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## **Summary of events**

### **Grampian Commander / Nelson Location**

### **Marine Safety Forum**

**28<sup>th</sup> May 2009**

Gordon Wallace, Commercial Director North Star



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## Summary of Incident

Vessel	: ERRV "Grampian Commander"
Location	: Nelson Platform (Steel Jacket Structure)
Incident Number	:GGUARD/AWN/0908
Date	: 2.9.2008
Time	:11:25 Hours
Visibility	: Good
Wind	: Light Airs
Current	: Setting 063 @ 0.2 Knot
Point of impact with Rig	: North West Leg
Point of Impact with Vessel	: Port Quarter
Potential Outcome	: <b><u>SEVERE / Highest Potential</u></b>
Vessel Operations at time	: Close Standby Operations
Bridge Team	: Master and AB (Both UK nationals).
Propulsion Systems	: All operational, ME, Fwd Azimuth and Schilling Rudder System
Radar and Microplot	: All operational.



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## Incident Investigation Team

<b>Name</b>	<b>Title</b>	<b>Company</b>	<b>Experience</b>
Alistair Nicol	QHSE Manager	North Star	Engineer / Naval Architect
Martin Duthie	Safety Coach/ QA	North Star	ERRV Master
David Coultas	Eng Director (designate)	North Star	Chief Engineer
Gordon Wallace	Commercial Director	North Star	Master Mariner
Brian Rennie	Contract Holder	Shell EPE	Master Mariner
George Melvin	HSE Adviser	Shell EPE	



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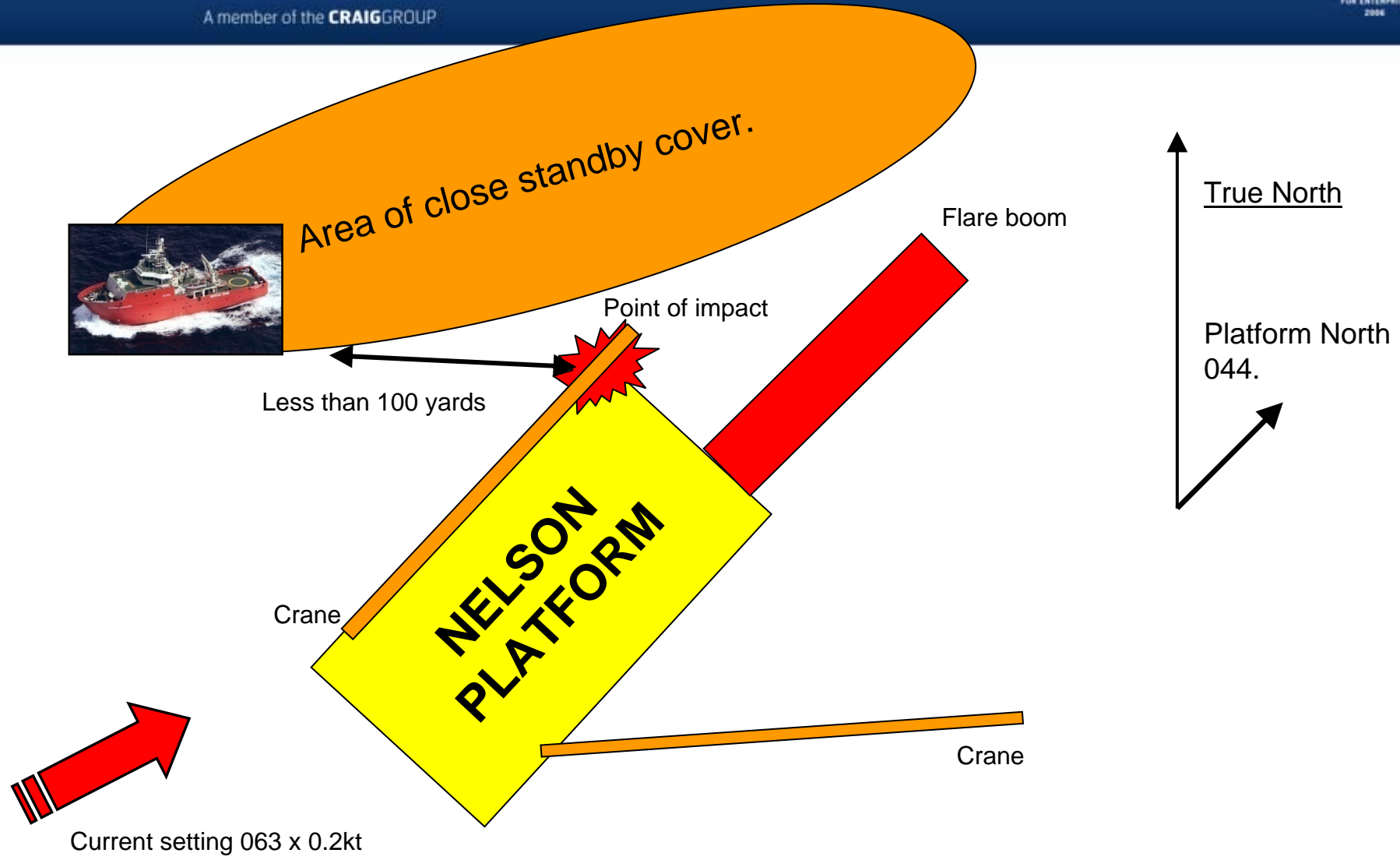
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Shell EPE Incident Review Panel



