

BAMS – Bridge Alert Management System by Totem Plus

The complexity of modern navigational bridge layouts and the large number of computerized systems on such bridges is a well known fact. Consequently, Alarms or messages from various sources require immediate response and acknowledgement, and those sources are frequently at different locations across the bridge. Such alarms can impose a major distracting factor when the navigator has to concentrate on important safety tasks. The rush to silence a buzzer of a faulty speed log while trying to concentrate on traffic to avoid collision, for example, can be nerve breaking and sometimes dangerous and can pose a safety threat.

To help the navigator to avoid distraction in such circumstances, Totem Plus has developed the BAMS: a central **Bridge Alert Management System**. The BAMS is type approved by GL, is in accordance with latest IMO resolutions and can be installed on any type of vessel. The BAMS enables easy identification of the source as well as rapid silencing of the audible alarm. If alarm description or related information is available then BAMS reports the information content and allows acknowledgment from the panel.



The main backbone of the BAMS is the interface to all relevant bridge systems, either through serial inputs using NMEA protocol or alternately through hard wire (binary) signals. The BAMS shows all the systems in a clear display on a touch screen monitor, allowing fast identification of the faulty system and rapid silencing of the audible signal. The cause of the alarm can be seen in a clear way using the information transmitted by the faulty system.

Notwithstanding the above, the information flow can also go the other way around, not only for distraction alarms: the BAMS can be integrated with the BNWAS, allowing transfer of un-answered alarms to the second stage BNWAS alarm. The transfer will be activated after a pre-determined delay time, adjustable separately for each system. Such transfer is imperative with failure of major navigation equipment such as Autopilot, Gyro, navigation lights and more.

The BAMS offers further a one year log of all system events and activity, and the possibility to download such logs into external media via USB. The user can choose between several options, such as all alerts referring to one source only, all pending alarms of all systems, all the events in a certain period, configuration changes etc.

Time	Alert	Description	Status	Priority
13:04:40	1	(AIS) D code 24	Active Alert	E-Alarm
13:04:51	5	(Echo Sounder) Deviating from a planned route code 25	Active Alert	Alarm
13:04:49	1	(Echo Sounder) Gyrocompass failure code 18	Active Alert	Alarm
13:04:49	2	(Echo Sounder) MAIN ERROR code 18	Active Alert	Alarm
13:04:49	3	(Echo Sounder) Limit alarm code 29	Active Alert	Alarm
13:04:49	4	(Echo Sounder) Systematic error code 33	Active Alert	Alarm
13:04:48	0	(Echo Sounder) Speed Log Failure code 22	Active Alert	Alarm
13:04:47	4	(Gyro) Deviating from a planned route code 1	Active Alert	Alarm
13:04:47	5	(Gyro) Limit alarm code 49	Active Alert	Alarm
13:04:46	0	(Gyro) Systematic error code 18	Active Alert	Alarm
13:04:46	1	(Gyro) Speed Log Failure code 28	Active Alert	Alarm
13:04:46	2	(Gyro) Systematic error code 1	Active Alert	Alarm
13:04:46	3	(Gyro) D code 35	Active Alert	Alarm
13:04:45	0	(Speed Log) System malfunction or failure code 6	Active Alert	Alarm
13:04:45	1	(Speed Log) Systematic error code 42	Active Alert	Alarm
13:04:45	2	(Speed Log) Deviating from a planned route code 39	Active Alert	Alarm
13:04:45	3	(Speed Log) Systematic error code 23	Active Alert	Alarm
13:04:45	4	(Speed Log) Systematic error code 23	Active Alert	Alarm
13:04:44	3	(VDR) Positioning system failure. code 24	Active Alert	Alarm
13:04:44	4	(VDR) System malfunction or failure code 13	Active Alert	Alarm
13:04:44	5	(VDR) System malfunction or failure code 44	Active Alert	Alarm
13:04:43	0	(VDR) Gyrocompass failure code 14	Active Alert	Alarm
13:04:43	1	(VDR) System malfunction or failure code 31	Active Alert	Alarm
13:04:43	2	(VDR) Deviating from a planned route code 25	Active Alert	Alarm
13:04:42	1	(GPS) D code 6	Active Alert	Alarm
13:04:42	2	(GPS) Speed Log Failure code 16	Active Alert	Alarm
13:04:42	3	(GPS) Speed Log Failure code 38	Active Alert	Alarm
13:04:42	4	(GPS) Positioning system failure. code 41	Active Alert	Alarm
13:04:42	5	(GPS) Speed Log Failure code 35	Active Alert	Alarm
13:04:41	5	(AIS) Speed Log Failure code 33	Active Alert	Alarm
13:04:41	0	(GPS) Limit alarm code 48	Active Alert	Alarm
13:04:40	4	(AIS) Positioning system failure. code 37	Active Alert	Alarm
13:04:39	4	(Radar) Gyrocompass failure code 11	Active Alert	Alarm
13:04:39	5	(Radar) Speed Log Failure code 6	Active Alert	Alarm
13:04:38	2	(Radar) Speed Log Failure code 10	Active Alert	Alarm
13:04:38	3	(Radar) Gyrocompass failure code 20	Active Alert	Alarm
13:04:37	4	(EDIS) Systematic error code 0	Active Alert	Alarm
13:04:41	1301	(BAMS) No Communication With CLINOMETER	Active Alert	Alarm
13:04:40	0	(AIS) System malfunction or failure code 22	Active Alert	Warning

Priority : Alerts Category : CategoryB Alert Number : 0 Condition : New

Last Echo Sounder 24/11/2011 1:04:51 PM Local Time 24/11/2011 1:07:59 PM

The BAMS can be operated in 3 different modes: Sea mode (default), Silent mode (no audible alarms) or Anchor mode (alert if position drifted etc.) . In addition to the remote handling of alarms, the BAMS can also show relevant data about the alerting system (if such data was supplied by the system maker) by using the "Decision support" feature.