UAF has a Cooperative Agreement (CA) with NSF to Construct and Operate the ARRV (OCE-0723426)

PIs:
Dan Oliver
Terry Whitledge
Denis Wiesenburg

Denis Wiesenburg
UNOLS Annual Meeting 2008

October 2, 2008

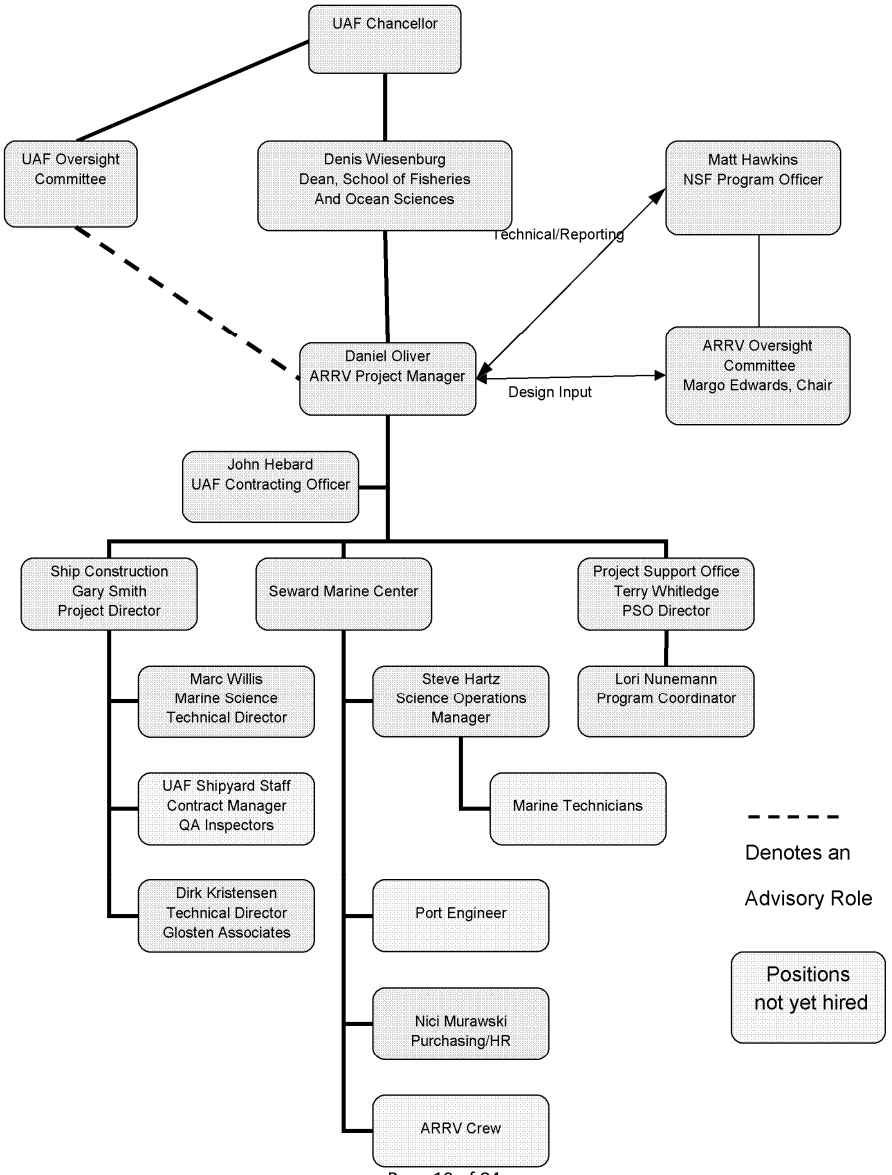
Seward Marine Center Director
Leading the ARRV Program

- Capt. Dan Oliver (USCG – retired)
- 30 years service experience in the U.S. Coast Guard
- He sailed on USCGC HEALY over 4 years, two years as Executive Officer (XO) and 2 years as Commanding Officer.
- B.S. in Marine Science USGCA
- M.S. in Mech. Engineering, University of Michigan

UAF ARRV Project Team

- Project Director: **Capt. Dan Oliver**
- Construction Manager: **Mr. Gary Smith**
- Program Manager: **Dr. Terry Whitledge**
- Science Operations: **Steve Hartz**
- Marine Science Technical Director **– Marc Willis (Oregon State University)**
- Technical Support: **Dirk Kristensen (Glosten Associates) et al.**

FIGURE 1.1 - ARRV PROJECT ORGANIZATION



Alaska Region Research Vessel

- Length: 242 feet
- Beam: 48 feet
- Draft: 19 feet
- Endurance: 44 days
- **Icebreaking capability: 2.5 ft at 2.5 knots**
- Crew: 20
- Scientists: 26
- Cruising speed: 12 knots
- Handicap accessible
- Ability to transmit data real-time to classrooms, the public

