

26^{ra} Conversazione

All'attenzione dei Colleghi

1) A proposito di inglese : sono stato sollecitato da alcuni partecipanti al corso Radar a "dare delle risposte" (così accontento anche il caro "Compagno di viaggio", il sig. Mario D'Andrea).

In questi giorni, a proposito di inglese, si sta sviluppando un dibattito sui corsi universitari. Alcuni ritengono che sarebbe vantaggioso abbandonare l'italiano, dando un calcio alla lingua nazionale. Se ne è parlato su vari giornali, ma soprattutto in una tavola rotonda presso l'Accademia della Crusca.

Quale università ha già adottato l'inglese nell'insegnamento?

Ha cominciato l'area economico-aziendale, e l'idea ha trovato adepti nelle facoltà scientifiche e tecnico-professionali (Ingegneria, Informatica) e sta interessando anche Giurisprudenza e le Scienze della Comunicazione.

Si sostiene che soltanto così si preparano gruppi di allievi alla comunicazione internazionale.

Si fa inoltre osservare che molti dei testi di studio di materie specialistiche sono in inglese.

Ma noi che abbiamo una ricca lingua di cultura come l'italiano, vorrei che meditassero almeno sulle parole di Francesco Sabatini quando osserva:

"Siamo certi che i docenti abbiano sempre la perfetta competenza linguistica per far lezione in inglese?"

La didattica non è automatica ripetizione di un sapere già codificato e verbalizzato in discorsi depositati nella nostra mente: è un momento, per il docente, di migliore esplicitazione a se stesso e quindi di approfondito riesame delle conoscenze possedute, un'attività che esige spesso il ricorso improvviso alle risorse più fresche e creative del linguaggio, quelle alimentate soprattutto dalla pratica di una lingua liberamente usata in ogni circostanza della vita."

Le lingue non sono un mezzo puro e semplice di comunicazione, neutro e asettico. La lingua dello insegnamento non può che essere una lingua posseduta in profondità e di forte spessore culturale.

La lezione non consiste in una ripetizione automatica di un sapere già codificato. Per questo basta un buon libro, magari in inglese, come basta uno schermo per lezioni trasmesse via etere (ricordi, caro Mario, come ci accaloravamo alla parola didattica).

Riflettiamo su queste parole di Gian Luigi Beccaria⁽¹⁾:
"Noi dobbiamo pretendere che oggi la scuola e la università esigano una perfetta conoscenza dell'inglese. Ma non dobbiamo dimenticare che la lingua non è soltanto uno strumento neutro, senza passato, senza storia. Se in futuro si smetterà di pensare nella propria lingua, la comunità intera ne verrà impoverita".
E allora?

Prendiamo innanzitutto coscienza che l'inglese è la lingua del mare. Non c'è nulla da fare, l'inglese ha dalla sua un'enorme forza trainante che lo fa avanzare

1) Gian Luigi Beccaria: Mia lingua italiana

inarrestabile. Inutile opporsi.

Le ragioni per cui l'inglese è stato adottato come lingua veicolare sono in sostanza extralinguistiche: non lo si è adottato perché ha una sintassi più semplice, parole più corte, tanti monosillabi. La ragione vera va indicata nel suo "prestigio" culturale, tecnologico, economico. La fortuna è legata all'espansione coloniale nei secoli passati e all'egemonia e al prestigio del modello tecnologico statunitense che gli ha fatto da volano.

Gli insegnanti delle materie professionali possono fare molto per aiutare i nostri alunni ad acquisire, nell'ambito interdisciplinare⁽²⁾, gli strumenti necessari per un confronto diretto e continuo tra la nostra cultura nautica e quella del mondo anglosassone.

Cioè i nostri allievi dovranno sviluppare l'abilità di interpretare, senza equivoci, il significato di testi di carattere professionale in lingua inglese. Ho cercato di fare la mia parte redigendo questionari, problemi, argomenti di carattere professionale in inglese.

Qui allego:

2) SAQ ANSWERS: dal n° 1 al n° 44
(Vedi la Conversazione n° 6 del 26.03.2010)

Napoli 14.01.2013

Con Affetto
Franco Sponto

(2) Vedi la Conversazione n° 11 del 18.10.2010

Risposta n° 2

SAQ 1. From which sources do you obtain information about your OOW duties?

