AMERC News

Issue 81 – Incorporates Circular 301 **November 2021**

Editorial

Welcome to issue 81 of AMERC News - which doubles as **Circular 300** and, as such, must be circulated to all GMDSS instructors / examiners by their AMERC centre contact.

As we head into Autumn, as ever I hope this newsletter finds everyone healthy and well.

On page 2, you'll find updates from the latest ***MCG open session meeting***, which was held on Monday 20th September via Zoom. The Executive Committee has decided in the ongoing interests of safety, all further meetings in 2021 will continue to be held remotely.

The ***NAC Statistics Report*** for GMDSS examinations is also on page 2.

'Maritime Miscellaneous' (page 3) this edition comes from our Vice-Chairman Terry Slack, and is a notice on New EMF regulations, which all Course Providers should make sure they read.

On page 6, an advert from Paul Martin of Communication Matters for ICS DSC2 equipment available if anyone is in need.

GMDSS Criss-Cross has made a return and is on page 7. Answers will be given in the next edition.

*Your submissions are always welcome for **Explanation Please? Member Profile, Maritime Misc.'** and **Tales from the Key-Side** – and other items that were likely to be of interest to others.*

Thanks for reading! Please get in touch if you have anything to add to next quarter's newsletter.

Prue

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The **Maritime Consultation 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/or the MCA Deck & GMDSS Team Leader; the NAC and other AMERC/industry specialists.

The latest meeting was held online in September 2021. The following items reflect discussions at MCG and/or associated items that may be of interest to Members and training centres.

The EC and MCG met via Zoom on 30th September 2021 for both open and closed meeting sessions. Below is a summary of the open session.

New Centre Approval

For the last few months, UKSA have been undergoing the extensive process of gaining approval as an AMERC-Approved AEV. The Chief Examiner Keith presented his final report, which was discussed by the EC. Approval has been granted, and the MCA has been informed. Congratulations have been sent to UKSA on their new AEV status.

Chief Examiner Reports

Full audits have been carried out remotely for the following centres: Bluewater Palma, Bluewater Antibes, Academy TEMA Safety and Training, AMET and Anglo Eastern. All centres passed with no issues, and have been issued a one-year extension by the MCA (current process due to remote audits) Congratulations to all centres for continuing to adapt well to these remote audits.

New examiners

Ben Adams of MPT was granted full examiner status Also, applications for probationary examiner status were approved for Cleaton Duguid (Shetland UHI) and David Gibson (HMS Collingwood). Congratulations to all applicants!

NAC Statistics Report

(*Editor's note: As with all NAC statistics at the moment, Covid-19 must be taken into consideration when looking at these numbers.)*

GOC - UK exam numbers have decreased by 5% from the same period last year and overseas exams have decreased by 37%.
UK first-time pass rate has increase by 3% and overseas first-time pass rate has increased by 5%.

ROC - ROC exam numbers have decreased by 58% for the UK and overseas have decreased by 35% compared to last year.
Again, we had a 100% first-time pass rate for UK exams compared to 89% last year. The first-time pass rate for overseas exams has remained largely the same.

LRC - UK exams have decreased by 57%, however, overseas LRC exams have increased by 157% since last year

There have been 1074 GMDSS certificates issued for this year against 1365 last year.

GMDSS Examination Statistics – rolling annual report: National Administration Centre (NAC) examination statistics for the period ***1st Jul 2020 – 30th Jun 2021*** are shown below:

EXAMINATION	ENTERED (1st time)		PASSED (1st attempt)		% PASSED 1ST ATTEMPT	
UK GOC	594	(555)	550	(515)	515/555	(92.8%)
ALL GOC	1026	(968)	963	(909)	909/968	(93.9%)
UK ROC	44	(44)	44	(44)	44/44	(100%)
ALL ROC	70	(69)	67	(67)	67/69	(97.1%)
LRC	21	(21)	21	(21)	21/21	(100%)

Maritime Miscellaneous – EMF Regulations (by Terry Slack)

Electromagnetic fields (EMF) Compliance and Enforcement

Here in the UK Ofcom has stated that all radio licensees will need to comply with the latest Electromagnetic field (EMF) requirements for the protection of the general public from radio transmissions. These requirements are based on the guidelines issued by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The EMF rules, as specified by Ofcom, are designed to protect members of the general public. However, this protection excludes the licensee, the owner, operator or installer of the equipment. It also excludes workers, crew and certain volunteers who are protected under other health and safety legislation. All other members of the general public, including passengers, paying customers, friends and family must be protected under the EMF rules.

