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
Persistent Arctic Multi-Sensor Buoy

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