

#### 1 PROJECTS

A summary of the projects carried out by TARKA-SYSTEMS for marine/offshore/salvage/wind applications:

# **2015 NES OFFSHORE** FLOATOVER and MOTIONS

**Q2-Q3 2015:** Installation and start-up on site Sensors: Motions, GPS, Wireless-datalink,

RIDIUM Tracker, Flow sensor, RTG-GPS, Tidal sensor







# **2015 NES OFFSHORE** FLOATOVER and MOTIONS

**Q2 2014**: Preparation and assembly of complete Motion Monitoring System on barge for motions GPS and wireless link to tugs. Boxes powered by battery supply.

Software: Mlab to collect and present all sensor data

Sensors: Motions, GPS, Wireless-datalink, IRIDIUM Tracker.

**Q4 2014:** Preparation and assembly **Q2 2015:** Installation and start-up on site







# 2014 – 2015 RESOLVE MARINE SALVAGE MOTIONS and WIRELESS DATALINK

**Q4 2014**: Preparation and assembly of complete Motion Monitoring System with two separate stand-alone motion boxes with wireless link to Control Office. Boxes powered by battery supply.

Software: Mlab to collect and present all sensor data

Sensors: Motions, GPS, Tide, Wireless-datalink, IRIDIUM Tracker.

Q1 2015: Installation and start up on-site in South America



## 2014 BARGE MASTER NEW BUILT T40

**Q3 2014**: For new built product T40. Assembly of a portable measurement flight-case to be able to carry out measurement on-site. Case has modular setup for universal sensor inputs. Development of special measurement software.

Software: Mlab to collect and present all sensor data,

connection with SIEMENS plc. Sensors: Motions, GPS, Force, PLC





### **2013-2014 HEEREMA BARGE H851**

**Q2-Q3 2013:** Preparation and assembly of hardware and software for complete monitoring system on the largest barge of the world. System consists of the following sensors:

Motion, DGPS, IRIDIUM Tracker, Tide, Wind, Flow, Wireless datalink with three tugs.

FLOAT-OVER: Barge was used to install ARKUTUN-DAGI topside

Q3 2013: Extension of SOW with strain-gauges in water ballast tanks. 15 sensors in 3 tanks

Q1 2014: Installation on-site in Korea and China

Q2 2014: Extension of SOW with extra strain-gauges in ballast tanks, 10 sensors in 2 tanks

Q3 2014: Installation on-site in Korea and China

Q1 2015: Barge is prepared for new float-over project



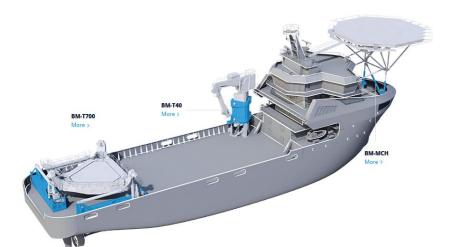


### 2013 BARGE MASTER NEW BUILT T700

**Q3 2014**: For new built product T700. Assembly of a complete measurement system to gather all incoming signals. Development of special measurement software for test during sea-trails

Software: Mlab to collect and present all sensor data, connection with SIEMENS plc.

Sensors: Motions, GPS, Force, PLC, Wave Buoy





2013 MAMMOET SALVAGE

**Q1 2013**: Complete monitoring system for wreck salvage for subsea monitoring of rotations and accelerations during salvage operation. System includes also a wireless video buoy and a wireless data buoy.

System used for projects in Malaysia, Canada, Irak

Software: Mlab to collect and present all sensor data.

Sensors: Motions, GPS, Wireless video buoy, wireless data buoy





2013 HEEREMA TRANSPORT

**Q2 2013**: Complete monitoring system for motion and location monitoring during transport



Projects carried out as Lead Instrumentation Engineer at Maritime Research Institute Netherlands (MARIN). (Period 1998 -2011, average of 100 days a year abroad for installation en measurement activities)

- **US Coast Guard,** site manager and full installation of measurement system on Coast Guard cutter BERTHOLF. (USA)

- **BLUEWATER FPSO GLASDOWR**, Installation and maintenance on fatigue life system.(Scotland, South Africa, Singapore)
- **ANADARKO TLP MARCO-POLO**, motion monitoring system for tow-transport (Golf of Mexico)
- **FSPO USAN,** Installation of complete measurement system (Angola)
- **Cruise ship MILLENNIUM,** installation of sensors and system for research project.

### **References from clients:**

**Barge Master:** <a href="http://www.tarka-systems.nl/upload/file/quick/TarkaOffshore2013.pdf">http://www.tarka-systems.nl/upload/file/quick/TarkaOffshore2013.pdf</a>

United States Coast Guard: http://www.tarka-systems.nl/upload/file/quick/USCG Wijgerse ltr 02.pdf



# Brief summary of projects and portable solutions:































