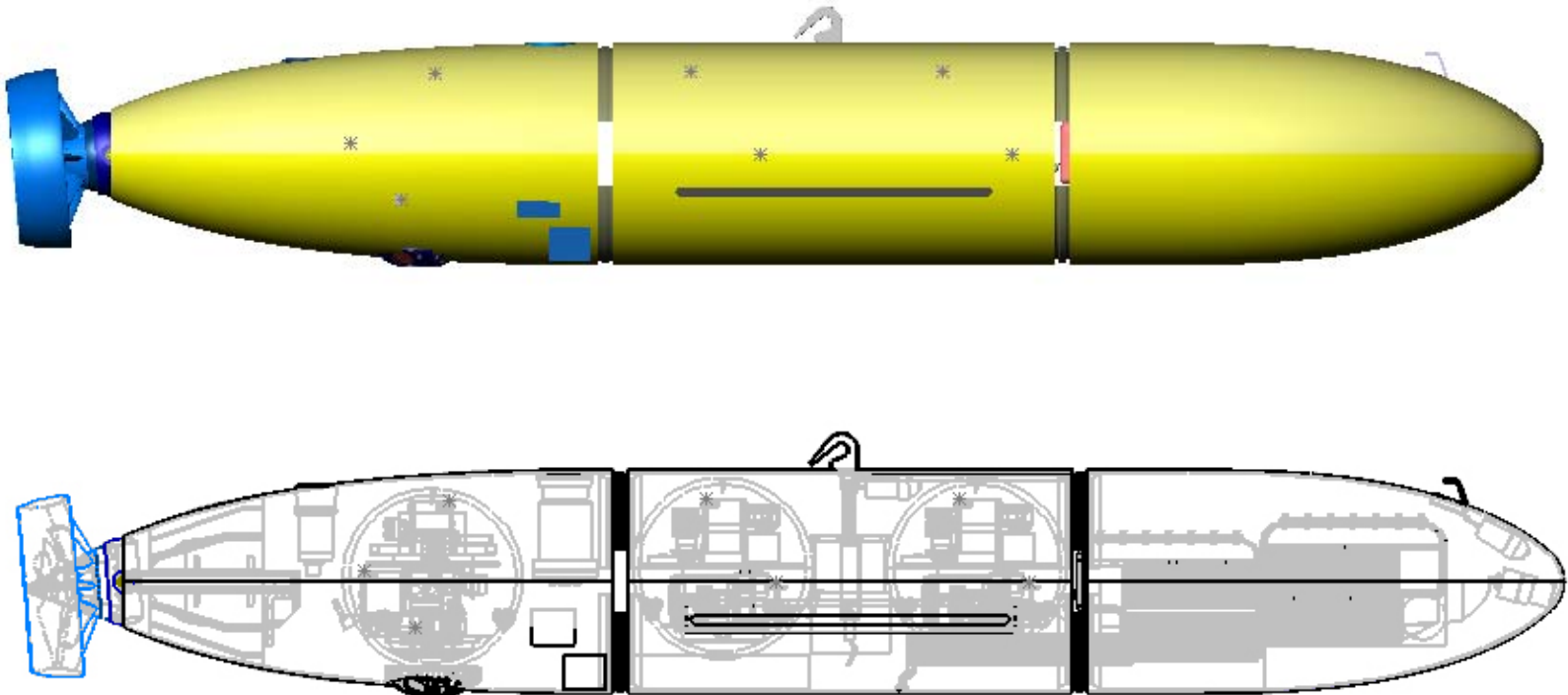
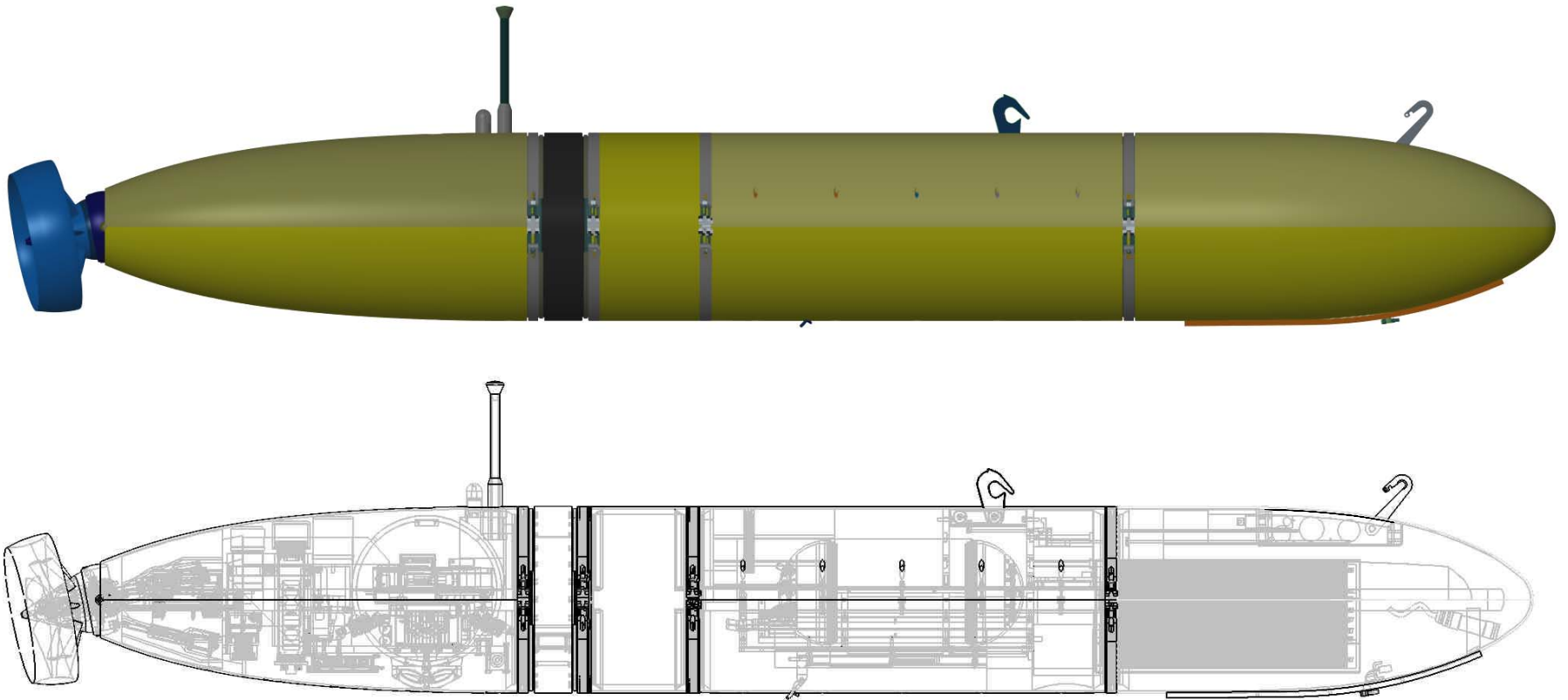


