Benefits of chartering RV´s for the offshore industry. Scientific Charter Experiences with BO Sarmiento de Gambo
Chartering Experiences

**BO Sarmiento de Gamboa**

16th ERVO Meeting, 11th–12th June 2014, Barcelona, Spain
Outlines

- **Large Scale Marine Facilities**
  - Characteristics
  - Support Facilities
- **Industry Collaboration Scenarios**
- **Incidence Industry Sectors**
- **Market & Opportunities**
  - Contacts- Contracts with Industry
- **Industry Requirement's**
The CSIC-UTM operates three RV’S (Global, Oceanic and Regional) under competitive national call.

1. RV Hespérides (Global)
2. RV Sarmiento de Gamboa (Oceanic)
3. RV Garcia del Cid (Regional)

Being two of them Large Scale Scientific Technology Facilities (ICTS), which have special national treatment for funding.
At 20 km from Vigo, inland, warehouse for holding and maintenance of heavy equipment:

- 6 Lab-containers (van)
- Winches and trawl winches
- Streamers, compressors...
Scenarios Public-Private Sector Collaboration

Seismic Scenario
- 6,000 m streamer 480 channels
- Portable seismic structure for gun arrays
- 2 compressors (25 m³/min), one on back-deck, other engine room
- 2 air gun strings with capacity 6000 cu. In.
- National 18 OBS Pool

Engineering Scenario
- Multibeam Echosounder deep & shallow waters
- Parametric sounding
- USBL
- Dynamic Position
- ROV, AUV, Vehicles capacity

Environmental Scenario
- CTD Rosette
- Piston Coring
- Hydrography, Mapping
- High Crane capacity

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Industrial & Civil incidence Sectors

**Natural resources**: Oil, Gas, Deep Sea mining, etc.

**Environment**: Civil protection, Marine mammals protection, Biodiversity

**Marine Technology**: Sensor, vehicles, Seafloor Observatories, seismic tools

**Energy**: Submarine cabling, wind farming, wave energy, etc.

**Shipping Cia**: Shipyards, ship design, green ships

**Management**: Services, HSE Control, Training, etc.
Market / Opportunities

**MARKET CAP (b $)**

- **EXXOM - mobil; 400,42**
- **REPSOL; 28,77**
- **CEPSA; 10,4**
- **ECOPETROL; 116,22**
- **Royal Dutch SHELL; 213,14**
- **FUGRO; 6,3**
- **ALCATEL-LUCET; 3,54**
- **Telefonica; 67,11**
- **GAS NATURAL ENDESA; 20,39**

**SALES (b$)**

- **EXXOM - mobil; 400,42**
- **REPSOL; 28,77**
- **CEPSA; 10,4**
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Source: Forbes List, May 2013

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**High standards, industry requirements**

**VESSEL AUDIT REQUIREMENTS**
- **OVID** (Offshore Vessel Inspection Database)
- **OVPQ** (Offshore Vessel Particular Questionnaire)
- **OVIQ** (Offshore Vessel Inspection Questionnaire)
- **OVMSA** (Offshore Vessel Management Self Assessment)

**The OVPQ Sections are as follows:**
1. General Information
2. Certification and Documentation
3. Crew and Contractor Management
4. Navigation
5. Safety and Security Management
6. Pollution Prevention and Environmental Management
7. Structural
8. Specialty Vessel/Unit Data
9. Deck Equipment
10. Communications
11. Propulsion, Power Generation and Machinery
12. Ice Operational Capability
13. Helicopter Operations
14. DP Capability and Systems
15. Lift Boats / Jack-ups

**The OVMSA are as follows:**
1. Management, Leadership and Accountability
2. Recruitment and Management of Shore-based personnel
3. Recruitment and Management of Vessel personnel
4. Reliability and Maintenance Standards
5. Navigational Safety
6. Offshore Operations
7. Management of Change
8. Incident Investigation and Analysis
9. Safety Management (Shore and Fleet Monitoring)
10. Environmental Management
11. Emergency Preparedness and Contingency Planning
12. Measurement, Analysis and Improvement

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**Step 1-**
Registration of your Company and the vessel R/V Sarmiento de Gamboa in Oil Companies International Marine Forum’s (OCIMF) Offshore Vessel Inspection Database (OVID)

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**HSE Policy (primarily requirements)**

- **Planning and field management of Injury & Illness (I&I)**
  - Provide guidance to ensure that prompt, adequate, and appropriate medical care is provided for work-related injuries and illnesses (I&I) in order to minimize the impact to employees.

