

Subject: "Deepwater Horizon", Comments on SK-122100-21-04

Date: Thu, 04 Nov 1999 18:57:57 -0600

From: Richard Coronado <coronador@camerondiv.com>

To: dweathers <dweathers@rbfalcon.com>

CC: David Walters <waltersd@camerondiv.com>, kwin
Al Cotten <acotton@rbfalcon.com>, Joni Courtney

Ref: DH-O-200

File Code: DH225/VII-1

Drew,

I received your fax and I am incorporating Peter Nixon's comments and changes. The following is a brief summary of Peter's comments and changes along with my comments.

1. Remove NEMA 4X, Reed switch junction box and cable -W70. Five individual cable will be terminated in the HPU Control Panel instead of junction box.

Cameron Controls Comments: Drawings updated: SK-122100-21-04 & SK-122144-21

2. Relocate and rename "HITEC Drillers Workstation" to "Drilling Control Interface Panel I-156-01, Location: Drillers Equipment Room.

Cameron Controls Comments: Drawings updated: SK-122100-21-04

3. Update drawings to reflect Cameron's and customer's supplied cables.

Cameron Controls Comments: Errors were found in SK-122100-21-04. Per purchase order, Cameron Controls is to provide signal and fiber optic cables and customer is to provide power cables. Drew has expressed the possibility of the shipyard providing ALL cables. From an electrical standpoint, this should not be problem as long as all (including fiber optic cables) the cables are properly installed and tested. Drawings updated: SK-122100-21-04

4. Replace all armored cables with unarmored cables per R & B Falcon's request.

Cameron Controls Comments: **R & B Falcon will provide document stating ABS has approved use of unarmored cables in Hazardous Locations.**

Drawings updated: SK-122100-21-04 & SK-122144-21.

5. Cables -W71, -W72 and -W73 are used for the motor heaters and motor thermostats and not 3-phase power. Replace four conductor cables with three conductor cables for all 3-phase power cables.

Cameron Controls Comments: **R & B Falcon will provide document stating that all equipment will be locally grounded.**

Drawings updated: SK-122100-21-04 & SK-122144-21.

6. Replace 3 TSP #16 Awg cable with 7(C) #14 Awg cable for Motor Starter Signals to the PLC.

Cameron Controls Comments: I would like to clarify with the person doing the interface for the Motor Starters. This motor starter starter interface has become a nightmare on the "Deepwater Nautilus" and I wish to avoid the same problems on the "Deepwater Horizon". Cameron Controls will provide one output and need two input signals. The signal are as follows:

START MOTOR output signal: A 24 VDC output from our system to your motor starter. I imagine a relay or dry contact will be needed somewhere either in your system or our system to isolate our system from your motor control circuit (usually 120 or 240 VAC).

MOTOR RUN input signal: A 24 VDC input into our system indicating that the motor is running. Again a relay or dry contact will be needed somewhere.

MOTOR OVERCURRENT input signal: A 24 VDC input into our system indicating the motor has

COOPER CAMERON CONTROL			
RBS - 8D		Correspondence Distribution	
Date Received	Cameron Log No.	Name	Info Act
11/4	1-825	Richard Coronado	
		Boile Williams IV	
		Margaret Buckley	
		Paul Perez	
		Terren Roark	
		Walters	

tripped. Again a relay or dry contact will be needed somewhere.

I will try to incorporate your comments and e-mail the updated drawings to you tomorrow. Please forward a copy of this e-mail to Mr. Peter Nixon as I do not have his e-mail.

Regards,

Richard Coronado
Cameron Controls