Introduction

A supply vessel was scheduled to deliver supplies to an installation in the North Sea. The vessel master was new to the field and was unfamiliar with the tidal currents of the area.

Description of process

The OIM, or a delegate, is responsible for all activities within a 500m radius of the installation, known as the 500m safety zone. All vessels must remain outside of this perimeter until all pre-entry checks are undertaken by both the vessel and the installation. Only then is a vessel given permission to enter the 500m safety zone.

Details of the Incident

The vessel approached the 500m zone and informed the control room operator (CRO) that pre-entry checks had been completed. The CRO was preoccupied with another task and granted permission to enter. The CRO did not monitor the vessel's approach nor relay information that a vessel was approaching.

On entering the 500m zone, the vessel approached the platform directly and at excessive speed. It didn't stop at approximately 200m off the platform to complete its set-up and assess how the vessel was holding position with the weather and tide conditions.

No-one on the vessel or installation raised concerns about the speed and approach angle of the vessel.

During the final set up alongside, the ship's Master lost control due to errors in the setting up of the propulsion system. The vessel impacted with an exposed riser, damaging the vessel, platform leg and riser.

The installation GPA was activated and all personnel mustered.

There was no immediate hydrocarbon release but, as a precaution, the platform was shutdown and blown down. Non-essential staff were evacuated until the damage was assessed. It was several weeks before the installation returned to normal operations.

The jacket structure was designed and fabricated in the 1970s and not as structurally strong as modern designs. This is common in the North Sea. The platform was designed to withstand an impact energy of 1.8 MegaJoules. The estimated energy of this collision was more than 3 MegaJoules.

Good Practice Guidance

Every installation should have a marine responsible person who is in communication with vessels whilst within the 500m safety zone. Responsibilities of the marine competent person include:

- OIM-delegated responsibility for all marine operations within the installation 500m safety zone
- Control of all vessel movements in the 500m zone to ensure operations are carried out efficiently and effectively and to minimise time alongside the installation
- Co-ordination of multiple, marine-associated communications within the installation and between the installation and the vessel e.g. control room operator, crane operator, deck foreman
- Ensuring communications between vessel and installation are established prior to entry to the 500m zone and that they are maintained throughout the operation and on departure. This will include (but not be limited to):
 - o completion of all pre-entry and set-up checklists
 - visual observation of vessel approach, vessel set-up checks at a safe distance from the installation and set-up at working position by installation
 - monitoring of station keeping and operations whilst alongside
 - monitoring changes to the operation and weather conditions (trigger points) and when vessels depart the 500m zone



Guidance Notes for a Marine Responsible Person are available from:

www.stepchangeinsafety.net www.marinesafetyforum.org

The incident described here is not real but has been created using a combination of incidents that have occurred recently in the North Sea.

