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# Collision Avoidance and Well Interceptions – “Hits and Misses”



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# ISCWSPA

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Society of Petroleum Engineers

Wellbore Positioning Technical Section

Industry Education Sub-Committee

# Wellbore Positioning E-Book

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<http://www.uhi.ac.uk/en/research-enterprise/energy/wellbore-positioning-download>

And through link on the Docs and Publications Page of  
[www.ISCWSA.net](http://www.ISCWSA.net)



# The Steering Committee

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Co-Chairs:

John Thorogood – Global Consultant

John Wright – Bearco

William Allen – BP

Pete Clark – Chevron

Steve Grindrod – Copsgrove

Phil Gurden – BHI

Ben Hawkinson – SDC

Angus Jamieson – Tech 21

Simon McCulloch – Maersk

Steve Mullin – Gyrodata

Benny Poedjono – SLB

John de Wardt – De Wardt

Harry Wilson - BHI

Robert Wylie - NOV

# Attendees

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33 Operators

42 Service and Consultant

4 Academia



# Keynote – Hugh Williamson B.P.

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- Collisions occur more often than thought
  - IADC collect NPT data through a confidential website
- BP manage risk through OMS (Operating Management System)
  - Accountability
  - Training
  - Competency
  - “Systematic and in Control”

# Session 1, Database Integrity

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- Positional Database recognized as valuable company asset – by some
- ISCWSA operators group working on standardized raw data reporting format
- Steve Sawaryn recommended OPC automation format



# Session 2, Collision Avoidance Management

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- There is no generic gyro error model
  - ISCWSA does not validate or approve
- Should we rely/promote regulation to improve positioning
- Three common practices – SF, PoI, MASD
- Collision avoidance plan entirely dependent on survey accuracy – Survey program must be executed as designed
- Ranging for collision avoidance



# Session 3, Practical Directional Drilling

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- Call for DD certification program
- Increasing use of remote control centers
- DD companies need collision avoidance and risk analysis process + management of deviation from plan

# Session 4, Relief Well Design

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- Contingency Issues, what a minefield!
  - Intersection risk much reduced by accurate survey
- Think you can drill a relief well?
  - Publications of Collision Avoidance Sub
  - Survey Program Exercise
  - Ranging Interval Calculation
  - Drilling simulator

