



**eCMID Accredited Vessel Inspector**

# NEWSLETTER

**MAY 2023**

MARINE  
SURVEYING  
ACADEMY





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# Introduction from Mike Schwarz, CEO, IIMS and MSA



**Dear AVI**

Welcome to this occasional newsletter from the Marine Surveying Academy written for the AVI community.

I am pleased to welcome a number of new AVIs to the scheme for whom this will be their first newsletter. The scheme continues to grow and there is a steady stream of new applications each month seeking accreditation. There remains plenty of opportunity around the world for AVIs. In particular, the offshore wind sector is burgeoning and imposing pressures on shipyards to produce new, bigger vessels to service the industry, many of which in time you may well be auditing.

The subject of lithium-ion battery technology is one that is troubling a great many people in the marine industry right now. There are more questions than answers as regulators struggle to keep up with the rapidly advancing technology. I have written a short article on this topic for this newsletter but have not tackled this subject from a technical standpoint, because that is not where my skills lie. Rather I have sought to alert others in the industry about some of the inherent dangers based on the knowledge I have gained over recent months. It seems inevitable and rather worrying that the dozens of fires witnessed in the superyacht sector last year have the potential to affect offshore personnel and assets too.

The imminent Festival of Knowledge VII on 16th May looks like attracting a solid audience and there is still time to book your place or reserve copies of the videos we will make on the day for later viewing at:

<https://bit.ly/3Lqpwel>

We are broadcasting a variety of interesting and relevant topics delivered by some industry experts for your benefit. This is a great way to accumulate some valuable CPD points too. We are considering holding Festival of Knowledge VIII as a hybrid event, probably broadcasting from a European location later this year. So, watch out for details and if you can make it in person, we would love to welcome you.

My colleagues and I continue to contribute to the AVI scheme and attend the quarterly meetings of the IMCA eCMID steering committee. The committee has undergone some personnel changes in recent months, but their commitment to the programme remains as solid as ever.

And finally, I would like to add my personal congratulations to Iain Grainger, the recently appointed new CEO of IMCA, who will replace Alan Leatt who is retiring at the end of May.

Regards

**Mike Schwarz**  
*IIMS & MSA Chief Executive Officer*



# From the eCMID AVI Team

Here are some words from the eCMID AVI team summing up the first quarter of 2023;

## Hilary Excell, Business Manager and Director



I am pleased to report we have had a busy start to 2023 with well attended courses and a regular supply of new applications to join the established eCMID AVI community.

We continue our close working relationship with IMCA and the eCMID committee, reviewing, developing, and improving the eCMID system. The focus is on improvements to the database and updating of the inspection documents, adding additional supplements as required.

Expansion of offshore renewables around the world has started to open up new markets such as the Far East and USA and we are supporting a number of businesses and individuals as they progress their applications to become AVIs.

Attention is being given to new vessel designs being developed to advance decarbonisation including hybrid and other varied propulsion systems. With the increase in uncrewed surface vessels and the current lack of suitable legislation, projects are underway to support vessel owners, contractors, and inspectors with their development and use.

The agenda for the forthcoming Festival of Knowledge VII on the 16th May highlights some of these new technologies so please do join us either on the day via zoom or to take the video recording of the day. For details and to reserve your place go to: <https://bit.ly/41GD0t0>. We look forward to you joining us.

Don't forget you can contact us at the office, on the AVI WhatsApp group, or LinkedIn group. We are always keen to hear from you and receive your suggestions and feedback on the eCMID system and AVI scheme.

## Pui Si Chung, Accreditation Scheme Administrator

The AVI Scheme has now reached the beginning of its 9th year. Congratulations to all those veteran AVIs from 2015!

Since the Scheme first started, we have received to date, just under 900 applications from Inspectors seeking accreditation. Of those, 660+ have successfully passed the assessment process and have been awarded AVI status. Currently we have 420+ AVIs worldwide who are live and continue to carry out eCMID and eMISW inspections.

New applications for AVI accreditation continue to remain steady and for 2023, we have received an average of 8 applications per month.

AVI 5-Year Revalidations also remain strong with more than 170 AVIs coming forward to revalidate for a further 5-years.