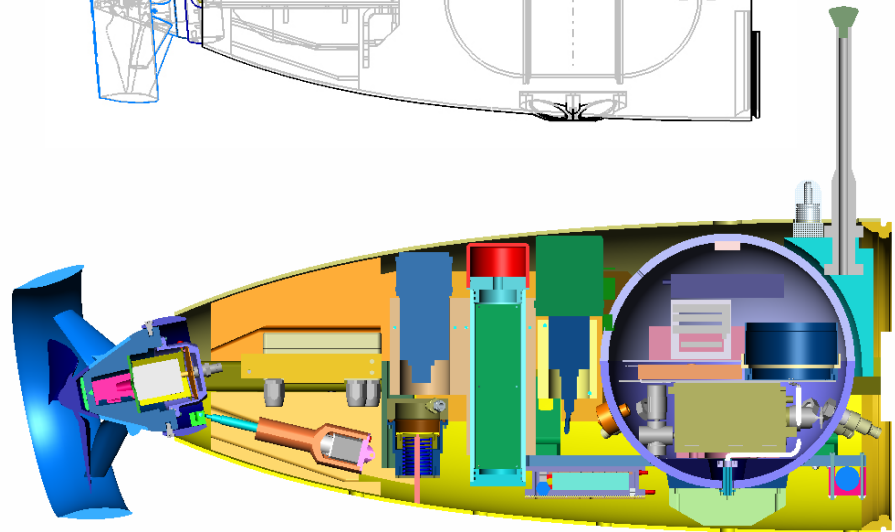
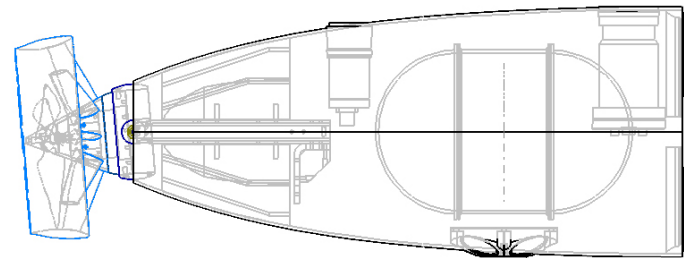
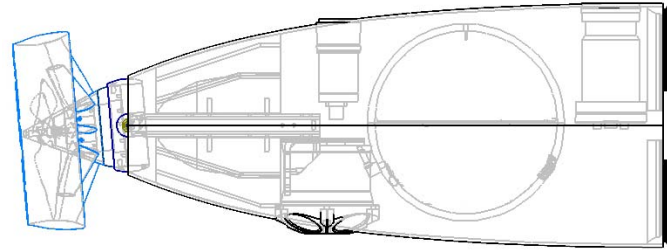
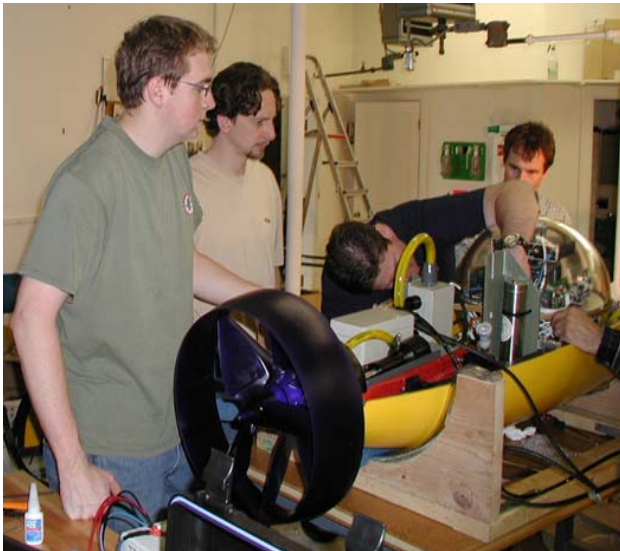
Preliminary Vehicle Configuration



