

Editorial

Welcome to issue 38 of AMERC News - which doubles as **Circular 250** and, as such, must be circulated to all GMDSS instructors/examiners by their AMERC centre contact.

In this issue we have the report on the most recent **Maritime Consultancy Group** (MCG- Page 2) - which reflects relevant items covered in the AMERC Executive Committee (EC) earlier the same day; and the AMERC Annual General Meeting (AGM – Page 3). Included are (amongst other things): **NAC Personnel changes**; the **latest quarterly figures** from the National Administration Centre (NAC); a **change in Company Secretary**; the **MNTB Technical Committee Report** (with a request for feedback from members on course criteria); the **annual Financial Report**, and **Executive Committee appointments**.

The **Examiner's Panel** (Page 5) report includes details from the **Chief Examiner's annual report, annual examination statistics**; and information about the **upcoming 2013-15 examination series**.

That's followed by our **Member's Profiles section** (Page 7) – this time featuring member **UKSA** on the Isle of Wight.

We've another '**GMDSS Criss-Crossword**' (Page 8) to help stretch candidates knowledge of **international geography** and the use of **Admiralty List of Radio Signals** (ALRS) publications. The answers to puzzle 37 are also included.

This edition's **Maritime Miscellaneous** (pages 9-13) features a summary of the **presentations given by Peter Blackhurst (Inmarsat) and Andy Fuller (IMSO)**. Peter's presentation included an **Inmarsat update; Arctic NAVAREAs**; availability of **Short Access Code 41** (meteo reports from ships); and **GMDSS/ Safety services for FleetBroadband** – in addition to information on **Alphasat** and **Global Xpress**.

Andy Fuller covered recent **IMSO activities**; agreement on the **new World Met Organisation system**; work to prepare for **new satcom providers to be allowed into the GMDSS**; and the **Long Range Identification and Tracking (LRIT) infrastructure and operation**.

Appendix A (pages 14-20) opens our discussion on the next series of **SOLAS procedures - examination questions**.

All centres and examiners are asked to review the examples given and comment on both the **revised format; and on the wording being used**.

It is imperative that any relevant feedback is not held back until next June – the intention is to have a full set of 'final' draft questions and answers ready for Examiner's Panel June 2012 – with only the final dotting-of-i's and crossing-of-t's to be done at that time.

Sláinte

Ian W

Mail: ian.waugh@btinternet.com

The **Maritime Consultancy Group (MCG)** meets regularly - currently four times each year – for the AMERC Executive Committee 'Open Meeting'. MCG membership consists of AMERC Executive Committee (EC) representatives; the AMERC Chief Examiner; the MCA Chief Examiner and the MCA Deck & GMDSS Team Leader; and AMERC/industry specialists. The open meeting can also be attended by other invited persons. (*You can ask to be invited by contacting the AMERC Secretary*). The following items from recent meeting(s) & follow-up are drawn to your attention:

MCA/AMERC Contract: it was reported that the contract was now signed-off.

AMERC Website: AMERC website statistics revealed that the most popular page, by far, is the GMDSS Quiz. Hits for May 2011 were up by almost 80% from May 2010. The number of unique visitors was up by over 40% - those visitors making an average of over 12 hits per visit. About 6% of visits lasted more than 1 hour (that quiz again!).

AMERC Candidate Feedback Process: A system to allow for examination candidates to provide feedback to AMERC NAC is to be introduced, in addition to centre feedback.

NAC Personnel Changes: Jackie King has decided to retire with effect from 9th September 2011, having served as AMERC National Administration Centre (NAC) Coordinator for over three years. Joan Hobbs – Operations Manager of Wray Castle - will be taking a more hands-on role in the NAC when Jackie moves on to her new life. Joan will be supported by Elizabeth (Liz) Grove, who currently works as accounts assistant to Julie Cartwright (Wray Castle Finance Manager and AMERC Treasurer). Liz will divide her time between her accounts work, and supporting Joan in the NAC (lots of figures, then!). Jackie will leave with very best wishes, from all, for an enjoyable retirement.

Classroom space: Following a review to determine space requirements for training centres; it was considered appropriate that the judgement of the Chief Examiner (or his representative) would continue to prevail.

RNLI SARROC training: RNLI Search and Rescue Radio Operators Certificate (SARROC) training, delivered to RNLI crew, now comes in two versions. The SARROC (UK) incorporates the RYA Short Range Certificate (SRC), and Search and Rescue communications training. The SARROC (INT) is an International version incorporating the full CEPT SRC syllabus, and Search and Rescue communications training, for International operators. AMERC continues to recognise the SARROC.



GMDSS Examination Statistics: National Administration Centre (NAC) examination statistics for the period

1 Jan 2011 – 31 Mar 2011 are shown below:

EXAMINATION	ENTERED (1 st time)	PASSED (1 st attempt)	% PASSED 1 ST ATTEMPT
UK GOC	374 (295)	284 (231)	231/295 (>78%)
ALL GOC	845 (694)	669 (547)	694/547 (>78%)
UK ROC	53	46 (43)	
ALL ROC	71 (64)	64 (61)	64/61 (>95%)
LRC	29 (29)	29 (29)	29/29 (100%)

Annual General Meeting 2011

The Association's AGM and Examiner's Panel were held at Park Farm Hotel, Norwich on Thursday 9th June 2011. There were thirty-three delegates and sixteen had apologised for absence. The following notes for AMERC News are a summary of proceedings – not the official minutes of the AGM - which will be produced and distributed by the Secretary using the normal process.

Keith Mitchell (retiring Company Secretary)

presented his final report as Company Secretary (included in full in the AGM papers, available from your Member contact - see 'Members' section at www.amerc.ac.uk Some notable points being summarised as:

- The AMERC/MCA contract has now been finalised, thanks to the efforts of the Chairman (Chris Harrison) and especially the Vice-Chairman (Mike Webster). Mike had taken the opportunity to retire quietly from AMERC and he went with our very best wishes;
- The change in Company Secretary, after serving in that post for many years – together with further possible changes in 2012 – had prompted a succession planning debate within the Executive Committee. The changes had also provided an opportunity to define the roles of Company Secretary; and of the Chief Examiner (and his Assistant/Deputy) more clearly;

Phil Davies presented his MNTB Technical Committee Report (available in full in the AGM papers). Some points highlighted by Phil were:

- The MNTB Technical Committee had accepted that the length of the UK GOC course should remain at 60 hours minimum (as against the IMO Model Course length being 132 hours minimum);
- Revision of the NARAS(O) (Navigation, Radar and ARPA Simulation at Operator level) and NARAS(M) (Management level) course criteria was nearing completion. Full approval is required before colleges resubmit their Courses for Manual Amendment approval.

