

## **Before Deployment:**

Open/Print *PingerBoxCoreLog.xls*

Note water depth from the Echosounder because it will not give a bottom depth after “PingerMode” is on

Tell the deck boss, winch operator & bridge the value of the bottom depth

## **On Deck:**

Deploy BoxCore, remember to pull pins!!!

Down to 75m

Turn on Pinger using screwdriver in switch

Attach pinger using lanyard & 2 book clamps

Use long screwdriver to tighten eye nuts on book clamps

Gradually down at 40-60m/min

## **In Main Lab, on Knudsen Echosounder:**

Note the approximate depth of the pinger (from winch meters wire out) when PingerMode is turned on to keep track of crossings.

Toggle HF Channel to Off

Setup, PingerMode

1 sec

Processing gain up to 2 to 5

Log meter wire out at each crossing (it might be different than package depth if there's a large wire angle)

**If bottom = 3020m, crossings would be 750m apart at:**

500m

1250m

2000m

2750m

3500m

Speed of sound ~1500m/sec. Round trip ~750m/sec, sound goes to object & back.

On Echosounder display, 1000ms = 750m, 100ms = 75m

Bottom- 750m \* (# of crossing from bottom) = crossing depth

3500m - 750m \* 1 = 2750m

3500m - 750m \* 2 = 2000m ...

Tell the winch operator 100 meters above the bottom.

**“Doghouse, Lab, BoxCore is 100m above bottom”**

When core appears to touch bottom:

**“Doghouse, Lab, BoxCore is on the bottom”**

(or just yell “HIT” depending on where you are in relation to winch operator)

Winch operator - let out more wire for 3-10 sec

Winch operator - stop the winch

Winch operator - start bringing in wire at 10m/min

At max tension peak:

**“Doghouse, Lab, BoxCore is out of the bottom”**

Winch operator should increase speed to 60m/min until 100mwo

A few minutes after core is back up off bottom, take screen shots of winch tension plot, pinger trace and 3.5KHz echosounder.

## **On Deck:**

At 75mwo, Remove pinger book clamps, then lanyard

Turn off pinger

Recover BoxCore