## Rachel Moores, Events & Course Co-ordinator

My role is to organise and run AVI courses for those who achieve their AVI Accreditation. All accredited AVIs must attend an online Part Two course within 2 years of being accredited in order to validate their accreditation. We also receive course bookings from individuals who are not yet accredited, who wish to attend a course first before applying for the scheme. This way they can learn more and decide if it is a path they wish to pursue.

Our first eCMID AVI course in 2023 was held on the 23rd January and we had 12 delegates attend, from various locations ranging from Scotland to Nigeria to the USA. We have since held a second course in April with 12 delegates and plan to hold further courses this Summer. I am pleased to share the following feedback from our courses this year;

*"It was an enjoyable class with sufficient preparation, and the instructor went over the material in a way that was clear and concise."*

*"Joe delivered a particularly insightful and meaningful course unravelling the mysteries of the AVI work, and course content."*

*"Joe was also able to answer some questions on the practical aspects of the inspection which was well received as we all tend to work alone, well done Joe and Rachel for delivering a complicated subject, compacted into a day with a busy audience."*

Another crucial part of my role is to organize Part Two of the 5-Year Revalidation. This consists of a half day online refresher course to notify existing AVIs of any reviews and changes to IMCA's eCMID system and database, since they were originally accredited.

This year we have run two Part Two courses, with 24 AVI's successfully revalidated for a further 5 years.

I joined the Marine Surveying Academy in May 2022 and have enjoyed meeting lots of you online over the past year. I am due to go on Maternity leave this summer but am delighted to confirm that my predecessor Sharon Holland will be back to look after the role while I am gone. I am sure you will enjoy seeing a familiar face on our upcoming courses and I wish Sharon the best of luck on her return.

## Training Courses & Events for 2023

We are delighted to confirm the following courses & events for AVIs taking place in 2023.

- eCMID AVI Festival of Knowledge VII  
Tuesday 16th May from 09:30 – 16:00 (UK).
- eCMID AVI Accreditation Course  
Tuesday 13th June from 09:00 – 16:30 (UK).
- eCMID AVI 5-Year Revalidation – Part Two Mandatory Refresher Course  
Wednesday 14th June from 09:00 – 12:00 (UK).

Simply head to <https://www.ecmidvesselinspectors.com/events> to reserve your place. There will be further accreditation and revalidation course dates confirmed shortly.



# CPD Update

Continuous Professional Development is an important and mandatory part of your accreditation and demonstrates a commitment to your professional self-development. AVIs are required to achieve 10 CPD points per annual renewal year and our dedicated eCMID CPD App can help track your progress.



Submitting your CPD claims is easy to do via the App and you are encouraged to do so on a regular basis. The App keeps a tally of your current annual score so you can always keep up to date with your CPD status.

Full details of the eCMID CPD App can be found here <https://bit.ly/3nufXim>.

Any questions or concerns regarding CPD, please contact the Accreditation Scheme Administrator, Pui Si Chung at [info@marinesurveyingacademy.com](mailto:info@marinesurveyingacademy.com).

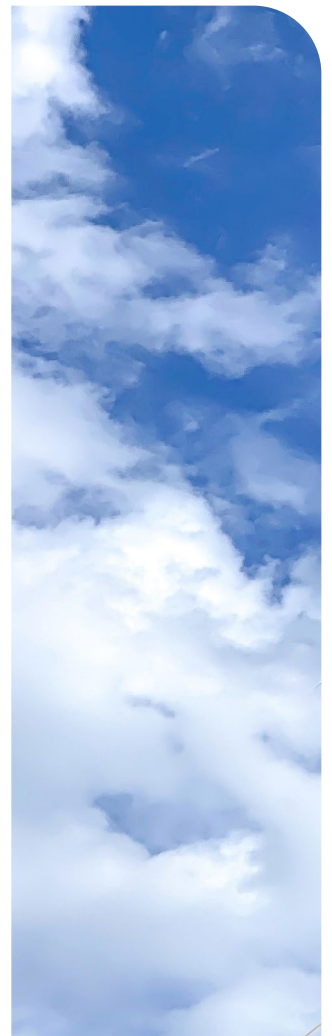
## eCMID System Changes in the last few years

We have been faced with multiple challenges in the past few years such as economic pressures, Covid-19 and new fuels. However, new opportunities are on the horizon with increased offshore wind and energy transition developments.

