Robots Offshore
Ali Novruzov, Isobel Bodefeld, Manaf Asif & Vivian Le
A Drone-Crawler System to Aid the Industry in Inspections

Function
- Our drone uses cameras, thermal cameras, and ultrasonic sensors to inspect materials, check flaws in heat distribution, and detect corrosion.
- Our crawling robot compliments the drone as it’s deployed along walls to check for corrosion where the drone cannot reach.

Structure
- Our drones all use the same frame, however depending on the functionality of a particular drone it is equipped with different sensors or tools such as cameras, thermal cameras, and ultrasonic sensors.
- Similar to drones, the crawling robots all use the same frame and have different sensors based on their location/job. They carry out eddy current testing, magnetic particle inspection, and ultrasonic testing.

Images

Benefits
- Provides added safety to workers and ensures longevity of equipment
- Platforms can become more eco-friendly with more knowledge of carbon output and inputting ways to minimize it
- Would help the company be more time and cost efficient in unnecessary or postponed turnarounds
- Creates new job roles which leads to growth in the economy

Sources