



Business Development in Practice – Lauritzen Offshore Services

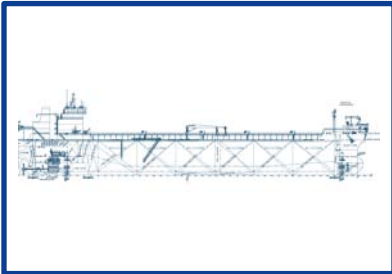
24 June 2010

Lauritzen Offshore's Fleet



Dan Eagle

- Shuttle Tanker (45,000 dwt)
- November 2008
- On contract to Petrobras in Brazil



Dan Cisne & Dan Sabiá

- Shuttle Tankers (59,000 dwt)
- 2Q11 and 4Q11
- On contract to Transpetro in Brazil



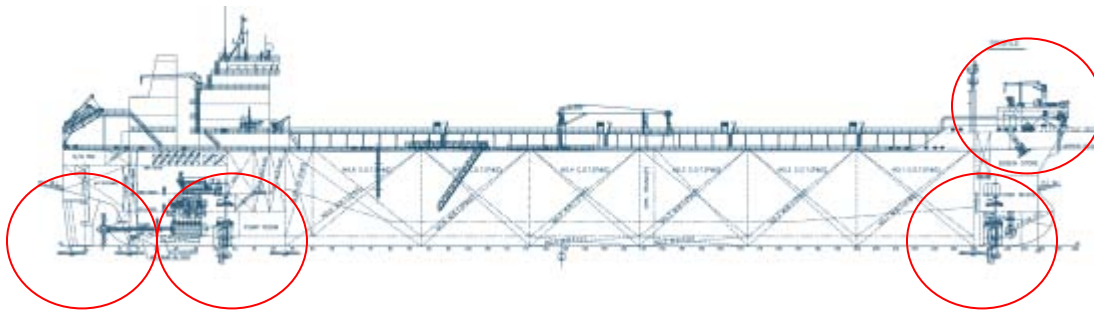
Dan Swift

- Accommodation & Support Vessel
- November 2009
- On contract to Statoil in Brazil



Shuttle Tanker Technology

- The shuttle tanker business area grew naturally out of Lauritzen Tankers and the experience of the staff.
- Conventional tanker with the addition of dynamic positioning (DP) equipment and bow-loading system (BLS)



- Thrusters & reference systems
- Controllable pitch propeller
- Bow-loading system



Business Development in Practice: Dan Swift

- Former RoRo vessel “Kraka” purchased by Alcatel for intended conversion into cable-layer.
- After the crash of the cable-market and a subsequent dispute between Alcatel and the yard, the vessel was laid up.
- In meetings between J. Lauritzen and Petrobras’ exploration & production engineers, the concept of a mono-hull accommodation vessel was discussed as an attractive solution for future requirements.
- The idea was further conceptualized by J. Lauritzen.
- J. Lauritzen purchased Kraka, including equipment at an attractive price.
- Vessel was brought to Blohm & Voss (Hamburg) for conversion into a high-end Accommodation & Support Vessel.
- The vessel, renamed Dan Swift, redelivered in November 2009 and went straight into its first contract for Statoil in Brazil.