The last few years have brought a variety of changes to the eCMID AVI scheme. If you have recently attended one of our online AVI courses, you will remember the following updates being discussed.

- Only online eCMID/eMISW reports are recognised by IMCA.
- Only inspectors with AVI status may upload a report.
- Inspectors training to be an AVI or for additional vessel types must be supervised on site by an AVI who holds the relevant accreditation.
- A change to upload fees to fund system maintenance, support and future software development. £120 per eCMID report/£60 per eMISW report effective from 1st January 2023.
- New ability for linking inspection companies with external inspectors.
- PWA (Progressive Web App) was launched mid-2020 and has proved to be a great success.
- On the 9<sup>th</sup> December a new supplement was introduced to allow an additional 10 images.

These improvements have had a positive effect on the scheme, and we continue to adapt to meet industry demands and changes.



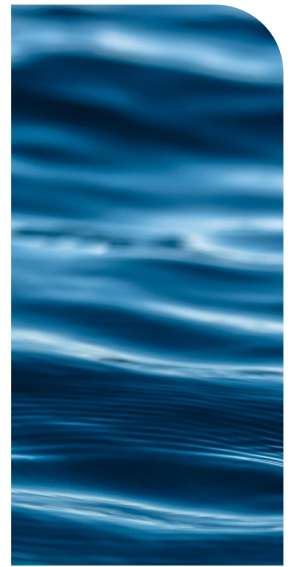
# eCMID Findings Analysis

Last year IMCA launched a new analytics hub within its eCMID system for users. Following the launch, we are pleased to enclose some of IMCA's findings.

Out of 761 vessels analysed during the period 1st April 2022 to 1st April 2023, the below findings are of some concern:

- **85** Vessels had out-of-date Statutory and Class Certification.
- **66** Vessels did not have a controlled entry into an enclosed space.
- **61** Vessels did not have a lock-out/tag-out policy in place.
- **56** Vessels had defects recorded on their LSA.

In addition to these findings, IMCA anticipate the publication of the findings analysis report in early Summer 2023. The report will also include the Inspector Quality Analysis Report that is to be developed using the QA data extracted from AVI reports.



## Safety Flash Reminder

<https://www.ecmidvesselinspectors.com/>. The aim of Safety Flashes is to avoid repeat incidents. This is achieved by members sharing the key safety matters and incidents that are referenced to in the articles. The ninth Safety Flash of 2023 was released in April and includes stories involving multiple injuries to fingers and hands from portable grinders and watertight doors – not for the faint hearted!

IMCA releases regular Safety Flashes which are available to read on the eCMID website

## Are lithium-ion batteries safe on vessels?

*By Mike Schwarz, CEO, IIMS and MSA*



There are believed to have been nearly 70 fires last year affecting the large yacht and superyacht sector alone. What lessons can we learn from these events to take into other maritime sectors? As more new information on this subject comes to light on a regular basis, I simply have to come back to it time and time again and share what we know. It is a complex subject and one that is consuming the finest technical minds in the marine world right now. We all need to be aware of the phenomenon for it will not resolve any time soon. I fully understand the need to decarbonize and embrace this technology and am not against progress. But it comes at a price and one that society needs to be prepared to pay.

I recently attended an event hosted by Shoosmiths, a firm of maritime lawyers. The event took the form of a panel discussion involving five expert panellists from different parts of the marine industry and was entitled "Are lithium-ion batteries safe on yachts?" It drew an audience of 120 delegates, way beyond their expectations and included marine surveyors, yacht management companies, regulators, underwriters, boat and insurance brokers and boat builders. As the event unfolded, I would describe the mood of the audience as engaged but concerned. In some cases, many seemed unaware of the immense threat posed by lithium-ion battery fires and all in the room were anxious for guidance.

Guidance, however, was in short supply. One marina manager when asked what their policy is for berth holders to mitigate a lithium-ion battery fire disaster in one of their facilities said it is still too early for them and they are “only in the embryonic stages of developing a policy”.

