



LINCOLN
MARITIME

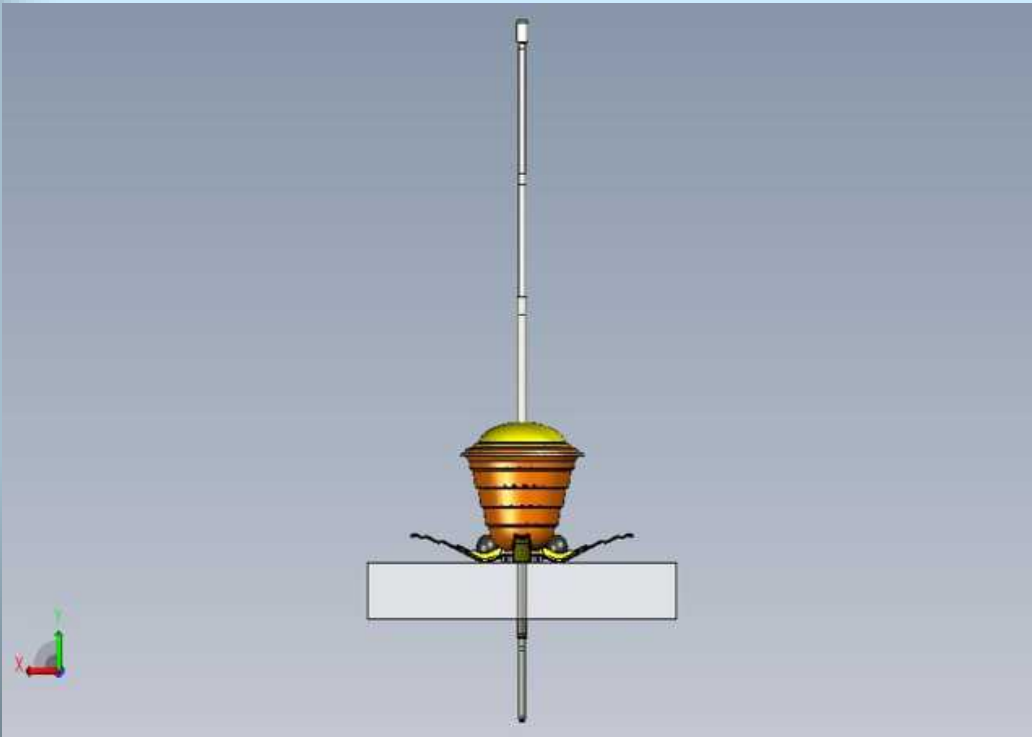


Airborne Expendable Ice Buoy (AXIB)
for Polar Ice Zone Deployment



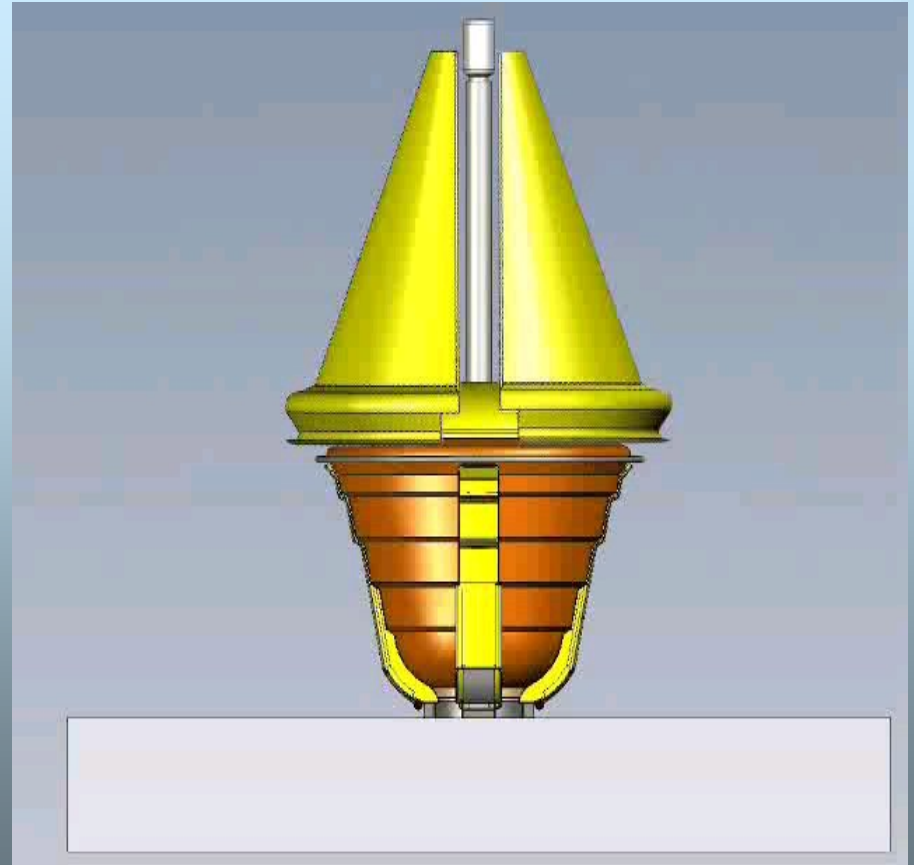
AXIB-PENGUIN™

Air-Deployable Meteorological Buoy



- Adaptable to ice or water
- Stays erect
- Withstands extreme weather
- Long life

LBI presents the
AXIB-PENGUIN™



AXIB Principal Features

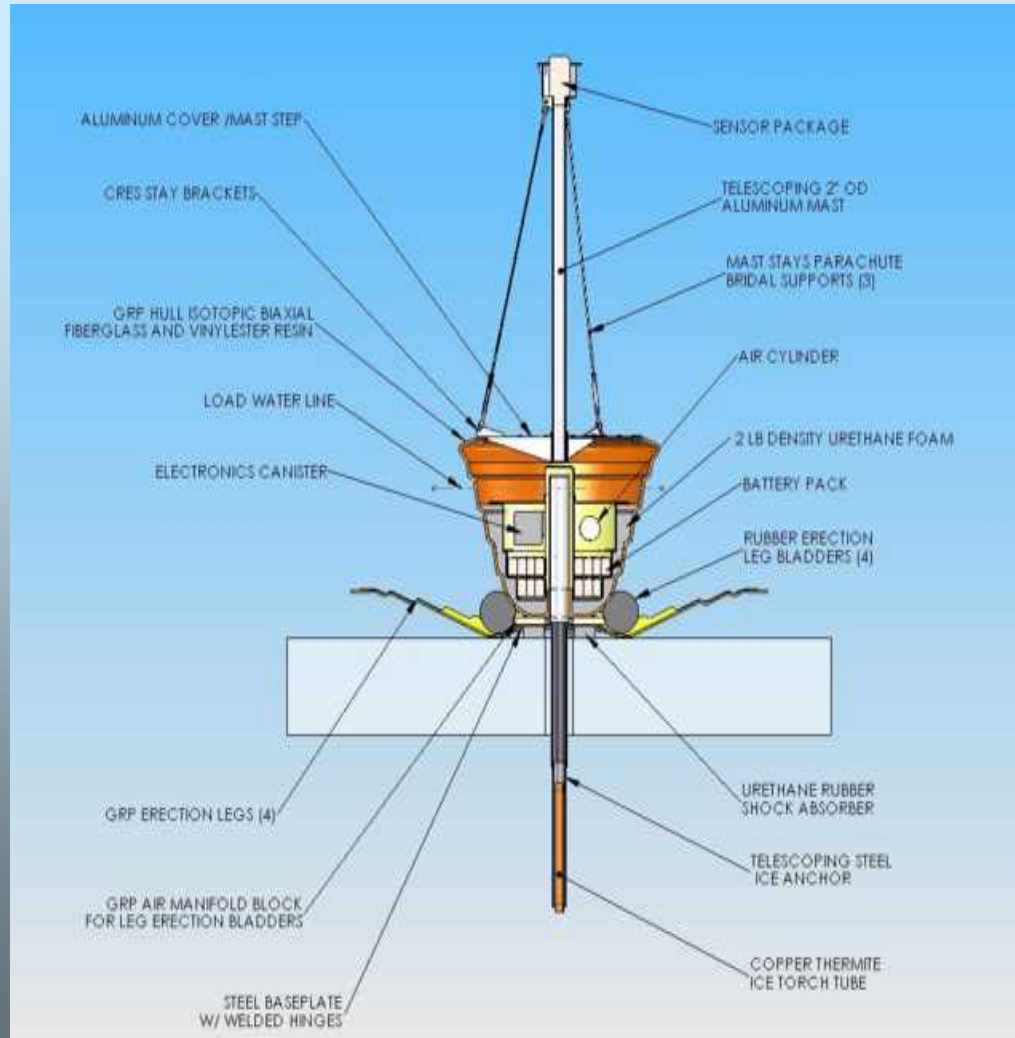
- Robust Hull Construction
- Sensor Mast
- Long life batteries
(Lithium Thionyl Chloride)
- Legs to erect to vertical on ice
- Ice anchor