So what are these rules?

The purpose of the change to the license conditions, is to ensure that the general public are kept sufficiently far away from any transmitting antenna so that they are not subject to unacceptable levels of Non-Ionizing Radiation.

A radiated power threshold has been set by the ICNIRP of 6.1 Watts Effective Radiated Power (ERP). This is equivalent to 10 Watts Equivalent Isotropic Radiated Power (EIRP) and is the figure used to identify equipment that is required to comply with the licence conditions. Any transmitting system that radiates a power lever of 10 Watts EIRP or more will be required to show compliance.

However, certain items of marine radio equipment have been recognised as providing an average radiated power that is below the threshold of 10 Watts EIRP and is therefore exempt.

This equipment includes:

- AIS - SART’s and Radar SART’s
- EPIRB’s and PLB’s
- MOB Devices
- Portable marine band VHF transceivers
- Portable VHF Survival Craft transceivers
- Portable UHF transceivers
- Portable Airband transceivers
- Ship Security Systems

- Vessel Monitoring Systems and LRIT

Equipment that will be required to show compliance with the new licensing conditions include:

- Fixed marine VHF transceivers
- Marine MF/HF transceivers
- Fixed GMDSS Satellite Earth Stations
- Radar

So how do we show that the above equipment installation is compliant? Ofcom has identified three methods:

1. Manufacturers instructions on EMF compliance
2. A compliance distance table
3. Using Ofcom's EMF calculator

Methods 1 and 2 can provide the necessary compliance. However, for more complex installations or if methods 1 and 2 do not meet the requirement, then using the Ofcom EMF calculator is the best method to use. The calculator requires the following input values:

- Maximum radiated power
- Maximum transmission time in any 6 minute period **
- Operating frequency (MHz)

* **six minutes transmission time is used as this is the averaging period as defined in the appropriate EMF guidelines published by ICNIRP. So if a transmission is continuous for a period of 6 minutes then this is considered to be a transmission for 100% of the time. If however a transmission is for a period of 1 minute but occurs three times within the same 6 minute period, then this is considered to be just 50% of the transmission time. In all cases this time period is used to calculate the average radiated power of the radio installation***

Here is an example:

- VHF 25 watt transceiver
- VHF antenna with 6dbi gain
- 156 MHz operating frequency
- Transmitting for 50% of the time within a 6 minute window

Using the Ofcom calculator give a separation distance for the above parameters of 2.88 meters

The above result is calculated by initially using the Ofcom Power Calculation tool and then applying the resulting radiated ERP to the Ofcom EMF Calculator.

So in this example the exclusion zone of 2.88 meters around the antenna is to be maintained whilst transmitting.

Clearly there are a number of variables available within these calculations. The output power of the transmitter could be reduced, the transmission time within a 6 minute window could be reduced and of course the gain of the antenna could be reduced. In all cases this would result in a reduced separation distance. Additional no consideration has been given to any feeder loss within the system. This again could result in a change to the required separation distance for any given installation.

It should be noted that if the VHF radio was switched to low power then this would result in the calculator reporting that 'No further assessment is required'.

The compliance activity should be carried out on all applicable installations, including any updates or changes to the installation. The results from the calculations should be located with the radio license.

The timescales for compliance are as follows:

- **For frequencies above 110MHz - after 18th November 2021**
- **For frequencies above 10MHz but below 110MHz - after 18th May 2022**
- **For frequencies below 10MHz - after 18th November 2022**

It is important to note that distress communications are excluded from any of the compliance requirements. However, Ofcom state that compliance is required when the radio installation is being used for all non-emergency situations including training exercises.

References:

- Ofcom's EMF License conditions: What you need to know as a ship radio licensee
- Ofcom's Guidance on EMF Compliance and Enforcement
- MCA MIN 662 (M+F) Ofcom retirement for protecting the general public from radio emissions: General information for vessels (Ship station license holders)

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ICS DSC2 EQUIPMENT FOR DISPOSAL

I have the following ICS DSC2 Equipment Modules ("Gold blocks") for disposal **free** to any AMERC Course Provider – providing you pay for and arrange collection and carriage.

