GEOTRACES SYSTEM UPDATE

- First voyage completed on Knorr in July 2008
- Design completed & modifications were made to Knorr in March 2009:
  - Stanchion added in Thruster Room to increase support to Trawl Crane Crutch
  - Strengthening of Trawl Crane Crutch
- Transition foundation between winch and deck designed & fabricated
- 2009 Voyage successfully completed in May

GEOTRACES SYSTEM UPDATE

- 2010 GEOTRACES scheduled for Oct on Knorr
- Over-boarding method being changed to a portable A-Frame packaged with the winch
- Design for all Global AGORs is complete
- Proposals were received 14 April, anticipate contract to be awarded week of 19 April
- Attempting to have the new over-boarding system available for October 2010 sailing date
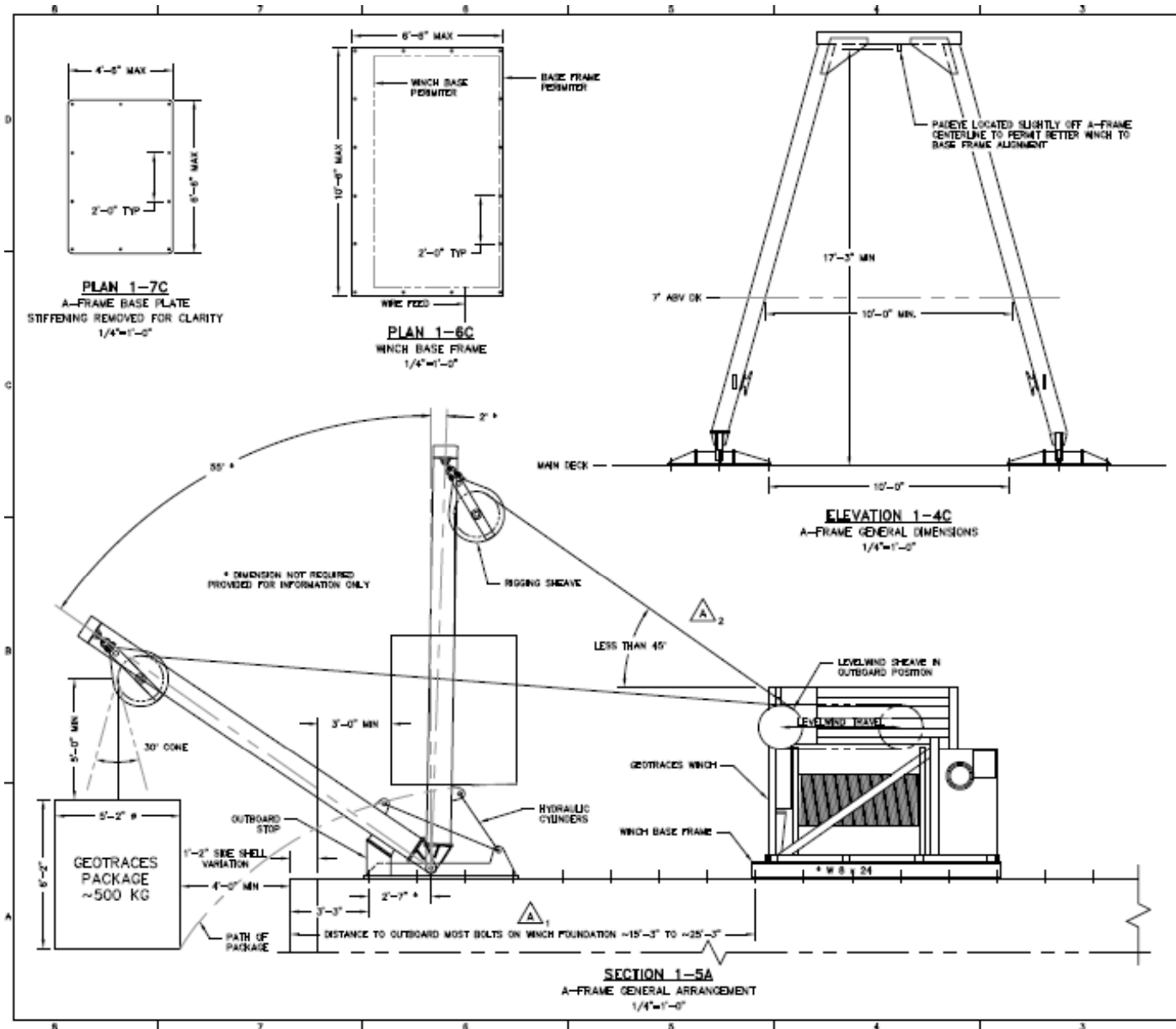
Proposed Over-Boarding System

BILL GREENE/GLOBE STAFF

Karen Stamieszkin of the Provincetown Center for Coastal Studies, held at the ankles by Lee Reeve, leaned into the water to collect a zooplankton sample as Charles Mayo kept an eye out.

GEOTRACES Over-Boarding Layout

PLAN 1-7C
A-FRAME BASE PLATE
STIFFENING REMOVED FOR CLARITY
1/4"=1'-0"

PLAN 1-6C
WINCH BASE FRAME
1/4"=1'-0"

ELEVATION 1-4C
A-FRAME GENERAL DIMENSIONS
1/4"=1'-0"

SECTION 1-5A
A-FRAME GENERAL ARRANGEMENT
1/4"=1'-0"

Fleet Broadband Operating Project

SHIP	Operating Status	SHIP	Operating Status
Atlantis	√	**Melville**	√
Knorr	√	**Revelle**	√
Oceanus	√	**New Horizon**	√
Sharp	√	**Sproul**	√
Cape Hatteras	√	**Endeavor**	√
Atlantic Explorer	√	**Thompson**	√
Wecoma	√	**Langseth**	√
Point Sur	√	**Walton Smith**	√
Palmer	√	**Savannah**	Antenna Received but not installed
Gould	Antenna Received but not installed	**Clifford Barnes**	Antenna Received but not installed

Fleet Broadband Operating Project

- **FBB Workshop held in Woods Hole May 2009**
- **New 3 Year Operating Program Implemented January 1, 2010:**
  - Data bandwidth established at 480 Gigabytes per year @ $1.52/MB rate. This is use or lose for ea yr of agreement
  - Phone charges are in addition to fixed billing for data:
    - FBB to Fixed phone or other Inmarsat sys: $1.08/minute
    - FBB to cell: $1.32/minute
  - 2 Stage Calling Shore to Ship established to manage cost:
    - To Iridium: $1.94/minute vs. $9 to $12/minute
    - To FBB: $1.63/minute vs. $9 to $12/minute

Fleet Broadband Operating Project

- **Need to integrate FBB System into operational use**
- **At this point, only 15 GB of the annual 480 GB pool has been used**
- **Used 3% over 25% of year**
- **2nd & 3rd Quarter will be key period of usage**
- **Focus on getting last 3 systems installed**
- **Recent activity to increase use:**
  - **Integrating FBB System into shipboard networks**
  - **Converting all voice calls through data ports VoIP**