The Offshore Industry
-middle-aged, but still learning

Mike Utt

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Production Platform
Summerland, California
Lake Maracaibo, Venezuela
Caspian Sea Soviet Era Up To 100 KM Offshore
When did the Offshore Industry begin?
Louisiana
September 9, 1947
Ship Shoal Block 32
There are 5 basic types of offshore “Oil Rigs”
1. Fixed Platforms
Fixed Platforms (>1000’ or 328m) - Installed or Sanctioned

- Shell Cognac 1978
- BP Amberjack 1991
- Exxon Mobil Heritage 1992
- Total Fina ELF Virgo 1999
- Exxon Harmony 1992
- BP Pompano 1994
- Shell Bullwinkle 1991

- 312m 1,025 ft. GOM
- 314m 1,030 ft. GOM
- 326m 1,070 ft. Southern California
- 344m 1,130 ft. GOM
- 366m 1,200 ft. Southern California
- 393m 1,290 ft. GOM
- 412m 1,353 ft. GOM
Compliant Towers (CTs), Compliant Piled Towers (CPTs), Guyed Towers - Installed or Sanctioned
Mobile Offshore Drilling Units
2. Submersibles
Posted Barge In Louisiana Bayou
World’s First Submersible Drilling Rig “Breton Rig 20”
HAYWARD-BARNSDALL
“BRETON RIG 20”
(TRANSWORLD RIG 40)

MOBILE
PONTOONS

1950

ODECO
“MR. CHARLIE”

HINGED
PONTOONS

1954

CALC
“S-44”

RECESSED
PADS

1954

ODECO
“JOHN HAYWARD”

FIXED HULL
EXTENSIONS

1955

PENROD DRYDOCK
(PHILLIPS RIG 42)

FLOATING
DRYDOCK

1955

OFSHORE “NO. 53”

FIXED HULL
EXTENSIONS
& SPUDS

1955

NATIONAL COAL BOARD
(ENGLAND)

CABLE CONTROLLED

1955

MAGNOLIA “RIG 52”

BIRD-ON-A-NEST

1956
3. Semisubmersibles
World’s First Semisubmersible Bluewater I
4. Jackups
DELONG-MCDERMOTT
“NO. 1” (OFFSHORE “NO. 51”)
FIRST MOBILE JACKUP

GLASSCOCK “MR. GUS 1”
COMBINATION TYPE
(ELEVATED DECK)

OFFSHORE “NO. 52”
CYLINDRICAL LEGS
WITH CANS

ZAPATA “SCORPION”
OPEN FARBCICATED
LEGS

ELECTRIC RACK AND
PINION DRIVE

1954

1954

1955

1956

GLASSCOCK “MR. GUS II”
(CORAL “MR. GUS II”)

SUPPORT MAT &
SPUDS

“DIXILYN 250”
CANTED LEGS

OFFSHORE “ORION”

STRAIGHT LEGS
(DEEP WATER)

1957

1963

1966
Offshore Company’s No. 51

World’s First Mobile Jackup
5. Drillships
World’s First Drillship: Submarex
Drillship Cuss-I
Zapata Sidewinder
Offshore Malaysia, 1963
Mobile Offshore Drilling Units
2004 Fleet

• Jackups - 389
• Semisubmersibles - 166
• Drillships - 40
• Drill Barges - 22 (51 with Lake Maricaibo)
• Tenders - 24
• Submersibles - 10 (includes 3 Arctic rigs)
Floating Production Systems
World’s First Floating Production Platform - Transworld 58
Semisubmersible Floating Production Systems
15 Deepest Units - Installed or Sanctioned
U.S. First Purchaser’s Crude Oil Price

$/BBL

YEAR


data from Energy Information Agency
TLPs Tension Leg Platforms - Installed or Sanctioned
Spars, Deep Draft Floaters (DDFs), Caisson Production Units (CPUs), Deep Draft Caisson Vessels (DDCVs), Single Column Floaters (SCFs) - Installed or Sanctioned
Genesis Spar
Horn Mountain Spar
Red Hawk
Cell Spar
If you know that there are different kinds of offshore “oil rigs”...
Drilling

• Platform Rigs
• Mobile Offshore Drilling Units
  - Drilling Tenders
  - Jackups
  - Submersibles
  - Semisubmersibles
  - Drillships
Production

• Fixed Platforms
  - Steel Jackets
  - Concrete gravity-based structures

• Floating Production Systems
  - Semisubmersibles
  - Tension-leg Platforms
  - Spar Platforms
  - Ship-Shaped FPSO’s
then you know more than most of the news reporters in the world.
• Since 1947, the offshore industry has moved from the first platform out of sight of land to safely producing in 7,000 feet (2,100 meters) of water and safely drilling in 10,000 feet (3,050 meters) of water.

• The industry is still learning, and there is more to come...
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