

# International Association of Drilling Contractors



## ART BOP Controls Subcommittee Meeting

14 May 2014

9 – 11 am

IADC

10370 Richmond Ave., Suite 760

Houston, TX 77042

## Minutes

Chair Person – David Dartford – Noble Drilling  
IADC Chair -

Will Averil – Chevron- driving contractors to take the lead.

BOP Controls – Best Practices

- Consensus on competency training

Root Cause Analysis – Operational Excellence-Noble implemented an Operational Excellence Reliability Assurance Group

ISO 14224

Classification of Equipment of Failures

Best Practices – send to position not to person

Review of Noble Equipment Failure Investigation

- Subsea
  - Summary Forms to ISO Codes
  - Planned Time – report
  - Fluids are part of the root cause analysis
  - Competency Training
- Transfer of best practices to IADC

BOP Controls

- Built in diagnostics
- Internal diagnostics
- Built in analysis resulting in overwhelming alarms
- Not data but analysis – owner analysis – has ownership
- Separate components not stifling competition
- White Board – nuts & bolts
  - How long to repair –
    - KPI's
    - User Controls – standard deviations
  - Alarms Functions – 2 types
    - Alarm information
    - Data information
  - Borrow from other technologies
    - Aerospace
    - Nuclear
    - Process Industry
  - Benchmark Test Valves

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- What is reliability
- Data feed from the field – what is driving the technology
  - Process Industry
    - Reliability data specifications
    - Manufacturers provide reliability data
    - Gathering data
  - Reliability and Safety
    - Separate KPI's
    - Reliability – How long to repair
    - User Controls – standard deviations
    - Alarms and Functions – balance of information

## Drilling Industry

- View themselves as unique and cannot borrow from other industries
- Lock into technology ; does it stifle technology
- More sense to put more diagnostic on stack
- Analytical design stifles technology

## Electrical World –Cyber Security DNV has one week

- Controls standards coming out – with more data being generated in real time  
compromise on security is no compromise
- Commercial and safety concerns in protecting data.

## Final Overview and Efforts

- Cyber Security
- Getting data returned
- Sharing data with OEM's
- Returning broken components back to OEM's for performance base manufacturing with base lines , Common trends – Difficult in certain areas – One of Nobles Best Practices
- Target Text for best practices
- Effort and work on componenets

## **Attendance:**

Tony Modaro, AWC Incorporated

Floyd Estay, Axon Energy Products

Chris Robertson, Axon Energy Products

Gene Cammack, Exida Consulting

Don Hickman, Hickman Sales & Service

Scott Maddox, IADC

Bob Cowan, National Oilwell Varco

David Dartford, Noble Drilling

Charles Graff, Parker Hannifin Corporation

Eldon Thomas, Parker Hannifin Corporation

Carlos Beltran, Parker Hannifin Corporation

Peter Skipp, Rockwell Automation