Dropped pallet during loading of stores

**Description of Process:**
Loading of pallet through a vessel deck hatch.

**Description of Incident:**
During a routine lifting operation from quayside to vessel, whilst attempting to lower a pallet laden with stores through a deck hatch, the load contacted the corner of the hatch, damaging the pallet and caused most of the 902kg contents to fall 7.2m to the deck area below. Although the pallet contained multiple items the individual weights of the goods dropped were significant; had a person been under the load and struck by a falling item the result may have been a fatality.

No-one was harmed during the incident, however the storeman was in the line of fire when receiving the load at the designated landing site. The storeman ran from the area.
and slipped on cooking oil which had spilled from the damaged supplies, causing him to fall to the deck onto his hands and knees.

Prior to the lifting operation, personnel responsibilities had not been adequately established at the tool box talk (TBT) and several crew members had arrived on the worksite late, failing to attend the TBT. This resulted in confusion as to who was responsible for the load at each point during the lift.

In preparation for the lift, and unlike the previous loads, the bosun neglected to utilise the load securing chain on the pallet lifting frame. This oversight had been noticed by the crane operator but went unchallenged as the crane operator felt it was his supervisor’s responsibility and did not want to challenge his superior’s action.

On lowering the pallet into the stores hatch the crane operator was expecting instructions from the banksman, who conversely believed that the crane operator had control at this stage. Because of the incorrect understanding and lack of control from the banksman, the load was lowered into the blind hole in one slewing motion and not in a staged progression, this did not allow for the load to be stabilised and centralised prior to lowering through the hatch. The risk assessment did not refer to the practice of a staged progression.

As a result of the above, the load had a sufficient degree of freedom to contact the side of the hatch and damage the pallet, resulting in the contents dropping to the deck below.

**Causes:**
- Insufficient detail recorded in the lift plan and task risk assessment
- Personnel responsibilities were not adequately established at the TBT
- The load was not sufficiently secured on the pallet – lifting chain not utilised
- The crane operator took no action when he noticed the pallet lifting frame chain was not being utilised
- There was no pause above the hatch to secure and centralise the load before lowering

**Contributing Factors:**
- Self-imposed/perceived time pressures
- No additional rigging was used to secure the contents of the pallet
- Pallet lifting box held on-board did not fit the pallet size being used
- Not all personnel involved in the operation attended the TBT
- Culture-driven behaviours influencing the crane operator’s decision; he felt it was inappropriate to challenge his supervisor.
Good Practice Guidance:

- Ensure all personnel involved in an operation attend a TBT before taking part in the activity; the TBT should sufficiently outline roles and responsibilities of those involved.
- Reinforce the ‘STOP THE JOB’ philosophy to work teams prior to conducting an operation.
- Review lift plans and task risk assessments for routine lifting operations ensuring they are up to date and there is sufficient detail surrounding: control of loads, roles and responsibilities of personnel involved, securement of loads, lifting of pallets, line of fire, confirmation of clear areas during blind lowering etc.
- Review the method for securing pallet loads ensuring it is adequate for the proposed lift.
- When lowering through a blind hole, adopt a staged progression to the lift, allowing for the load to be stabilised and centralised prior to lowering.
- Communicate with your work team that time constraints should not impede the safe progress of an activity. If there are concerns regarding time constraints and the viability of completing a task this should be raised with the offshore management team or supervisor.