

**Please note that the data card modelled in this presentation is incomplete and inaccurate and used only for illustrative purposes. The slides will be updated in due course when work is completed on this project.**



## **INSTALLATION DATA CARDS**

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# Why Have Data Cards??



1. Ca. 1995/96 collision between PSV and Forties Charlie jacket
  2. PSV narrowly missed striking main 36" export risers
  3. Investigation raised numerous issues on vessel and installation
    - Mate new to ship, but from "sister" vessel
    - Command transfer protocol from forward to aft different from sister vessel
    - Master to Mate handover at 500m zone
    - Mate instructed to position off west face by platform deck crew
    - Platform deck crew unaware of restriction on PSV ops. on west face due presence of main export risers
    - Restrictions to vessel ops. in Field section of Operator's Marine manual, but not highlighted
    - Realisation that practice of "dumping" Operators' manuals on vessel did NOT address info. issues
- This resulted in....**
4. Data cards giving concise info. on Marine hazards at Installations
  5. 500 metre zone pre-entry checks ensuring proper control transfer
  6. Development of an Industry standard in "Safe Management and Operation of Offshore Support Vessel Operations"

# Original Example – Page 1

## Forties Charlie Platform Information Sheet



The Master and Driving Mates should read and understand Generic Sections 2 & 7 and Field Section 5 of the Standing Instructions For Offshore Marine Ops

### Location

LAT 57° 43' 37.03" N Water Depth 128 metres  
LON 00° 50' 50.74" E Platform Heading 358.3°T

### Particular Marine Hazards

- ▶ Do not enter the 500m zone around any platform without permission from Platform Control.
- ▶ Pipeline risers on South and West face.  
Restricted entry area on the West face.
- ▶ Trenched pipelines carry the export to shore, these are at risk to vessel anchor impact.
- ▶ A wave rider buoy is moored in position 270°T and 0.5 miles from FB with a quick flash white light. Masters are advised to manoeuvre in this area with extreme caution.
- ▶ No vessel may anchor in the Forties Field without authorisation from Forties Marine.

### On Arrival

On arriving at the Forties Field, contact Forties Marine prior to entering the 5 km controlled area. All Vessel movements within the Forties Field are controlled by Forties Marine on the Forties Alpha Platform.

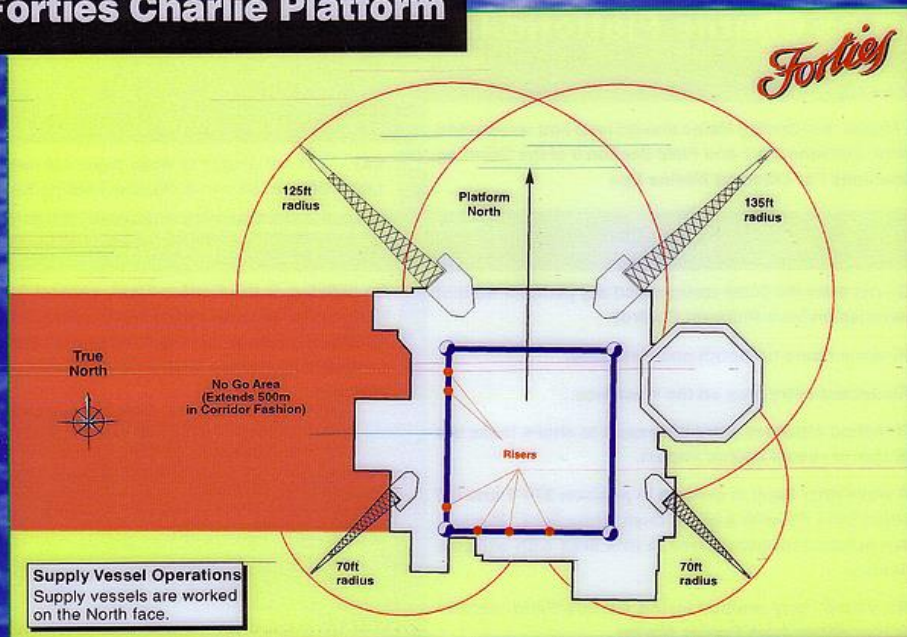
STATION - Forties Charlie only	FREQUENCY
Marine	VHF 16, 13 or 17
Deck	VHF 17
Safety Control Room	VHF 17 VHF 16 or 17
Aviation	122.00 Mhz

### Pre-entry Check to be completed in conjunction with Forties Charlie Control prior to entry into 500 metre zone

Master to confirm to Forties Charlie Control	Yes/No	Comments
Main Engines: Tested Ahead and Astern.		
Steering Gear: Fully function tested (main and emergency) to be confirmed to be fully operational.		
Thrusters: Bow, stern and azimuthing thrusters (as applicable) running and confirmed to be fully operational.		
Joystick: Function tested and confirmed to be fully operational.		
Communications: VHF sets/deck speakers tested and two way communications established with crane.		
That the Master is fully aware of the Platform Procedures for vessel entry (Steering offset course, speed and manoeuvring).		
Weather conditions are suitable for proposed operation.		
Vessel Master must record completion of check list in deck log book.		
Forties Charlie Control to Confirm to Vessel that	Yes/No	Comments
Deck and crane communications have been tested satisfactorily.		
Which side of platform will be worked and channel to be used.		
Forties Marine to confirm to the Standby Vessel that supply vessel operations are about to commence.		
Forties facilities are ready to receive cargo.		