Proposed Vehicle Configuration



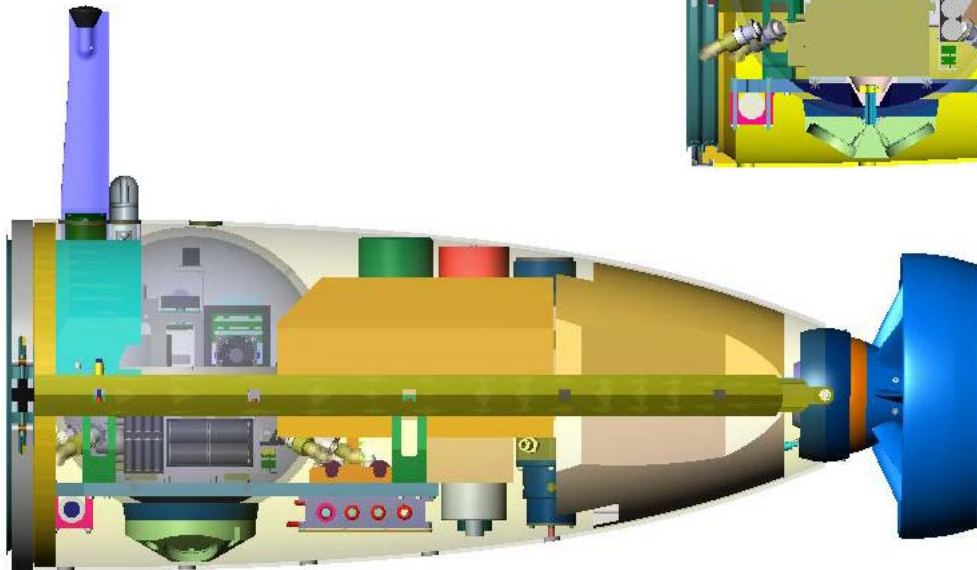
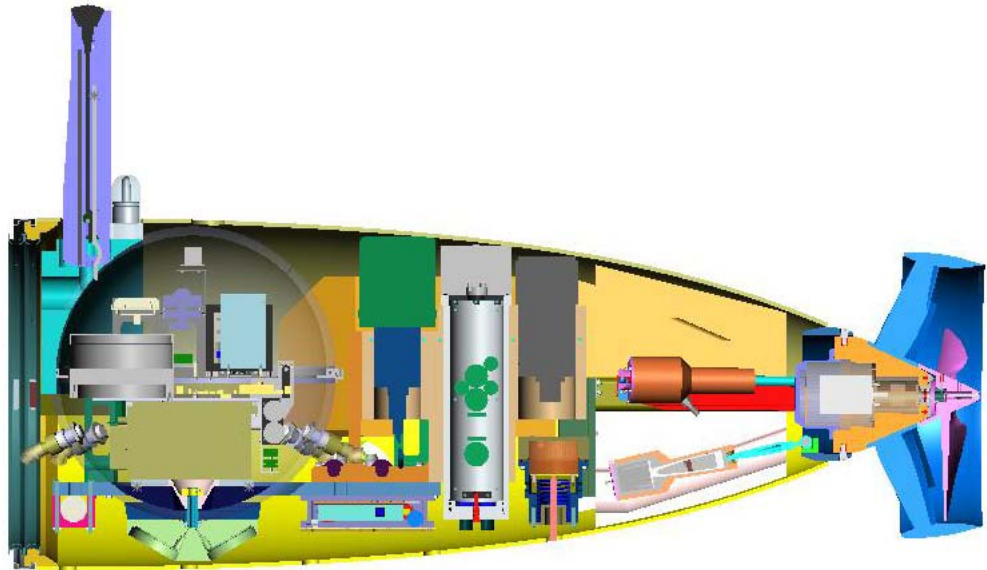
Tail Section at DR1



Tail Section Interior/ Exterior

Modified Antenna,
mounting, strobe, etc

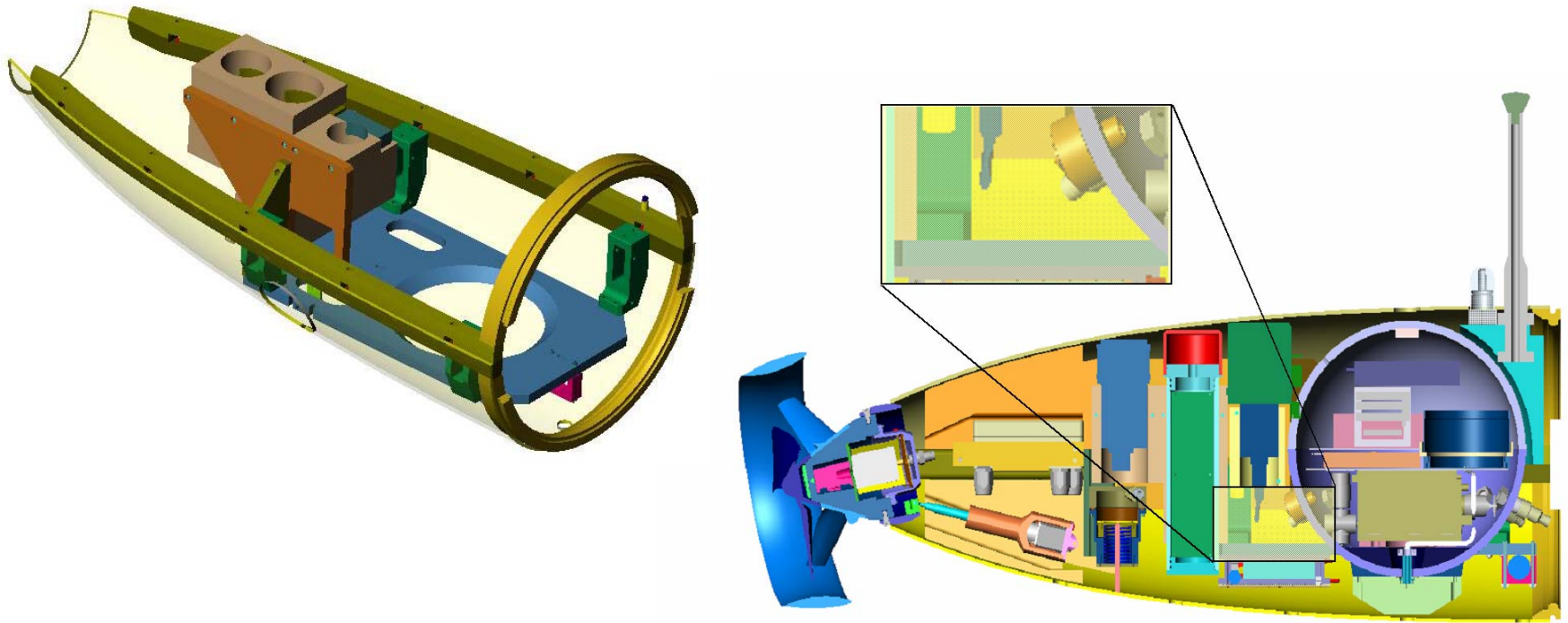
Moved acoustic element
to clear sphere



Designed pressure vessel
and assembly for BART

Sorted out compensator,
and service panel

Tail Section Service Panel



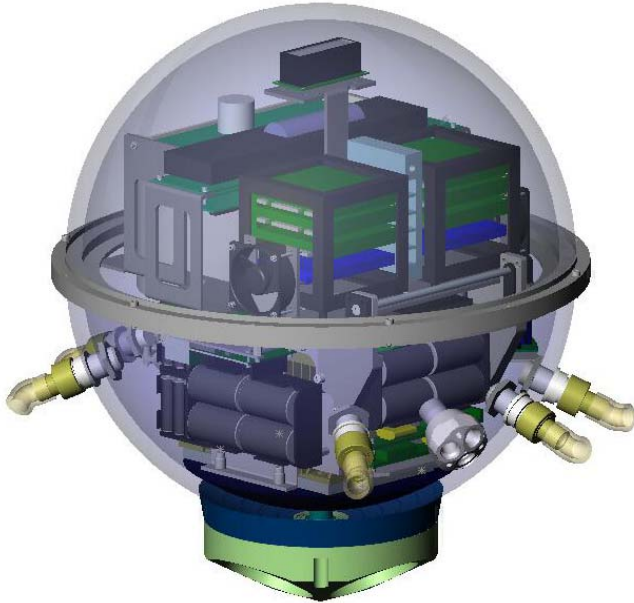
Panel on starboard side, lower shell