DESIGN REFRESH

- Updating the contract design that was completed in December 2004
- Major changes:
  - hull lengthened to 242 feet – Archimedes principle
  - improved crew berthing – habitability issue
  - eliminated trawl fishing gear – cost reduction
  - greater guidance/emphasis on u/w radiated noise
  - ABS review of drawings, CG review of GA
  - greater detail on science requirements

CURRENT PROJECT STATUS

- In phase 1 of a 4 phase project
- Phase 2 delayed by NSF – no FY09 funding
- Finalizing design refresh and development of project documentation
- ARRV Oversight Committee established
- Revised PEP delivered to NSF 9-19-08
- Preparing for Final Design Review with NSF - October 20-23, 2008

CURRENT PROJECT STATUS

- **NSF award to UAF: $123 million**
- **UAF Funding to date: $4.7 million (phase 1)**
- **Funds appropriated: $51.43 million**
  - **by Congress**
- **Total project cost: $175,853,214 (est.)**
- **Contingency included: $20,777,000 (est.)**

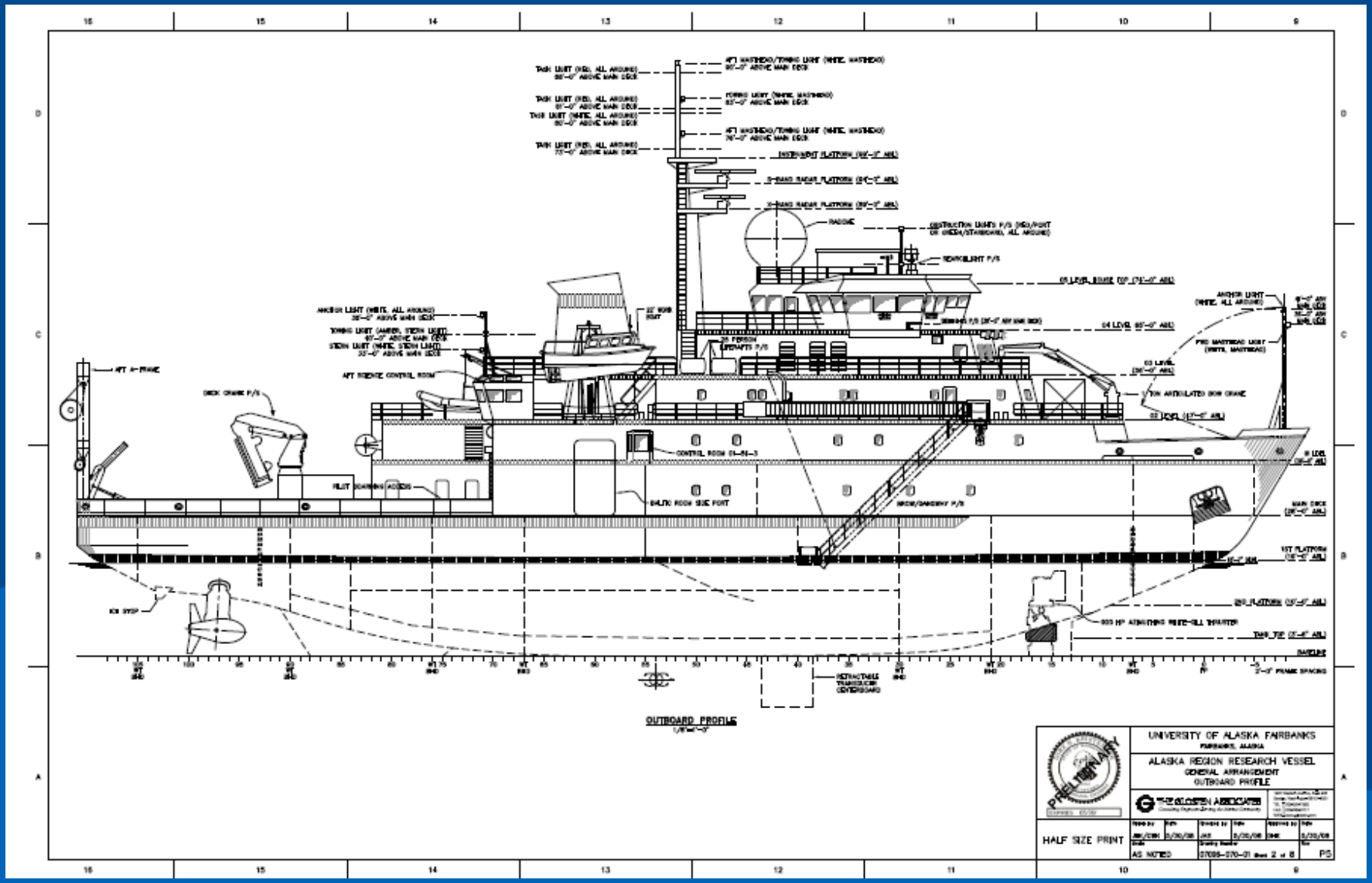
PROJECT SCHEDULE

- Final Design Review – October 20, 2008 at NSF
- Phase 1 will finish end of **May 2009** with National Science Board approval of FDR
- With NSB approval, expect to get funding in FY2010 for shipyard bids in **August 2009**
- **March 2010** – Begin Construction
- **39 to 50 month shipyard contract period – lead time for Z-drives is the critical factor**
- **2014** – Vessel delivered to UAF science ready