There seemed to be a consensus that lithium-ion batteries, if installed in a new build boat or ship, and meeting all the latest requirements on keeping them in sealed metal containers, are no more inherently dangerous than conventional fossil fuelled vessels. Indeed, the evidence would seem to support that; and insurers confirmed they have no issue insuring an electric vessel powered by lithium-ion battery propulsion. The picture is less clear when batteries are retro fitted into older vessels. But the panel discussion focused heavily on the other less thought about aspects such as the charging of devices powered by lithium-ion batteries onboard, particularly overnight, including mobile phones, laptops, tablets and superyacht toys, for this is where the major issues lie. Leaving them to charge unattended overnight is potentially dangerous as overcharging can cause thermal runaway resulting in a catastrophic fire. This applies equally to an onboard setting as it does to a land-based home one. There have sadly already been examples. I will never do this again; nor should you, and I would encourage you to pass on this information. Please tell anyone you meet not to do it either.

One of the panel spoke passionately about the importance of using the right charger for each device and not some cheaper replacement from an unknown supplier, which presents a further unnecessary risk.

There was an acceptance and understanding that firefighting systems are not yet developed sufficiently to extinguish a lithium-ion battery fire in most cases. Simply chucking the burning object overboard, whilst a highly dangerous thing to do and not recommended, will bring some peace of mind, but won't put out the fire! Early warning detectors of an imminent thermal runaway event are under development. But then we learnt about the lethal mass of unignited toxic gases which hang around at low levels that could easily go undetected and ignite, or simply kill.

Representatives from the insurance and underwriting industries admitted they are still grappling with this whole area. From their comments it seems likely that new clauses are certain to be written into consumer insurance policies to cover the use of lithium-ion powered devices on their vessel.

The discussion turned specifically to superyacht toys and other accessories, many of which are powered by lithium-ion batteries and have been the cause of several fires. That might include for example, the jet ski, the tender, the electric scooter or eBike. The list is long.

Whilst regulators are also grappling with this dilemma and trying to decide what regulations to implement, this is fine in the longer term for commercial vessels or boats that are subject to regulation. But what about the millions of pleasure boats worldwide that are unregulated? How do we as an industry get this message to them? I have no simple answer.

For now, it seems educating people to the dangers and encouraging them to use common sense and risk assess is the best way to make progress.

I mentioned earlier in this article that other developments have recently come to light about lithium-ion batteries. Let me tell you something about one of them.

### **Early detection key to preventing electric vehicles fires**

Following several high-profile ship fires involving electric vehicles (EVs), Survitec has produced some valuable advice for operators of vessels transporting hybrid and EVs, such as ferries, ropaxes, RoRos, PCCs and PCTCs, on how best to prevent and control fire onboard ships involving lithium-ion battery powered vehicles.

According to Survitec there are a number of ongoing initiatives within the industry to improve safety in this area. There is a desire to develop early fire detection systems to better monitor and protect car decks and lithium-ion batteries installed in vehicles onboard.



Any slight deviation in their properties can provide an early indication that conditions are right for a fire and afford time to take preventative measures to protect or quarantine hybrids and EVs. Pre-ignition signs of a battery fire include heat and smoke from parts of the vehicle where the battery is usually placed, popping sounds from battery cells, and toxic gas emissions.

While early detection solutions are available, Rafal Kolodziejcki, Survitec's Head of Product Support & Development Fire Systems, revealed that these systems are not yet adapted to allow for pre-fire conditions specific to lithium-ion batteries.

In my simplistic way as always, I ask why not?

At the moment it feels to me like the marine industry is way behind the curve on this one, stumbling along, learning as we go and making up the rules to suit as best we can as new information emerges.

So, will it take a major incident involving the multiple loss of life before the regulators finally come up with something definitive, just as SOLAS was born out of the Titanic disaster over a century ago?

Please, let's hope not!

**Mike Schwarz**

## MAIB Safety Bulletin: Potential safety hazards from flexible hose installations

Posted on **March 24, 2023** by **News Hound**

On Sunday 19 September 2021, fire broke out in the auxiliary engine room on board the Finland registered roll-on/roll-off cargo ship Finnmaster while departing Hull, UK. The fuel source for the fire was identified as coming from a small-bore flexible hose that failed due to being overheated by an exhaust gas leak from the outboard turbocharger of auxiliary engine 2.