Members are encouraged to provide feedback on *any* course criteria to Phil - as AMERC's MNTB Representative - so that the Committee will be able to fully discuss any implications for practical training that may only be obvious to those 'at the coal face'.

Phil further reported that an ad-hoc working group into the review of the harmonised examination syllabi for the GOC (ERC/DEC/(99)01, held in Istanbul in March was recommending to the committee that:

- the document should be future-proofed by replacing any reference to 'Inmarsat' in the generic satellite sections by 'SOLAS compliant satellite services';
- Reference to Safety and Urgency 'alerting' in the Inmarsat section would be removed, as there was no such provision. The use of short (2-digit) codes for these functions do not alert in the specific sense;
- a section on Voyage Planning from the GMDSS point of view would be included;
- obsolete terminology or systems such as A3E, A1A etc would be removed;
- new technologies such as AIS-SART would now be included, as would a brief reference to related systems such as SSAS/LRIT; and that
- the document would be streamlined to remove some repetition.

Phil's contact details are:

P.B.Davies@ljamu.ac.uk

Tel: +44 151 647 0494; Fax: +44 151 647 0498

Julie Cartwright presented the Financial Report, the main points being:

- We (again) had a small 'negative contribution' this year;
- As with last year, income from GOC exams was up, whilst ROC and LRC income was down – the overall result being more examination income; but that
- In common with everyone else, interest received on deposits remained very low.

AGM 2011 (*continued from previous page*)

Motions:

1. Moore and Smalley were approved as the accountants for the year 2011;
2. The annual membership fee remains at £220.00 for Full Members and £110.00 for Associate members for the year 2012
3. The financial accounts for the year 2010 were approved;
4. Mr Keith Mitchell was elected as a Director and Ordinary Member of the Executive Committee;
5. Mr Willie Williamson was elected as a Director and Ordinary Member of the Executive Committee; and
6. Applications from four organisations for Full Membership were approved by Membership vote - those new Member organisations being:
 - a. Maritime Training Institute (Karachi, Pakistan);
 - b. RT Training (Isle of Wight, UK);
 - c. D and B Services (Antibes, France); and
 - d. Istituto Istruzione Secondaria Superiore “Giovanni Caboto” (Trieste, Italy).

Election of Officers to the Executive Committee

Following an appeal last year for more people to put themselves forward for election to the Executive Committee, this year saw a healthy voting session in which five candidates had been nominated for the two vacant posts. In the event, Keith Mitchell (who was standing-down as Company Secretary) and Willie Williamson were duly elected (as shown above – Motions 4 and 5). Thanks are extended to John Buchan, Edward Hackett, and Paolo Quaranta for accepting nomination. It is hoped that future meetings will continue to see members being prepared to put themselves forward (after all, how else can those who've served for a number of years hope to 'escape'?)

Executive Committee Appointments:

- Terry Slack was appointed Company Secretary;
- Julie Cartwright was appointed Company Treasurer;

Annual General Meeting 2012

AGM 2012 will be held in Edinburgh, Scotland on June 6-7th.
Details of the specific venue will be provided nearer the time.
Access to Edinburgh city centre by car, and car parking, is a trial of willpower and initiative – arriving by public transport is highly recommended if you don't want to be seen as lacking in either!

Edinburgh Airport currently has daily scheduled flights to a large number of airports, both in the UK and Overseas.

[Click HERE for flight guide and route map.](#)

There are also direct rail services with Aberdeen, Birmingham, Glasgow, London (Kings Cross Station), Manchester, and Newcastle (amongst others).

Examiner's Panel

The Examiner's Panel was chaired by Eric Lamb – GMDSS Chief Examiner – who presented his Annual Report. This was followed by the NAC report; and information gained from centre visits by Eric, Keith Watkins (Deputy Chief Examiner) and Francis Rodrigues (Assistant Chief Examiner (Overseas)). Discussion on the upcoming (2013-2015) examination series highlighted the need for good preparation in advance of next year's Examiner's Panel.

New Operational Performance Test (OPT); and General Knowledge (GK) Paper: A number of centres had continued to find it difficult to adapt courses and timetables to cater for the revised examination process. The change in OPT scenario from examiner-led testing, to one where candidates take more responsibility for practical examination progress, has led to a rethink in this area.

Items revealed from QA visits and/or Paper Surveys showed that:

- Some examiners had not prepared adequately for each practical scenario, having failed to source appropriate NAVTEX, DSC, LES and/or live signals in advance - to suit publications available and/or stations able to be received in the particular location;
- Examiners were not always monitoring the time taken for each element of the exam in a way that would ensure that candidates were given the opportunity to complete all sections of the OPT;
- The standard of marking for the R/T examination, and the General Knowledge paper, had improved and showed no real cause for concern; however
- As a result of our now having a combined 'SOLAS' and 'multi-choice' General Knowledge (GK) paper, some candidates had been able to achieve a 'pass' mark despite having a 'SOLAS' marking that would have resulted in a fail using the previous (separate) marking system.

Course Approvals/Inspections:

- New Approval/Inspection report formats had been devised by the Executive, to provide a more structured approach for use by the Chief, Deputy and Assistant Chief Examiner (Overseas) during inspection visits. The new approach includes minuted meetings with REC Co-ordinators/examiners before and after sitting-in on part of the course and examination. Centres were reminded that time should be set-aside for these meetings. All documentation (timetables, lesson plans, course notes, past exam scripts for QA checking etc) should be made available on arrival.
- Centres were reminded that any change to venue, room, equipment and/or staffing should be notified to AMERC as they occur; and that such changes may require a visit to the centre prior to further course(s) being run using different resources to those already approved.

GMDSS Examination Statistics: A review of examination papers for the year showed a similar trend to last year, in that pass rates for GOC were again slightly down; whilst ROC and LRC passes were higher than the previous year.

