



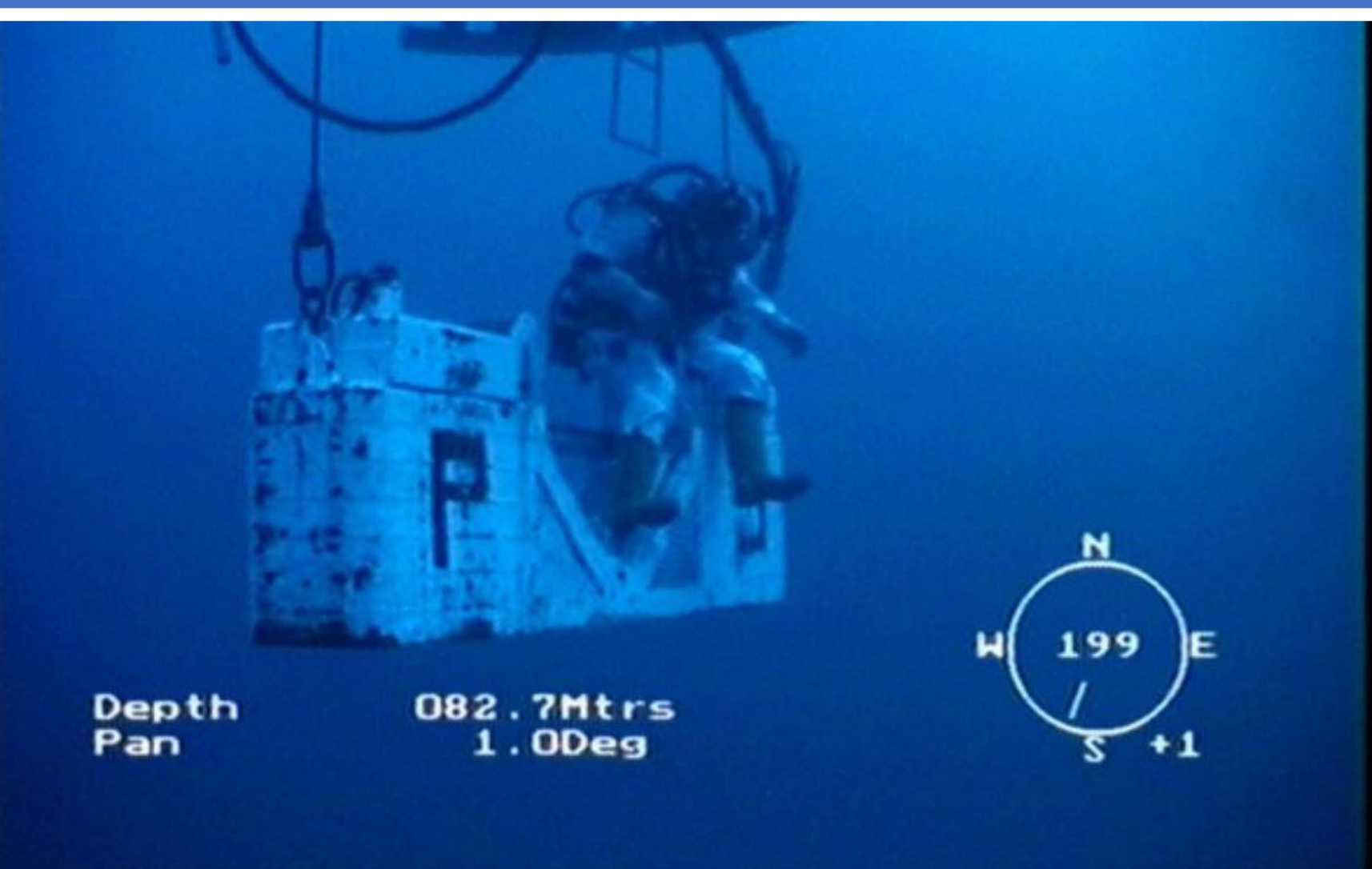
Diving Class - 2022



Impact of Saturation Diving

Saturation diving is done in deep water
 Mostly for oil and gas companies
 No divers in the water for these companies, prices start going up
 Divers also provide routine maintenance on platforms and pipelines

MAG: Rich, N. (2013, February 7). Diving deep into danger. *The New York Review of Books*, 60(2), 20.



