

Agenda

- Background and Industry Drivers
- Technology
- Key Learnings and Operational Implications
- Future Development and Scaling
- Conclusions and Takeaways

Industry Context & Motivation

- Continuously improved HSE
- Emissions reduction
- Higher efficiency and lower total cost
- Alignment with energy transition and digitalization

Reach Remote Concept Overview



Work-class ROV



Reach Remote – Ship of the Year 2024 by Skipsrevyen

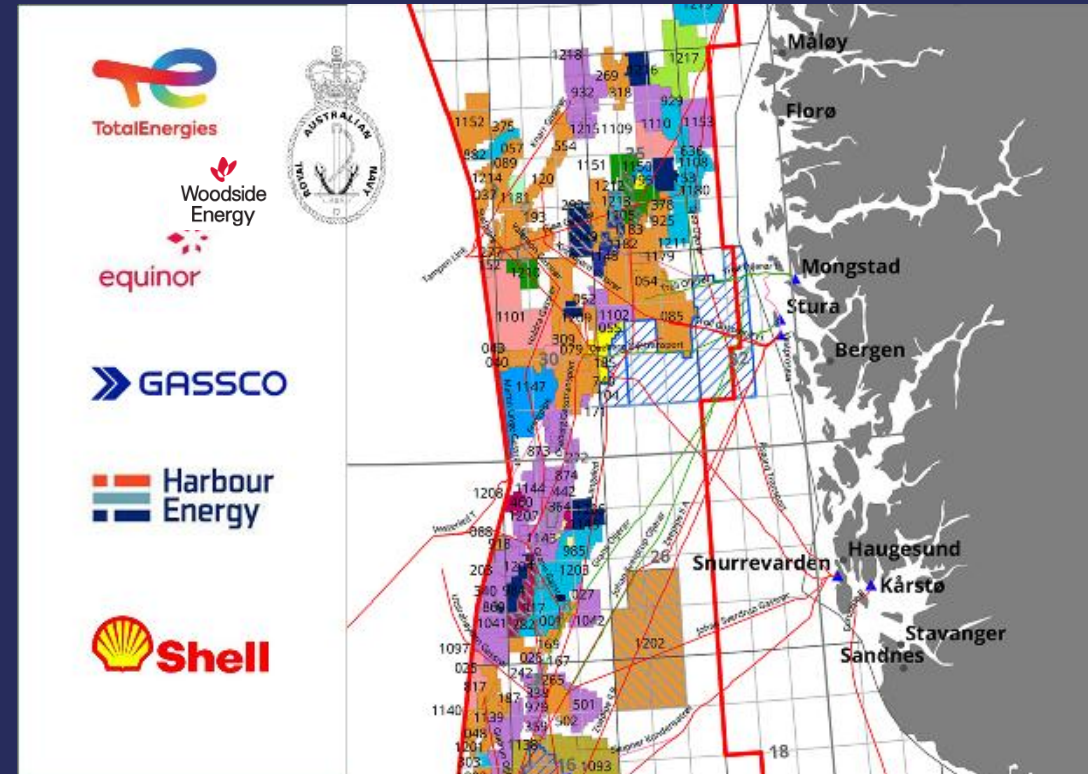


Length: 23.9 meters
Designed with DP2 principles
Electric Work Class ROV onboard
Hull-mounted survey sensors
Cyber Security management plan
Endurance of 30 days
No personnel required offshore
Norwegian Flag

Diesel-electric hybrid propulsion
Aerial Drone Capacity
Multiple communication carriers
EM2040, SBP TOPAS PS120
5,5 m max draft
11 knots max speed
3,5 m Hs, 20 m/s wind

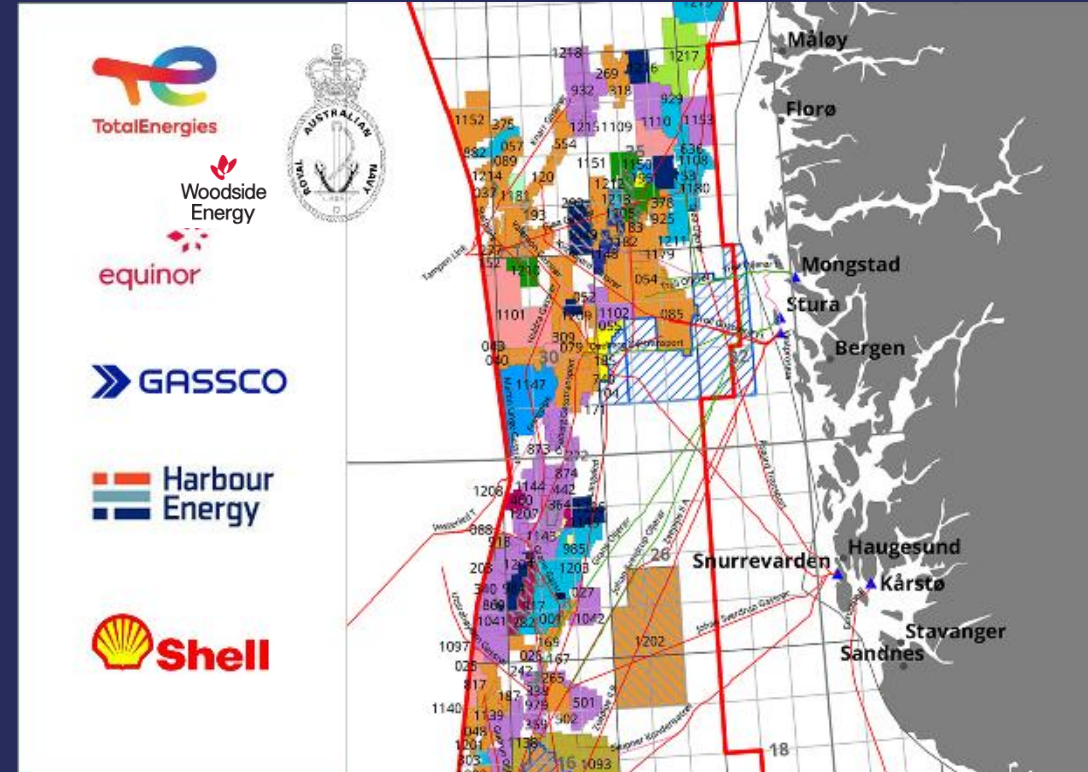
The JIP

- First operations early 2025
- Industry partners: Total Energies, Equinor, Gassco, Harbour Energy, Shell and Woodside Energy
- Purpose: Real offshore operations for technology qualification



JIP – Operational Scope

- Pipeline inspection
- gWatch gravity & seafloor deformation
- Structure inspection & CP stab
- Seabed mapping & environmental surveys
- Torque tool
- Guard vessel duties





REACH
SUBSEA

FIELD LOG
REACH VIDEO
REACH MAP
RR01 OVERVIEW
ZROV01 OVERVIEW

600008 | RR PILOT — MULTICLIENT
RR01 — OPERATOR & MAINTAINER

VESSEL NAV

- POSITION
- HEAVE
- MOTION
- ACCEL.
- HEADING
- DEL. HEAVE

LATITUDE 60.78606° ±0.02 M
LONGITUDE 3.53619° ±0.01 M

SPEED 0.3 KT
HEADING 359.3°

WATCHDOG

- EDGETECH
- TOPAS
- NAVISCAN
- SIS
- FROM_RR01
- SEAPATH
- SPRINT
- TIDE-NPD
- GWATCH
- PSEUDOVIDEO
- VIDEO
- NAVIPAC
- CTD
- USERDEFINED
- SIS-WCD

VESSEL SYSTEMS

- ASPERA
- INS
- PDU
- CTD
- NTP
- WATCHD.

ACTIVE OPERATORS

SURVEY.RR1@REACHSUBSEA.COM

Rate: 25.0 Hz | SV: 1486.0 m/s | 2025-04-25 21:05:35

ZROV01 ALTITUDE | 4.3

ZROV01 DEPTH | 320.64

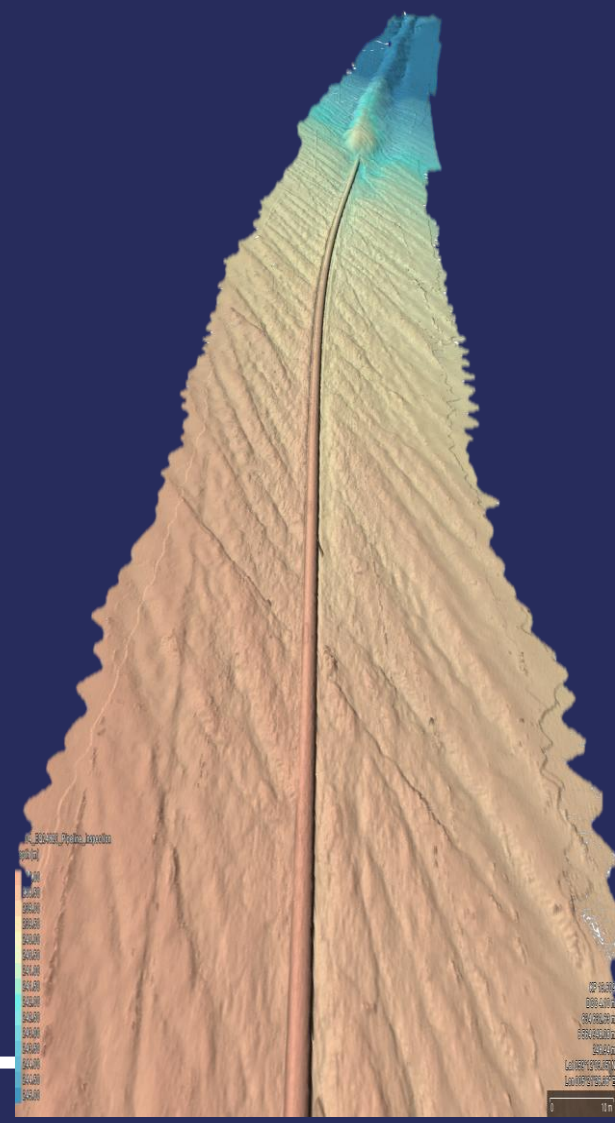
ZROV01 PITCH | 0.03

Roll: 359.24°
 Pitch: 0.04 m/s
 Heave: 1.91 m
 Roll Rate: 2.65°/s
 Pitch Rate: 0.48 m/s
 ZroVov: 180.1°
 ZroVov Rate: 181.25°/s
 ZroVov Accel: 10.97 m/s²
 ZroVov Decel: 189.91°/s²
 ZroVov Roll: 358.13°
 ZroVov Pitch: 1.42°
 ZroVov Heave: -0.24 m
 ZroVov Roll Rate: 4.14 m/s
 ZroVov Pitch Rate: 320.69 m/s
 ZroVov Heave Rate: 529283.42 m/s
 ZroVov Roll Accel: 6739302.49 m/s²
 TMS Depth: 276.54 m
 TMS Pressure: 1025.45 mba

FIELD LOG | REACH REMOTE 01 | PROJECT 600008

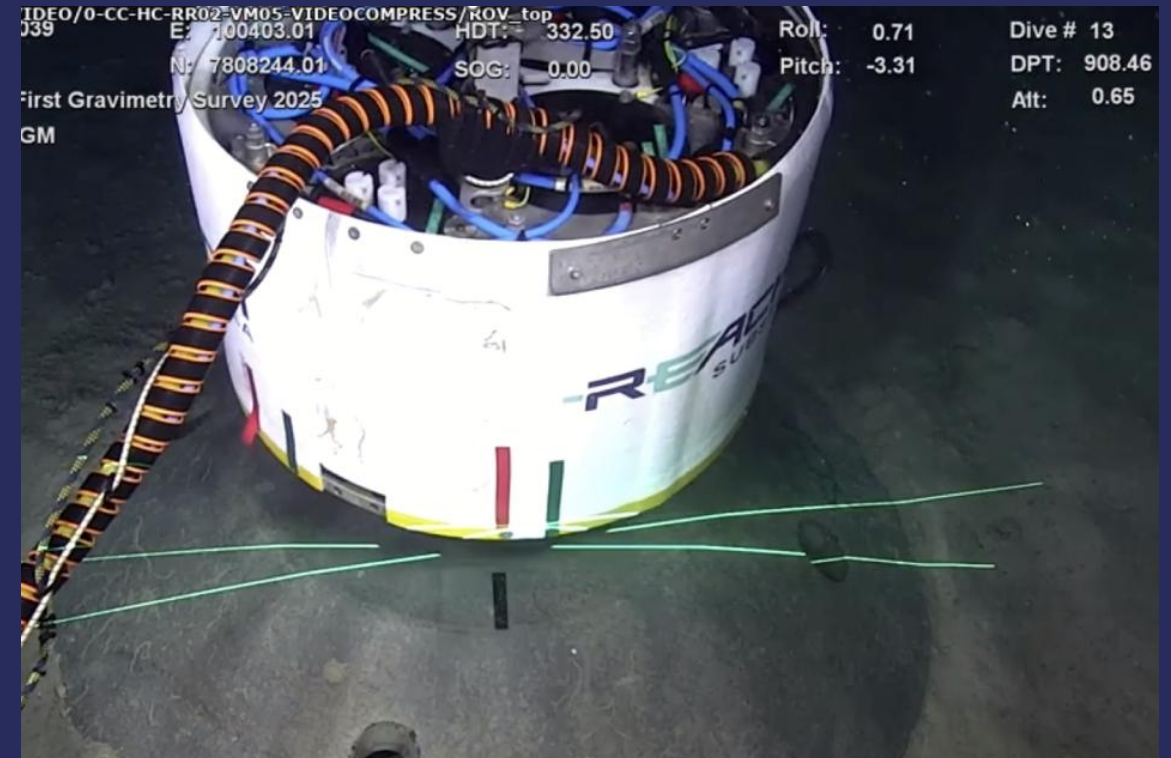
SELECT PERIOD: 2025-04-20 00:00:00 - 2025-04-26 00:00:00

VESSEL	TIME	PROJECT ID	CLIENT	TASKPLAN/COUNTER	EVENT	RUNLINE	KP	KP REFERENCE
REACH REMOTE 01	2025-04-25 17:36:42	600008	REACH SUBSEA	TP-008	ROV SPEED 0.8KNT, ALT 3.2M			ROV
REACH REMOTE 01	2025-04-25 17:35:54	600008	REACH SUBSEA	TP-008	ROV SPEED 0.7KNT			ROV
REACH REMOTE 01	2025-04-25 17:34:37	600008	REACH SUBSEA	TP-008	TRACK FILE ISSUE SORTED. ROV AT AUTOTRACK - ROV AND VESSEL INCREASING SPEED			ROV
REACH REMOTE 01	2025-04-25 17:32:06	600008	REACH SUBSEA	TP-008	ROV DECREASED ALT TO 3.2M FOR BETTER QUALITY OF IMAGE, SPEED 0.5KNT			ROV
REACH REMOTE 01	2025-04-25 16:39:19	600008	REACH SUBSEA	TP-008	ROV SPEED 0.5KNT			ROV



gWatch – Gravity and Seafloor deformation monitoring

- 25+ years of gWatch at Troll
- World's first uncrewed campaign
- $<1\mu\text{Gal}$ gravity repeatability
- 1 mm seafloor deformation
- Advantages for time-lapse monitoring

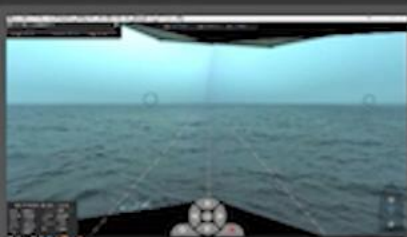
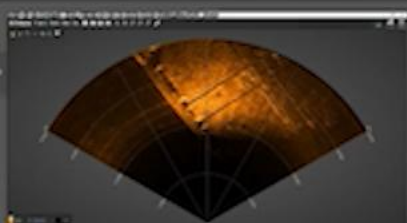


VESSEL NAV

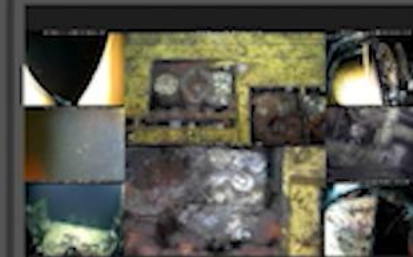
POSITION	MOTION	HEADING
HEAVE	ACCEL	DEL. HEAVE
LATITUDE 61.09764° N ±0.02 M	SPEED 0.5 KT	
LONGITUDE 2.27491° E ±0.02 M	HEADING 172.2°	

ACTIVE OPERATORS

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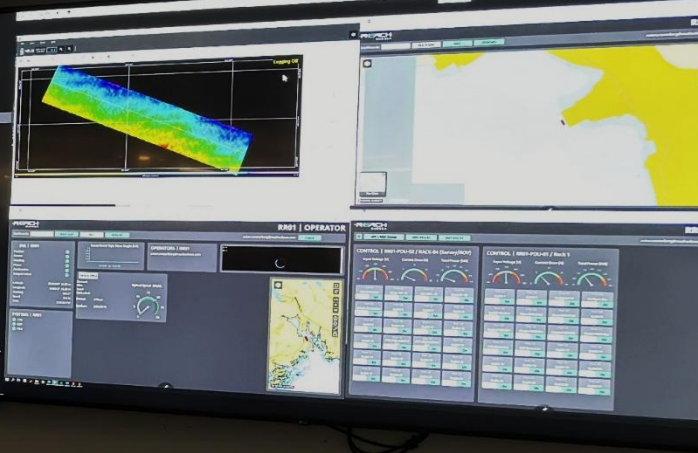
VESSEL-BASED SIG. WHT HGT (1.25)



- which we haven't done before.
So, that's very exciting.

REACH

SUBSEA



Mobile ROCs

- Containerized mobile ROC concept
- Plug and play
 - Fiber, satellite, 4G/5G
 - Power
- Operator experience
 - No perceptible latency
 - Improved alertness and shift work



REACH SUBSEA
VIRE | GUEST REACH
VIRE | GUEST

VESSEL SYSTEMS

- ASPERA
- INS
- PDU
- CTD
- NTP
- WATCHD.

VESSEL NAV

POSITION MOTION HEADING
HEAVE ACCEL DEL. HEAVE

LATITUDE 60.43838° ±0.02 M SPEED 1.9 KT
LONGITUDE 5.2607° ±0.01 M HEADING 354.7°

WATCHDOG

- EDGETECH
- TOPAS
- NAVISCAN
- SIS
- FROM_RR01
- SEAPATH
- SPRINT
- TIDE-NPD
- GWATCH
- PSEUDOVIDEO
- VIDEO
- NAVIPAC
- CTD
- USERDEFINED

SEAPATH DATA

TRANSFER STATUS: FTP READY
LAST FILE SCAN: 16/04 09:17:18
LAST FILE TRANSFER: 2504160727.L10 @ 08:31:55
LOCAL FILE PATH: [Browse](#)

FIELD LOG | REACH REMOTE 01 | PROJECT 600008

Filter table...

VESSEL	TIME	PROJECT ID	CLIENT	TASKPLAN/COUNTER	EVENT	RUNLINE	KP	KP REFERENCE
REACH REMOTE 01	2025-04-16 08:33:00	600008	REACH SUBSEA		NOMA DEPARTED FOR WORKSITE	TP-011	0	RR01
REACH REMOTE 01	2025-04-16 08:07:53	600008	REACH SUBSEA		VESSEL DEPARTURE FOR WORKSITE	TP-011	0	RR01
REACH REMOTE 01	2025-04-16 06:34:43	600008	REACH SUBSEA		VESSEL COMPLETED TESTING	TP-011	0	RR01
REACH REMOTE 01	2025-04-16 05:42:22	600008	REACH SUBSEA		VESSEL PERFORMING TESTS PRIOR DEPARTURE TO WORK SITE	TP-011	0	RR01
REACH REMOTE 01	2025-04-16 00:00:00	600008	REACH SUBSEA		MIDNIGHT (UTC); WGS84: LAT 060°23'35.28532" LON 005°15'17.07917"	TP-011	0	RR01
REACH REMOTE 01	2025-04-15 17:56:01	600008	REACH SUBSEA	TP-011	ROV DOING TOOLBOX FOR WORKING IN HEIGHT		0	ROV
REACH REMOTE 01	2025-04-15 10:30:00	600008	REACH SUBSEA	TP-011	ROV PERSONNEL ENTERING VESSEL TO START ROV ADJUSTMENTS AND LARS TESTING		0	RR01

FIELD LOG | **REACH VIDEO** | **REACH MAP** | **RR01 OVERVIEW** | **ZROV01 OVERVIEW**

600008 | RR PILOT | MULTICLIENT MAINTAINER

SELECT PERIOD: 2025-04-11 00:00:00 - 2025-04-17 00:00:00 [RESET](#) [EXPORT](#)

ACTIVE OPERATORS

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Key achievements

- Licensed to operate in:
 - Norway
 - Australia
- Continuous operations since delivery
- Scarborough January '26
 - 22 days continuous underwater operations with Work Class ROV
- Safely operated within 500m zone
- Zero offshore exposure to personnel
- Lower fuel use and emissions



Key Conclusions and outlook

- Reach Remote is field proven and in operation
- Strong partnerships and client focus
- Improved HSE and data quality
- New operational paradigms

- Next step uncrewed operation
- Autonomy



Thank you:



John Even Lindgård

Commercial Director – Monitoring Division

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Everything within Reach