NAC examination comparison 2010 against 2009 – Total number of examinations taken by certificate type:

EXAMINATION	2010	2009	rise (fall)
UK GOC	1275	1141	>11%
ALL GOC	3082	2796	>10%
UK ROC	115	178	(>35%)
ALL ROC	206	383	(>46%)
LRC	140	285	(>50%)

Examiner's Panel (*cont'd from previous page*)

GMDSS Examination Series 2013-15 – Multiple-choice questions: Attendees were asked to review the multiple choice question bank on the 'Quiz' section of the AMERC website, and to send any comments on questions with which they may have problems to ian.waugh@btinternet.com - this question bank (along with any new questions that may be added meanwhile) will be used for the next series of exam papers. Ian also suggested that examiners also enter a 'wrong' answer, to see whether they are happy with the explanation that is presented when wrong answers are selected.

GMDSS Examination Series 2013-15 – 'SOLAS' questions: 'SOLAS' question preparation for the next series has started, and examples of an amended question format is included as Appendix A of this newsletter. Again – all examiners are asked to review the revised format – together with the type of wording used for the example questions - and send comments to Ian (who will forward within AMERC as appropriate). The intention is to have all relevant comments received and considered well before next AGM/Examiner's Panel, so that the new set of papers can be promulgated to RECs in time for a considered review at Examiner's Panel 2012. Further example questions may be circulated in subsequent AMERC News editions.

Inmarsat Presentation: Peter Blackhurst of Inmarsat provided an update to the Examiner's Panel – this update is published in more detail under 'Maritime Miscellaneous' (Page 9) - where those used to the current format of AMERC News might expect to find such an article.

IMSO Presentation: Andy Fuller – Deputy Director General of the International Mobile Satellite Organisation provided an update on IMSO activities to panel – again, this update is published in more detail under 'Maritime Miscellaneous', (Page 11).

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Retiring Company Secretary Keith Mitchell (*the one with the wider smile ...*) hands over to Terry Slack.



Member Profile(s)

This area is for you to tell us who you are and what you do.

For new members, we'd like to know more about you.

For existing members: the others - new and long established alike – would like to hear about your own operation. The entry below from member UKSA shows the type of information that you may want to include – but, as it's your own area, you can say what you like (omitting, of course, profane, indecent and obscene language ;-))

Member Name: UKSA (United Kingdom Sailing Association)

Centre Location: Arctic Road
West Cowes
Isle of Wight
PO31 7PQ

Main Contact: Paul Martin
Phone: +44 (0)1983 294 941
email: paul.martin@uksa.org
<http://www.uksa.org>

Radio/Electronics Courses Offered:

GMDSS GOC, ROC, LRC, and SRC.

Other Courses Offered:

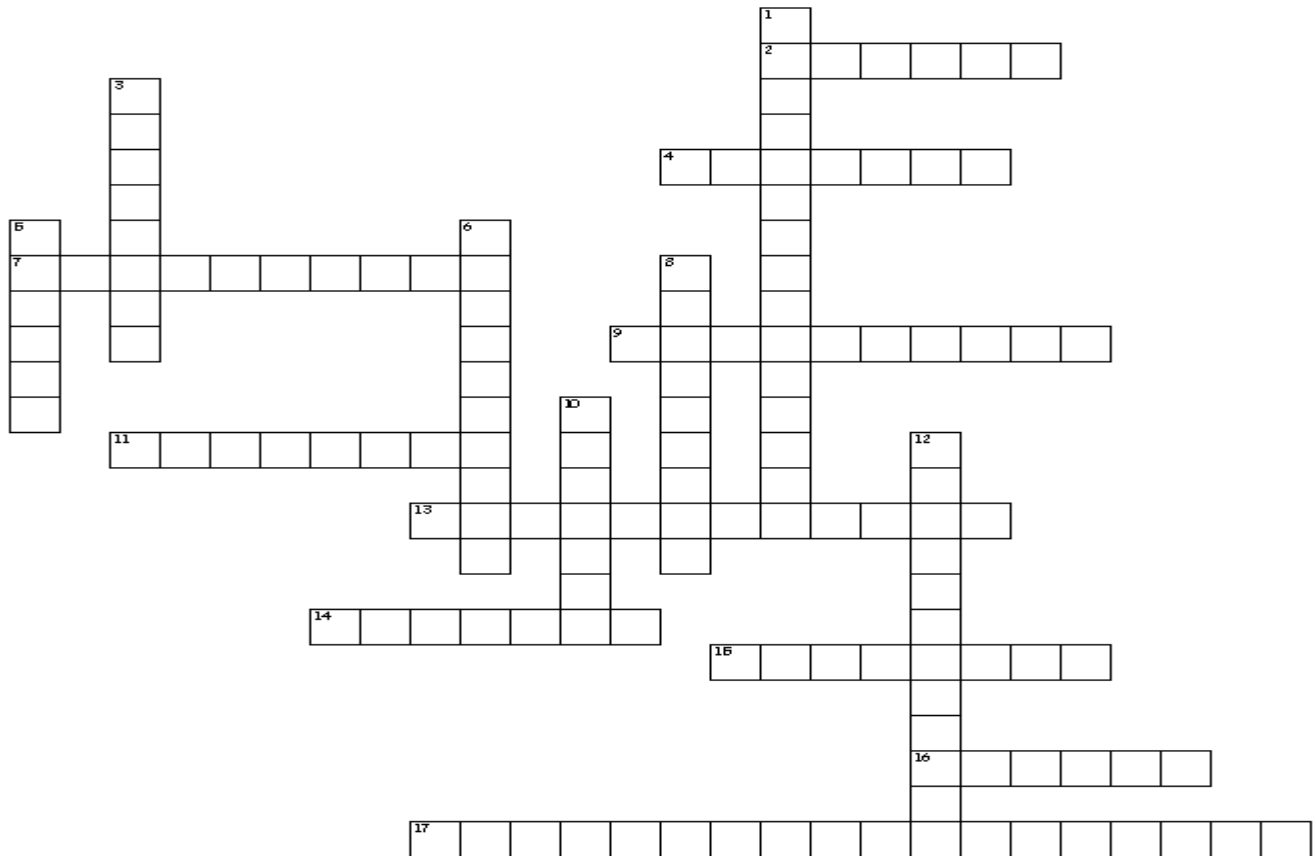
The full range of career training required for MCA Deck Officer (yacht) - from Yacht rating to Master >3000gt – including STCW'95 Basic Training; Master 200ton (limited and unlimited); OOW; Ch. Mate; Master 500gt (yacht) and Master 3000gt (yacht). Other yachting career training covers a range of courses for sailing, engineering and hospitality; and further modules for all types of watersports are also delivered at UKSA, along with a range of RYA leisure craft training courses.