Necessity of saturation diving

- Underwater gas and oil pipelines
- No need for repetitive decompression/ which in return becomes energy efficient
- Cost efficient

ERJ (JJ) The Assessment of Daily Energy expenditure of Commercial Saturation Divers Using Doubly Labelled Water. *Frontiers in Physiology*, 11, 1-7.

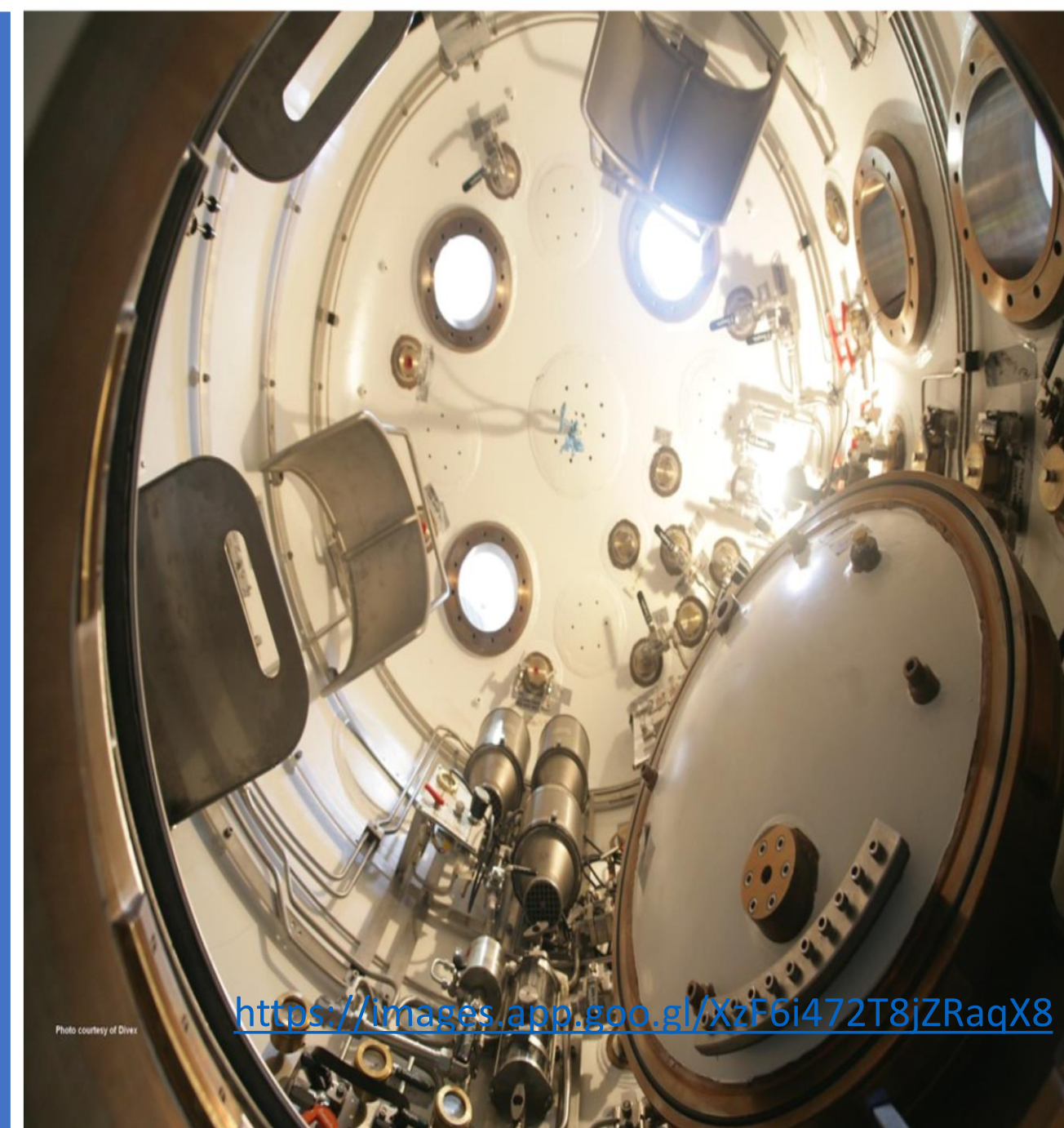


Compression

- PPO2 (partial pressure of oxygen) increases as you descend
- Upon descent your switched to a Heli-ox mix of air
- Decreased O2

Dive Bells and Saturation

- Dive bells are watertight
- Gas filled with gasses (HE & O2) from surface supplied hoses
- Emergency systems on board



