From Sea to Space
Diverse Products & In-Depth Services

Remote Operators Vehicles
- Work Class ROV Market Leader
- Completion & Construction Services
- Inspection, Maintenance & Repair
- Industry-Leading Subsea Simulations
- ROV Manufacturing
- Pilot/Technician Training School

Entertainment Systems
- Simulation & Training Systems
- Show Action Equipment
- Ride Systems

Space Systems
- Astronaut Training & Equipment
- Robotic Systems & Tools
- Thermal Protection Systems
- Commercial Space Products
- Engineering & Program Management

Navy Systems & Marine Services
- Submarine Rescue Systems
- Underwater Exploration & Recovery
- Inspection & Repair
- Advanced Robotics
- Ship/Submarine Alterations & Repairs

Subsea Products
- Control Umbilicals & Connection Systems
- High Integrity Control Valves
- Installation, Workover & Control Systems
- ROV Tooling & Work Packages
- Piping Connectors & Repair Systems
- Power & Pump Cable Manufacturing

Mobile Offshore Production Systems
- FPSO, MOPU & Spar Ownership
- Conversion Projects
- Leasing & Operations Management
- Engineering & Project Management

Subsea Projects
- Multi-Service & Dive Support Vessels
- Installations & Light Construction
- Inspection, Maintenance & Repair
- Project Engineering & Management
- Diving Services

Inspection Services
- Worldwide Inspection & NDT
- Advanced Inspection Technologies
- Specialized Inspection Systems
- Independent Inspection Authority
- Onshore & Offshore Services

www.oceaneering.com
Oceaneering International, Incorporated

- Oceaneering International, Inc. (NYSE: OII)
- Founded 1964
- Corporate Headquarters - Houston, Texas
- Worldwide: 66 locations in 18 countries, ~ 8,000 People
- Primary Business: Oil & Gas Services
- FY2009 Sales ~ $1.88 Billion
- Solutions for Customer needs in any harsh environment

Began servicing NASA and other space customers in 1978.

Oceaneering’s sales and profits have more than tripled since 2002
SAFETY
At Oceaneering; Safety is our #1 Priority

Personnel safety is always the primary consideration and will not be compromised.

- Oceaneering International, Inc.
#1 Operating Standard
Worldwide Operations Bases

Oceaneering’s Corporate Headquarters, Houston, Texas
Underwater Services
The World’s Leading Underwater Exploration Company...

- Pioneered deep commercial diving (to 1000’+)
- Led the diving safety revolution
- World’s largest ROV operator
- Operates NASA’s Neutral Buoyancy Laboratory

Millions of man hours of safe diving have led to our reputation as the #1 underwater services company in the world
Oceaneering Advanced Technologies
Oceaneering Entertainment Systems

OES designs, builds, and installs:

- **Dark Ride Vehicles:**
  - Spiderman Vehicles, Curse of the DarKastle, Tokyo Dome Hanwa
- **Large animated figures:**
  - JAWS Sharks, Jurassic Park Dinosaurs
- **Special projects:**
  - Shamu Believe; Times Square Glockenspiel; KSC Launch Ride Experience
Oceaneering Technologies

OTECH designs, builds, and operates special purpose systems for the USN and provides deep water search and recovery services:

• Mercury 7 capsule, CSS Hunley, RMS Titanic, HMS Hood & Bismark

• Custom remotely operated and autonomous vehicles

• Next generation submarine rescue system

• Sea-basing; HiCASS, Small to Large Transport
Marine Services Division

- MSD provides installs and mods to the USN for submarines, surface ships, and deep submergence vessels
  - Dry Deck Shelters, LCAC life extension u/w ship repair
- One of only three companies certified to perform SUBSAFE work
Oceaneering Space Systems (OSS)

- Headquarters: Clear Lake, Texas
- Offices: Friendswood, TX, Hanover, MD
- Primary Business: Product Development, Engineering, Testing, Manufacturing, & Training Services for Space
- ISO 9001:2008 Certified
- AS9100 Certified
- 2008 NASA George M. Low Award winner

**Key Business Areas:** Astronaut Equipment & Training, Robotics, Thermal Protection Systems
NASA George M Low Quality Award

- NASA’s most prestigious Quality and Performance Award

- Nominated by JSC in 2007 and 2008 in Large Business, Product category

- Selected by NASA HQ as national finalist in 2007 & 2008
Diverse Business Base

Programs & Customers – Partial List

Constellation Program
International Space Station
Space Shuttle
Delta II, Delta IV
Titan
Atlas
Hypersonic Vehicles
Missile Defense
Drug Discovery/Biotech
Battlefield Robotics
Future Combat Systems

- NASA JSC
  - Engineering
  - Mission Operations
  - Exploration Office
  - EVA Office
- DARPA
- USAF
- US Army
- Boeing
- Lockheed-Martin
- Northrop Grumman
- Jacobs Sverdrup
- Hamilton Sundstrand
- Sojitz
- Jet Propulsion Lab
- Raytheon
- Rigaku/Molecular Structures
- ATK
- United Space Alliance
- BAE
- Mitsubishi Heavy Industries
- MEI
- Thiokol
- Wyle

Our diverse business creates stability and opportunities for our employees
EVA Tools and Equipment
Astronaut Tools & Equipment for Safe and Reliable Space Operations...