About UKSA:

UKSA is a registered charity that is committed to changing the lives of everyone it works with through its maritime training and experiences. The charity has enhanced the lives of many young people during our sixteen years of operation, and undertakes extensive fundraising activities to provide personal development opportunities to all. UKSA is a globally recognised professional training establishment, training in watersports and yachting to the highest level. As a charity, the UKSA is dedicated to changing lives through personal development and maritime education. We aspire to provide the very best quality maritime education and the widest range of opportunities to develop self-esteem, confidence and motivation. In addition to the career training mentioned above, UKSA also focuses on schools and groups to help children who would not otherwise have the opportunity to develop key personal and social skills through watersports activities. We also provide opportunities for people with disabilities to develop skills and confidence through yachting and watersports – and we give young people the chance to develop confidence, self belief, team skills and expertise through the intense challenge of high performance yacht racing.



GMDSS Criss-Crossword Number 38 - all answers should be researched and/or confirmed by reference to ALRS, *where appropriate*



Across

2. Situated in Shandong Province, is this China's biggest iron ore **port**?
4. **NAVTEX** station approximately 13deg40min North 100deg40min East.
7. Egypt's second city and main **port**.
9. (5,5) **Pilot service** for Indian **port** of Kolkata (and others).
11. **NAVTEX ID** (phonetic) for station at 7-across
13. (6,6) waters separating Queen Charlotte Island and mainland Canada.
14. Controlling station for **MF DSC** service on Greenland west coast.
15. Southerly **port** on Greenland, close to the Gronnedal Naval Radio station.
16. **SafetyNET NAVAREA** covering 2-across and 5-down
17. (6,5,7) '**Call**' for Karachi **Pilot Service**

Down

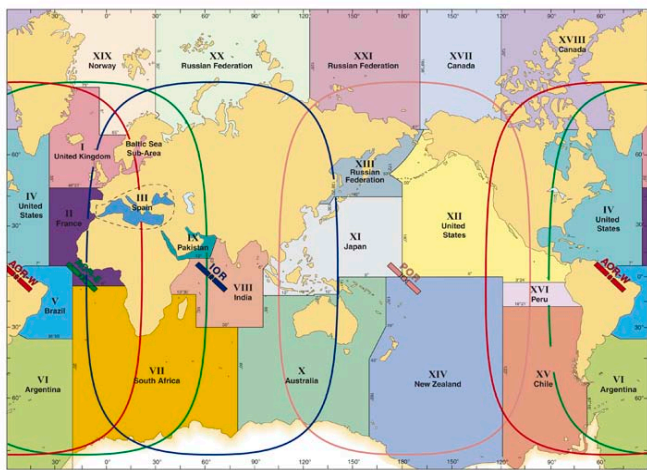
1. (5,5,5) dividing point for Delaware Pilot Traffic Tower and Delaware Maritime Exchange (USA Atlantic Coast).
3. **Arctic NAVAREA** for N.E. Canada and west of Greenland
5. Yellow Sea **port**; **NAVTEX** station; **VHF** and **MF DSC station** location.
6. (3,7) Moroccan headland, where the Atlantic and Med meet.
8. (5,4) Thailand **Port** at 4-across
10. Nearest **HF DSC Station** to 14-across
12. (6,6) **Traffic Zone Sector 1** located at 13-across.

Issue 37 answers: **DOWN:** 2. Antalya; 3. Vincent; 4. Novorossiysk; 5. Pinneberg; 11. Algeciras; 13. Twenty. **ACROSS:** 1. Mombasa; 6. Odesa; 7. Walvis; 8. Finistere; 9. Hamburg; 10. Samsun; 12. Luderitz; 14. Sochi; 15. Kipevu.

Maritime Miscellaneous 1: Inmarsat Update from Peter Blackhurst – Inmarsat Head of Maritime Safety Services - summary:

GMDSS provision continues on Inmarsat-B, Inmarsat C/mini-C and Inmarsat Fleet 77. However: Inmarsat-B equipment is no longer manufactured, and service retirement has been announced as 31st December 2014. For FleetBroadband (FB), studies are at an advanced stage for provision of GMDSS services similar to Fleet 77.

As reported in our last issue, five new **Arctic NAVAREAS** have now been established. Peter not only provided the conventional map (below left) – but also an Arctic Skua- eye view (right). (Both diagrams – with the Arctic-eye view showing the extent of Inmarsat-C coverage, are featured in the latest (2011-12) version of ALRS Volume 5 – recently published).



Tables were then introduced showing current **Short Access Code** (SAC – 2-digit code) availability and routing. Noted that 2-digit code service was introduced primarily for use on Inmarsat-C/telex services, but that some (very few!) providers do use the same codes for telephone access (e.g. on Inmarsat-B and/or Fleet telephone services).

The example on the right shows the routing for code 41 (Met Reports) for all four satellites. An edited version of the SAC tables for codes 32, 38, 39, 41, 42 and 43 for individual satellites - omitting actual telex /fax numbers, but showing which authority is being accessed - can be provided to training centres, by the Editor, on request.