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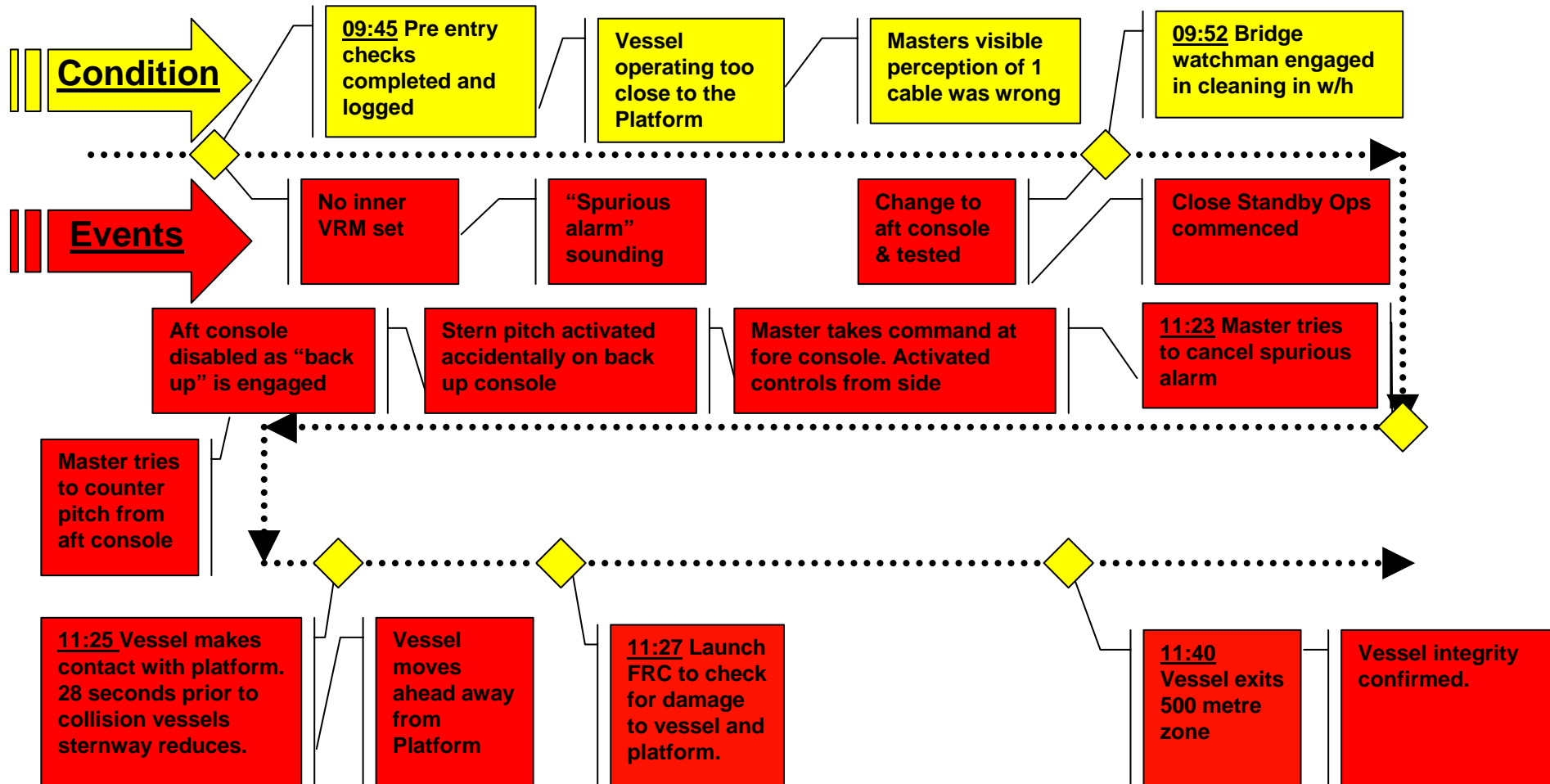