The STCW Convention resolution on Bridge Watchkeeping (Annex 2)
Company navigational instructions

Master's Standing Orders
Master's Night Orders
Master's verbal orders

SAQ 2. What is positive reporting and why is it necessary for the testing of equipment before the ship sails?

Positive reporting means reporting personally in response to an order. When positive reporting is required by the Master I must carry out the duty and report back verbally to the Master personally to assure him that I have actually undertaken and completed the required task.

SAQ 3. What must the Navigating Officer do to ensure that the ship's passage plan is updated prior to sailing?

Check that the largest scale chart is available, corrected up to date with the passage plan details and that future charts are stored in the right sequence
Record tidal information for the time of departure
The latest weather forecast should be available
The log books, chart equipment and other relevant publications are ready for use
All bridge recorders have adequate paper and are ready for use
All time related activities are updated from the time of departure
The pilot card is completed with up to date information
Bridge and Engine Room clocks are synchronized

SAQ 4. What reports are expected from the engine room to the bridge prior to sailing?

The main engine(s) is (are) ready for manoeuvring
Power is available for deck machinery such as winches, windlass and the gangway motor
Auxiliaries for generating extra power are made ready
Air is opened to the whistle
Water is made available on deck
Control systems are tested
Communications are tested
Steering gear, telegraphs and control systems checked with the bridge

When appropriate, the controllable pitch propeller control system is verified and the thrusters operational.

SAQ 5. If the Master told you to check all was clear on the shore side, ready for departure, what would you look for?

The gangway was up and clear of obstructions

The vessel was singled up

No pipes, hoses, nets, telephone lines or cables were connected to the shore

Cranes, chocks, derricks, gantries and other cargo related equipment was clear

SAQ 6 . List the main items to be updated on the pilot card.

The draught (forward and aft), the non-availability of equipment, the date, port and displacement and any defects which might affect the navigation of the ship

SAQ 7 . Why is it necessary to contact the port VTS station prior to sailing?

To inform the VTS that the ship will soon be sailing and to find out the movement of other vessels in the vicinity

The port VTS may redirect other ship movements or if there is a risk of unsafe traffic movement. The port VTS may delay or bring forward the time of the ship's departure

SAQ 8 . How would you monitor the navigation of the pilot?

By familiarising myself with the intended pilotage passage and the tracks laid down on the chart in accordance with the pilot's briefing

I would then know the intended courses to be steered and I could then establish the ship's speed and monitor progress

I would independently fix the ship's position and note the times of passing buoys

I would note the distance off radar conspicuous land

I would monitor the depth recorder against the chart

I would observe traffic

SAQ 9 . How would you, conveniently, check the compass error in pilotage waters?

By taking transits or verifying heading marks by a compass bearing

SAQ 10. How would you know what VHF channels to monitor when leaving port?

By checking the plan, asking the pilot and consulting the Admiralty Guide to Radio Signals if the information was not available elsewhere

SAQ 11. You are alone on the bridge with the pilot and you notice a course alteration which you do not think is correct. What are you going to do?

As OOW I have a duty to query any unexpected deviation from the pilotage plan. I would therefore:-

Ask the pilot if the action was intended

If appropriate ask the pilot to check the heading at the steering position to verify any compass error

If I was concerned about any deviation from the plan or the safety of the ship I would call the Master

SAQ 12. List the correct way of rigging a pilot ladder

The pilot ladder must be clean, properly secured inboard and lowered until it is about 1 metre clear of the water. Manropes should be available, properly made fast and the same length as the ladder

The pilot ladder should be tested for safety and security

Details of rigging the pilot ladder with the accommodation ladder are also given in the annex

SAQ 13. Who should be in attendance when a pilot is on the ladder, and why?

When the pilot is picked up or disembarked an officer must be in attendance with radio communication to the bridge. A second crew member should also be in attendance in case of an emergency

SAQ 14. What safety equipment must be provided at the pilot ladder?

Whenever a pilot transfer takes place there must be a lifebuoy and light ready for immediate use with a heaving line, proper illumination, a torch at night and a radio for communication

SAQ 15. What provision must the OOW make for boarding and disembarking pilots in the dark?