- NASA’s leading DDT&E contractor for new EVA tools and equipment
- Responsible for sustaining engineering and replenishment of all operational EVA tools and equipment for Shuttle and ISS
- History goes back to STS-1 and includes all satellite retrieval and repair missions

Preparation for deployment of an ISS solar array

OSS provides sustaining engineering for all of NASA’s Shuttle & ISS EVA tools and crew aids
Extravehicular Activity - EVA
Safe and Effective Life Support Systems...

- Constellation Space Suit System (CSSS) Prime Contractor
- Advanced life support systems / cryogenic life support systems
- Spacecraft ECLSS

OSS Liquid Air Pack, Mars Exploration Simulation

NASA Concept of CSSS Configuration 1 and Configuration 2 Suits

Automated Nitrox Breathing Gas System for NBL
Constellation Space Suit System

For Launch/Entry/Abort/Contingency EVA
- Umbilical based life support
- For micro-gravity EVA (“floating”)

For Lunar Surface Ops
- Portable life support system (PLSS)
- For low-gravity walking, not floating
- High degree of suit commonality with Config 1
- Enhanced sensor & comms systems

Configuration 1
- Outer garment
- Original hand sketches by 20-year Oceaneering employee Bill Wightman

Configuration 2
- Umbilical Connection
- PLSS (Portable Life Support System)
- Pressure Garment
- Outer garment
Astronaut Training
Safe, Efficient Services and Management...

- NBL Operations
- Health, Safety, & Environment Management
- Critical Systems Engineering
- Mockup Development

Managing and Operating NASA’s Critical Astronaut Training Facilities

Astronaut Training at NASA’s Neutral Buoyancy Laboratory

Full Scale Space Station Trainer/Mockup At NASA’s Space Vehicle Mockup Facility
Logistics & Cargo Systems
Logistics Hardware and Services for Space...

- Cargo Containers
- Shuttle Payload Integration
- Cargo Bags
- Custom Flight Support Equipment (FSE)
- Turn-key Product Development
- Turn-key Services

Over 25 years of experience providing flight support equipment, and analytical and physical cargo integration services; pressurized & un-pressurized, commercial & government

SHOSS Cargo Boxes: The first multi-purpose, re-useable, commercial cargo boxes for space

OSS manufactured Nitrogen Tank Assy (NTA) transfers to new location on ISS

On-Orbit Installed Handrails attached to the European Columbus Module
Robotics & Automation
Reliable, Practical Solutions in Robotics, Automation, and Tele-Robotics...

- Biotech Automation
- DoD Field Robots (EOD)
- Space Station Tools, End Effectors, and Interfaces
- Telescience Systems/Telemetry Management
- Automated Material Processing
- Software Control Systems
- Embedded Controllers
- Displays, and Electronics

Combining state-of-the-art design with practical field experience for genuine solutions

Automated protein crystal processing system
OSS’ Terabot integrated with Matilda Base for EOD
Robonaut “Centaur”
Robonaut
Thermal Protection Systems
Turn-Key Thermal Protection Systems...

- Requirements Development
- Adv. Technology Development
- Design and Analysis
- Develop, Test, & Certify
- Manufacturing
- Installation & Field Service
- Inspection

- Foam & Cork
- Other Ablatives
- Blankets
- Ceramics
- Metallic TPS

NGLT/SLI Shuttle ERIS Missile
Delta II/IV LEAP Advanced Weapon Sys
X-33 Atlas IIAS Taurus
X-34 Titan IVB SRMU

Nationally recognized, turn-key TPS developer for NASA, Military, and Commercial expendable and re-useable launch vehicles
We have the tools, resources, and capabilities to certify what we design.
Electronics and Software Production
Full Service Design & Fabrication…

- NASA Certified ESD Workstations
- Surface Mount Assembly/Re-Work Stations
- NASA Certified Electronics Technicians
- ORCAD, PSPICE, VXWorks
- Flight S/W Certification
- Commercial to Full Flight Capability

Designing and Integrating Electronics, Software, and Mechanical Systems for Spaceflight Equipment
Manufacturing Services
We Build What We Design...

- Flight certified, State-of-the-art machine shop
- Mockup and prototype shop
- Standard & exotic materials, including composites
- Flight certified TPS and Softgoods manufacturing
- Flight certified Inspection Systems
- Certified and Bonded Stores
- Full traceability (as required)
- Commercial practices for commercial products

Highly skilled techs & machinists, state-of-the-art equipment, nearly 30 years spaceflight experience
Product Assurance
We deliver what the Customer orders…

- ISO 9001:2008 Certified
- AS 9100 Certified
- Full Configuration Management
- Safety, Reliability, & Maintainability Analysis
- NASA Signature Authority (Quality)
- Tailorable to meet Commercial and other Customer needs

Commerically Competitive Aerospace Quality Standards, Flexible Approach