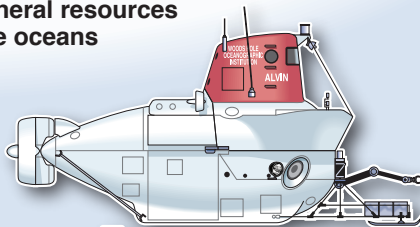


Race to bottom of world's oceans

A manned Chinese submersible, the *Jiaolong*, has successfully completed a Pacific Ocean dive to 5,057 metres, paving the way for a record-breaking 7,000m test dive in 2012 which would put China in the lead in the race to explore potentially vast mineral resources in the depths of the oceans

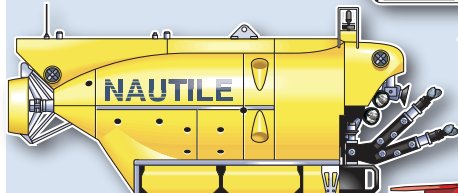
Alvin, U.S.

Length **7 metres**
Crew **3 people**
Max. depth **4,500m**
Launch **1964**



Nautile, France

Length **7m**
Crew **3**
Depth **6,000m**
Launch **1984**



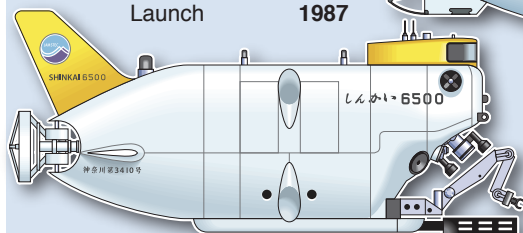
Mir, Russia

Length **7.8m** Crew **3**
Depth **6,000m**
Launch **1987**



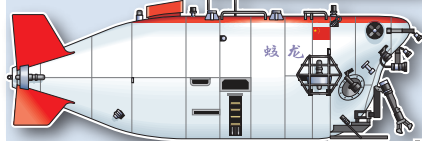
Shinkai, Japan

Length **9.5m**
Crew **3**
Depth **6,500**
Launch **1989**



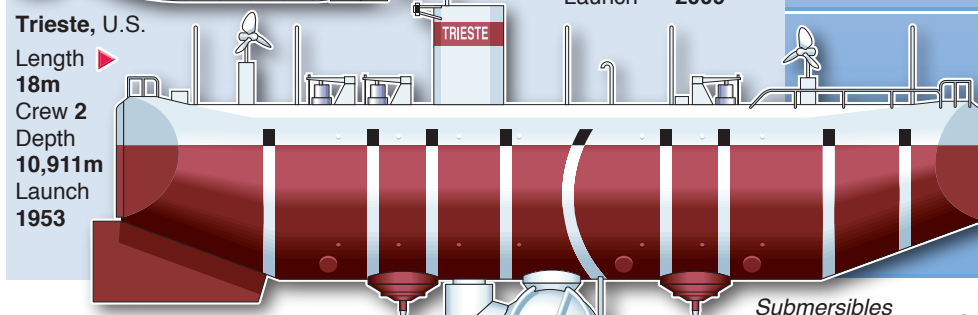
Jiaolong, China

Length **8m**
Crew **3**
Depth **7,000m**
Launch **2009**

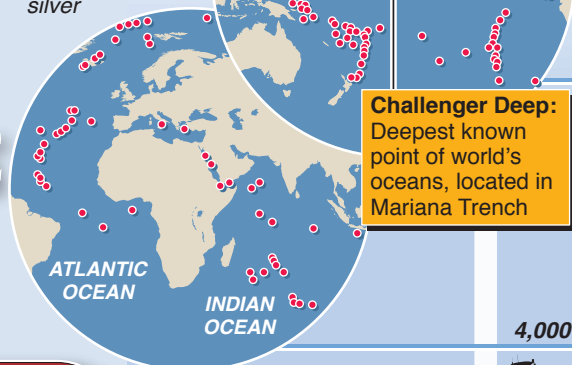


Trieste, U.S.

Length **18m**
Crew **2**
Depth **10,911m**
Launch **1953**



● Deposits rich in copper, lead, zinc, gold and silver



Alvin, 4,500m
Version designed to reach 6,500m planned by 2015

Nautile
6,000m

Mir
6,000m

Shinkai
6,500m

Jiaolong
7,000m

6,000

8,000

Trieste
10,911m

11,000

Submersibles shown to scale

DEEP-SEA EXPLORATION

1960: Jacques Piccard and Don Walsh dive 10,911m to floor of Challenger Deep in bathyscaphe *Trieste* – record still stands

1966: Alvin used to locate 1.45-megaton hydrogen bomb lost in USAF midair collision over Mediterranean

1979: Alvin gives scientists first ever view of "black smokers" – hydrothermal vents containing high levels of sulphur-bearing minerals – on East Pacific Rise

1989: Japan's *Shinkai* dives to 6,527m

1990s: Mir films wreck of *Titanic* for movie director James Cameron

2007: Mir plants Russian flag on Arctic seabed

Jun 2009: Nautile used in search for black box of crashed Air France Flight 447

2010: Jiaolong plants Chinese flag on floor of South China Sea

Jul 26, 2011: Jiaolong dives to 5,057 metres

1960s

1970s

1980s

1990s

2000s