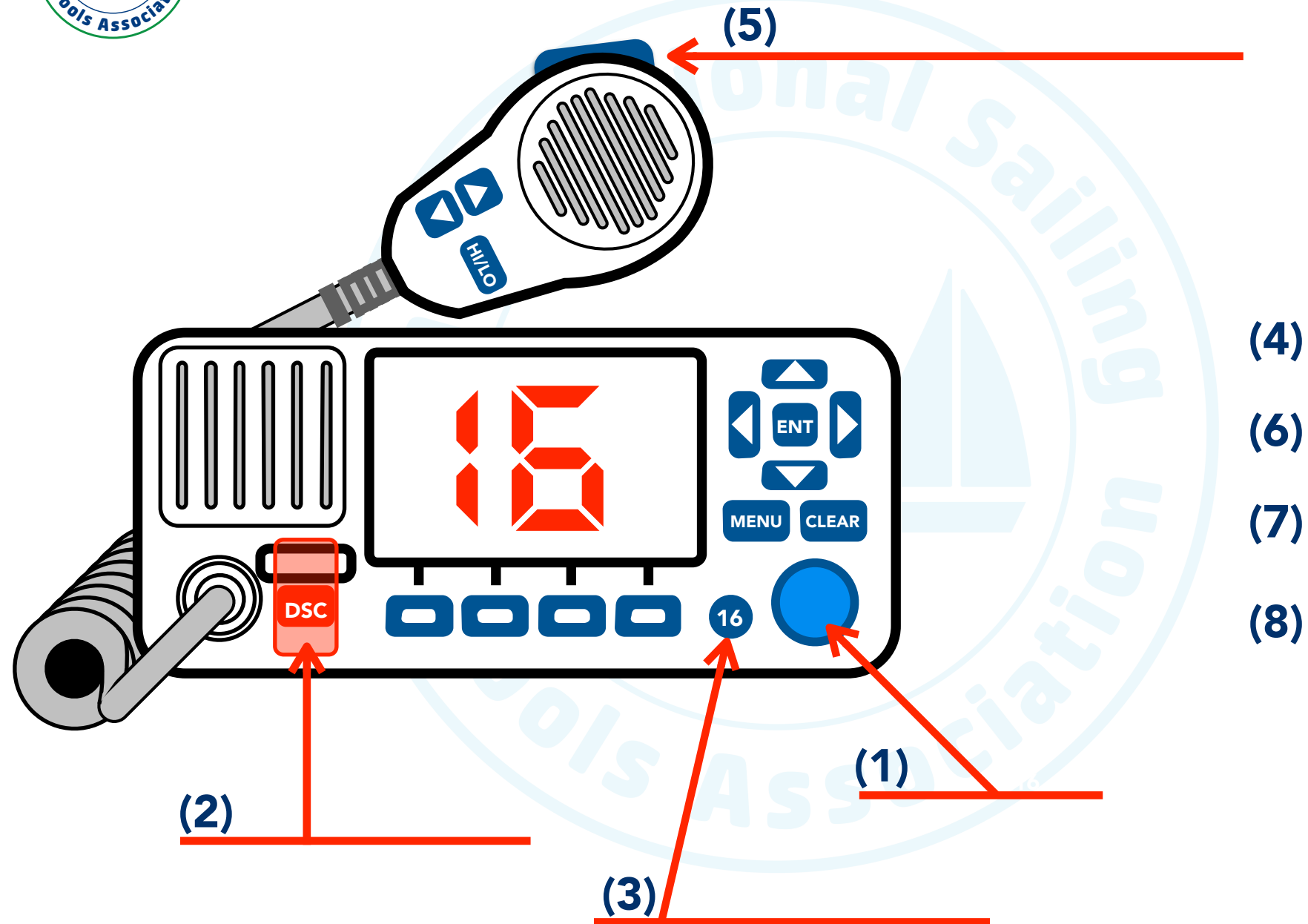
DO YOU REMEMBER ?





