Heerema Simulation Center

IMCA

Engineering with the Human Factor in the Loop

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OIL & GAS
- Fixed platforms
- Float-overs
- TLPs

REMOVAL
- Removal & Disposal of platforms

RENEWABLES
- Transformer platforms (HVAC & HVDC)
- Turbines and Foundations

HMC Offshore Construction Contractor
The Heerema Simulation Center

Simulation Area (floor 2)

- Bridge / DP Stations
- Ballast Room
- 2x Deck Rooms
- 2x Crane Domes
- Float-Over / Winch Station
- Instructor Room
Scope:

• Module installation on floating hull

Objective:

• Cost saving
• Determine impact loads based on operator skills
• Optimize clearance between pedestal crane
Approach

Engineer with the human factor in the loop

→ Engineering preparation
→ Simulation with Offshore Crew
→ Post-Process Results
Results

Engineer with the human factor in the loop

- Lower Design Loads for Supports
- Platform Crane
- Pre-trim Hull
- DP-behavior was stable
Conclusion

Engineer with the human factor in the loop

- Safer installation
- Reduced cost
- Efficient alignment
- Better overall understanding and procedure optimization
Thank You

Questions?