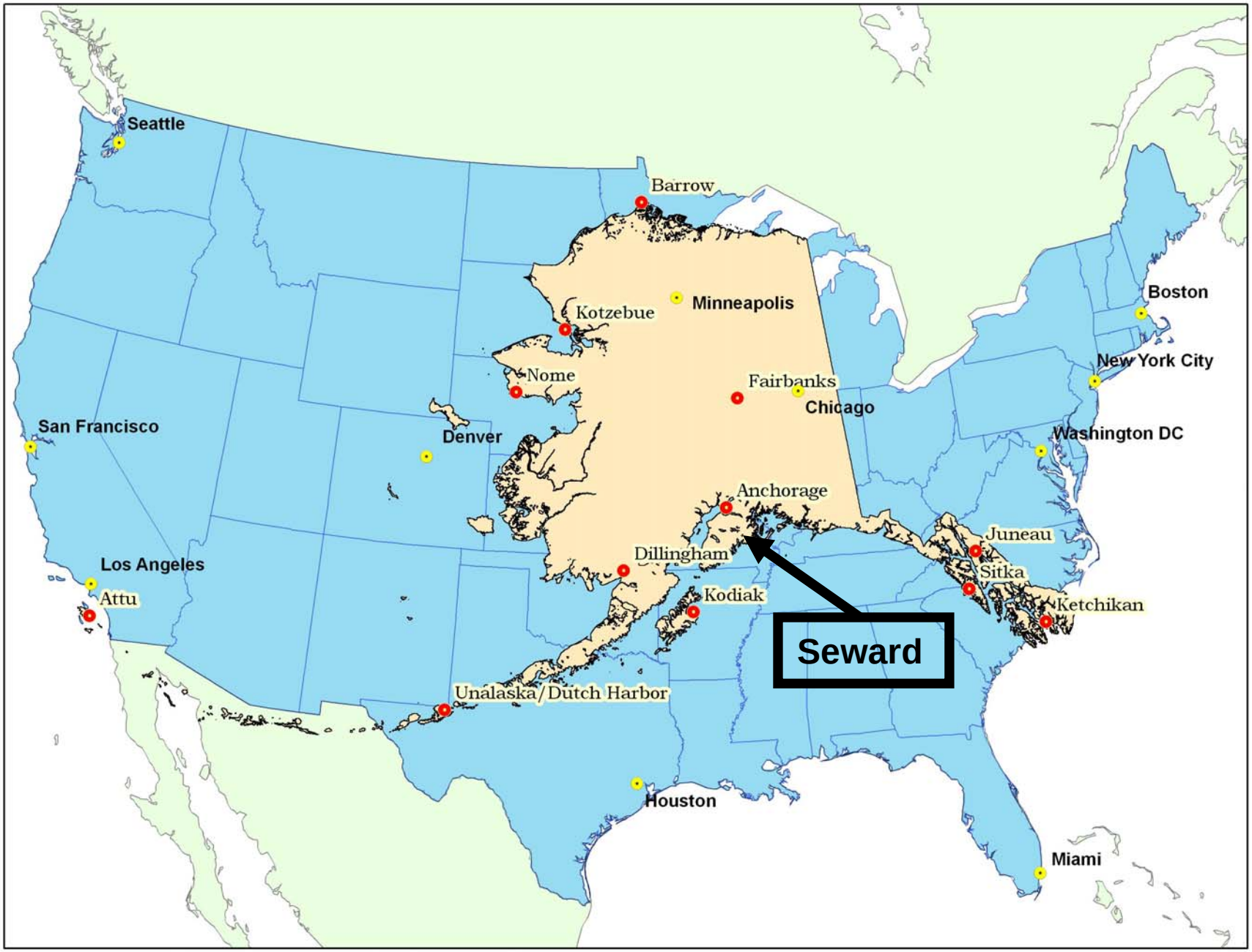
ALASKA REGION RESEARCH VESSEL

ALASKA REGION RESEARCH VESSEL

ALASKA REGION RESEARCH VESSEL



Alaska's size relative to the continental United States



These to maps are projected in an Equal Area projection appropriate for their global location.
Both maps are projected at a base scale of 1:18,490,830.

For more information about this map, please contact rmikol@gi.alaska.edu

Produced by the UAF/Geographic Information Network of Alaska (GINA)
(www.gina.alaska.edu)

Seward Marine Center Plan

ARRV Movie