BEFORE MAYDAY CALL

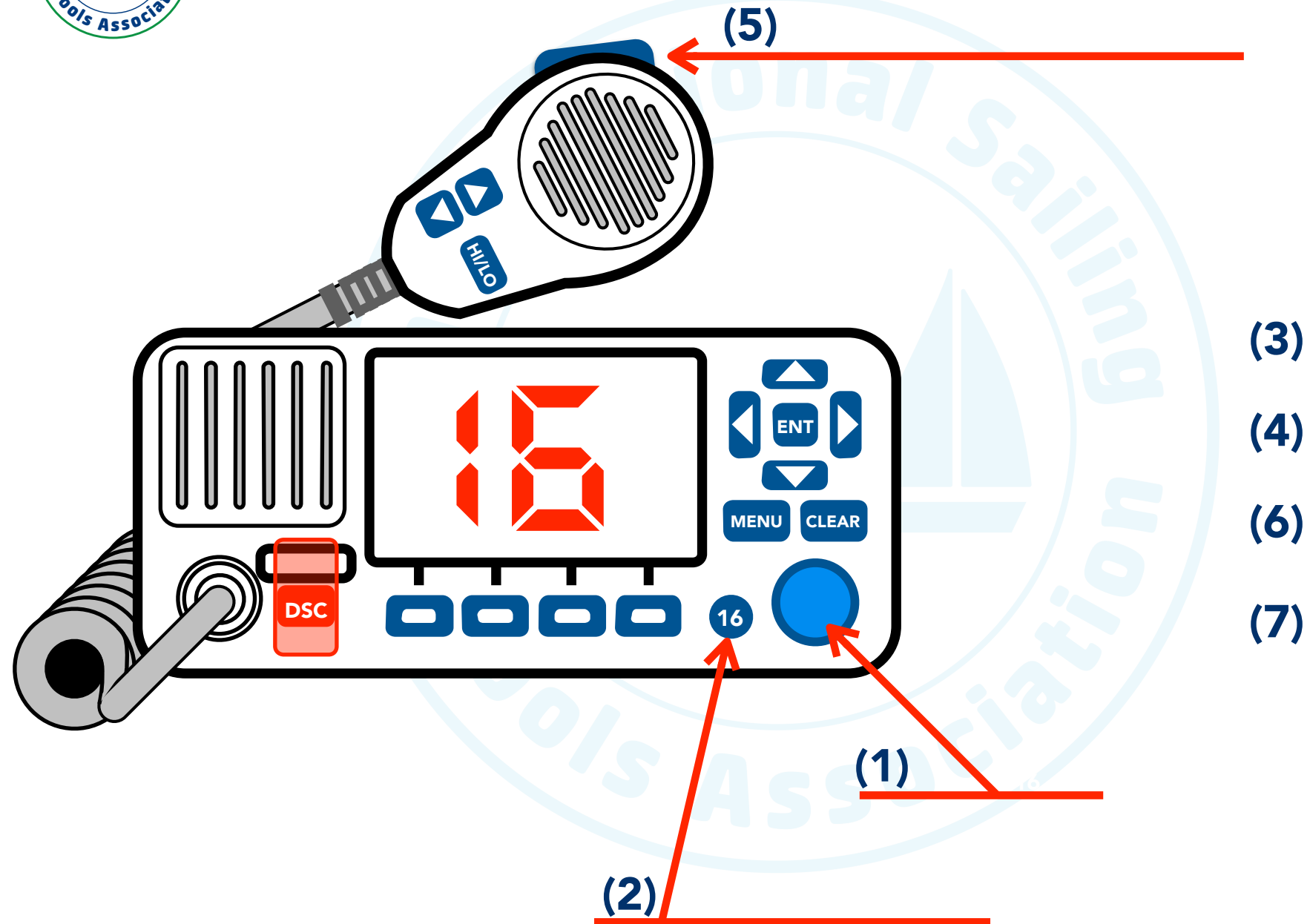
DO YOU REMEMBER ?





ROUTINE CALLS

DO YOU REMEMBER ?





TYPES OF CALL

DO YOU REMEMBER

1. M...
2. M... R...
3. S... M...
4. S... D...
5. P...
6. S... F...
7. P... P...
8. P... P... M...
9. S...
10. R...



MAYDAY CALL

DO YOU REMEMBER

USED ONLY FOR

? & ?

PURPOSES

CREW IN

? & ?

DANGER



GMDSS AERIALS DO YOU REMEMBER ?

