

Biological Threats

Sharks



- similar drone attacked off Perth
- electroreception down to 5 nV/cm or 5×10^{-7} V/m (Ampullae of Lorenzini)
- yum yum yellow
- 670 psi bite force
- breach attacks on slow moving objects
- closer to shore holds large shark species

Coral Reefs



- world's richest & most extensive corals
- harbors more underwater species than any other nation
- reef bombings are an almost daily occurrence & could damage glider

Remora



- "shark-sucker fish", widespread distribution *especially* near the coast
- have caused trouble to other gliders
- up to five different species in the area could be a physical threat
- behavior is widely unknown and unpredictable, therefore hazardous

Biofouling



- warm and shallow coastal waters have more biofouling organisms
- organisms increase drag, disrupt ballasting, alter instrument calibration
- gliders use ClearSignal™ anti-fouling coating, but are still vulnerable

Pirates



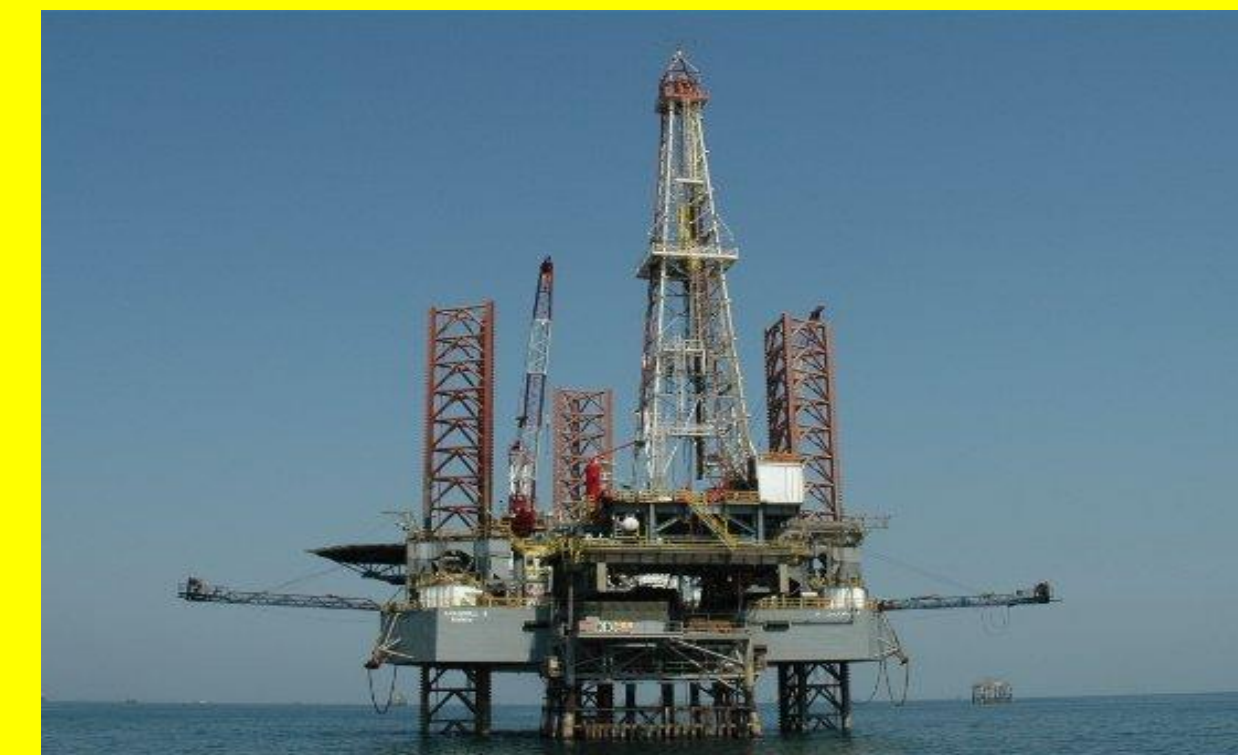
- second most dangerous pirating waters in the world after Nigeria
- more than half the world's pirating happens here
- pirates bypass authorities by hiding on islands surrounding the area

Fishing



- waters are dominated by artisanal fishing
- utilizing both non-powered and powered vessels
- one of the most productive tuna fisheries in the world
- glider can be entangled in nets and lines or be struck by fishing traffic

Resource Exploitation



- 40% of world's offshore oil comes from this region; minerals and sands exploitation widespread, often illegal
- though unlikely, there is potential for collisions, or pollutant interference
- maritime disputes could complicate transit through certain areas

Pollution



- The Indian Ocean is largely polluted by plastic debris
- Pollution covers about 10 million square kilometers of the Indian Ocean.

Human Threats