



International service provider SafeSTS now rolls out the Protected Transfer System (PTX) globally, and Capt. Bob Gilchrist shares its many benefits.

#### THE PROBLEMS IT SOLVES

As global demand for crude oil continues, Ship-To-Ship (STS) transfer operations remain an essential link in the energy supply chain. These operations do however present unique challenges. These include the potential for spills and physical risk to personnel during transfer, as well as damage to the transfer equipment itself. Whilst such risks to the crew, environment and equipment assets have always existed and been managed within the framework of OCIMF guidelines, regulatory and corporate stakeholders strive for continuous improvement within risk management and safety.

Changing weather patterns, regulatory requirements, reputational considerations, as well as the modern-day focus on personnel safety have significantly changed the risk profile of oil STS operations. This has been the driving focus on adaptation by SafeSTS (global STS provider) of existing product technology already mandated within LNG STS operations, to now be applied to the STS transfer of crude and derivatives.

# CLASS-APPROVED, ALREADY ADOPTED AND IN SERVICE

Already successfully integrated into hundreds of offshore STS operations and adopted/mandated by a growing number of jurisdictions and oil majors (foremost amongst which the PANPAC & PAL offshore zones) the Protected Transfer System (PTX) is a joint development between SafeSTS and Gall Thomson.

Pooling the marine experience of SafeSTS across thousands of such operations since 2009 and the



engineering expertise of Gall Thomson, renowned for its Field Verified Marine Breakaway Coupling technology, the PTX represents a significant advance in the safe handling of crude oil transfer at sea.

#### ZERO-SPILL DESIGN

The PTX's cutting-edge sealing mechanisms instantly close during a breakaway, creating a tight seal to prevent crude oil from escaping. This guarantees a no-spill environment, aligning with stricter global environmental standards and protecting marine ecosystems.

#### QUICK AND SIMPLE TO INTEGRATE

At its core, the PTX ensures safe, rapid, on-demand remote disconnection during the side-by-side transfer of crude oil. It is fast and easy to integrate into existing STS systems and processes.

The PTX Release is mobilised on its own lightweight skid and installed within a few minutes via straightforward ratchet camlocks between the transfer hose and the vessel manifold. Its transportability significantly enhances ease of cross-operational use, whilst also allowing for permanent deck installation where desired due to its compact on-deck footprint.

## SPEEDY AND SAFE TO **ACTIVATE AND RESET**

As an active mitigative measure in the case of a deteriorating weather situation as well as in emergency scenarios, the PTX ensures a rapid, on-demand release which is activated remotely through a Reflex Hydraulic-Pressure Unit (HPU).

This deck control minimises the potential for environmental damage, shortens response times in critical situations, and keeps all personnel at a safe distance. It also prevents hose rupture or manifold damage during unintentional breakaway events.

## **DELIVERING COMMERCIAL BENEFITS ON TOP**

There are not only safety and environmental benefits attached to the PTX. The PTX also protects high-value transfer assets - equipment which would take considerable trouble and expense to replace, with all the associated operational downtime, on top of the intrinsic cost of equipment substitution. The deployment of the PTX allows for the swiftest possible resumption of operations after activation, using all the same equipment. Once activated, the PTX can be safely disconnected from the manifolds and hose end to be reset within an hour – so well within the time window for restart of operations once separation has been deemed necessary and it has been activated.



Whilst the PTX delivers greater operator safety and stakeholder peace of mind from the first day of integration, it will also very likely pay for itself the first time its button is ever pressed.

### INDUSTRY SIGNIFICANCE

By maximising operational efficiency, as well as ensuring personnel safety and environmental protection, the PTX represents a step-change in the risk profile of the STS lightering of crude oil – whilst also offering commercial return on investment once activated.

It uses existing, proven, easily integrated technology to make operations safer where they already take place. And it has already led to operations being approved in new locations where they had previously not been permitted.

The PTX has already been adopted/mandated by high-profile stakeholders within the industry and is now set to roll out globally via SafeSTS. With the development of this failsafe release, SafeSTS

together not only advanced maritime safety but also set a Q2 21st century benchmark for the responsible handling of crude oil at sea.



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