## **FACTS**

- Vessel struck platform.
- Vessel had propulsion and power through-out.
- Vessel was manoeuvring on main engines and foreword azimuth (Schottel).
- Vessel was in a drift OFF situation.
- Vessel was closer than 1 Cable from the location – (Breach of Procedures).
- Vessel Master could not gauge 1 Cable when asked to demonstrate, although he knew the actual distance (200 yards).
- Vessel was operating with 2 man bridge, the AB was engaged in cleaning duties in wheel-house
- No faults found with ER Control or Power Management Systems.
- No alarms relating to the pitch control were observed in alarm history within power management system.
- Spurious alarm was not linked to any failure of machinery.
- Master wears glasses for reading, no glasses required for distance.
- Master had two years experience on this class of vessel, and has been Master with North Star for in excess of 15 years.
- The Master has previously undertaken Bridge Simulator Training.



## Time-line of events

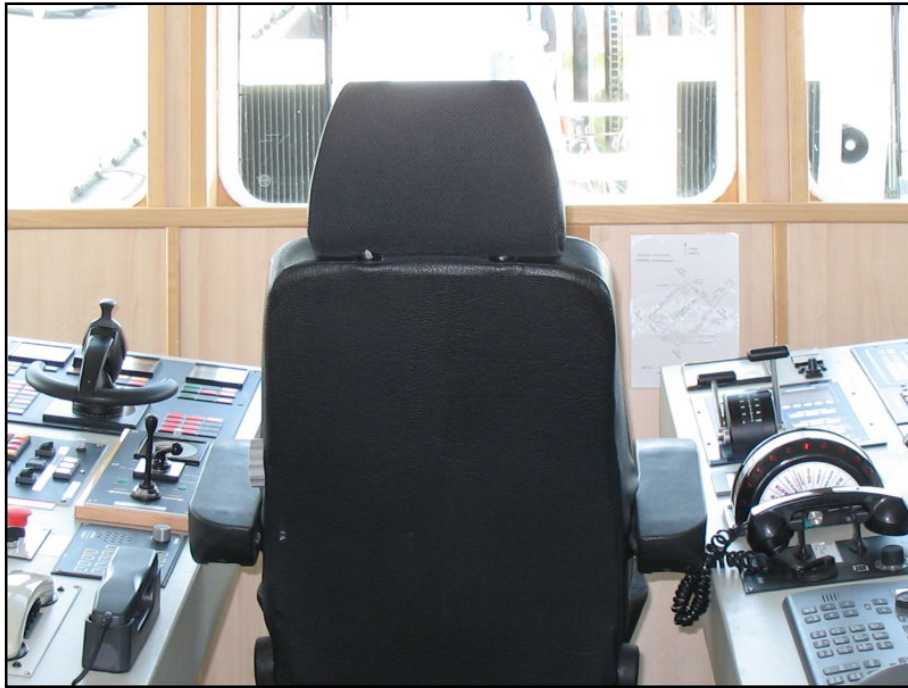


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Fore bridge looking forward

Aft bridge looking aft





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ME CPP control at  
Aft Bridge