Availability and routing of SAC-41 - Meteo reports from ships

LES Operator	Country	AOR-E	AOR-W	IOR	POR
KDDI	Japan	National Met office 103	National Met office 003	National Met office 303	National Met office 203
MCN	China			N/A 311	N/A 211
Morsviazspudnik	Russia	N/A 117		N/A 317	N/A 217
OTESAT	Greece	National Met office 120		National Met office 305	
Singapore Telecom	Singapore			Yes (PSTN fax) 328	Yes (PSTN Fax) 210
Stratos Mobile Networks	1	UK Met office 102	UK Met office 002	UK Met office 302	UK Met office 202
	2	Dutch Met office 112	Dutch Met office 012	Dutch Met office 312	Dutch Met office 212
Telecom Italia	Italy	N/A 105		N/A 335	
Vizada	France	Meteo France 121	Meteo France 021	Meteo France 321	Meteo France 221
	Norway	NOAA - USA 104	NOAA - USA 004	NOAA - USA 304	NOAA - USA 204
	USA	NOAA - USA 101	NOAA - USA 001	NOAA - USA 301	NOAA - USA 201
VISHIPEL	Vietnam			N/A 330	
Tata	India			N/A 306	



GMDSS/Safety Services for FleetBroadband were then explained – noting that GMDSS compliance would be forthcoming in two independent stages. The first would be for voice communication for a non-SOLAS commercial service (due during the third-quarter of 2011) – expected to be followed by the introduction of the SOLAS compliant (voice) service in 2014. Both service variants would include:

- Pre-emption and prioritisation in both shore-ship and ship-shore directions; and
- Alarms and reporting infrastructure required for the provision of a GMDSS service

Compliance with voice requirements will be as specified in IMO Resolution A. 1001(25) - Criteria for the provision of Mobile Satellite Communication Systems in the GMDSS – which will ensure that SOLAS-compliant FB with voice distress will be introduced prior to the closure of Inmarsat-B services at the end of 2014. Peter also confirmed that the SOLAS-compliant service would NOT be introduced until network infrastructure able to provide 99.9% availability was in place, using a combination of:

- Site and equipment redundancy; and
- Satellite redundancy via restoration on I3 satellites

And that - due to link-budget constraints – this compliance would be applicable only to FB500 terminals. However – the non-SOLAS compliant service would be available to FB500, FB250 and FB150 terminals during the second half of 2011.

Inmarsat's activities outwith the GMDSS include the new **Dynamic Telemetry Service (DTS)** on FleetBroadband. DTS will be separate from existing (Voice, SMS, Standard IP) services - the commercial product being similar to Inmarsat-C, but without Sat-C limitations. Being hardware based and not linked to SIM, the DTS service can be used for VMS, LRIT, AIS and other character-based telemetry needs. DTS is expected to have a high Quality of Service - including commercial grade security, 99.6% availability, low latency and large payload. DTS will be available over the full FB product range, requiring only a firmware upgrade. A subscription based service with a set cost for monthly package; overall control will remain with the terminal owner.

Further satellite developments – specifically **Alphasat** and **Global Xpress** – were then introduced. **Alphasat** – a new satellite scheduled for completion in 2012 – will come into service as an L-Band supplement, allowing Inmarsat to become a commercial operator for the European Space Agency (ESA). Alphasat will provide coverage over Europe, the Middle East and Africa.

Global Xpress - claimed to be the first global satellite system designed specifically for (normally regional) Ka/Ku-band VSAT services – will feature:

Global Ka-band coverage over narrow spot beams on three geostationary satellites to be launched starting 2013; payload flexibility to direct capacity where and when demanded; higher throughput than Ku-band VSAT (i.e., 50 Mbps forward to 60cm antenna, 5 Mbps return) at lower cost; system designed for weather resistance equivalent to Ku-band, with integrated L-band service for assured availability; ground segment optimized for simplified, low-cost service delivery, including for seamless mobility; and wholesale services to be offered in lease, end to end and hybrid packages to enable multiple distribution models and access technologies.

[The editor can provide a PDF copy of Peter's complete presentation, on request, to training centres and other interested parties]

Maritime Miscellaneous 2: Recent IMSO Activities, from Andy Fuller, Deputy Director General of the International Mobile Satellite Organisation (IMSO).

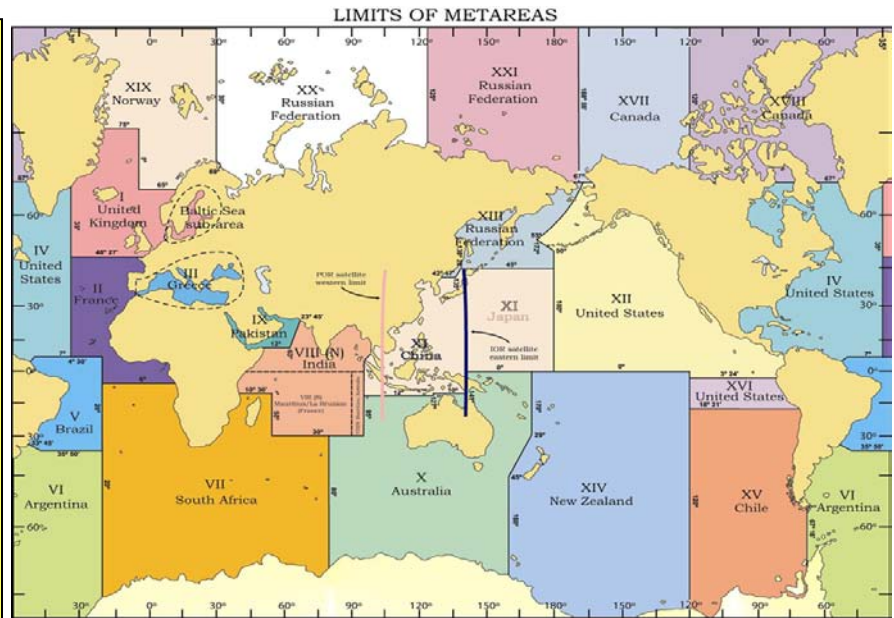
Our other external presentation was from Andy Fuller of the IMSO. Andy explained that the **core purpose of the IMSO** is to:

- ensure the provision of maritime mobile satellite communication services for the GMDSS (previously an internal function of Inmarsat - prior to privatisation); and to
- assume the functions/duties of LRIT (Long Range Identification and Tracking) Co-ordinator.

Recent IMSO activities with regard to the GMDSS included work involved with:

- Preparing the IMO position for WRC-12 (World Radio Conference 2012);
- Revising the International NAVTEX Manual;
- Implementing the new Arctic NAVAREAS;
- World Met Organisation (WMO) Worldwide MetOcean Information Service
- The Correspondence Group on procedures for accepting new satellite service providers into the GMDSS; and
- a scoping exercise for a Review of the GMDSS.

