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Watch Call

References

- Kongsberg K-Chief 700 Integrated Control System Product Description, 304844/B
- Kongsberg K-Chief 700 Operator Manual, 332618/B

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Content

- Watch Call system
- System design and functionality
- Watch Call HMI on the OS
- Watch Call and Class Societies
- Panel layout with buttons, indicators and LCD screen
- Operator Fitness Alarm System



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Purpose

Monitors the vessel during Unmanned Machinery Space/Engine 0 (UMS/E0).

Two main functions:

- Alarm extension
- Officer call

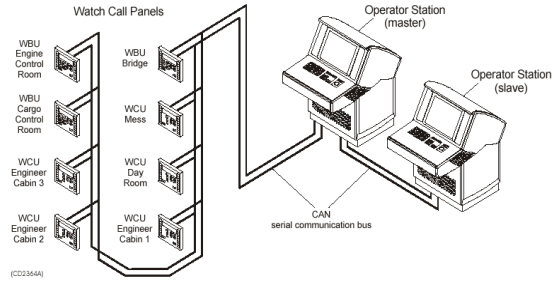


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Watch Call system

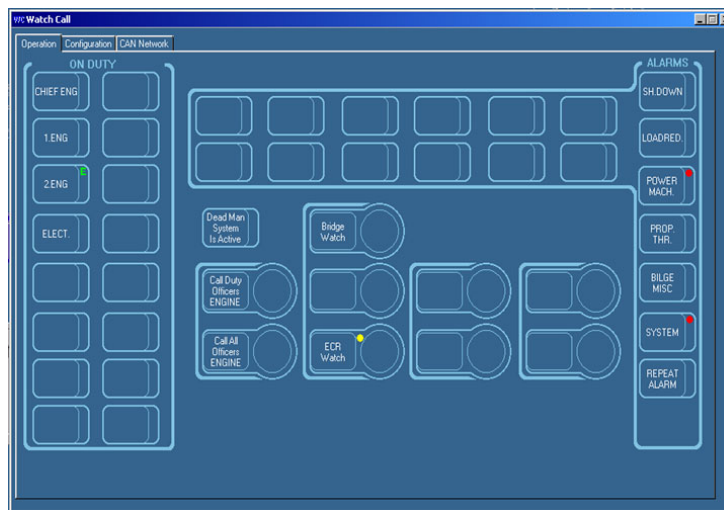
The Watch Call System design:

- Watch Bridge Unit (WBU) hardware panel
- Watch Cabin Unit (WCU) hardware panels
- Watch Call HMI interface on OS's



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Watch Call HMI





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Watch Call Repeat philosophy

- There are 2 main differences in the Watch Call set up, depending on which class society the vessel has its approval from
- Ex 1: One engineer set on duty, if not acknowledge (ack) within 3 minutes, the Chief Engineers panel is active, if not ack within 3 new minutes, ALL engineers are on duty
- Ex 2: One engineers set on duty, if not ack in ECR within 5 minutes, ALL engineers are on duty
- It is only possible to deactivate the Watch Call from the responsible OS Stations

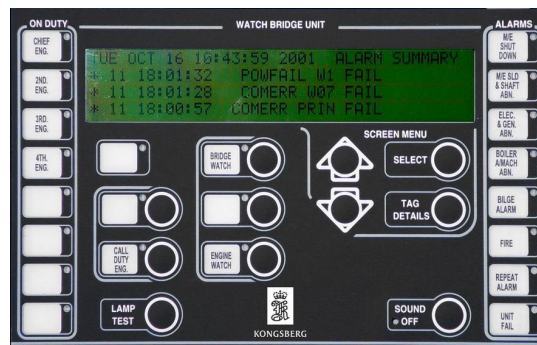


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Watch Bridge Unit

Watch Bridge Unit (WBU)

- LCD (Liquid Crystal Display) type, which has a 4 row by 40 characters display, and six alarm groups





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WBU functionality

Used to SELECT alarm summary, selected points summary or time display

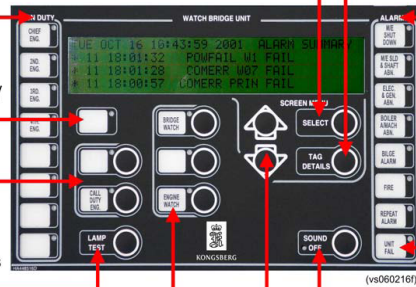
Indicates the officer having on-duty status

Indicates if the engineer's safety system is active

Used to call on-duty officers

LAMP TEST Push to check that all indicators are OK

Indicates the location having watch responsibility



Used to display TAG DETAILS

These alarms are divided into groups for handling and defining priority

SYSTEM FAIL Indicates that the unit has failed

SOUND OFF Push to silence the buzzer

Used to scroll alarms on the display



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Watch Call Paging Possibilities

