

# *M/V GLACIER Conversion*



*UNOLS Council Meeting*

*13 October 2005*



## *M/V GLACIER Restoration and Conversion*

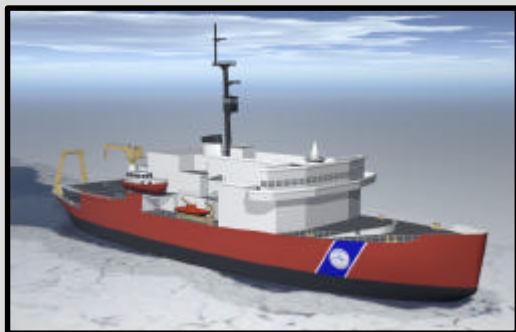
## *Background*

- GLACIER Society is a non-profit organization dedicated to:
  - *Supporting Polar research*
  - *Providing medical assistance to indigenous peoples of the Arctic Basin*
  - *Conducting educational programs*
- These services will be delivered by the Glacier Society's restored and reconfigured former USS/USCGC **GLACIER**



## *M/V GLACIER Restoration and Conversion*

## *Ship Characteristics*



### *GLACIER Characteristics:*

- Length 310 feet
- Beam 74 feet
- Draft 28 feet
- Displacement 8,650 tons
- Propulsion Diesel electric - 21,000 hp
- Speed 17 knots





## *M/V GLACIER Restoration and Conversion*

### *Major Aspects of Conversion*

- ABS Classed and certified to USCG Subchapter U, IMO, SOLAS, MARPOL, and ASPPR (Arctic Shipping Pollution Prevention Regs)
- New science capabilities equal to or greater than Global Class AGOR
- New accommodations for 120 total personnel (including crew, science, medical, and educational personnel)
- New machinery and control systems
- New shell plating or add double hull
- Add bow and stern thrusters and DP capability
- Completely new communications and navigational systems including GMDSS and broadband communications
- Medical and dental treatment facilities
- Swimming pool and sauna



## *M/V GLACIER Restoration and Conversion*

## *Science Capabilities*

- *Lab space* 6,000 sq. ft.
- *Working deck space* 3,000 sq. ft.
- *Handling Systems* Stern and side frames and cranes
- *Acoustic systems*
  - Deep multibeam echosounding system
  - Shallow multibeam echosounding system
  - Marine mammal avoidance system
  - Single beam echosounder
  - Subbottom profiler
  - Acoustic positioning system
  - ADCP
- *Other Systems* Gravimeter, magnetometer, AUV
- *Helicopters* 2 Bell 412 (in hangar)
- *Work boats* 2 - 25 to 30 feet
- *Land vehicles*



# M/V GLACIER Restoration and Conversion

## Conversion Timeline

Event	CY2006				CY2007				CY2008				CY2009			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Concept Design	█															
Contract Design		█														
Detail Design			█													
Restoration and Conversion						█										
Commissioning														◆		
Science/Medical Operations																→