VHF CH70 Watch receiver (DSC2-004.00 GMDSS VHF CH70 WATCH RECEIVER) - four available

MF/HFScanning receiver (DSC2-005.00 GMDSS MF/HF SCANNING WATCH RECEIVER) - three available

You will know these are for use in the ICS DSC2 integrated GMDSS DSC system combined with an ICS DSC2 control panel and suitable VHF or MF modem interface, they are **NOT** standalone receivers.

All are in perfect working order and tested.

I am in need of any Transas Tutor 4100 with dongle and licens disc, or any Transas Tutor Dongle with the Fleet 77 facility. however old.

Thanks

Paul Martin

Chairman AMERC

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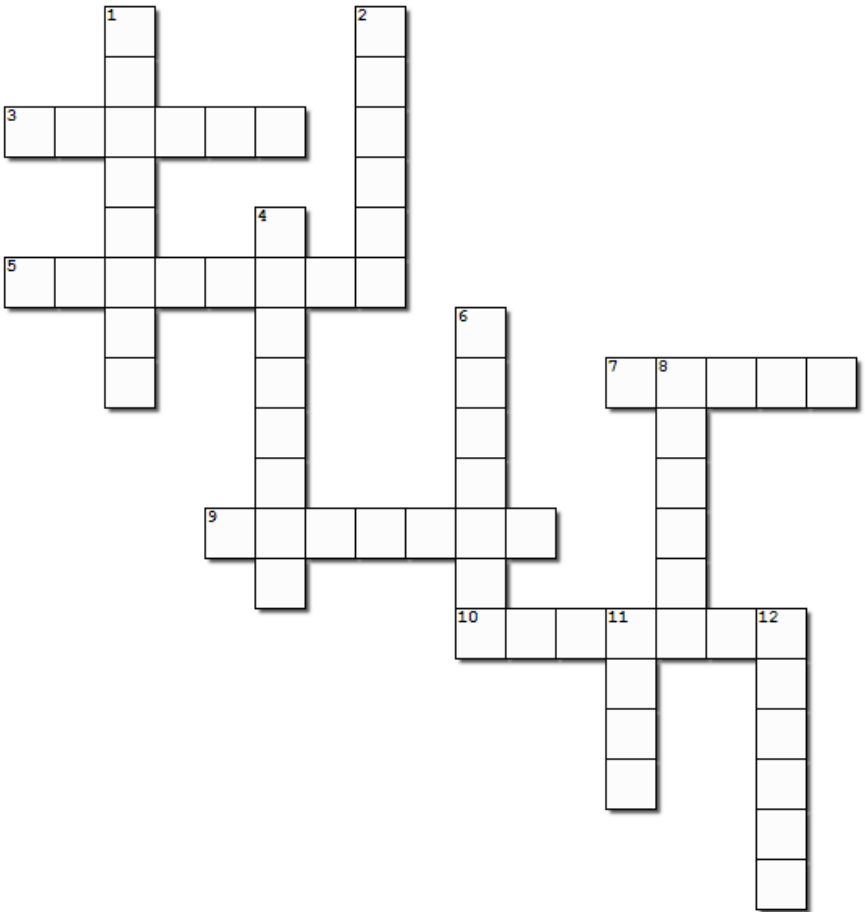
GMDSS Criss-Cross Edition 81 - answers should be researched and/or confirmed by reference to ALRS / ADRS, ***where appropriate.***



Down:

1. MRSC on Finland's south coast
2. Port at NAVTEX station on mainland China, just north of Taiwan
4. Became the world's busiest container port in 2010, overtaking Singapore
6. Estonian JRCC; NAVTEX station; VMF/MF DSC station and VHF/MF/HF RT station
8. Port and VHF/MF DSC station immediately serving south of 5-across
11. NAVTEX ID letter for station serving 12-down
12. Port on northern Taiwan, lying south of the Tamsui River and facing west onto Taiwan Strait

Across:

3. Most central seaport on west coast of Ireland
5. Bay to the south of 4-down
7. Island DSC station remotely controlled by 6-down
9. NAVTEX station located at Long Beach
10. Californian harbour, situated between Long Beach and San Diego

Issue 80 answers

Across: 2 = Mike, 5 = Cam Rhan, 7 = Evergiven, 8 = Sinop, 10 = Linyuan, 12 = Antwerp
Down: 1 = Miyazaki, 3 = Esbjerg, 4 = Canada, 6 = Annapolis, 9 = Latakia, 11 = Maputo