# Session 5, Interception Techniques

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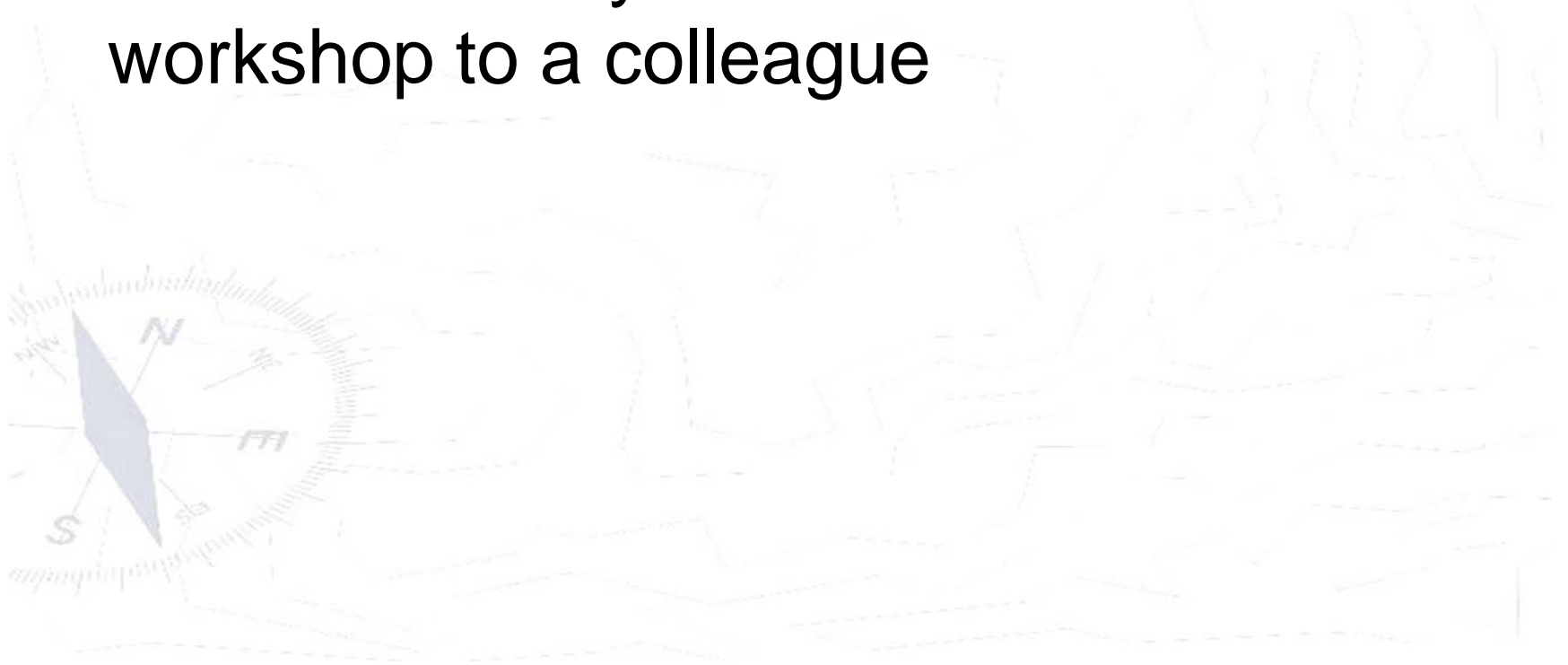
- Focused on Mag-Ranging
  - Good description of two main types, passive and active
- Alternatives – Acoustic?



# Attendee Survey

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- Overall rating – 78.3%
- 51.1% definitely would recommend the workshop to a colleague



# Next Steps

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- SPE Paper, Amsterdam
  - Authors: Thorogood, de Wardt, Mullin and Bacon
- Scribe report with presentations to made public
- Repeat ATW
- Or “Advanced Wellbore Positioning for Improved Reservoir Performance”

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# Education Sub-Committee

Meeting Number 3

San Antonio Oct 10, 2012

# Mission Statement

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- ***Raise Awareness and Understanding of Wellbore Positioning Technology and Practices across the Industry***

# The E-Book

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- JPT might give us free ad
- Article for the JPT / AAPG / SPWLA
- Local organizations as well (e.g., in Houston, Lafayette, etc.)
- Email blast to SPE members
- Possibly in the AAPG trade paper
- Advertise to colleges
- Encourage UHI to contact universities that have Petroleum Engineering programs
- Generate a course based on the book



# E-Book Presentations

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- Standard modules based on the ebook
- 10, 15, 20 slides on each major topic/chapter
- Must develop a template
- Must insist that authors include Notes, as well as the slides
- Owners of chapters could produce slides

# Action Items 1

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- Gather presentation from Angus (Steve)
- Gather presentation from Ross Lowdon and Harry Wilson (Steve)
- Create a template for ISCWSA presentations (Steve; will send it around)
- Volunteer to produce presentation for e-book chapters (all)
- Peer review of presentations (Carol to lead, but technical detail will be for others to review)
- JPT: Advertising e-book (Robert)
- SPE WPTS Awareness Presentation slides (Ben) and peer review (Educational Committee)

# Action Items 2

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- LinkedIn group (Carol)
- Find out the legal issues on video taping ISCWSA talks and/or ebook-chapter presentations (e.g., via Cametsia) (Jon Stigant)
- Publish Educational Subcommittee Mission Statement – put it on the website and/or modify ISCWSA Mission Statement (Steve to present at ISCWSA general meeting tomorrow)
- Topical Luncheons (Robert)
  - URTeC (?) – SPE/AAPG/SEG sponsored convention on unconventional resources
  - New Orleans

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# Thanks