- **Drug & Alcohol (D&A) Compliance**
  - Contractor must incorporate requirements into their A&D requirements
  - All workers must sign an acknowledgment that they have been informed, understand and will comply with Customer and Contractor A&D requirements
  - Workers must notify supervisors of OTC or prescription medications that may mentally or physically impair their work

- **Pre-Access & Annual:**
  - Contractors in Comparable to Designated (CTD) & Safety Sensitive (SS) Positions must have passed a valid A&D test within the prior 12 months before beginning work for customer.
  - Contractors working continuously for customer in CTD & SS positions must have an annual A&D test

- **Random Testing:**
  - All Comparable to Designated (CTD) personnel identified will be continuously subject to random A&D testing
  - Minimum rate of testing of CTD pool is 50% annually
  - Pro-rate number of tests needed for short term jobs

- **Environment (MMP)**
Global Incident Trends – Worldwide Geophysical Operations

• Incident analysis had several common themes
  – Failure to follow procedures
  – Failure to recognize the hazard / lack of situational awareness
  – Inadequate use of Last Minute Risk Assessments

• Root causes identified highlight potential areas for improvement:
  – Personal safety awareness
  – Behavioral based safety awareness

• Continuous focus on PPE
  – Improving technology (i.e. gloves, glasses)
  – Constant usage

2010 – 2011 Root Cause Analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Behaviors</td>
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<tr>
<td>Work Directions</td>
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<tr>
<td>Management Systems</td>
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<tr>
<td>Human Interface</td>
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<td>Procedures</td>
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<tr>
<td>Training</td>
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<tr>
<td>Natural Factors</td>
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<tr>
<td>Equipment Design</td>
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<td>Communications</td>
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<td>Equipment Maintenance</td>
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<td>Equipment Failure</td>
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</tbody>
</table>

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What is a Change?

- An alteration, modification, addition or revision from the project plan that could have a Safety, Health, Environment and/or Security impact on operations

Types of Change:

Operational: e.g., continuing of operations without a piece of critical equipment such as a back-up generator

Equipment: e.g., changing the type of drill (rotary vs. air)

Procedures: e.g., modifying an integrity critical procedure such as close pass (e.g. closest approach to a platform)

Field Personnel: e.g., replacing an integrity critical position such as a vessel officer, Party Manager, SHE&S advisor, etc.
MARINE MAMMALS PROTECTION (MMP)

- **EIA Previous Report**
  - *No injury to marine life*
    - Conduct survey taking guidance from **JNCC** guidelines for marine mammals / protected species
      - Pre-watch observation period (30 min for WD < 200 m)
      - Soft Start – 20 minutes
      - If line turns are shorter than 40 min, no need to
        - 3 MMOs onboard
        - PAM use during night start mandatory
        - PAM use during the day is required by client
SWOT Analysis

**Strengths:**
- Qualified technical personnel
- Experienced and qualified crew
- Marine Infrastructure
- Industry Standards

**Weaknesses:**
- Rigid hiring System
- Management (administration)
- Reduce personnel

**Opportunities**
- Industry (market) interested
- Demand industry: 2-D Seismic, Environment, "Deep Sea floor", etc.
- Services, knowledge

**Threats**
- HHRR: Crew & Technicians
- Infrastructure: Maintenance & Development
- Administration: low flexibility
BENEFITS FOR NATIONAL RESEARCH VESSELS

- Use the spare time of the RV’s
- Maintain high level training for the crew members
- Keep and maintain large scale infrastructure’s
- Reach High Industry Standards
- Help National Research Programs in difficult times

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BO Sarmiento de Gamboa accomplish the high industry standards to link through research contracts in marine industry business.

Thanks very much for your attention.