Holds PPV, Shore cable, oil, bleed lines

Proprietary

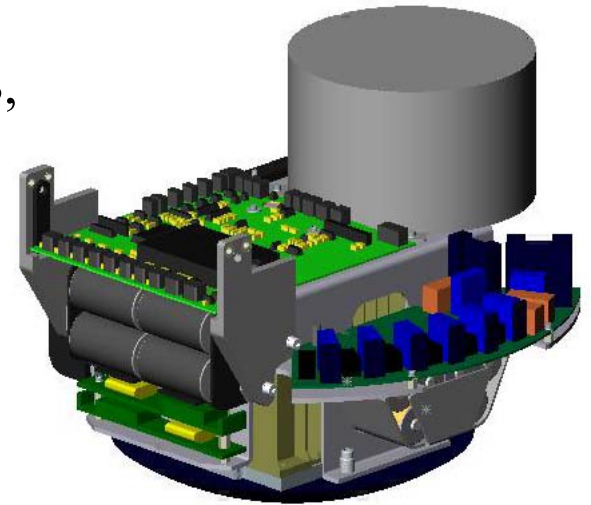
Bluefin

Tail Section Main Electronics Housing

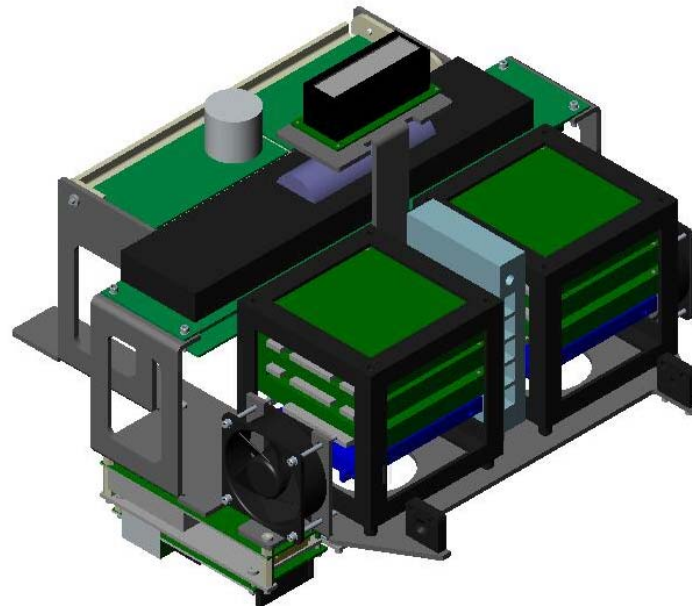


Refined DVL to
INS coupling.
Switched molding
compound, mold
procedure, tooling

Modified mid-
chassis (rotated PCB,
better hinges,
mounted all
components, better
wire routing)