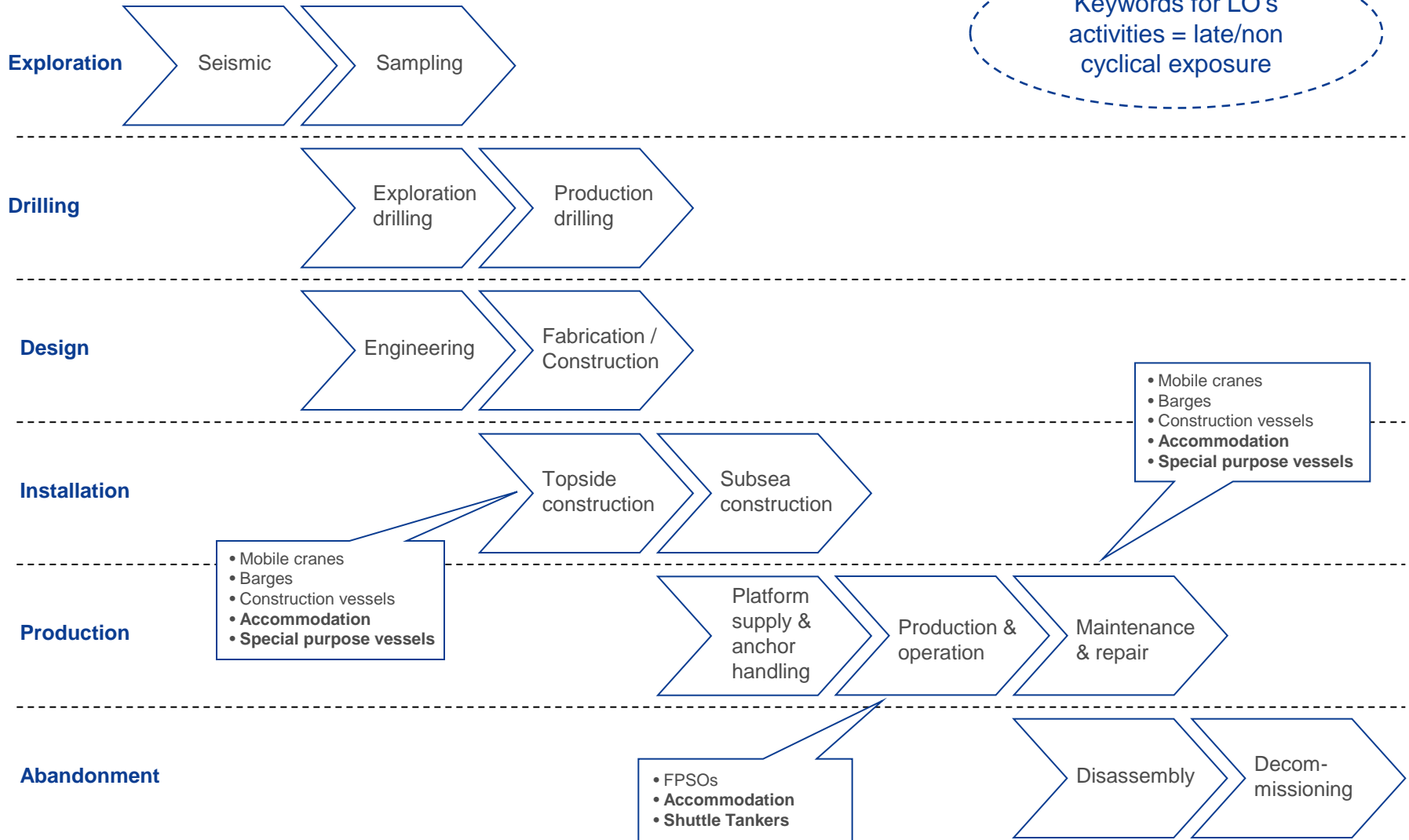
Above: Kraka on its way to Blohm & Voss



Above: Dan Swift in Guanabara Bay, Rio, just before deployment on the Peregrino Field



Value Chain



Accommodation Vessel Types



Semi-submersibles

- Majority of units with DP
- Harsh-weather compatible
- Expensive and inflexible mobilization
- High capex and high maintenance costs (old fleet) = expensive solution
- 20 units in total



Barges

- Typically moored (some DP)
- Only compatible with benign weather
- Relatively cheap solution
- Typically no gangway (some barge/ship cross-overs available with gangway)
- ~100 units in total and ~45 with accommodation capacity exceeding 250 PAX



Jack-ups

- Water depth restricted to ~125 meters
- Harsh-weather compatible
- Fixed installation (vulnerable to typhoons etc.)
- Expensive and inflexible mobilization
- Between 20-30 units depending upon specification (many very old units)