An overside arc light and a torch

SAQ 16. Why must the pilot ladder be rigged so that it does not touch the water?

If the bottom of the ladder was in the water it would be caught by the movement of the sea, particularly if the ship was moving through the water. This would be dangerous and could cause the pilot to be thrown from the ladder

SAQ 17. Approaching the pilot vessel in fog, the Master of the pilot vessel says "I can see you on the radar now 135° at 2 miles". Where would you look to find the pilot vessel and why?

In the IMO Standard Marine Vocabulary bearings are always given FROM the vessel. So my ship is 135° from the pilot vessel at a distance of two miles
I would therefore expect to see the pilot vessel on a reciprocal bearing of 315° FROM my ship at a distance of two miles

SAQ 18. When examining the chart, prior to taking over the watch, what will you be looking for?

I would note the ship's position and work out where I would expect the ship to be at the end of the watch

I would examine the track and note that it correctly 'followed on' over any chart changes

I would verify the track and the compass courses covering my watch

I would note buoys, lights or any other conspicuous navigational mark that I would expect to see in the next half hour

I would note the expected tidal set

I would look to see what night orders the Master had provided and mark on the chart when he requests a call

SAQ 19. You are aiming to make good a track of 090°T . The ship is allowing 7° drift to port for a current from the starboard bow, and a Leeway Angle of 3° for a wind on the port side. The Gyro Error is 2° low and the Compass Error 4° W. What is the Gyro Course and Compass Course to steer?

Gyro Course 092° , Compass Course 098°

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SAQ 20. a) What do you mean by a fix interval. b) Your ship is doing 12 knots. There is a current across the track of three knots towards the danger and a wind blowing in the same direction adding 1 knot of drift. The track is parallel to a sand bank at 1 mile. What should be the fix interval?

(a) The regular interval between fixes such that if an error has occurred there will be time to correct it before the ship might run aground. The fix interval is more frequent in confined waters

(b) The combined speed of wind and tide is about $1 + 3 = 4$ knots. The distance to the sand bank is one mile. To cover the worst situation, the fix interval would be 15 minutes, or in practice 10 minutes to give time to correct any adverse effects.

Once the fix interval got below 10 minutes I would use pilotage techniques

SAQ 21. Which should take priority — navigation or collision avoidance? Why?

In coastal waters, clear of obstructions, collision avoidance must take priority as this provides the most immediate threat. It is desirable to have a regular fix interval as this makes the estimation of the next fix position easier — but this is not essential

SAQ 22. You are OOW on a 20 knot container ship and you detect a small target at 4 miles approaching at 5 knots with a terminal period of 1 mile. Calculate the critical period (*)

This answer, which can be worked out using the table on page 39, is $9.6 - 2.4 = 7.2$ minutes

(La tavola risolve la formula $s = v \cdot t$)

SAQ 23. Why would you not trust the radar to give you warning of small vessels in coastal waters?

Small wooden and glass reinforced plastic vessels are very bad for reflecting radar waves and may not return a strong enough echo. Where an echo is weak it can easily be lost in clutter and cannot, therefore, be detected.

SAQ 24. Give some examples of when you would call the Master for assistance.

If I thought the ship might be put into danger from a situation I could not control, for example:

A give way vessel standing on

A sudden increase in traffic density

Deteriorating visibility

The malfunction of any essential navigational equipment, e.g. radar, steering gear

Reported problems with the engines

Any emergency onboard

I would, of course, call the Master in accordance with his instructions

SAQ 25. A steering system is a control system. How does it work?

The steering system works on the principle of a control system

When steady the system is stable

When the helmsman puts on, say, 10° of starboard rudder the signal is sent to the steering gear and to an additional piece of equipment called the hunting gear. This detects when the rudder is situated 10° to starboard and feeds back this information to the steering motor which stops turning the rudder

Without the feedback or corrective mechanism provided by the hunting gear the rudder would be uncontrollable

(*) Vedi NOTE

SAQ 26. List the items to be checked and monitored each watch.