The **new WMO system** – matching the IHO WNWNS (Navarea) system - *formalises the status quo* with respect to the (now) 21 International NAVAREAS/METAREAS. The system has been approved by the WMO and is expected to be adopted by the International Maritime Organisation (IMO) Assembly in December 2011. Eagle-eyed readers will note that the only material difference is the co-ordination responsibility for Nav/Met information for Areas III & XVI.

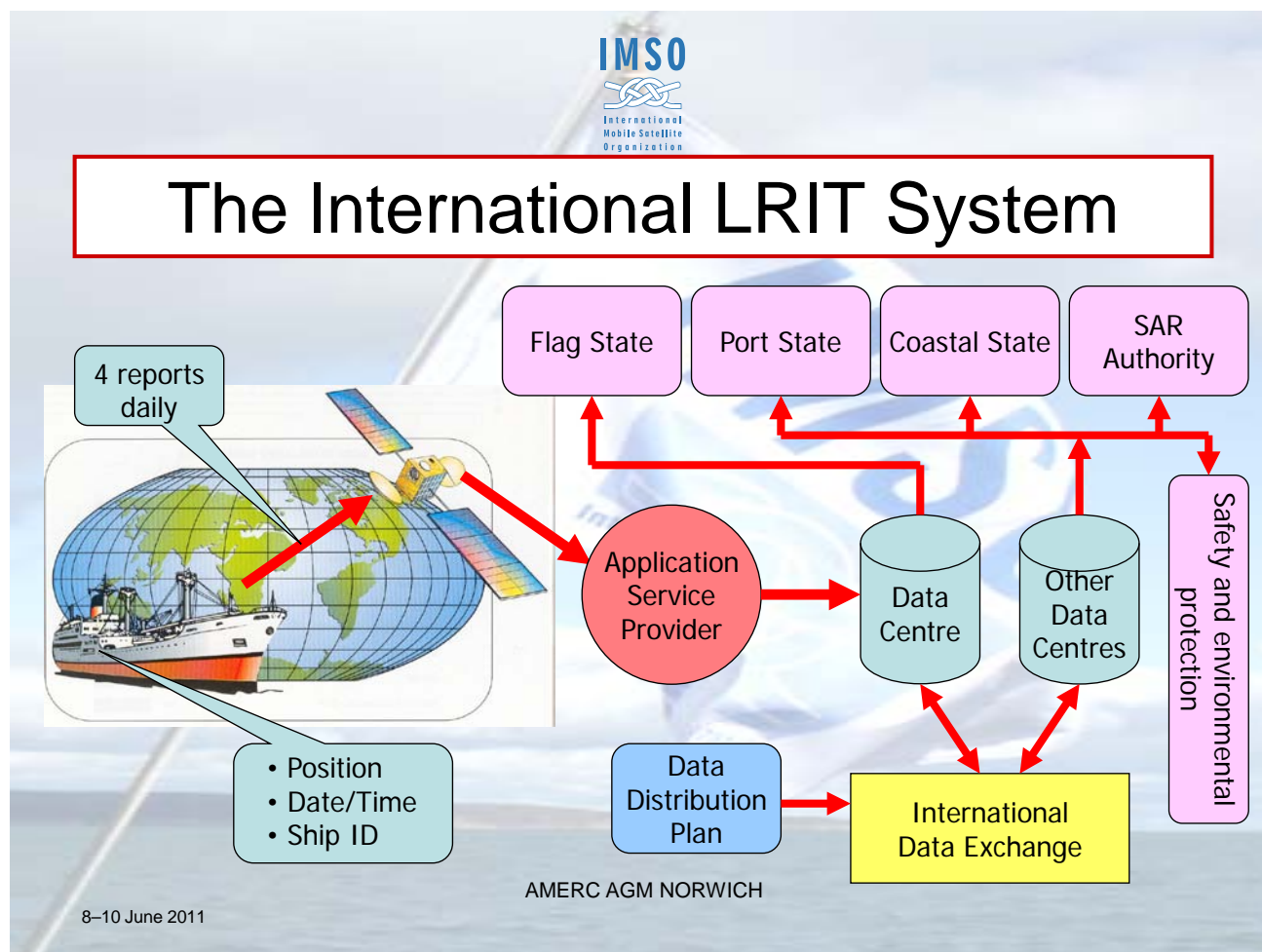


[Readers wishing to download the revised NAVTEX Manual ; the GMDSS Master Plan; the International SafetyNET Manual – amongst other relevant documents, click here!](#)

[Or – if you want to download the WMO JCOMM Newsletter No.9 – article on the new WMO Worldwide MetOcean Information Service – click here!](#)

IMSO work in **preparing for new GMDSS SatCom providers** is based on IMO Resolution A.1001(25) - Criteria for the Provision of Mobile Satellite Communication Systems in the GMDSS. Noted that the IMSO Convention was amended in 2008 for this purpose. A new Public Services Agreement (PSA) has been prepared, and is ready to be signed by new GMDSS providers. An IMO Correspondence Group has been established.

Long Range Identification and Tracking (LRIT) – the purpose of LRIT is to obtain regular position reports from ALL SOLAS ships on international voyages - and to make those reports available to authorised (government) users, whilst protecting the commercial security of the data.



The **IMO version of the LRIT infrastructure** (above) shows the key functions in the LRIT network. The ship reports its Identity, Position, and the date/time of that position, 4 times every day when at sea - to a **Data Centre**, via an **Application Service Provider (ASP)**. The Application Service Provider is nominated by the Flag State to provide LRIT service to ships flying that Flag.

The ASP deals with all issues relating to LRIT communication from the ship, ensuring that the correct reports are received on shore and lodged in the appropriate Data Centre.

The **Communications Service Provider (CSP)** – not shown on this diagram but represented by the satellite link from the ship to the ASP – provides the communications needed to allow the ship to report as required by the SOLAS Regulation.

The **Flag State** will, in most cases, choose to receive the reports about ships flying its own Flag. **Other States** will be entitled to receive information about ships in their various capacities as Port States, Coastal States, or as the SAR Authority for a particular region.

Most Flag States are expected to choose to receive information about the ships on their Register as a matter of course. Some will establish their own Data Centre, some may club together to use a Regional or Co-operative Data Centre, and some may use the International Data Centre. Whichever option a Flag State chooses, its chosen Data Centre will receive requests for data from other States through their own Data Centres via the *International Data Exchange*.

