ALERT 10 – 04

LARGE CONTAINER LIFTED BY HELICOPTER DOWNDRAFT

WHAT HAPPENED:

During a scheduled helicopter landing, the helicopter’s downdraft caused a large container weighing around 200 kilograms (440 pounds) to be lifted over handrails and then fall around 10 metres (33 feet) to the deck below. The container had been in place for some months and had experienced several similar helicopter landings without incident. The container was placed on the roof of a structure adjacent to the helipad on wooden battens and was not secured. The container was damaged in the fall. While no injuries were sustained, there was significant potential for serious injury.

WHAT CAUSED IT:

The container was placed adjacent to the helipad and 35 metres (115 feet) from the helipad centre. The container was mounted on battens, but was not fastened to the structure. These factors promoted the conditions for the rotor wash (air flow created by rotor system) to cause lift and move the container to a point where it fell over the handrail to the deck below. The helicopter in use had a significantly greater rotor wash (air flow created by rotor system) than the other helicopter types that visit the rig.
CORRECTIVE ACTIONS: To address this incident, this company did the following:

- The container was immediately removed from the location.
- The container will be replaced and installed with a designed restraint system.
- Lessons can be learned on the hazards that can be created by placing unsecured items, irrespective of their weight, in areas such as helidecks where there is intense airflow.
  - Even very heavy objects close to helicopter operations can become airborne if not restrained.
  - Placing objects on battens can allow sufficient air beneath the load to promote lift.
  - Personnel conducting surveys of areas adjacent to helicopter operations need to consider the aerodynamic energy that helicopter arrivals and departures can generate. (The helicopter down draft from the rotor moves roughly enough air to lift 11 tons into the air on takeoff.)
  - All loose items should be removed from the helicopter landing area and containers or storage systems close to helicopter operations should to be secured to a supporting structure.