ME CPP control at  
Fore Bridge

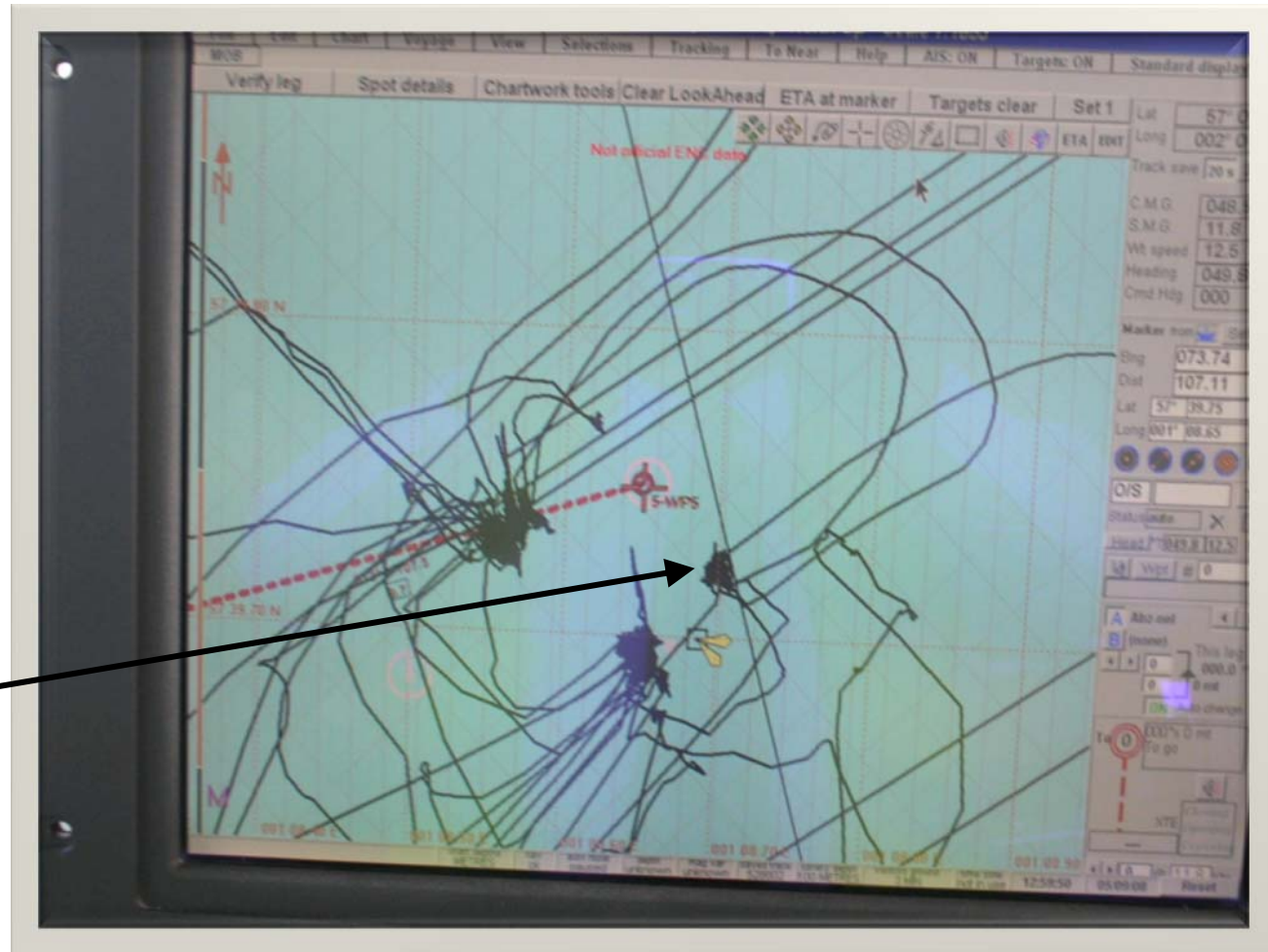


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## Microplot history print



Note proximity  
To platform



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## Observations

- Role of AB watch-keeper not defined, whilst AB was in wheelhouse he was undertaking other tasks.
- Alarm caused annoyance.
- All available means for checking distance off not used, or not used effectively.
- Vessel was operating too close to the platform.
- Binoculars provided are not “range finding type”.
- 500 metre checklist completed.
- Pitch demands via the backup controls cause power to increase exponentially.



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## **Conclusions – Why did it happen?**

- The balance of probability would indicate that the Master of the Grampian Commander accidentally applied stern pitch to the main engine propeller whilst trying to accept a spurious alarm by means of various button presses on the forward command consol, in particular the buttons on the back up pitch controller.
- The Master activated the buttons without the aid of his spectacles, and the buttons were activated by leaning over the console and looking at them from the wrong angle. (effectively upside down).
- The above action was compounded with the fact that the vessel was operating less than 100 yards from the location, significantly less than our procedures allow.
- The above actions and distances also concur with the witness statements made and the agreed timeline.
- Extensive testing of the CPP system established that although there was a slight offset in the ahead position, the system did not contribute to the contact with the platform.
- The deck hand watch keeper was engaged in cleaning duties and was not assisting the Master in maintaining an efficient lookout.



