BOP CONTROLS

ACOUSTIC BOP CONTROLS PACKAGE

EFC GROUP

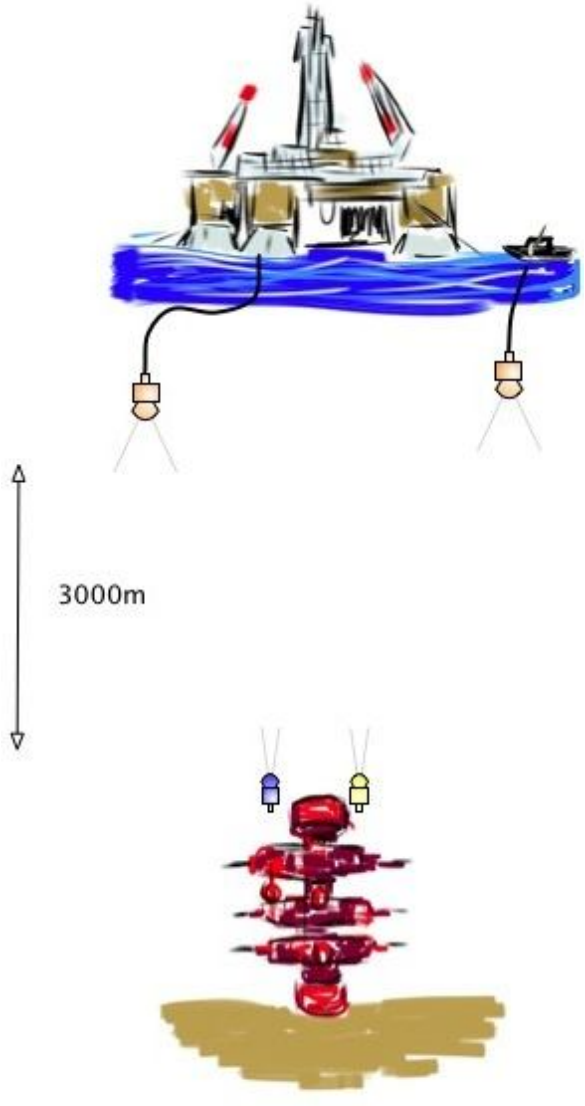
CONTROL PANEL REPLACEMENT ELECTRIC CONTROLS UPGRADE SURFACE BOP SEMI-SUB SHALLOW PILOTED HYDRAULIC

EFC's Acoustic BOP Controls is depth rated for 3,000m (10,000ft) and provides primary, fixed surface control with optional secondary, portable controls unit.

Optimal Acoustic transponder angle, extended battery life, and self-sequencing smart technology within the subsea Electro-Hydraulic Modules delivers a sophisticated solution, including surface modules
displaying critical feedback confirmation of BOP RAM open/close status and option to integrate further monitoring instrumentation.

EFC Group provides an all encompassing package solution, with proven experience & track record in:

- Advanced Electronics
- Subsea Hydraulic Analysis, Calculations & Build
- Instrumentation & Monitoring
- Mechanical & Structural Design & Build
- System Integration



ACOUSTIC PACKAGE FUNCTIONALITY	
Depth Rated	Up to 10,000ft
Battery Life	> 180 days, 100 operations
Functions	16
Transponder deviation	25º surface, 65º seabed
Subsea Interface	2-way Shuttle
Compliance	API 16D

nqa. ISO 9001 Registered UKAS QUALITY MANAGEMENT 015

CE Ex

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SURFACE CONTROLS & DISPLAY

emergency disconnect	armed / dis-armed
display	push button/HMI
subsea feedback	indication lights show BOP RAM Status
manual operation	push and hold to operate
monitoring	BOP temperature and pressure optional

SUBSEA-ELECTRONICS MODULE 1 & 2(SEM)

smart technology	self sequencing for emergency disconnect
intelligent batteries	customised update rate
subsea instrumentation	integrated with SEM module

ELECTRO-HYDRAULICS MODULE (EHM) FUNCTIONALITY

BOP type	interfaces with all BOP manufactures
redundancy	dual solenoids
subsea feedback	flow meter volume & pressure tx functions

MECHANICAL & STRUCTURAL FUNCTIONALITY

EFC Groups Mechanical Handling Solutions provides structural review, design and build as required to modify existing BOP stacks, typically piloted -hydraulic systems to enable seabed accumulation capability.

Block 1, Units 3-7
Souterhead Road
Altens
Aberdeen AB12 3LF Scotland UK
T: +44 (0) 1224 249355
F: +44 (0) 1224 249339
E: info@efcroup.net

1424 West Sam Houston Parkway North
Suite 140
Houston
Texas 77043 USA
T: +1 713 468 5325
F: +1 713 468 3498
E: info@efcgroup.net

65 Victoria Road
Guiseley
Leeds
LS20 8DQ
England UK
T: +44(0)1943 870 822
E: info@efcgroup.net

11c Tuas Road
Singapore
638509
T: +65 6794 5261
E: info@efcgroup.net

www.efcgroup.net

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