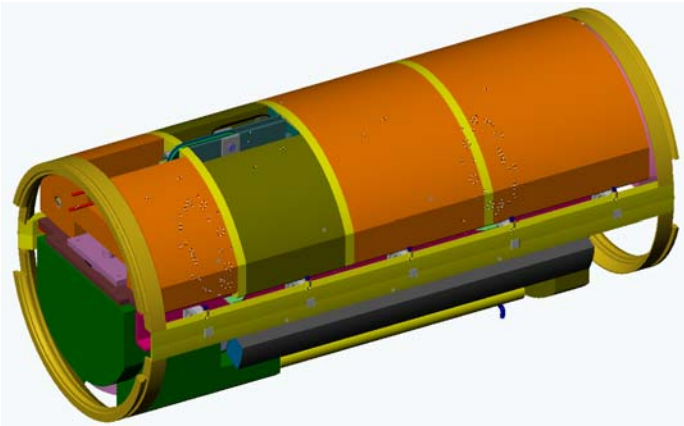


Modified top chassis
(added 2nd stack, fans,
top panel, remounted
all components for
service, wiring, noise)

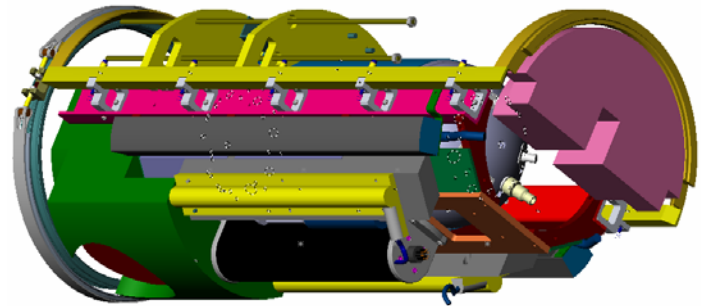
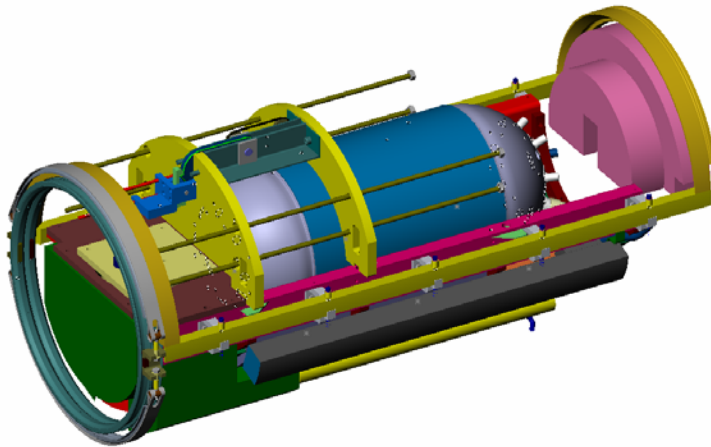
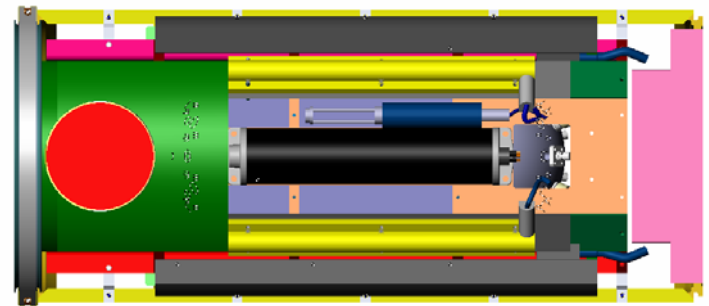