The helmsman or the automatic pilot is steering the correct course
The standard compass error is determined at least once a watch and, when possible, after any major alteration of the course; the standard and gyro compass are frequently compared and repeaters are synchronized with their master compass
The automatic pilot is tested manually at least once a watch
The navigation and signal lights and other navigational equipment are functioning
fix the ship's position
The change-over from automatic to manual steering and vice-versa should be made by, or under the supervision of, a responsible officer
The alertness of the lookout
Changes in the weather and barometric pressure
Weather forecasts

SAQ 27. What advantages^(*) does the eye have over the radar?

The eye has the following advantages:-
Reliable
Sensitive to colour
Can assess heading
Can identify small targets
Can see light configurations
Can assess ship types
Can identify conspicuous marks
Can identify flashing lights
Has better discrimination
Can see changing weather patterns
Can see effect of sea on vessel
Not affected by blind arcs (if observer moves)

SAQ 28. When would you instruct a lookout to assist you on the bridge?

I would post a look out:-
In accordance with standing orders
When the visibility deteriorates
When I need to be occupied with bridge work which requires special attention
Whenever extra assistance is required
If there was an emergency, like man overboard

SAQ 29. How would you brief a lookout?

A lookout will be much more effective and interested in the job if I explain what he might be expected to see during the watch
I would encourage him to look at the radar and search for targets visually

(*) VEDI NOTE

SAQ 30. List the ways of obtaining a compass error out of sight of land.

- Azimuth of the sun
- Amplitude of the sun
- Azimuth of the moon
- Amplitude of the moon
- Azimuth of the planet
- Azimuth of the star
- Azimuth of the Pole Star

SAQ 31. When would you call the Master, out of sight of land?

- I would call the Master in accordance with his Night Orders which would probably include any alter course or way points
- His requirements for being told about vessels with a CPA of less than (one) mile
- If the weather deteriorates
- Any potentially dangerous situation which might develop
- Any significant equipment failure

SAQ 32. List the information required by the Master at noon each day.

The following information is usually required by the Master at noon:-

- The most accurate position of the ship
- The day's run
- The daily average speed
- The total distance sailed
- The general average speed
- The distance to go to the next port
- The ETA

SAQ 33. Why is making a landfall so critical?

- Until land is sighted and navigational landmarks or lights are properly identified there will be doubt about the ship's position relative to land
- I would work out the ETA for the expected landfall

SAQ 34. What should you tell the Master when he comes to the bridge, prior to making a landfall at night?

- I would have the depth recorder running and I would show the Master how soundings compared with the chart. I would have worked out rising distances for the first sighting of lights and briefed the lookout accordingly
- I would have the radars running and tuned. I would prepare some ideas about the likely coastline
- I would be checking the GPS against the land datum
- I would have prepared information about tidal set and drift and any local currents likely to be experienced

SAQ 35. What preparations would you take when making a landfall in poor visibility?

I would call the Master in accordance with instructions. I would post a lookout to assist with searching for other vessels and fishing vessels in the vicinity
I would have the depth recorder running and the maximum number of radars running
I would ensure that the GPS was working. If there was a problem with other equipment I would consider using the radio direction finder
I would follow the policy on the closing of water tight doors

SAQ 36. What activities need to be undertaken prior to arrival?

Each department will have work to do prior to arrival:-

I would advise the engineers who will want to prepare for manoeuvring
Inform the Officer forward who will want the anchors and mooring arrangements fully operational
The Master will want the pilot ladder in readiness and there may be cargo operations to consider
Comply with coastal State reporting scheme
Advise the pilots
Report to the VTS if appropriate
Check the bridge and navigational equipment.

SAQ 37. Why is it important to establish correctly in advance which "side to" when berthing?

A lot depends upon which side to. For example, the gangway has to be turned out, the moorings prepared and the cargo manifolds or gantries aligned. Also, the preparations to take bunkers and a fresh water lighter may need to be considered as well as power and communication lines
Preparing to berth a ship on one side and then having to change arrangements to the other, causes extra work and is inconvenient.

SAQ 38. Where would you expect to find VHF calling channels for a pilot station and a port VTS?

Calling channels can be found as follows:-
The Admiralty List of Radio Signals
Guide to Port Entry
The chart
The VTS manual
Local notices
Company Instructions
If in doubt I would call on Channel 16 and transfer

SAQ 39. How many miles does it take your vessel to stop from a manoeuvring speed of 12 knots, fully loaded, (i) with no astern power (ii) with maximum astern power?