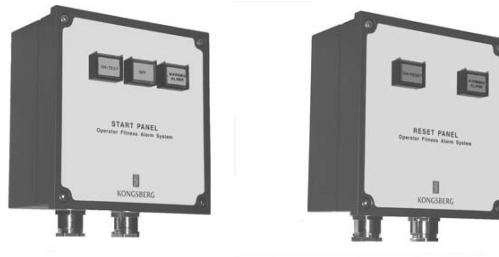
- When operating without the Watch Call system active, the system can also be used as a paging system, in case of a minor and/or major emergency
- This is activated by using: Call Duty Officer Engine. The selected Engineers local panel will then sound (call from engine) and on all the public panels
- Or it is possible to activate ALL Engineers panels and public panels by pressing Call All Officers Engine
- This functionality can also be used from the WBU on the bridge



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Operator Fitness Alarm System (OFAS)

- The Operator Fitness Alarm System
- Also called: Engineer's safety system/Dead man alarm system/Patrol Man
- Local start panels are located at each entrance to ECR. It is also possible to start the OFAS from the OS in ECR



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Operator Fitness Alarm System

Functions:

- Start, stop and reset from push-buttons on Panels

When OFAS is activated:

- The system will activate a separate rotating light after an expired time delay (3 – 27 minutes)
- The engineer must now reset the system (reset button on local reset panels located around in Engine Room space) within the timeout time (3 minutes)
- If the system is not reset within this time period, the system will activate the Dead Man Alarm in WBU,WCU's and Horn/Light to alert personnel

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Operator Fitness Alarm System

Local control

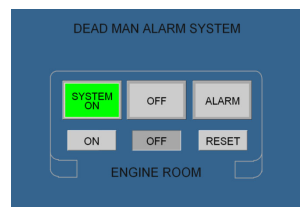
- The system could be activated and de-activated manually by activating the ON/Test button on start panel for some seconds, or to activate it from the HMI in local OS in ECR
- The system is also activated automatically from the alarm system when an engine room alarm occurs during unmanned engine room
- It is important to turn the OFAS system OFF, when leaving the ECR



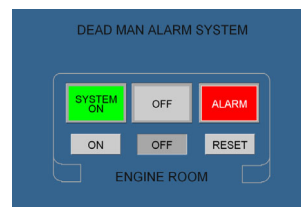
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Operator Fitness Alarm System / Dead Man Alarm System

System On



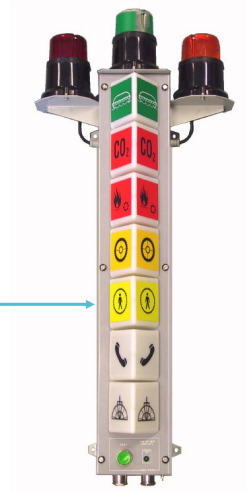
Dead Man Alarm activated





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Light Column for OFAS

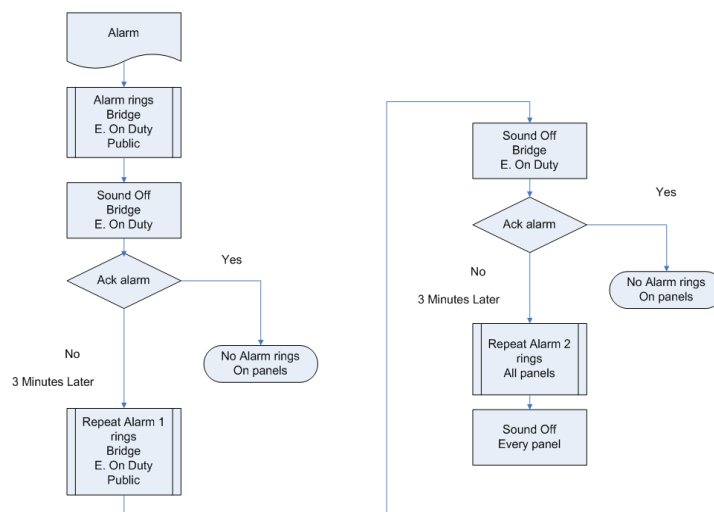


Dead Man Alarm



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Watch Call Alarm Scenario





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Exercise:

- Watch Call



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Learning Objectives

- Describe the purpose of the Watch Call system
- Identify a physical Watch Call unit
- Explain the bridge watch functionality (Used for E0 (unmanned machinery))
- Explain the repeat alarm philosophy of Watch Call
- Describe the different functionality in WBU and WCU
- Identify and explain the Watch Call HMI
- Assign engineers on duty and transfer to Bridge Watch Control
- Identify a physical Operator Fitness Alarm System Unit
- Explain the functionality in Operator Fitness Alarm System



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**End of the
presentation**

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