ENTRY 50: DEAD MAN ALARM REPLACEMENT

Question	Answer
1. Are you submitting as a:	Individual
2. Email	piyushjain_tmi@yahoo.co.in
3. Email address #2	piyushjain.tmi@gmail.com
4. Tell us about yourself/team	Myself, Piyush Jain, from India. I'm a marine engineer by profession, currently working as operational level engineer officer onboard merchant ships. On 4th of August 2018, there was a seminar held at Institute of Marine Engineers (India), Navi Mumbai by Capt. Anuj Velankar and Mr. Anshuman Ghosh regarding UK P&I club. Through that seminar they introduced us about this competition.
5. Date of birth	24-11-1989
6. Brief description of your idea	As we all know a ship's engine room or machinery space is a quite hazardous place to work. There are lots safety procedures, check-lists, regulations to improve safety standards in E/R. One of such is Dead Man Alarm System. Almost every ship's SMS manual, there is a procedure on how to enter machinery space during ummanned period which says about switching ON Dead Man Alarm System before entry. As per my experience, this procedure is hardly followed by duty engineers as this system needs to reset manually after every few minutes. Reset switches are fitted on each platform in E/R. During UMS period whenever there is a machinery alarm, duty engineer comes down to attend the alarm. He accepts the alarm and switch ON Dead Man Alarm System before entering machinery space to rectify the fault. During his stay in machinery space he has to manually reset the Dead Man Alarm System time to time. Sometimes he get so involved in his work that forgets to reset the Dead Man Alarm System or sometimes he forget to switch OFF the system before leaving the machinery space which results in Dead Man Alarm buzzing everywhere disturbing everyone. To avoid this situation this system is hardly used.

Question	Answer
	My idea is to make this system WIRELESS. There can be a wireless remote which duty engineer will carry in his pocket while entering machinery space during UMS period. This remote will have few buttons like 'Engineer's Call', 'General Emergency', 'Fire' etc. Upon encountering any such emergency situations may be it is personnel injury or any machinery related fault which need immediate response from fellow engineers he can press appropriate call buttons for signalling. These buttons will trigger alarms at appropriate places. If this system is installed, I don't think there is a need for conventional Dead Man Alarm System.
7. Tell us how your idea is original?	As per best of my knowledge, I never came across or read about this system anywhere. I don't think this type of system currently exist on any merchant ship.
8. How relevant is your idea to the shipping industry?	As this device is to be used in ship's machinery space, hence it is directly related to shipping industry.
9. How relevant is your idea to safety?	My idea is directly related to improving safety in ship's machinery space. As this will prevent delays in attending any emergency situations during UMS period, avoiding further damage to ship and the crew.
10. How might your idea be implemented?	This system can be installed anytime during ship's operating life. For installing this system, vessel doesn't even require to go for drydock or repair yard. Engine room Alarm Monitoring System makers like KONGSBERG, ACONIS etc will have to slightly modify their systems. A 'Receiver' is required to be installed in AMS panel which upon receipt of wireless signal from transmitter trigger the alarm. Transmitter is a wireless remote device, battery operated, which duty engineer will carry along with him. When any call button is pressed, remote will transmit the signal to receiver and receiver in turn will trigger alarm through AMS panel.
11. What is the overall aim of your idea – will it save lives? Prevent losses?	Using this system will allow faster response to any emergency situations in machinery space during unmanned period. Emergency could be either personnel injury or machinery related fault like oil spill, flooding, fire etc, thus preventing further losses and casualties.
12. Declaration	I hereby declare that this submission is my own work and that

Question	Answer
	it contains no material previously published by another person, or material which has to any substantial extent been taken from any existing project or programme.