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Stern views of Grampian Commander



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## Root Cause, Immediate cause & Contributing factors.

- **Root Cause** – The spurious and “annoying” alarm caused the Master to move to forward consol and inadvertently activate the back up pitch controller.
- **Immediate Cause** – Although the vessel was in a drift **OFF** position, the vessel was positioned far too close to the installation.
- The Master failed to judge 1 cable (200 yards) accurately.
- The act of moving between the forward and aft control stations meant that control of the vessel could not be managed efficiently.
- The Master attempted to operate the forward consol buttons by leaning over the starboard side of the unit; this and the lack of use of spectacles compounded his difficulty in successfully operating the buttons in the correct sequence.



<b>ACTIONS TAKEN</b>	<b>Status</b>
Fleet alert transmitted	
Fleet circular transmitted regarding watch-keeping	
Exponential thrust increase modified	
Investigation of spurious alarm to be completed and repair effected	
Pitch controller system checked and verified	
<b>ACTIONS OUTSTANDING</b>	<b>Status</b>
The Master to be reprimanded over stationing his vessel too close to the location and in breach of close standby procedures.	
The Master to be retrained in close standby procedures, and in the accurate judgement of distances utilising various methods. (Visual, optical and electronic).	
Optical method of accurate range finding to be sourced, tested and distributed to the <b>fleet</b> .	
During close standby ops, the Deckhand watch keepers role to be clearly defined in respect to watch keeping duties and assisting the officer of the watch.	
Share findings with MSF and through-out the fleet.	
The Layout of the CPP controls to be reviewed with manufacturers to eliminate the possibility of re-occurrence.	