

IADC Advanced Rig Technology (ART) Committee 10.00-11.30 Thursday 1 May 2025 Hybrid meeting IADC HQ, 3657 Briarpark Dr Ste 200, Houston, TX 77042 And on Zoom

Minutes

IADC Advanced Rig Technology Committee Co-Chairs Trent Martin (Transocean) and Alex Groh (Patterson-UTI) opened the meeting and welcomed participants. IADC's Linda Hsieh reviewed antitrust guidelines, emphasizing that all IADC meetings must comply strictly with antitrust regulations and avoid discussions on pricing, market allocation, or restrictions on services.

Upcoming Events:

ART Conference 2025 (Reykjavík, Iceland, 30 Sept - 1 Oct):

Alex Groh reported a record number (76) of abstract submissions, resulting in a highly competitive program with around mid-forties presentations accepted. The event will include panel discussions and diverse topics reflecting the group's mission. A geothermal rig site tour is planned for the conference's third day, encouraging attendees to remain through the entire event. Sponsorship opportunities remain available, and participants were urged to reach out if interested. Currently, the keynote speaker slot remains open, with Iceland Drilling under consideration.

ART Spark Tank (Late August 2025):

Trent Martin outlined the revival of Spark Tank, designed to provide visibility to innovators and small companies with promising ideas or technologies applicable to drilling operations. Abstract submissions are due by 24 June. The event, similar to the "Shark Tank" format, will occur in the week of 26 August, with senior leaders from operators, drilling contractors, and service companies serving as panelists ("sharks"). The committee requested assistance identifying suitable panelists and asked members to circulate the call for submissions widely.

IADC DEC Forum (1 July, Transocean, Houston):

Scheduled for early July at Transocean's offices, the forum will focus on rig power systems. Members were encouraged to participate.

Recent Events Recap:

DSATS/ART Symposium (Stavanger, Norway):

Alex Groh praised the recent symposium, highlighting excellent presentations focusing on the application of automation technologies outside traditional oil and gas sectors, demonstrating strong cross-industry applicability.

D-WIS Demo Day: The second D-WIS event reportedly went well. Next one will be <u>Demo 2</u>.

Current Projects and Initiatives:

Registration for any of the project-specific meetings will be posted on the <u>IADC ART</u> <u>meeting page</u>.

Bit Dull Grading (Project Lead: Paul Pastusek):

Paul Pastusek reported this project is nearing completion, with minimal remaining work on the drill bit section. *A final team meeting is scheduled for 23 June with the intent to address any remaining changes prior to publication.* Participants acknowledged the significant effort contributed by Paul and his team. The BHA grading portion requires substantial further development and will likely become a separate future project. *Matt Isbell and Blaine Dow volunteered to assist in finalizing the drill bit portion*.

Control System Best Practices (Project Lead: Blaine Dow, SLB):

Blaine Dow presented the intent behind this educational project, aimed at increasing industry awareness of best practices in setting up and utilizing drilling control systems (e.g., autodrillers, torque management systems). The objective is to create training materials (potentially including both video and written content) tailored to different audiences, such as drillers and system designers. The project proposal has been submitted to IADC Division VPs for approval. Lee Womble, IADC Drilling Services Divison VP, was on the call and indicated his support for the project.

A kickoff meeting is scheduled for 5 June. Numerous members volunteered, including representatives from Patterson-UTI, Transocean, HMH, NOV, Hess, Texas A&M University, and Petrobras, highlighting broad support.

Al Landscape in Drilling (Project Lead: Alex Groh, Patterson-UTI): Alex Groh reported that the IADC Executive Committee has asked ART to develop a white paper outlining the current and future landscape of Al specifically related to rig automation and technology. The document aims to educate decision-makers and implementers on practical applications and potential future advancements. *A project scoping session is set for 27 June. Volunteers include Alex Groh, John de Wardt, Ross Mahler, Ryan Berger, Gabriel Felipe, Dan Gudall, Mike Weidenfeller, Martin Kershman and Roman Shor. Alex will draft a detailed proposal to be sent to Lee Womble for final review within the next 2 weeks.*

Alternative Fuels/Energy Initiative:

Trent Martin discussed resuming this initiative, which had received conditional approval from the IADC Executive Committee several years ago, noting that it will examine alternative energy solutions and fuels for rig operations to reduce emissions and

increase sustainability. Proposed areas of study include natural gas engines, battery storage solutions, and hybrid power configurations. An initial meeting is targeted for 19 June, and volunteers include Ajay Kulkarni, Dan Asher, Kyle Martin, and Mike Weidenfeller.

Addition of DSATS/D-WIS Glossary Terms to IADC Lexicon:

Matt Isbell and Nickolas Brown described a proposal to integrate the existing DSATS and D-WIS automation glossaries into the IADC Drilling Lexicon to standardize automation and rig technology terms across industry use, potentially creating a new "rigspecific category" in the Lexicon. The existing glossary contains over 100 specific automation and interoperability terms. The committee discussed potential complexities, especially where regulatory definitions differ from technical or operational definitions. Matt and Nickolas will work with Mark Anderson with Ensign to draft a scoping document and present it to Trent Martin/Alex Groh for discussion, so the proposal can be presented at the next IADC Drilling Services Advisory Panel meetingon 3 June to gauge interest and feedback.

Next Committee Meetings:

Q3 Meeting: Scheduled for 5 August 2025 (In-person in Houston and online). ART Conference: 30 September - 1 October 2025 (Reykjavík, Iceland). Q4 Meeting: Scheduled for 11 November 2025 (In-person in Houston and online).

Meeting Closure:

The meeting adjourned following confirmation of action items, next meeting dates, and expressions of thanks for active participation both in person and online.

In-person attendees (IADC room):

Alexander Groh, Patterson-UTI Blaine Dow, SLB Crispin Chatar Dan Gudall, HMH Daniel Salinas, NOV Brandt Martin Kershman, TeqniSolutions Michael Weidenfeller, Capterillar Nickolas Brown, Ensign Taylor Pritchard, Transocean Tom Yost, NOV Grant Prideco Trent Martin, Transocean Linda Hsieh, IADC

Virtual attendees (via Zoom):

Ajay Kulkarni, Transocean Dan Asher, IRE Oil and Gas Darren Mourre Dmitry Kuravskiy, SLB – Celsius New Energy (Boston)

Elias Ghaly, Texas A&M University (PhD student) Gabriel Felipe, Petrobras Hussein Anifowose, Noble Corporation John de Wardt, DE WARDT & COMPANY Kamal Sanjakdar, Valaris Kyle Martin, Valaris Lee Womble, SLB Matt Isbell, Hess Paul Pastusek Roman Shor, Texas A&M University Ronald Schmitz, Trax Electronics Ross Mahler, Moxa Ryan Berger, Valaris Sriram Vengalathur, HMH Stephen O'Shea, ADS Services Travis Burke, Power Chokes