The *International Data Exchange* will interrogate the *Data Distribution Plan* to establish the entitlement of the State to receive that information, and consequent routing for messages through the system. Briefly: **FLAG** States are entitled to receive information from all ships in its register; **COASTAL** States are entitled to receive information about any ship within 1000NM of its coast; **PORT** States can receive information regarding any ship intending to visit that Port; and information provided to **SAR** Authorities is limited to that required for SAR operations.

By focusing on the functions described, IMSO intends to divide the overall complexity up into discrete and manageable portions - allowing responsibility for implementing each portion to be placed clearly in the hands of those who can realistically affect the outcome. In this scenario the complexity becomes manageable, but success will then hinge on a proper and sufficient definition of the communication protocols. Dividing the complete system up in this way also has the benefit of helping to identify where the costs lie and placing them where they can most efficiently be handled.

The *Automated Ship Report* can be sent via *any* appropriate means of communication, and is often sent using Inmarsat-C. The report will include Ship ID; Current Position (GPS); and the Date/Time of that position – without any intervention by Ship's Staff.

As the *LRIT Co-ordinator* – IMSO carries out a number of functions including:

- Scrutinising test results
- Authorising new Data Centres
- Auditing the performance, integrity and security of operational system annually; and
- Monitoring and reporting to the IMO Maritime Safety Committee (MSC)

LRIT Progress to date includes:

- 63 LRIT Data Centres integrated now
- 11 LRIT Data Centres about to start testing
- Representing more than 95% of the world merchant fleet and over 100 Governments
- 60 IMSO LRIT Services Agreements and contracts signed
- 38 audits completed in 2010
- 60 audits will be carried out in 2011

Readers requiring more information about the IMSO, and their role in the GMDSS and/or in LRIT – [click here for website link](#).

[Again – the Editor can provide a PDF file of Andy's presentation, to training centres or other interested parties, on request]

APPENDIX A: Proposed SOLAS Question Format for 2013-15 Examination Series.

Preparations are under way to formulate a new series of GK 'SOLAS' written questions. The aim is to improve the way questions are written, with the view to avoiding ambiguity – so that we can expect candidates to be able to produce the required, correct answer. *Six examples* of types of 'SOLAS' written question - using the proposed new format – are shown on the following pages. *You are asked to comment by email to the Editor - ian.waugh@btinternet.com - on the following aspects of the examples given:*

A. In this revised format, ship's information is presented on the top three lines of every question - and represents information that should be available on the bridge/radio operating position on all vessels. **The first two lines** show information that would be 'static' for the voyage, namely: Ship Name; Radio Callsign; MMSI; Sat-C ID; Sat-B/Fleet 77 ID; and number of POB. **Line 3** shows information that should also be available on the bridge/operating position - but which would be subject to change throughout the voyage - namely Position, time, and GMDSS Sea Area.

B. The standard ship information is followed by the '**Situation**' that the vessel finds itself in. Candidates would be expected to use the relevant information from the top three lines, along with the information provided in the **Situation**, to answer the questions that follow (and labelled a, b, c etc).

All trainers/examiners in the UK system are asked to review the question format/wording and comment on the following:

- 1a. Do you agree that it is right to present all the '*static*' and '*changeable*' information (as shown on the top three lines of the example questions), that would normally be available on the bridge? **OR**
- 1b. Do you believe that ***ship's information should be limited to that needed to answer the particular question*** - e.g. if it is a 'VHF/SSB radio' question then should we continue to provide MMSI, but not provide Satcom IDs? If a Sat-C question, should we omit the MMSI and Sat-B/F77 ID's from the information provided?
2. Do you agree that the suggested question format, together with the type of wording used in the example questions, make it (more/less) clear as to what's being asked, when compared to the current question format? - or do you think than one or more examples could invite more than one 'correct' answer? (explain please!).
3. Recognising that very few examiners had a chance to use the *current* series of questions prior to the June Examiner's Panel - if you have now had experience of using that set of GK Questions and Answers, and have any comment to make on those, please also send-in those comments.
4. Any other comments are, of course, welcome - as is feedback from readers who are not also UK GMDSS trainers/examiners.

Please note that:

- All responses to the above questions will be acknowledged; will be circulated appropriately to the compiler(s) of the new series; and will be taken into consideration when formulating further examples and/or used for the new full series of questions. A summary will appear in '***Question & Answers***'.
- Further examples may be provided in AMERC News between now and the formulation of the new series.
- The intention is that the next full set of (draft) question papers, with expected answers, will be formulated and circulated to REC Co-ordinators for discussion with their own examiners prior to Examiner's Panel 2012, to allow ***final*** comments to be received from REC co-ordinators prior to Panel; ***and that***
- ***The group working on the new series is prepared to assume that any Centre/examiner who has not found a need to comment on the proposed new format/question wording, is happy with the suggestions – but would very much prefer feedback confirming that that is the case ☺***

Vessel Name: Dunderheid	Radio Callsign: GXYZ2	MMSI 232444000
Sat-C ID: 423244410	Fleet 77 (Telephone) ID: 762324545	POB: 18
Current Position: xx xxN xxx xxW	Time Now: xxxx UTC	GMDSS Sea Area: A2

Situation 1). Your vessel has *struck a submerged object* and is in *grave and imminent danger of sinking*. The Master instructs you to *radio for immediate assistance*.

a) State the *primary GMDSS equipment, procedure and frequency* you should use to *initiate contact*, simultaneously, with *shore authorities and vessels* within radio range.

(x marks)

	Mark	Double Mark

[Answer paper note: ZERO marks for this section if WRONG alerting category/frequency used]

b) State the *Frequency* you should use for *subsequent communication*.

(x marks)

c) State the full *RT CALL and MESSAGE* you should then transmit.