Payload Section at DR1

Upper Frame



Lower Frame



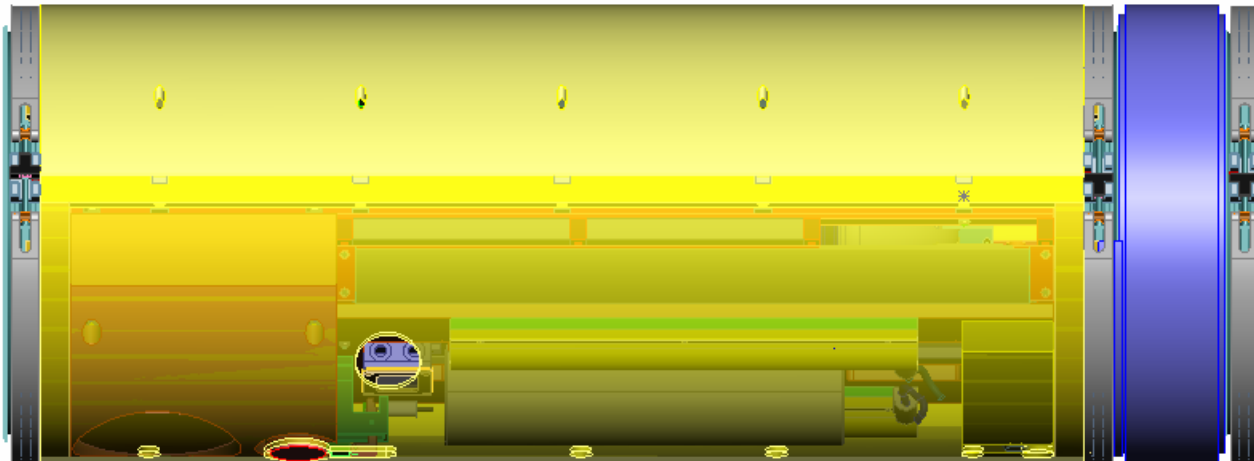
Payload Section External

Sensors located for optimal performance, protected from impact, smooth flow transition

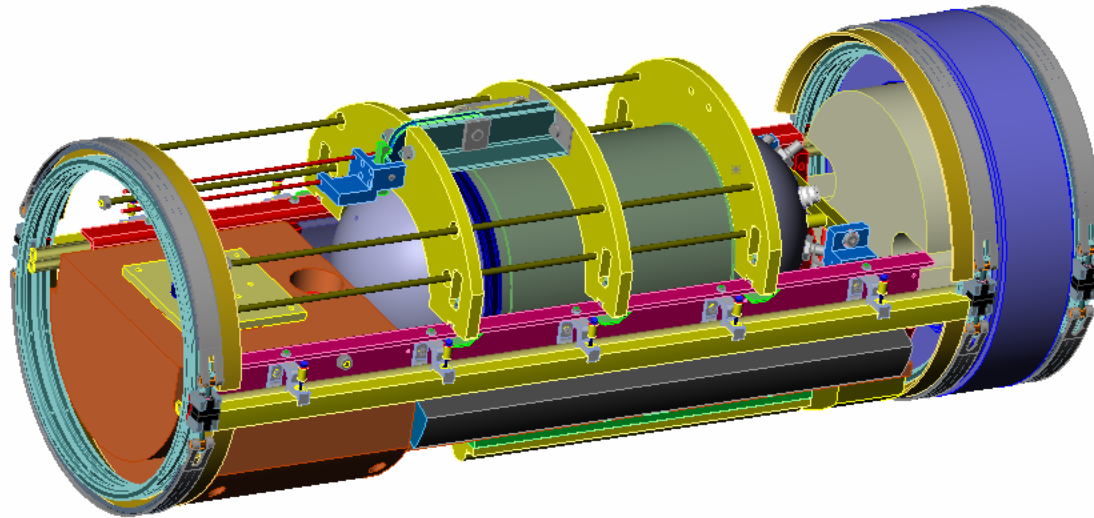
All components are readily accessible, electronics in single housing

Drain holes and SVP inlet are in-line on bottom

Note location of drop-weight, junction box and sound-velocity profiler



Payload Section Upper Frame



Relatively few modifications structurally—modifications for C_B — C_G

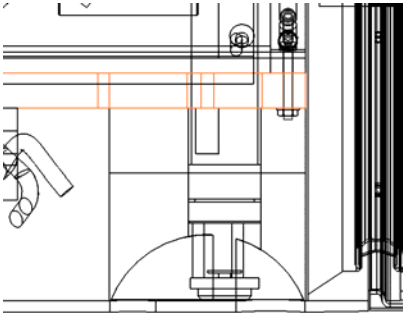
Hook assembly strengthened and moved aft for better pick angle