Erection Leg System



AXIB Fully Deployed



USCGC Healy Test

- Two AXIBs were installed by ship in Chukchi Sea during August '08 ice minimum
- One AXIB in water at edge of ice shelf
- One AXIB in multi-year ice



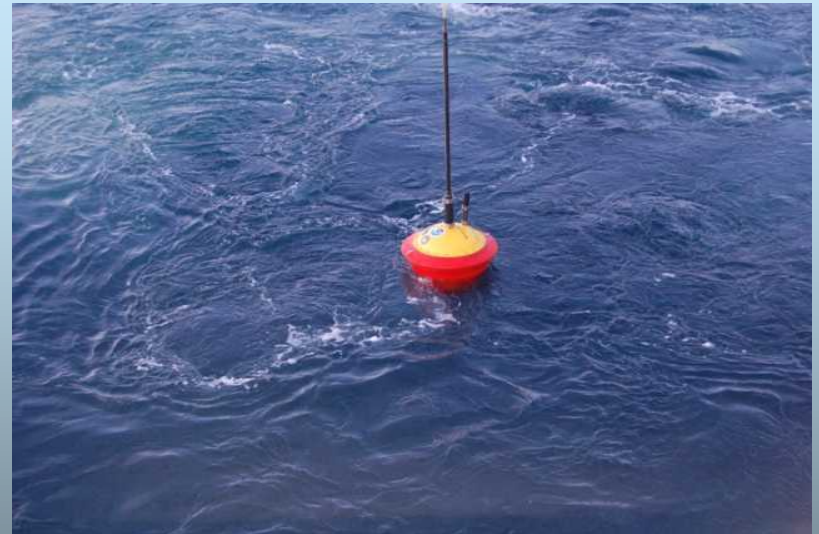
AXIB on Arctic Ice

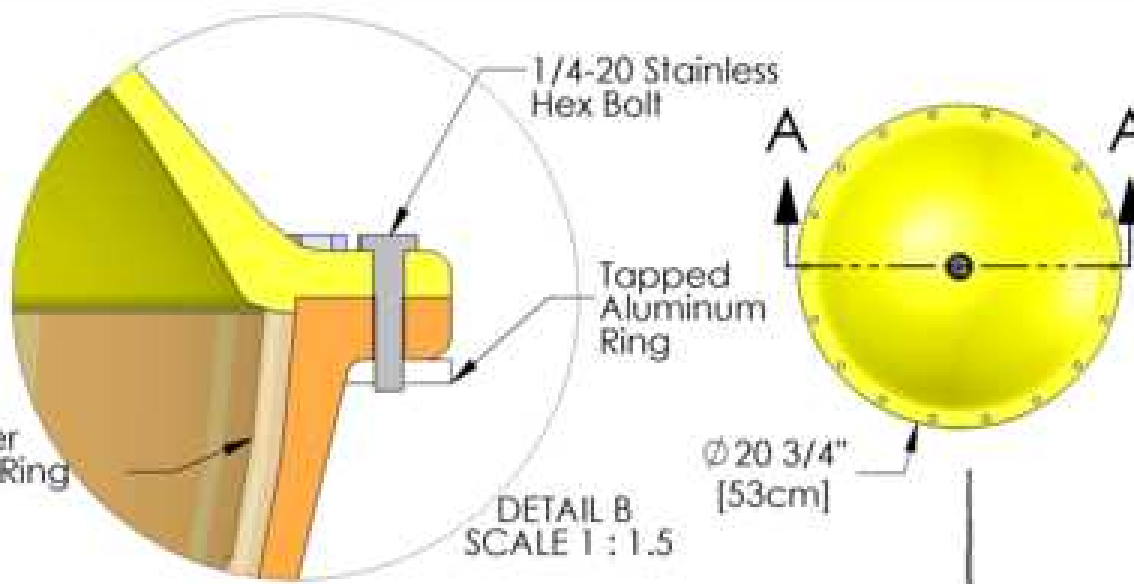
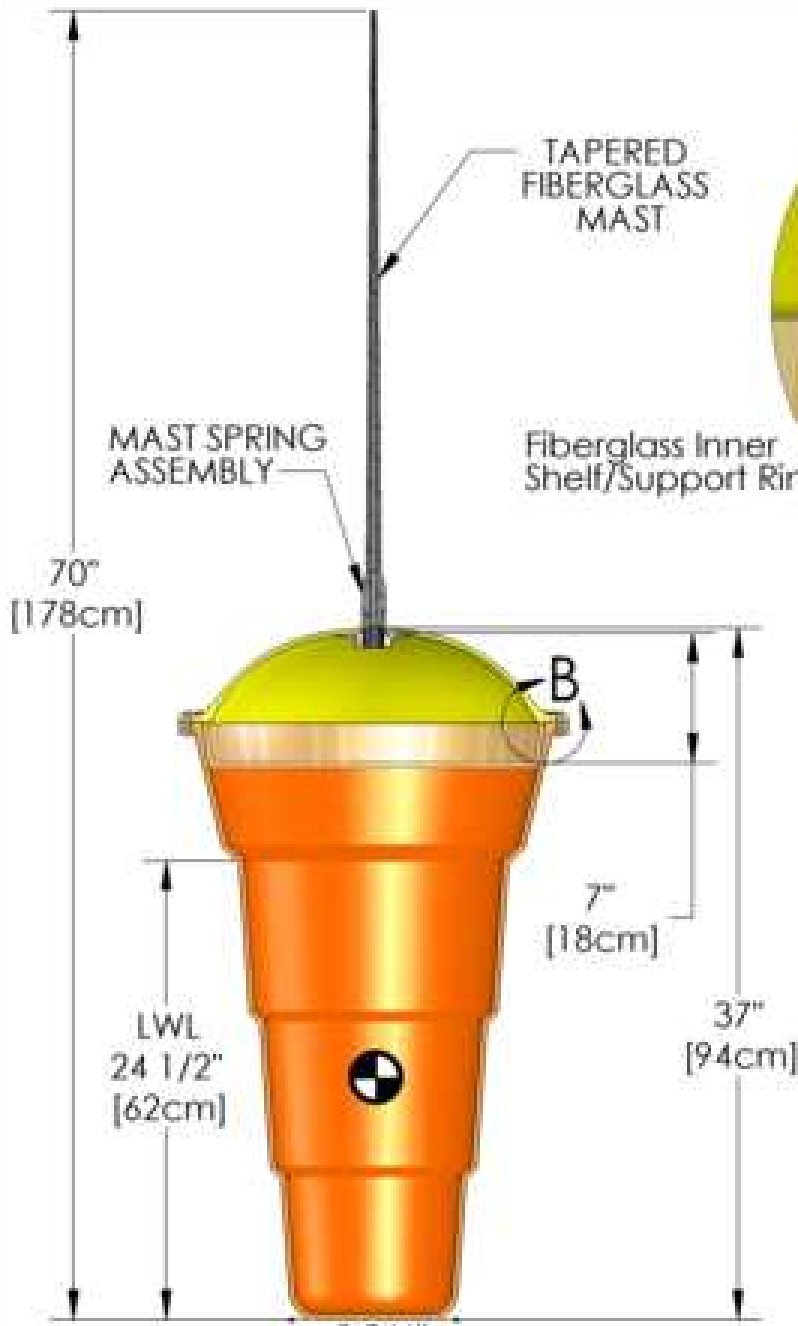
- Deployed from USCGC Healy in August '08
- Continuous operation of sensors and comms



AXIB in Arctic Water

- Effective operation while water-borne
- Sustained freeze-up during Winter '08-'09
- Continuous operation of sensors and comms
- Deployed overboard from ship






NOTES:

1. WEIGHT: ~88 lbs (~40kgs)
2. MAST CAN BE BENT FOR FITTING INTO DEPLOYMENT TUBE.
3. PARACHUTE CAN BE FITTED TO OUTER RING.
4. SENSOR PACKAGE TO INCLUDE AIR AND SEA WATER/ICE TEMPERATURE THERMISTOR AND BAROMETER.
5. CAN ALSO BE CONFIGURED WITH A THERMISTOR CHAIN.



PRELIMINARY

UNLESS OTHERWISE SPECIFIED:		NAME	DATE		
DRAWN	F. PAGEL	DESIGNER		DATE	REV.
CHECKED	F. LEONARD	DESIGNER			
TITLE #:				DATE	REV.
<p>AXIB TYPE 3</p>					
<p>DESCRIPTION:</p> <p>TORPEDO TUBE DEPLOYABLE BUOY</p>					
<p>PROPERTY AND CONFIDENTIAL</p>					
<p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LBI, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LBI, INC. IS PROHIBITED.</p>					
SIZE	PART NO.				
A	T30001				

Persistent Arctic Multi-Sensor Buoy

- robust arctic meteorological platform
- ice-capable thermistor chain
- ice altimeter