(x marks)

TOTAL

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Vessel Name: Disque Bleu **Radio Callsign:** FZCY **MMSI** 227555000
Sat-C ID: 422755510 **Fleet 77 (Telephone) ID:** 762275454 **POB:** 12
Current Position: xx xxN xxx xxW **Time Now:** xxxx UTC **GMDSS Sea Area:** A2

Situation 2). You have just *received* the following **DSC Distress Alert** on **2187.5kHz**:

From: 423244410
Nature: Sinking
Position: xx°xx' North xxx°xx' East at xxxx UTC
J3E

a) State, the radio **Frequency** on which you would expect to **receive subsequent communications**.
 (x marks)

	Mark	Double Mark

b) You receive the Mayday Call and Message from vessel 'Dunderheid' – the casualty position indicating that it is also within in Sea Area A2. What **initial action** would you take?(x marks)

	Mark	Double Mark

c) xxxx MRCC Acknowledges direct to the vessel and transmits a Mayday Relay, and requests vessels able to assist to respond. The Master instructs you to **Acknowledge** and to **offer assistance**. Using **relevant information** from above, state the **RT CALL and MESSAGE** you should subsequently transmit (*calculations not required*) (x marks)

	Mark	Double Mark
TOTAL		

Vessel Name: Disque Bleu **Radio Callsign:** FZCY **MMSI** 227555000
Sat-C ID: 422755510 **Fleet 77 (Telephone) ID:** 762275454 **POB:** 12
Current Position: xx xxN xxx xxW **Time Now:** xxxx UTC **GMDSS Sea Area:** A2

Situation 3). You have just *received* the following **DSC Distress Alert** on **2187.5kHz**:

From: 423244410
Nature: Sinking
Position: xx°xx' North xxx°xx' East at xxxx UTC
J3E

a) State, the radio **Frequency** on which you would expect to **receive subsequent communications**.
(x marks)

	Mark	Double Mark

b) You receive the Mayday Call and Message from vessel 'Dunderheid' – the casualty position indicating that it may also be within Sea Area A2. What **initial action** would you take? (x marks)

c) There is no Acknowledgement from shore and the Master instructs you to **Acknowledge** and to **offer assistance**. Using **relevant information** from above, state the **RT CALL and MESSAGE** you should subsequently transmit (*calculations not required*). (x marks)

d) You are unable to contact Dunderheid and no other distress working is heard. The Master assumes the role of OSC and instructs you to seek assistance from shore authorities and vessels. State the **primary GMDSS equipment, procedure and frequency** you should use to **initiate contact**, simultaneously, with **shore authorities and vessels** within radio range. (x marks)

[Answer paper note: ZERO marks for this section if WRONG alerting category/frequency used]

TOTAL

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Vessel Name: Dunderheid

Radio Callsign: GXYZ2

MMSI 232444000

Sat-C ID: 423244410

Fleet 77 (Telephone) ID: 762324545

POB: 18

Current Position: xx xxN xxx xxW

Time Now: xxxx UTC

GMDSS Sea Area: A3

Situation 4). Your vessel is *N.U.C* in the *Australian SAR Region*, and *urgently requires tug assistance*. The Master instructs you to *ask for maritime assistance* from the *relevant shore authority in Australia*, using *Inmarsat-C* equipment

a). State the *Message* you should *prepare for sending* (x marks)

	Mark	Double Mark

b) State the *procedure for sending* the above message (x marks)

[Answer paper NOTE: ZERO marks for this section if WRONG priority used]

c) A suitable ship is proceeding to assist you. The Master instructs you to *transmit a NAVIGATIONAL WARNING* to request *vessels within VHF range* to *give you a wide berth*. State, *including channels*, the *initial procedure* you should follow to *establish contact* with *SOLAS/GMDSS-fitted vessels*.

(x marks)

[Answer paper NOTE: ZERO marks for this section if HIGHER priority used]

d) How would you ensure that any *non-SOLAS vessels*, fitted with *pre-GMDSS* marine radio equipment, knew that you were about to send a NAVIGATIONAL WARNING? (x marks)

TOTAL

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Vessel Name: Dunderheid

Radio Callsign: GXYZ2

MMSI 232444000

Sat-C ID: 423244410

Fleet 77 (Telephone) ID: 762324545

POB: 18

Current Position: xx xxN xxx xxW

Time Now: xxxx UTC

GMDSS Sea Area: A3

Situation 5). An *uncharted shoal* has been observed in position xx°xx' North xxx°xx' East. The Master considers this a *danger to navigation* and instructs you to *inform the NAVAREA co-ordinator in Australia* using your *Inmarsat Fleet 77 Telephone* equipment.

a) State the *procedure for making contact* with the relevant authority, *using the correct priority*.
(x marks)

	Mark	Double Mark

b) Having established contact, state the *MESSAGE* you would send (x marks)

	Mark	Double Mark

c) The Master also instructs you to send the same information to *vessels within MF range*. State the *GMDSS equipment, procedure and frequency* you should use to *initiate contact* with such vessels.
(x marks)

	Mark	Double Mark

[Answer Paper NOTE: ZERO marks for this section if HIGHER priority used]

d) State the frequency to be used for subsequent communication (x marks)

	Mark	Double Mark

TOTAL

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Vessel Name: Disque Bleu **Radio Callsign:** FZCY **MMSI** 227555000
Sat-C ID: 422755510 **Fleet 77 (Telephone) ID:** 762275454 **POB:** 12
Current Position: xx xxN xxx xxW **Time Now:** xxxx UTC **GMDSS Sea Area:** A2

Situation 6). You have just *received* the following **DSC Distress Alert** on **Ch70 VHF**

From: 423244410
Nature: Sinking
Position: xx°xx' North xxx°xx' East at xxxx UTC

a) State, the radio **Channel/Frequency** on which you would expect to **receive subsequent communications**. (x marks)

	Mark	Double Mark

b) You receive the Mayday Call and Message from vessel 'Dunderheid' – the casualty position indicating that it may also be within Sea Area A2. What **initial action** would you take? (x marks)

c) The Master instructs you to **Acknowledge** and to **offer assistance**. Using **relevant information** from above, state the **RT CALL and MESSAGE** you should subsequently transmit (*calculations not required*). (x marks)

d) You are unable to contact Dunderheid and no other distress working is heard. The Distress Alert is received a second time. How would you let the casualty know that their DSC Distress Alert had been received? (x marks)

e) The Master assumes the role of OSC and instructs you to seek assistance from shore authorities and vessels. State the **primary GMDSS equipment, procedure and frequency** you should use to **initiate contact**, simultaneously, with **shore authorities and SOLAS/GMDSS-equipped vessels** within radio range. (x marks)

[Answer paper note: ZERO marks for this section if WRONG alerting category/frequency used]

TOTAL

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