# Original Example – Page 2

## Forties Charlie Platform



### Forties Marine - Based on Forties Alpha

- Main Marine Functions:**
- 1) To monitor all marine activity.
  - 2) To take initial action in a marine emergency.
  - 3) To co-ordinate the offloading and backloading of supply vessels; establish priorities including crane usage and to expedite vessel turnaround.

#### Crane Details

All Cranes	Approx SWL	Radius
North East	15 Tonnes	135 ft
North West	15 Tonnes	125 ft
South East	2 Tonnes	70 ft
South West	2 Tonnes	70 ft

#### Offshore Bulk Cargo Operations

Prior to commencing operations:

- Confirm vessel is capable of working in present weather conditions.
- Confirm there is adequate lighting.
- Confirm vessel's tanks are prepared for proposed operation.
- Confirm Crew are briefed on the correct product to be discharged and the correct connection.
- Establish Comms with vessel and rig.
- Agree - the product, the quantity, the discharge order and rate.
- Confirm length of hoses available, ensure similar hose lengths are in the water.
- Confirm whose "STOP" it will be.
- The hose must be visible to the person driving the vessel at all times, if this is not the case then a crew member with suitable comms should be posted to observe the hoses.
- Cargo transfer should commence slowly, with the rate being increased when lines have been proved.
- Confirm regularly with the Control Room the amount of cargo which has been transferred.

Grade	Connect	Ensure agreed pump rates / pressures before discharge commences
Diesel	4" Avery Hardoll	
Pot Water	4" Weco	
Cement	5" Weco	
Baryte	5" Weco	
Baseoil/Brine	4" Weco	
OBM	4" Weco	
Baseoil	4" Weco	

# Proposed Data Card Format



## Page 1

**Header** – Installation Name and Block No. plus type of Card, e.g. PSV/AHTS Data Card

**Location Detail** – Field Name, UKCS Block, Heading, Water Depth, Latitude, Longitude, Call Sign

**Communications** – Details of radio and telecoms. procedures. VHF Calling channel, Safety channel, Crane/Deck channel. Phone numbers for Emergency, Installation initial contact, Key Contacts, e.g Radio Room/Control Room, OIM?????

**Safe Anchorage** – Co-ordinates for anchorage in emergency. NB Geographical co-ordinates and not UTM's

**Hoses and Connections** – All bulk connection types and sizes

**Crane Info.** – Position, jib length and capacity of whip line and main block

**Installation Alarms** – Alarm type and associated audio/visual signal

**500 Metre Zone Pre-entry Checklist** – Installation specific requirements

**Action in Event of Emergency Alarm** – Installation specific requirements

## Page 2

**Diagram of Installation** – Showing Jacket outline with topsides superimposed, crane positions, main features e.g. bridges, flare booms, heli-deck etc.

**Particular Marine Hazards** – Subsea completions, flow lines, risers, overboard discharges, vents, subsea vents that may cause turbulence

**Installation Heading/Orientation**

**Tidal Flow** – Tidal stream arrows relative to high water Dover or site specific tidal information relative to a standard time superimposed on installation diagram. Also rate of tide at Springs and Neaps

**Bulk Hose Hang-off Points** – If possible, detailing products per hose and position

**Information Pertinent to Station Keeping** – e.g. Positions of laser reflectors etc.

**Any other information deemed appropriate for Master of a vessel visiting installation for first time**

## SCOTT PLATFORM – UKCS 15/22 PSV/AHTS Data Card

Location	Scott Field – 15/22	Latitude (Drilling/Production)	58° 17.35'N
Heading	337° (T)	Longitude (DP)	00° 12.13'E
Water Depth	140 metres	Call Sign	MMLH9

### Communications

Nexen House 24 hour Security	01 224 876 521	OIM Direct	01224 371 467
CCR	VHF CH. 10	Immarsat A	00871 144 7545 (Primary)
Safety/Calling	VHF CH. 10/16	Sat Mini M	00871 761 839 663 (Secondary)
Crane Ops	VHF CH. 68/77	Radio Room Fax	01224 371 172
		CCR	01224 371 100 ext. 6010 or 6020

### Safe Anchorage Zone

A designated Safe Anchorage Zone has been established for use in emergency situations. This zone is bounded by the following co-ordinates;

#### LAT/LONG

58° 19.35'N	00° 11.07'N
58° 19.35'N	00° 12.97'N
58° 18.35'N	00° 11.07'N
58° 18.35'N	00° 12.97'E

### Hoses and Connections

Potable Water	4" WECO
Fuel	4" Avery Hardoll
Cement/Dry Bulk	5" WECO
Liquid Mud	4" Avery Hardoll
Brine	4" WECO