ASV Competitive Parameters

Accommodation units are employed during:

- Installation and hook-up
- Modifications
- Inspection, repair & maintenance
- Decommissioning
- Offshore renewable energy projects will also increasingly require ASV services

Required operational features & equipment

- Size and quality of accommodation
- Size, off-take level, and redundancy of gangway
- Deck space
- Workshop and storage facilities
- Helicopter facilities
- Crane
- ... and very importantly; safety standards

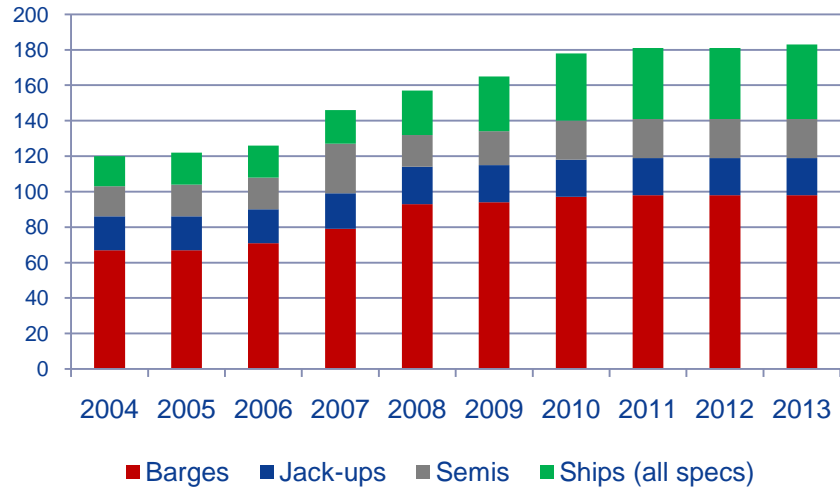


Dan Swift

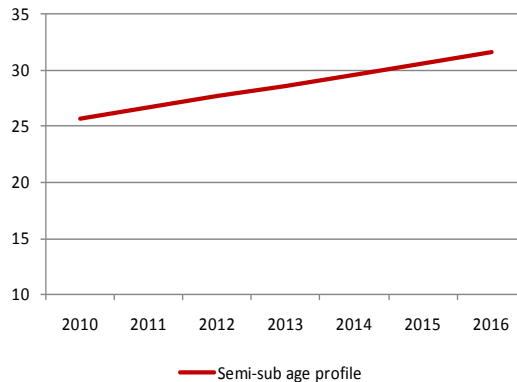
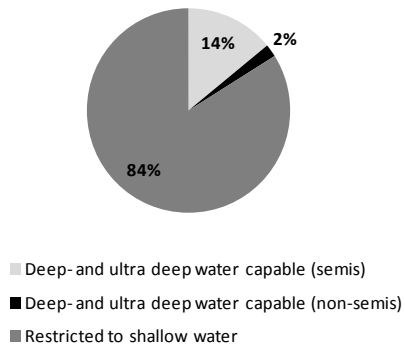
- First of its kind!
- Major conversion redelivered from yard November 2009
- “Floating hotel, airport, and shipyard”
- Modern, high-end equipment and interior facilities
- 250 passengers in addition to marine crew and catering staff.
- Dynamic Positioning system with 15,000 kW of thruster power
- Two telescopic gangways
- Complies with the strictest Health, Safety & Environment requirements
- Danish Flag / DNV class / passenger vessel notation
- Environmental Reference Number: ERN (99,99,87)
- Under the tested conditions, gangway can connect more than 82 percent of the time
- High passenger comfort (probability is 99,6% that the crew will feel no worse than MIR 25)



ASV Fleet



Operational flexibility



Mono-hull advantages over semi-subs:

- Fast and flexible transfer and repositioning and mobilization.
- No requirement for anchor-handlers and tugboats.
- Flexibility to emergency disconnect in case of sudden danger or abrupt weather change.
- Lower capital cost.

Mono-hull advantages over barges and jack ups:

- Fast and flexible transfer and repositioning and mobilization.
- No requirement for anchor-handlers and tugboats.
- Flexibility to emergency disconnect in case of sudden danger or abrupt weather change.
- Deepwater capabilities.

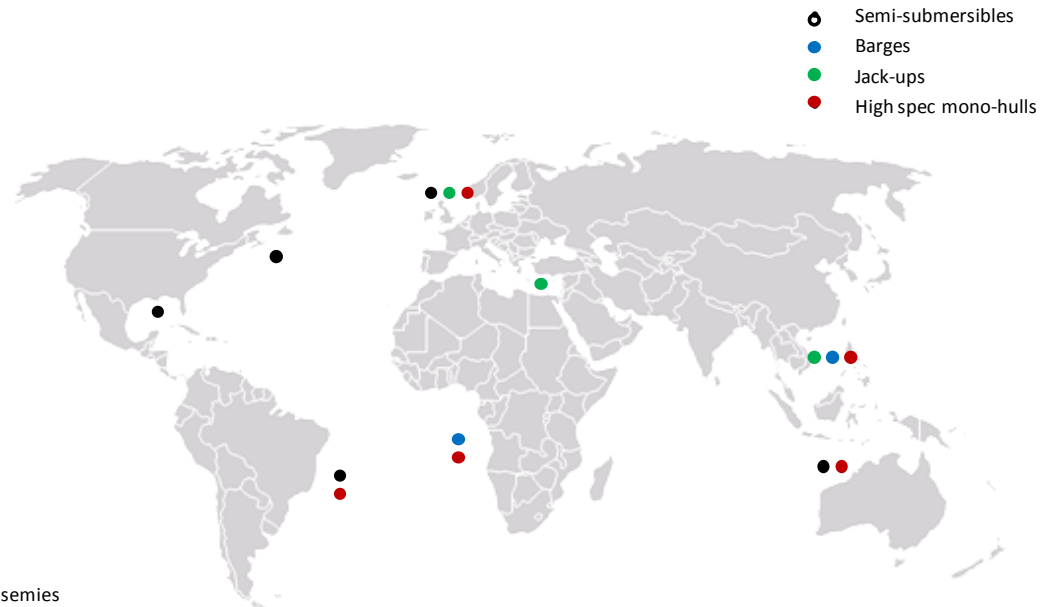
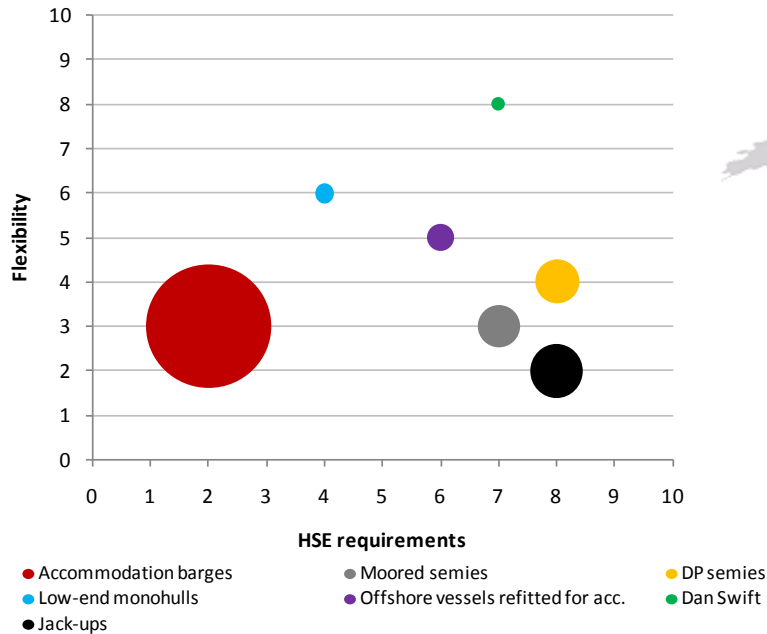
1) Note that "ships (all specs)" in the figure above are moored flotels without gangway.

