Systems Integration Project Overview

DELIVERING TURNKEY SOLUTIONS ON-TIME, ON-BUDGET
Systems Integration Capabilities

Turnkey systems integration of communication, security and crew morale solutions developed with robust engineering, analysis, design and project management processes and tools.

Solution Infrastructures Include:
- Offshore rigs and platforms
- Chemical plants and refineries
- FPSOs and maritime vessels
- LNG plants and other land-based facilities

Engineering, Analysis and Design Capabilities
- Requirement and specification development
- RF and radar coverage analysis
- Network and security design
- Front-end engineering and design
- Conceptual trade studies through detail design
- MW Path Analysis, VSAT Link Budgets

Integration and Testing Procedures
- System buildout and integration
- Factory Acceptance Testing (FAT)
- Site Acceptance Testing (SAT)

Facility and Network Infrastructure
- Teleport construction and upgrade
- Radio and microwave towers
- Cable plans and termination points
- Power systems and loading
- Equipment cabinets and racks
- Heat load analysis

Client Support
- Installation, maintenance and operations support
- On-site training
- 24/7 Customer Support Centers (CSC)
- In-country customs and delivery management
- Coordination of field installation activities

Entertainment and Morale Services
- IPTV
- TVRO

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Connectivity
- Satellite
- Microwave
- LAN/WAN
- Subsea fiber
- Wireless voice
- Wireless broadband

Communications
- Voice, Video and Data
- Internet and Intranet LAN/WAN
- PBX – Analog and VoIP
- Video streaming/conferencing
- Radio systems – trunked, P25, and conventional

GLOBAL SYSTEMS INTEGRATION PERSONNEL
Angola • Australia • Brazil • Indonesia • Mexico • Norway • Singapore • UAE • UK • US

RICH LEGACY OF SYSTEMS INTEGRATION EXPERIENCE
Harris CapRock has three decades of experience in designing and integrating multiple, complex telecommunication systems on-time and on-budget. We provide project management and systems integration services to oil and gas clients with operations all around the world.
Gulf of Mexico Well Containment Project
Harris CapRock deploys turnkey systems integration solution onboard lightering tankers

CUSTOMER:
Gulf of Mexico well containment and technology company

FAT LOCATION: Houston, TX

INSTALL/INITIAL COMMISSIONING LOCATIONS:
Dynamic Industries Yard – Lake Charles, LA
Point8 Yard – Louisiana

FINAL COMMISSIONING LOCATION:
Lake Charles, LA and/or other Gulf of Mexico port locations.
  > Commissioned vessels will have marine well containment responsibility for the entire Gulf of Mexico

TOTAL ESTIMATED VALUE: $3M

PROJECT DETAILS:
> IP PBX (VoIP)
> Public Address/General Alarm
> CCTV (IP Camera)
> Completed detail design and testing of the telecommunication systems and comprehensive documentation package

Vessels will operate as lightering tankers during normal operations. When a disaster call or drill is announced, the vessels will come to port, off-load crude oil, and sail to the designated port where the containment system and telecommunications modules are stored. Once all well containment modules are installed and operating, the vessels will head to the disaster site for spill containment.

Angola Deepwater Project
Harris CapRock deploys turnkey systems integration solution onboard deepwater production platform

CUSTOMER:
Global, major E&P operator and shipbuilder

FAT LOCATION: Houston, TX; Pennsylvania; Norway; U.K.

INSTALL/INITIAL COMMISSIONING LOCATIONS:
Delta Engineering – Houston, TX
Shipbuilder Headquarters – South Korea

FINAL COMMISSIONING LOCATION:
Luanda, Angola
  > 50 miles offshore Cabinda, Angola in approximately 1,200 feet of water

TOTAL ESTIMATED VALUE: $4.2M

PROJECT DETAILS:
> VoIP, MDF, IDF, DC Power/UPS System
> Radio Systems – Marine, Aviation, Crane, Microwave, IP Remotes
> Platform/Trunking Repeater Systems
> ETV System, TVRO
> Radar System
> Back-up Satellite Phone System
> Copper LAN Network
> Fiber Network
> Wireless LAN System
> PTP Microwave System
> Termination and testing of all instrumentation cabling (copper, fiber and coax)
> CCTV
> Public Address/General Alarm
> DC Power/UPS System
> Incident Command Center Communications
> Communications Towers
Gulf of Mexico Deepwater Project

Harris CapRock deploys turnkey systems integration solution onboard deepwater production platform

CUSTOMER: Global, major E&P operator

FAT LOCATION: Houston, TX

INSTALL/INITIAL COMMISSIONING LOCATIONS:
- Powell Industries – Houston, TX
- Shipbuilder Headquarters – South Korea
- Gulf Island Fabricators – Houma, LA
- GMF Ingleside – Aransas Pass, TX

FINAL COMMISSIONING LOCATION:
- Production platform site, Gulf of Mexico (2014)
  - 225 miles offshore New Orleans, LA,
    in water depths of 5,300 feet

TOTAL ESTIMATED VALUE: $4.5M

PROJECT DETAILS:
- Radio Systems – VHF Marine, UHF Trunked, Survival and Aeronautical
- AIS (Automatic Identification System)
- Weather Tracking Systems
- Cat-6 and Fiber-Structured Cabling
- Personnel on Board
- Infrastructure to Support Communications Services
- Entertainment Television

Brazil Deepwater Project

Harris CapRock deploys turnkey systems integration solution onboard one FPSO and two production platforms

CUSTOMER: Global, major E&P operator

FAT LOCATION: Houston, TX

INSTALL/INITIAL COMMISSIONING LOCATION:
- Kiewit Offshore Services – Ingleside, TX

FINAL COMMISSIONING LOCATION:
- Macaé, Brazil
  - 53 miles offshore Brazil in the Campos Basin

TOTAL ESTIMATED VALUE: $2.5M

PROJECT DETAILS:
- Radio Systems – Aviation, GMDSS
- VHF FM Radio Repeaters and Handhelds
- Non-Directional Beacon
- Network Equipment
- Wireless Bridges
- Fiber-Optic Systems
- VoIP Telephone Network
- VSAT
- Personnel on Board
- Infrastructure to Support Communications Services
- Entertainment Television