

ENGINEERING Exp 378P/368X Subic Bay Philippines to Hong Kong to Hong Kong.. 5 Nov to 15 Nov to 8 Dec 2018

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ENGINEERING

OVERVIEW:

Transit from Subic Bay Philippines to Hong Kong. Stopped on the way at Hole U1503A for a VIT HPU system test by Siem. VIT was deployed 3880m to seafloor for a search of the re-entry cone. The search was terminated after 3 hrs and VIT recovered to surface for the transit to Hong Kong.

JR left Hong Kong for Exp 368X. At Hole U1503A, the VIT System was successfully deployed 5 X to seafloor (3880m) for observation and re-entry purposes.

HD-VIT SOFTWARE:

GYRO:

The Earth-rate calculation by HD-VIT was resolved, however, the software is compensating in the wrong direction for Earth-rate. Request to fix was forwarded to shore.

LED LIGHTING:

The Port (left) LED did not respond to commands from HD-VIT Control. Found the U/W cable signal pair to be intermittent. Replaced cable and ordered new (OV0820). Also replaced LED S/N 71269 with spare while fault-tracing. Both LEDs serviceable.

PAN/TILT:

The P/T device (S/N 3006) PAN function stopped working. Similar issue than P/T device (S/N 3524), currently on shore for repair. Will replace and ship for repair when serviceable device is returned.

PRESSURE COMPENSATOR:

The Pressure Compensator piston was not moving freely. Draining and exercising the device improved operation. We have no spare. Shore was requested to place an order for X2.

HD CAMERA :

Following the 3rd deployment on 368X, Camera S/N1 (RE-ENTRY), surfaced with condensation on the pressure vessel window. Both HD cameras were removed and opened to replace desiccant with fresh. O-rings were cleaned/checked and cameras assembled and installed for a successful 4th deployment.

MONITOR- WINCH LEVELWIND CAMERA:

Installed new monitor in Subsea to support the new VIT Winch levelwind camera.

OPTICAL LINK INTEGRITY:

OTDR measurements are periodically made on the spare Brown Fiber from DP to the VIT Frame J-Box. Compared against measurements from previous Expeditions, this could be an early indication of potential issues especially on the FORJ and Umbilical. OTDR measurements on the BRN fiber shows no evidence of optical link degradation.

FIBER OPTIC ROTATOR JOINT (FORJ):

FORJ Port measurements were performed on the spare (S/N 1518) to verify serviceability.

Optical input: 1310/1550nm at 0dBm and FORJ then rotated through 360deg.

Port	Att @ 1550nm	Att @1310nm
1	1.4 - 4db	1.4 – 4db
2	0.6 – 2.2db	1.1 – 2db
3	1.3 – 1.8db	1.6 – 2.1db
4	0.3 – 1.1db	0.4 – 1.3db

Results acceptable.

GENERAL MAINTENANCE:

- Flushed devices/connectors with fresh water following deployments and sprayed with silicon lubricant.
- Umbilical was flushed with fresh water on last two retrieval.
- VIT System serviceable and ready for deployment.

RIS:

DOWCOMM:

Coreline Depth overlay was intermittent on RIS and labstack displays.
On the RIS Master, some variables were enabled to TX via WITS DEVICE2 to DowComm.
Kraketoa COM1. Disabling them cured the issue.

RIS KEYS:

Keys will expire on 13 Jan 2019. GET-CODES were forwarded to shore for new key-code request.

DHML:

Performed go/no go check on 2 x APCT3's and 2X SET2's received from CS in semi-controlled temperature environment.

S/N 002	21.994	APCT3
S/N 007	21.565	APCT3
S/N 628	21.622	SET2
S/N 540		no cal file. Shore Request to return to CS.

INVENTORY:

APCT3	S/N 002
APCT3	S/N 007
APCT3	S/N 031
APCT3	S/N 032
SET2	S/N 530
SET2	S/N 628
MicroSmart 10k	S/N 40129
MicroSmart 10k	S/N 40121
MicroSmart 10k	S/N 40060
MicroSmart 10k	S/N 4986
MicroSmart 15k	S/N 4997

MicroSmart 15k S/N 4981 could not be located?

Request from shore to return SET2 S/N 540 for possible data logger replacement.

SHIPPING RECEIVED:

1. APCT3 S/N 002
APCT3 S/N 007
2. SET2 S/N 540
SET2 S/N 628
3. Compression glands for VIT Frame J-Box.

SHIPPING RETURNED:

1. SET2 Temperature tool S/N 540

ORDERS/REQUESTS:

1. 1 X U/W LED Y cable for LED lighting. OV0820.
2. RIS Key codes were requested.
3. HD-VIT *Earth-rate* software change.

ORDERS/REQUESTS OUTSTANDING:

1. Pressure compensators for VIT J-Box.
2. 2 X U/W Cables for cameras. OV0841.
3. Main hybrid Pod/Umbilical connector/pigtail.
4. HD-VIT *Infinity focus* software change.
5. PAN/TILT repair S/N 3524.
6. WFOV Camera.
7. ERS motors.
8. DowCOMM User Guide update.