The flexible hose assembly was part of a modification made to the auxiliary engine alarm system more than 15 years prior to the fire. It was contrary to requirements and relevant guidance, as it was too long and had been routed close to hot surfaces. The hose had not been approved or surveyed by the classification society when it was installed. Furthermore, despite being replaced a number of times in the intervening period, the material, length and routing of the hose had remained the same throughout and the risk it posed had not been identified or mitigated.

The key safety issues identified were:

- The risks associated with a modification on safety critical equipment should be considered before and during the work being completed. The relocation of the pressure switch closer to the cartridge filters would have removed the need for a long hose; if this was not possible, a rigid metal pipe secured with clamps and routed at an appropriate distance from the engine's exhaust might have been a safer option.
- Flexible hoses are recognised as having a higher risk of failure than a properly fitted metal pipe. An isolation valve fitted at the point of supply allows a flexible hose to be safely isolated in the event of leakage.

This accident remains under investigation and the detailed causes and circumstances will be published in an investigation report in due course.

Click to download the safety bulletin: [Finnmaster Safety Bulletin 01/2023](#)

# A day in the life of Eilidh Smith, Accredited Vessel Inspector & Subject Matter Expert

## **Q1. What does your current role involve?**

*I'm the subject matter expert for vessels at all Iberdrola's offshore windfarms that are in the operations and maintenance phase. I develop procedures for marine operations, review vessel requirements, help to develop logistics plans for new sites and carry out or review of on hire surveys for all vessels operating on our sites.*

## **Q2. Are you working with other AVI's?**

*Currently there are no other AVI's at Iberdrola but I am mentoring some of my colleagues through the process so there should be some new AVI's soon.*

## **Q3. What types of vessels are you most engaged with?**

*I mainly work with crew transfer vessels and service operation vessels.*

## **Q4. From an AVI inspection point of view, which vessels pose the biggest challenges and why?**

*Vessels that don't fit any of the supplements can be a challenge. The supplements allow you to focus in on the particular operations of the vessel and completing the survey without one of the supplements can feel like a job is only half done.*

## **Q5. You attended an online AVI course in June 2022. What were the key learnings you took away?**

*The key thing I took away was how quickly the industry as a whole adapted during the pandemic. People became very creative with how to get the most out of surveys when they couldn't physically visit the vessel.*

## **Q6. How might you incorporate these learnings into your work as an AVI going forward?**

*I have been trying to be more pragmatic and flexible when completing surveys, and being more understanding to the challenges that the crew might face.*

## **Q7. How important and relevant is it to refresh your knowledge and keep up to date?**

*The marine industry is constantly evolving, from new vessel designs, novel fuels and the advent of unmanned vessels. Legislation also evolves although sometimes at a much slower rate. You have to keep on top of all these changes to ensure that we get the best vessels available to us.*

## **Q8. Since the onset of COVID-19, online training is now very much the norm. What kind of impact has this had on your working life and has it created challenges?**

*Online training has had a huge effect on my working life. It means that I no longer have to lose a day traveling to/from the training location and I can be more flexible in my choice of courses.*

## **Q9. In your location of the world, have you started to see some face-to-face events resuming and, if not, are you looking forward to real-time networking again?**

*Face-to-face events have started in earnest this year. I have attended some in person conferences and meetings. Although online meetings are convenient, it's great to be able to interact with people again.*

## **Q10. How do you like to relax and unwind in your spare time?**

*I enjoy travelling and almost always have a book in my hand, I try to volunteer when I can and I have recently started a Mexican cookery course.*

## Upcoming IIMS activity

The Marine Surveying Academy Ltd (MSA) is a wholly owned subsidiary of the International Institute of Marine Surveying Ltd (IIMS). The IIMS hosts a variety of professional training courses and online seminars for marine surveyors. Below is a list of the upcoming events in 2023. More information can be found on the website:

**<https://www.iims.org.uk/events/categories/whats-on/iims-events-meetings/>**

# Upcoming Events

- **eCMID AVI Festival of Knowledge VII** - online - 16/05/2023 – 9:30am – 4:30pm BST
- **IIMS 2023 Southampton Conference** - 06/06/2023 - 07/06/2023 - All Day
- **IIMS Dinner** - 06/06/2023 - 6:30 pm - 11:00 pm
- **IIMS 2023 Annual General Meeting** - 07/06/2023 - 8:30 am - 10:30 am
- **Remote Tonnage Training** - 29/06/2023 - 12:00 am
- **Report Writing Online Seminar August 2023** - 01/08/2023 - 10:00 am - 1:00 pm
- **IIMS Baltimore Conference** - 24/08/2023 - 25/08/2023 – All Day
- **Certifying Authority Training** - 11/10/2023 - All Day
- **Report Writing Online Seminar November 2023** - 02/11/2023 - 10:00 am - 1:00 pm
- **Yacht & Small Craft Late Autumn Training Day** - 07/11/2023 - All Day
- **eCMID AVI Festival of Knowledge** - 09/11/2023 - All Day
- **Scotland Yacht & Small Craft Training** - 15/11/2023 - 16/11/2023 - All Day

## Special thanks to Joe McWilliam

One of our tutors, Joe McWilliam, has played a huge part in the success of our eCMID AVI courses. We would like to take this opportunity to offer our personal thanks to Joe for his outstanding commitment and support to the scheme. Joe has tutored 11 of our AVI courses in the past year and always brings enthusiasm and engagement to the online delivery. Thank you for all your hard work and dedication Joe.

## WhatsApp Group reminder

A reminder that the WhatsApp group remains available for you to join, where you can share your experiences, ask questions and support each other. There are currently 127 participants in the group and if you would like to join please email Rachel Moores, Events and Course Co-ordinator at **[courses@marinesurveyingacademy.com](mailto:courses@marinesurveyingacademy.com)** with your preferred contact number, and you will be added to the group.



## MSA Contact Details

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MARINE  
SURVEYING  
ACADEMY

Tuesday 16 May 2023

09.30 - 16.00 UK GMT

# eCMID AVI Festival OF KNOWLEDGE

ONLINE SEMINAR  
Festival of Knowledge VII  
for eCMID AVIs...



**Online seminar: Tuesday 16<sup>th</sup> May 2023**

**Cost: £120.00**

**Time: 09.30 to 16.00 (UK GMT)**

**CPD points:** 4 CPD points will be awarded for attendance online or for purchasing the video content if not able to attend online.

09.30hrs **Mike Schwarz**, CEO, IIMS (International Institute of Marine Surveying) & MSA (Marine Surveying Academy)  
*Welcome and Introduction*

09.45hrs **Kerrie Forster**, The Workboat Association  
*Green skills: what is the future for onboard equipment and skills trends?*

10.30hrs **Adam Hugo**, IMCA. *eCMID Database and Scheme update plus photograph gallery*

10.45hrs **Richard Purser**, IMCA. *Updated DP event reporting*

11.00hrs **Nick Hough**, IMCA. *Safety Statistics and Flashes & eCMID findings analysis*

11.15hrs **Coffee**

11.30hrs **Richard Selby**, Maritime Aviation. *Lithium-ion batteries on vessels.*

12.00hrs **Darren Jones**, NRG Marine Ltd. *Sonihull Ultrasonic antifouling*

12.45hrs **Break for Lunch**

13.15hrs **Kate Harvey**, G+. *Health and Safety for the offshore wind industry*

14.00hrs **Michael Lewis**, XOcean. *Uncrewed Surface Vessels*

14.45hrs **Dan Stoyale**, BP. *Uncrewed Surface Vessels, an eCMID additional vessel type*

15.30hrs Questions & feedback

16.00hrs Close

Note, if you are not able to join online on the day there will be the option to purchase the entire contents of the seminar after it has taken place.

To book your place, please to click on the JotForm link <https://form.jotform.com/230292704654354> or contact us on +44 (0) 23 9231 3019.

**Cost: £120.00** - An invoice will be sent to you electronically once your confirmation email has been received.