2) Of 16% deep-water capable units in chart above, 14% are semi-subs



ASV Market Segmentation

- Flexibility in operations and conformance with strict Health, Safety & Environment requirements will be important drivers for market segmentation.
- High-end mono-hull units such as Dan Swift deliver added value in this respect.



ASV Demand

- Under-supply envisioned throughout forecast period.
- Day-rates of ~USD200/d forecasted for high-end accommodation units (average contract rate including mob/demob).

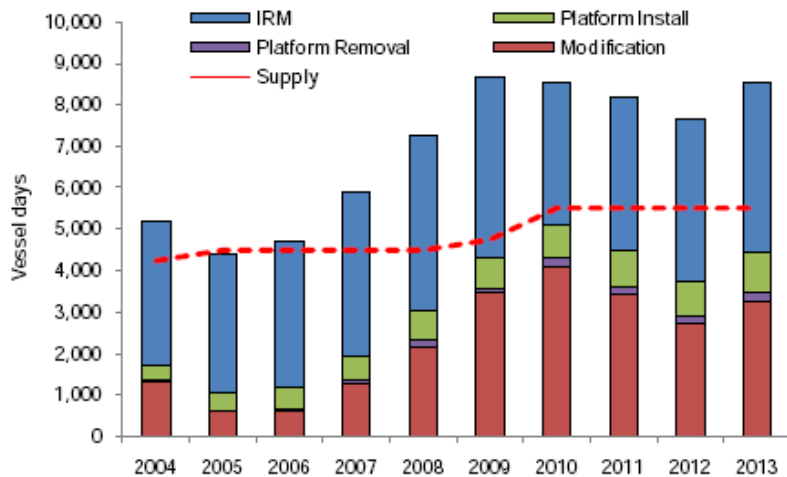


Figure 1-8: Combined Supply and Demand in Harsh Environmental Conditions 2004-2013

IRM: Inspection, Repair & Maintenance

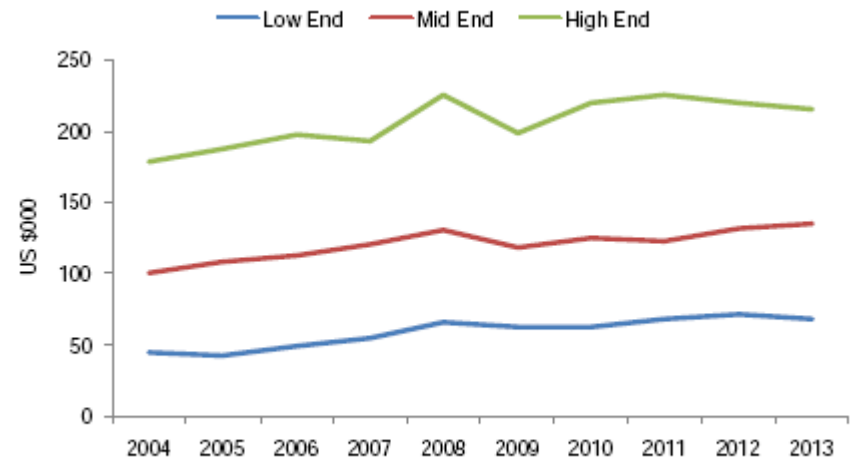


Figure 1-11 Accommodation Vessel Dayrate Indicator 2004-2013

Conclusion

ASV market summary:

- Ageing fleet in the high-end segment and very limited order-book.
- Market is expected to remain strong with attractive day-rates.
- The “Dan Swift concept” has proven very reliable and in many ways superior to existing designs.
- **Attractive growth forecast with new markets emerging and limited new capacity coming into the market.**

Critical success factors for the Dan Swift project:

- Identification of an attractive market opportunity.
- Courage to act in the absence of a secured charter after redelivery.
- Strong commitment to the project throughout the building process.
- High priority given to developing charter contract.