This varies from ship to ship in still water but the information for your ship should be available on board. It is usually much further than originally thought. Having obtained the answer, note it in the answer column and compare it with other ships.

SAQ 40. How can the OOW best assist the Master when approaching an anchorage?

- Discuss the plan
- Provide bearings and distances
- Control and monitor the engines
- Monitor the steering
- Keep a good look out for other ships moving
- Relay messages

SAQ 41. What is the purpose of lowering the anchor out of the hawse pipe when approaching an anchoring position?

On large ships this is necessary to reduce the free fall speed (the anchor is lighter in water and there is more resistance). Also it avoids damaging the bulbous bow if fitted. It also ensures that the cable is free in the cable locker. Lowering the anchor out of the hawse pipe is particularly important in confined anchorages

SAQ 42. What is the maximum speed through the water that your ship can anchor without risking breaking the cable?

This varies with size, but typically for a VLCC or Super Container Ship a speed of 1 knot should not be exceeded

SAQ 43. What various options are available to a ship at anchor when faced with a threat of collision from an oncoming ship?

Sound the whistle, flash the aldis and try calling on VHF to get the other ship to recognise it was standing into danger. Use the engines or use the rudder to create a sheer. Call the Chief Officer to go forward urgently to let go the brake. Inform the Master as early as possible

SAQ 44. Apart from navigational safety, what else should you do on anchor watch?

I would:-

- Monitor communications
- Comply with the COLREGS for a vessel at anchor
- Maintain a security watch

NOTE

1)

ADVANTAGES OF THE EYE

Reliable
Sensitive to colour
Can assess heading
Can identify small targets
Can see light configurations
Can assess ship types
Can identify conspicuous marks
Can identify flashing lights
Has better discrimination
Can see changing weather patterns
Can see effect of sea on vessel
Not affected by blind areas
(if observer moves)

ADVANTAGES OF RADAR

Generally reliable
Does not get tired
Accurate range information
Stable bearing platform
Simplifies the overview
Can penetrate fog
Better penetration in rain and snow
Useful for predictive collision avoidance
Predictive navigation (parallel index)
Can have longer range (height of aerial)
Can have low down port approach
aerial to minimise clutter

LIMITATIONS OF THE EYE

Poor at assessing distance
(worse at night)
Subject to night adaptation
Degradation through glare
(worse with age)
Gets tired searching
Binoculars needed for early
identification
(particularly on high speed
vessels)

LIMITATIONS OF RADAR

Misses small targets
Can miss substantial targets in clutter
Can de-tune
Prone to inherent and input errors
Targets need transponders for
positive identification
Is prone to interference
Cannot discriminate as well as the eye
Cannot identify ship types or operations
Cannot assess aspect immediately
Bearings less accurate than compass

2)

As vessels approach one another on a collision course, there are three phases which can be identified: an early period when the target is detected but when action to avoid collision can be deferred; a critical period when action must be taken; and a terminal period when it is too late to prevent impact.

The beginning and end of each period relate to a range of the values which are determined by the relative speed of approach of the two vessels concerned. The table below shows some typical relative speeds and the times to their collision point.

Distance NM	Time (minutes) to Potential Collision Point Combined Approaching Speed (Knots)							
	10	15	20	25	30	35	40	45
5	30.0	20.0	15.0	12.0	10.0	8.6	7.5	6.7
4	24.0	16.0	12.0	9.6	8.0	6.9	6.0	5.3
3	18.0	12.0	9.0	7.2	6.0	5.1	4.5	4.0
2	12.0	8.0	6.0	4.8	4.0	3.4	3.0	2.7
1	6.0	4.0	3.0	2.4	2.0	1.7	1.5	1.3
0.5	3.0	2.0	1.5	1.2	1.0	0.9	0.8	0.7

For example, if a merchant ship first detects a fisherman at four miles and their relative approaching speed is 20 knots, then the time of collision, if no action is taken, will be 12 minutes later.

If, however, there is a terminal period of one mile and a relative approach speed of 20 knots, then the critical

period for the same fishing vessel first identified at
4 miles will be 12 minutes - 3 minutes = 9 minutes.