<https://images.app.goo.gl/XzF6i472T8iZRaqX8>

Book: Nichols C., & Williams Robert. (2017). *diving bell*. Facts On File. (Encyclopedia of Marine Science)

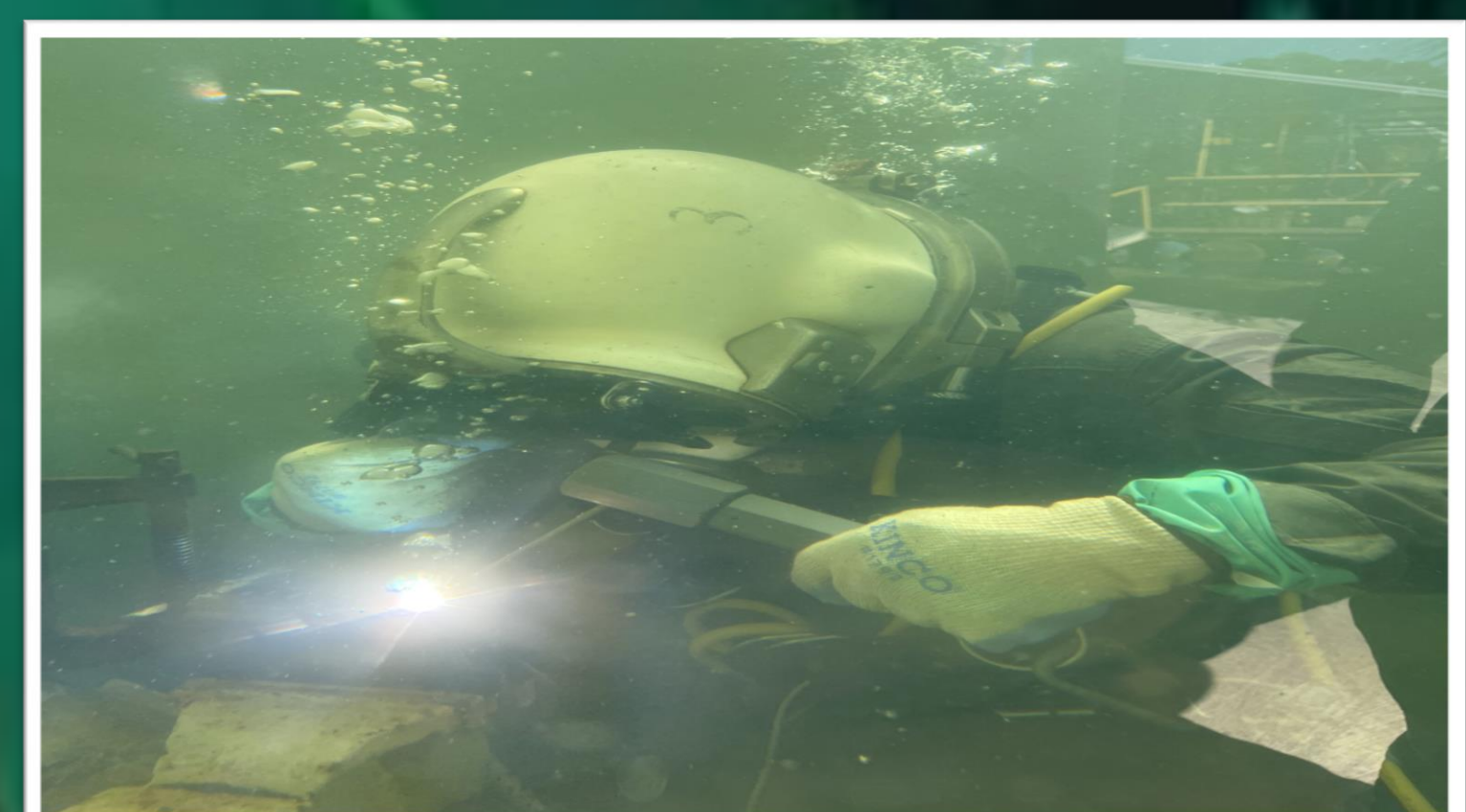
DSV'S Dive Support Vessels



<https://images.app.goo.gl/128L54m8AaLi6>

Supports diving operations to include Saturation

- Moon pool
- Dive hoses
- Four point
- DPS (Dynamic Positioning System)



Conclusions

- Obtain required certifications
- Wear the correct gear
- Understanding the science and physics of diving
- Follow the correct steps of launch and recovery of the bell and dive teams

By Following the Above Protocols: