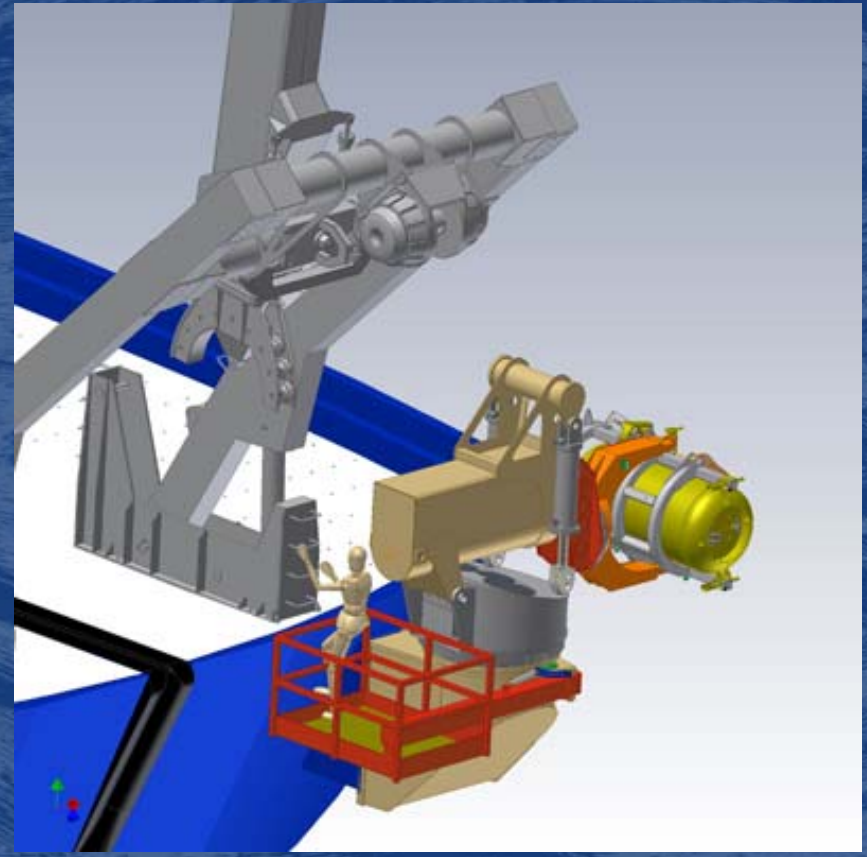
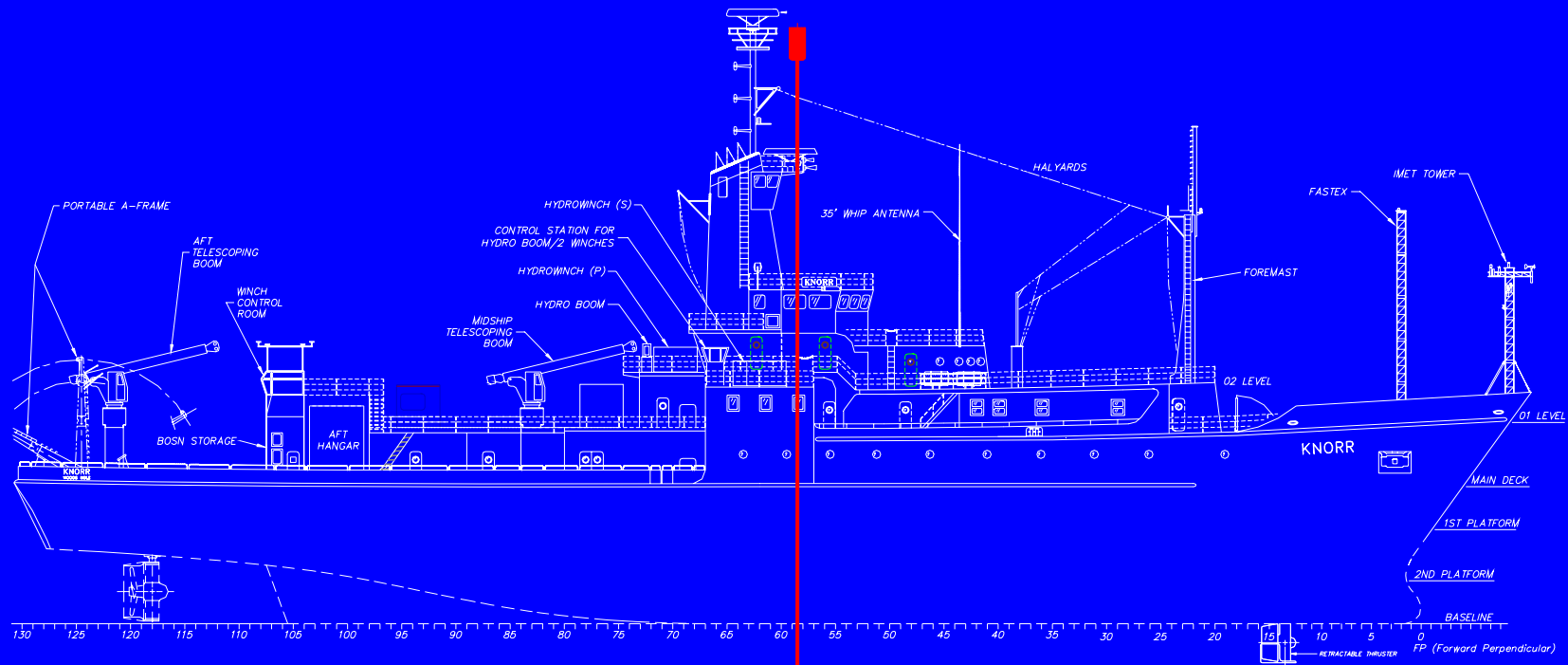


WHOI LONG CORE R/V KNORR



THE 'PROBLEM'



Long Coring Concept



SYSTEM OVERVIEW

- CURRENT MAX CORE LENGTH = ~46 M
- TAPERED WALL BARREL ASSEMBLY
- VARIABLE WEIGHT HEAD = 3,000-27,500#
- ACOUSTIC MODEM RELEASE
- HI-MODULUS SYNTHETIC MAIN ROPE
- ODIM CTCU ROPE HANDLING SYSTEM
- ALLIED A-FRAME AND 'GRAPPLE'
- STERN SHEAVE
- PROGRAMMED STARBOARD DAVITS [H/V trans]

HYBRID ROPE

- 2" DIA. 12 X 12 TORQUE BALANCED
- BREAK STRENGTH = 365,000 #
- 7.5 KM LONG
- PLASMA + VECTRAN
- FIELD REPAIRABLE
- ELONGATION w/ 30,000 # CORER @ 5,000 METERS DEPTH = ~2.0 M

PUGET SOUND ROPES ANACORTES, WA

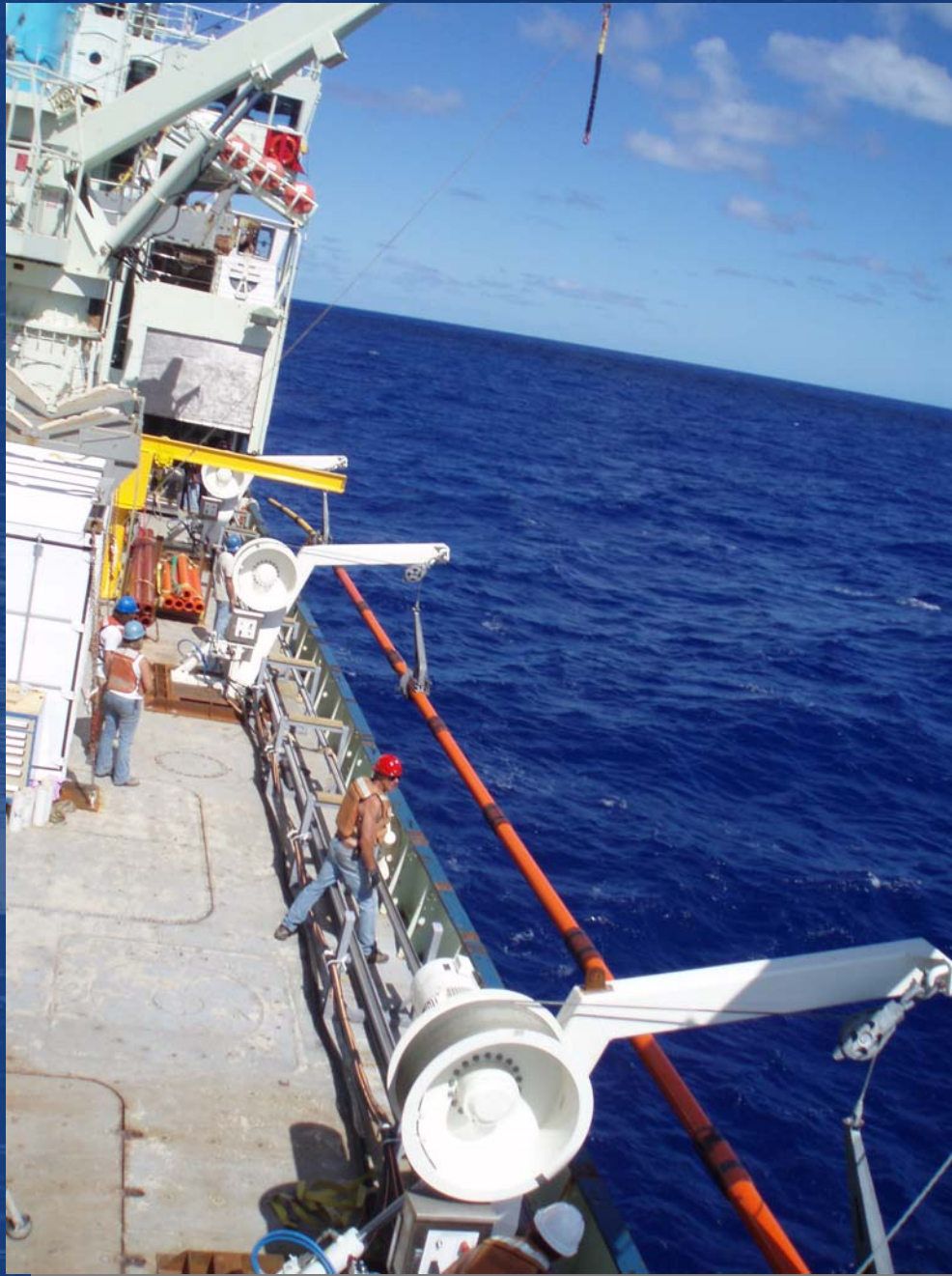






FIRST 150 FOOT LONG ATTEMPT
ODP SITE 1063/GPC5 4585 METERS



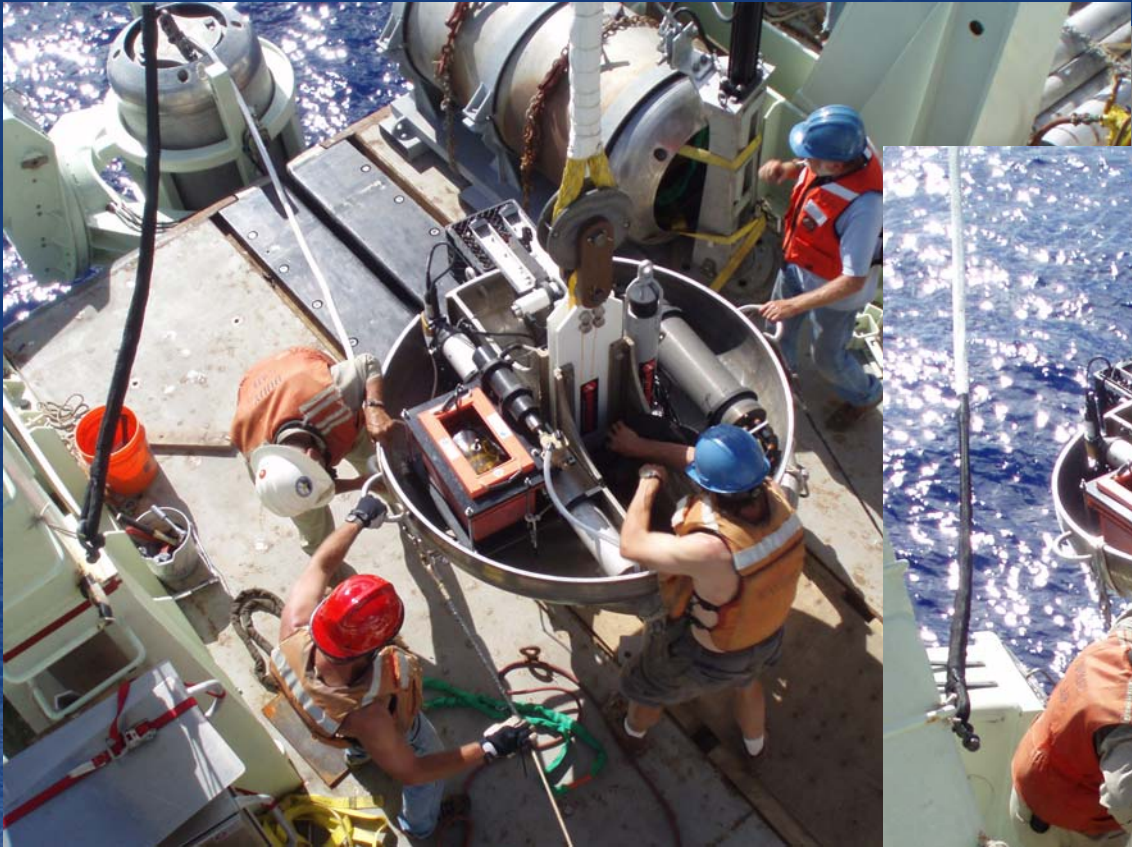


Starboard Davits



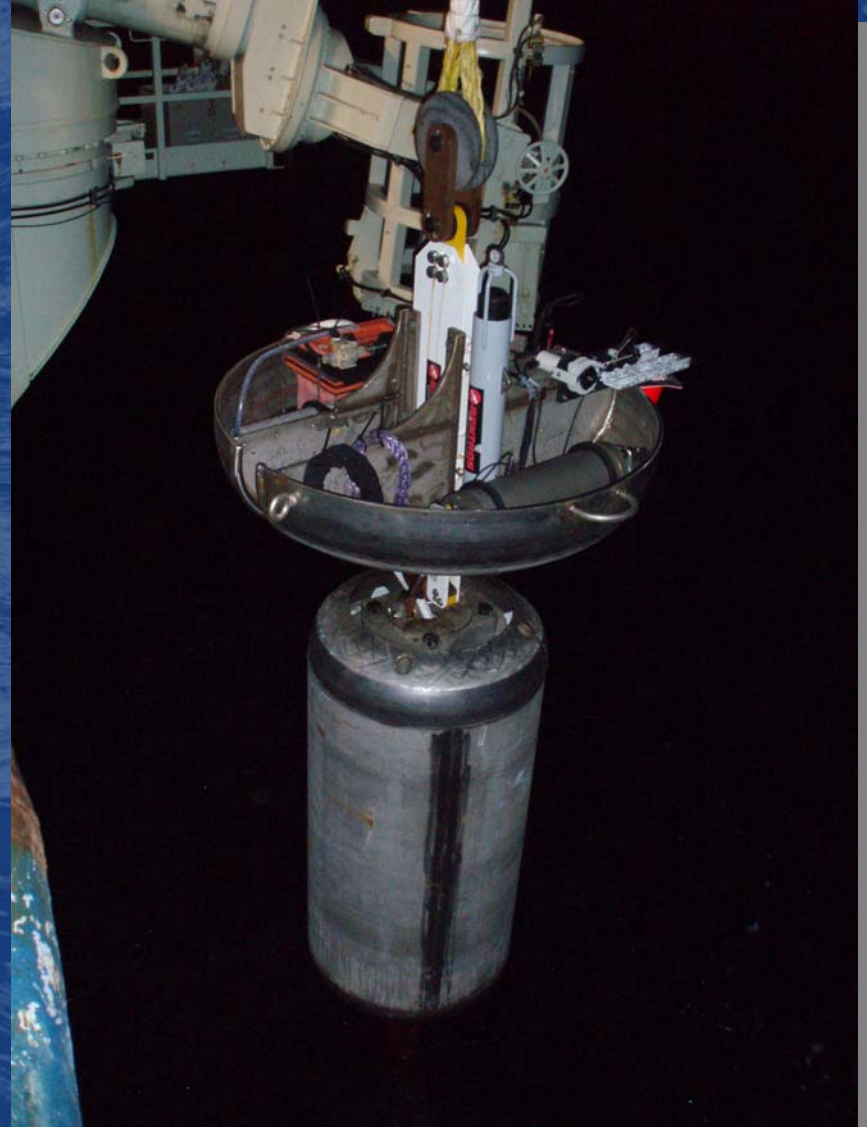
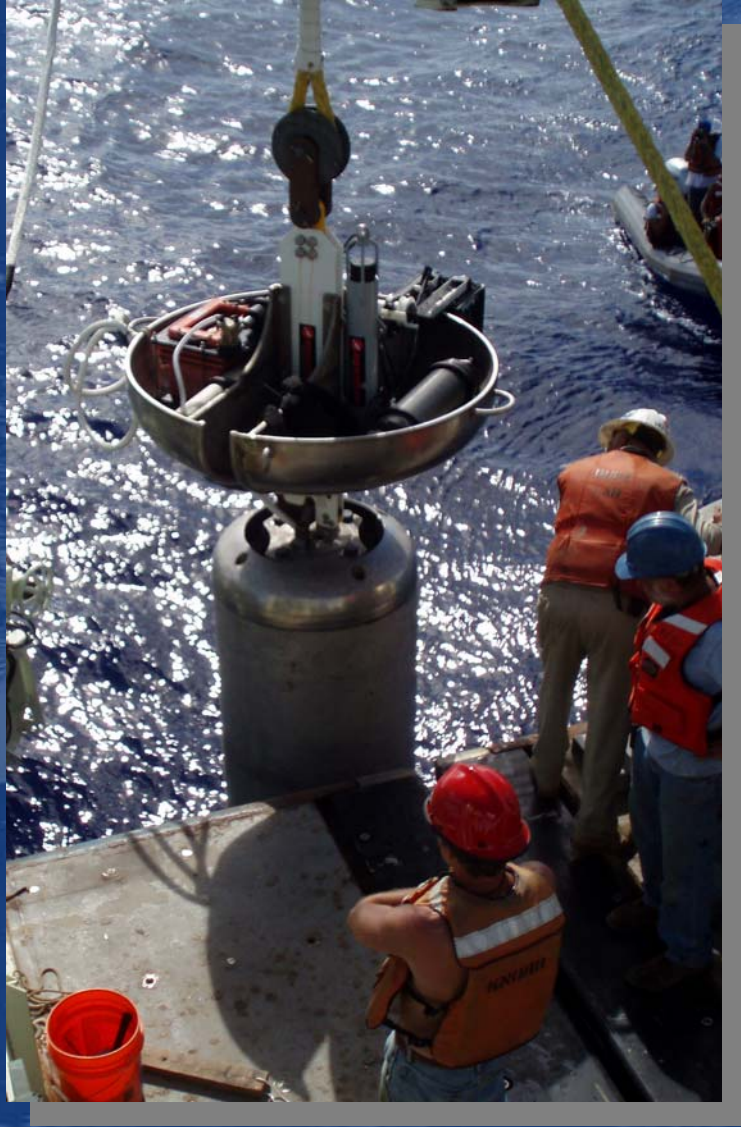


GRAPPLE SWINGS CORE FROM STARBOARD
TO STERN FOR RELEASE MODULE RIGGING



Latching the Release

FULLY RIGGED-GOING DOWN



Release Module Deck Unit

Core Deck
Monitor Comms! Terminal Button/Led Help!

Monitor

```
CHARGE RELEASE  
ok charge  
CHARGE STATUS?  
CHARGE STATUS?
```

RECONNECT
OK

Release Ack

GENERAL SETTINGS

Remote ID: 0 SET

Response Timeout (Sec): 10 SET

BOTTOM CONTACT CONTROL

Drop Weight: OK

Drop Ack: [Green LED]

AUTOMATIC RELEASE

Charge and Arm release first

Auto Release @ Altitude | Release Altitude (m): OFF 50.00

Auto Release @ Altitude or @ Bottom Contact: OFF

Auto-Release Active: [Green LED]

Auto Release @ Bottom Contact: OFF

MANUAL PRERELEASE SEQUENCE

The following two steps **MUST** be performed and confirmed prior to selecting a Release Command.

1. Charge Release Capacitors (13 Minutes to charge)

Charge Capacitors: ON

Charging Complete: [Yellow LED]

Charge Release first

2. Arm the Release

ARM: OFF

RANGING READINGS

OFF

Ranging Rate (Sec): 10 SET

RANGE (meters)

[Input Field]

POLLED READINGS

Power Altimeter first

OFF

ALTITUDE (meters)

[Input Field]

Polling Rate (Sec): 2 SET

BOTTOM CONTACT

Drop Bottom Contact Weight first

Contact: OFF

ALTIMETER CONTROL

Move Boom: OFF

Boom Direction: In [Green LED] Out

Altimeter Power: OFF

Boom Position: In [Green LED] Out

Comm 1 Logging OFF

10/10/2006 09:42:39

Recovery of the Acoustic Release



COREHEAD CAPTURE



GRAPPLE ROTATION TO STARBOARD





DEPLOYMENT OF RECOVERY CLAMPS



VERTICAL TO HORIZONTAL TRANSITION



EXTRUDER IN PLACE

RECOVERY COMPLETE



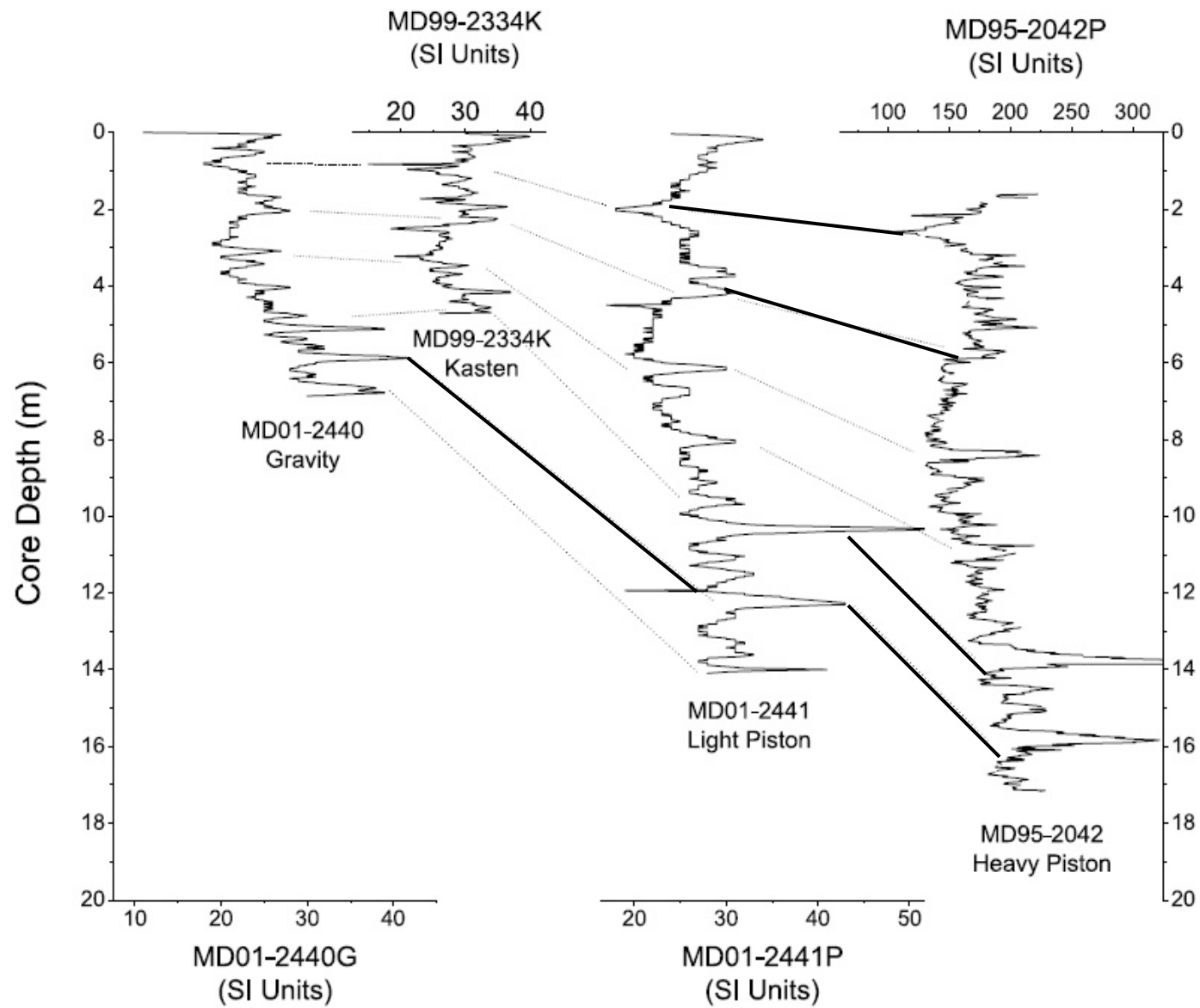
Core extrusion



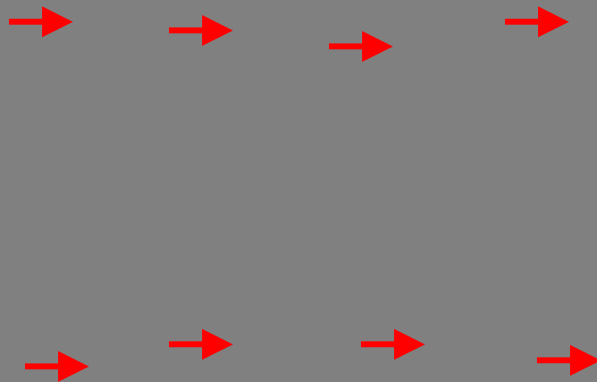
Core extrusion

The background of the slide is a blue-tinted image of a piston core. It shows several distinct, concentric rings that have been ground into the metal, creating a textured, wavy appearance. The rings are arranged in a roughly circular pattern, with some appearing more prominent than others. The overall color is a deep, uniform blue.

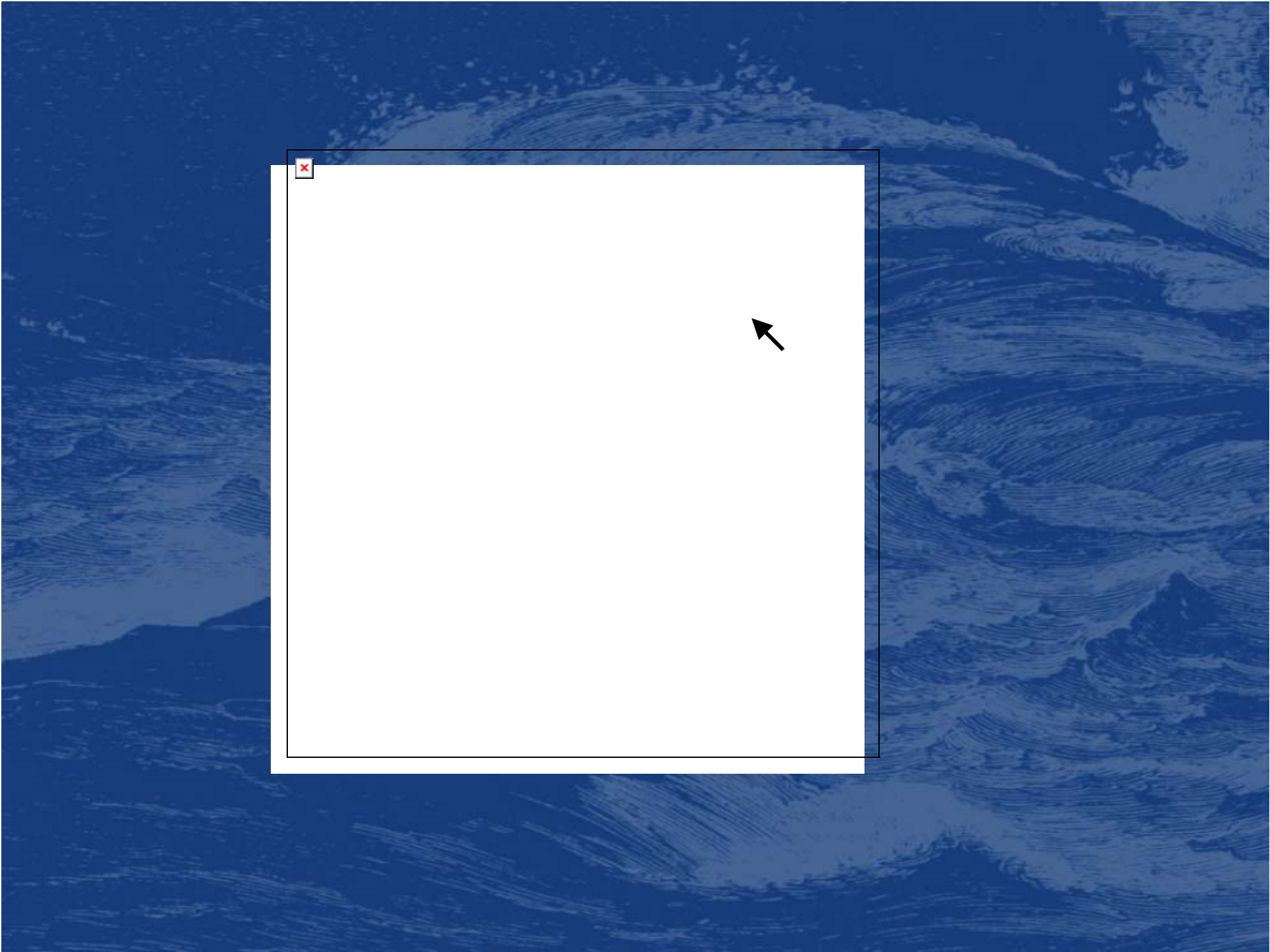
Piston Core Performance

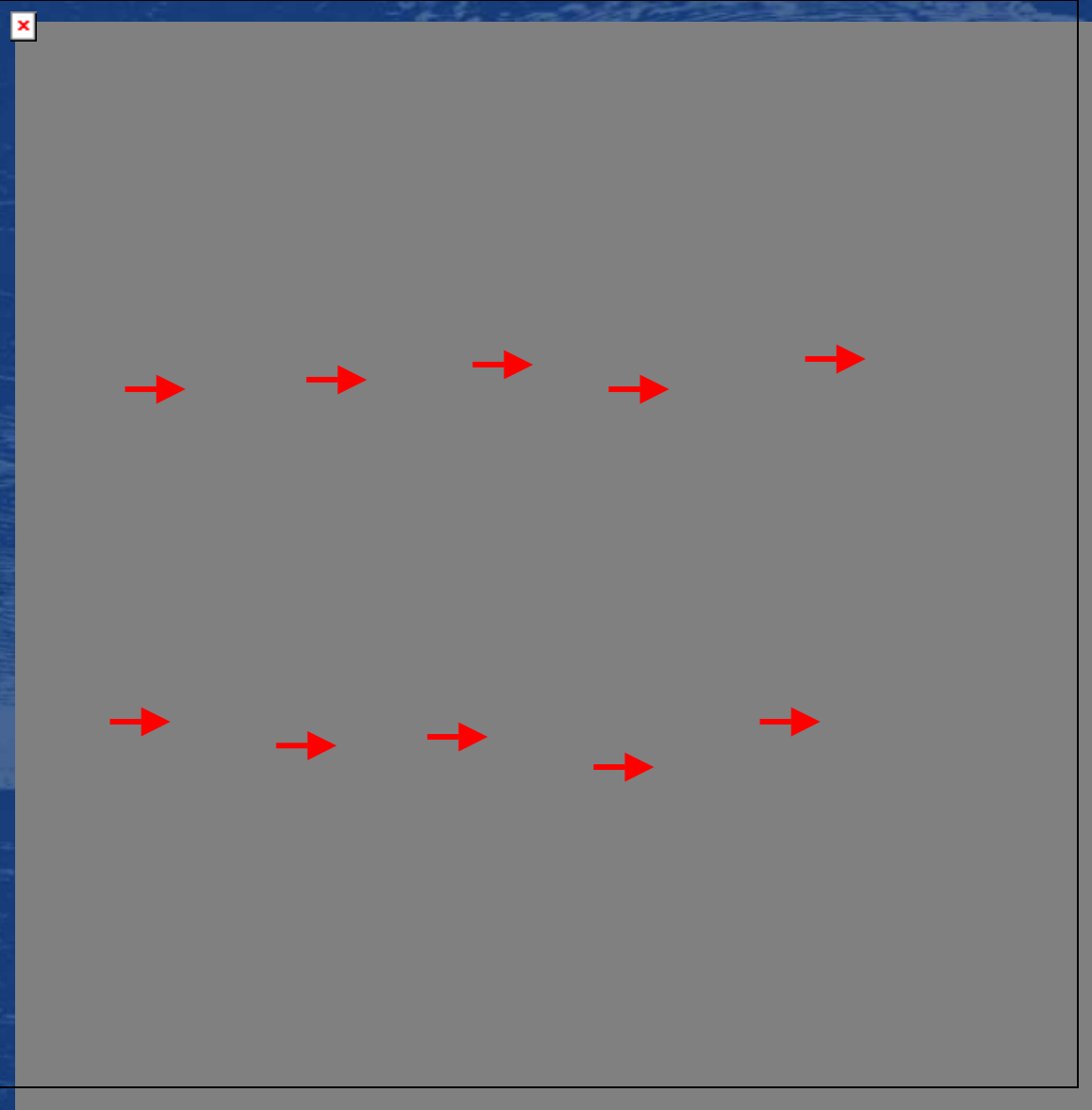


ODP 1063
Sites A, B, C, D



Keigwin, Rio, and Acton, 1998





KNR191 Piston Cores