5" to 4" Reducer (WECO) available for Dry Bulk

### Installation Cranes

Location	DP(E)	DP(W)	UQ(N)	UQ(S)
Jib Length	36m	36m	36m	45m
Whip Line SWL	15te	15te	15te	15te
Main Hoist SWL	30te	30te	30te	30te

### Installation Alarms

Prepare to Abandon	Yellow Flashing Light	Continuous Warble
General Alarm	Yellow Flashing Light	Intermittent Audible
Fire and Gas	Yellow Flashing Light	Intermittent Audible

### 500 metre Zone Pre-entry Checklist

Master to confirm to Installation	Yes/No	Installation to confirm to Vessel	Yes/No
Master aware of pre-entry procedure and copy of Common Guidelines on board		Work programme for vessel	
Engines/Generators tested, running and fully functional		All relevant in-field activities in progress	
Steering tested and fully operational		Working face/Crane(s) to be used	
All thrusters tested, operational and running		Communication channels tested and ready	
Joystick/Dynamic Positioning tested and fully functional		Any applicable operational restrictions	
VHF sets operational and on low TX power, radars on standby, MF/HF on receive only		Position of all platform based position reference systems	
Approved by Nexen Petroleum for DP Operations		All reference systems functioning per design	
DP set-up checks satisfactorily complete as per IMCA Guidelines			

**In event of alarm cease all operations and prepare to move vessel clear**

## Particular Marine Hazards

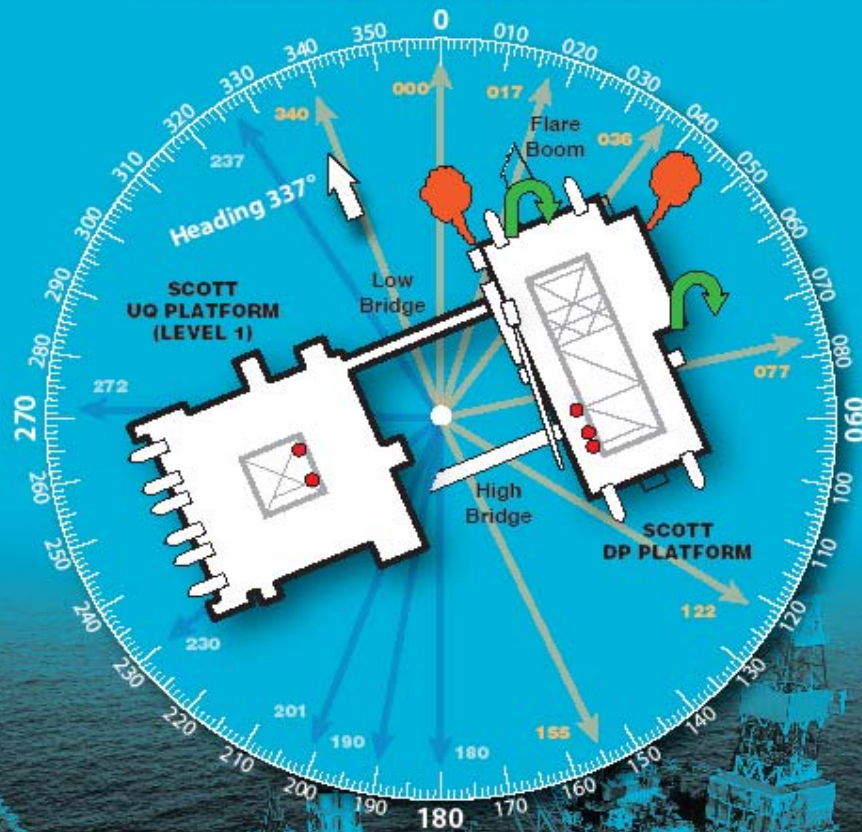


Chart 291 - Tide Diamond C

HW	DIR	SPR	NP
-6	340	0.4	0.2
-5	000	0.8	0.4
-4	017	0.8	0.4
-3	036	0.4	0.2
-2	077	0.2	0.1
-1	122	0.2	0.1
HW	155	0.3	0.2
+1	180	0.7	0.4
+2	190	0.8	0.4
+3	201	0.5	0.3
+4	230	0.2	0.1
+5	272	0.2	0.1
+6	327	0.3	0.2

Marine Information Key

	Vents
	Hose Hang-off Points
	Risers

# Summary of Requirements



1. **Simplicity** – Keep information simple and don't over-complicate with unnecessary data, e.g. UTM Coordinates, make of crane etc.
2. **Avoid Duplication** – Sailing Instructions and Operator's manual generally contain all the info. necessary on reporting etc. Common Guidelines have all procedures for bulk transfers, so why include on card?
3. **Pictures** – The vessel sees the installation from the sea, NOT from the air. Why have aerial photos?
4. **Graphics** – A good diagram detailing outline of Jacket and topsides (displaying overhang), platform orientation, crane positions and positions of relevant hazards like risers, discharges etc. is preferable to written word or aerial photograph.
5. **Tidal Information** – Facility to display tidal currents during vessel's stay, either installation specific or for nearest tidal diamond, is valuable to vessel staff.
6. **Uniformity of Data Layout** – If all cards were drafted in same format, this would eliminate or reduce confusion when looking for information at different [installations](#).