Sub-Bottom Profiler mounted directly into foam and lowered

Pressure vessel is hinged to frame—pivots up to 90 (upright) for access

Key spacing modified to solidify a 9.25" standard

Payload Section Lower Frame

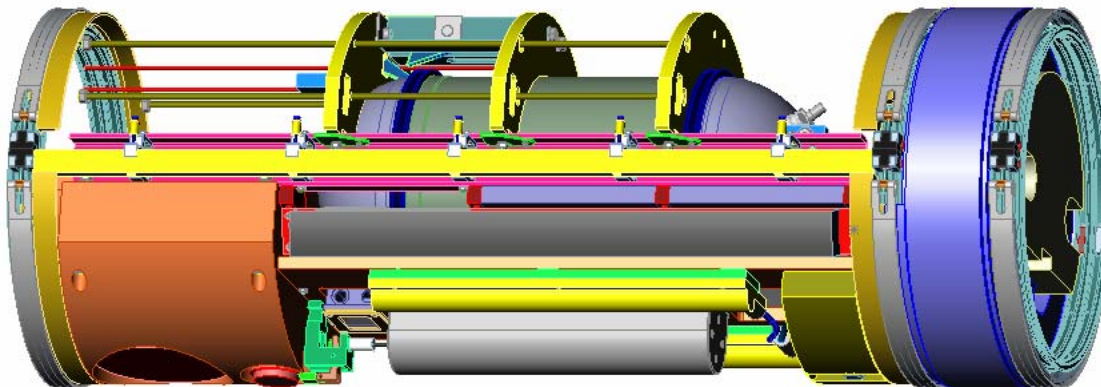


Significant modifications to accommodate: ITC standard SSS (front to back), flat SBP hydrophones

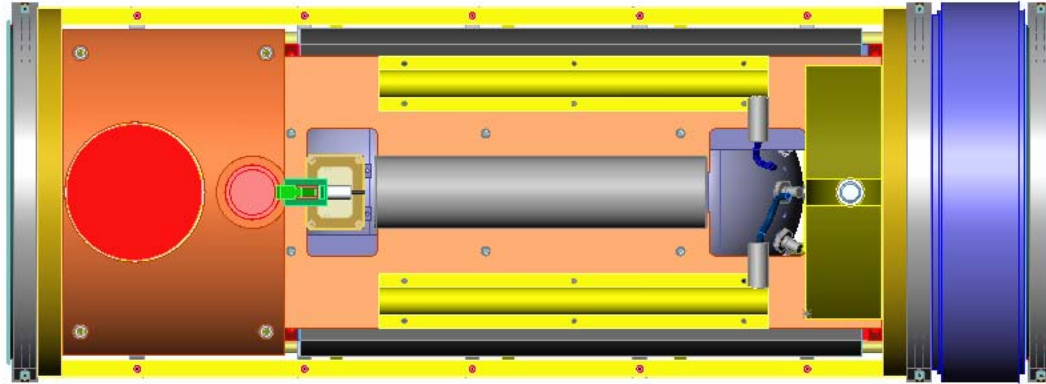
All sensors mount to internal frame, which can be dropped in from top

Lower rails and inserts modified to fix issues raised on DWP

All foam pieces are integral to structure, and better standardized



Payload Section Bottom View

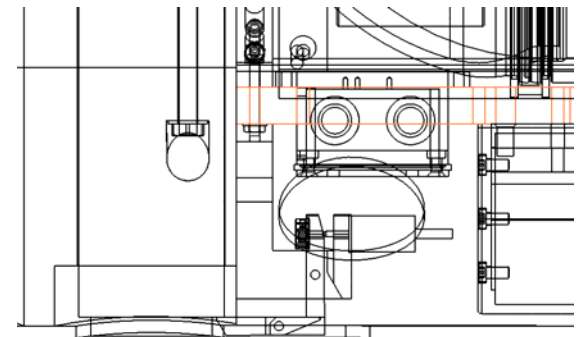


Cable routing, electrical noise, hull-borne noise minimized to maximize sensor performance

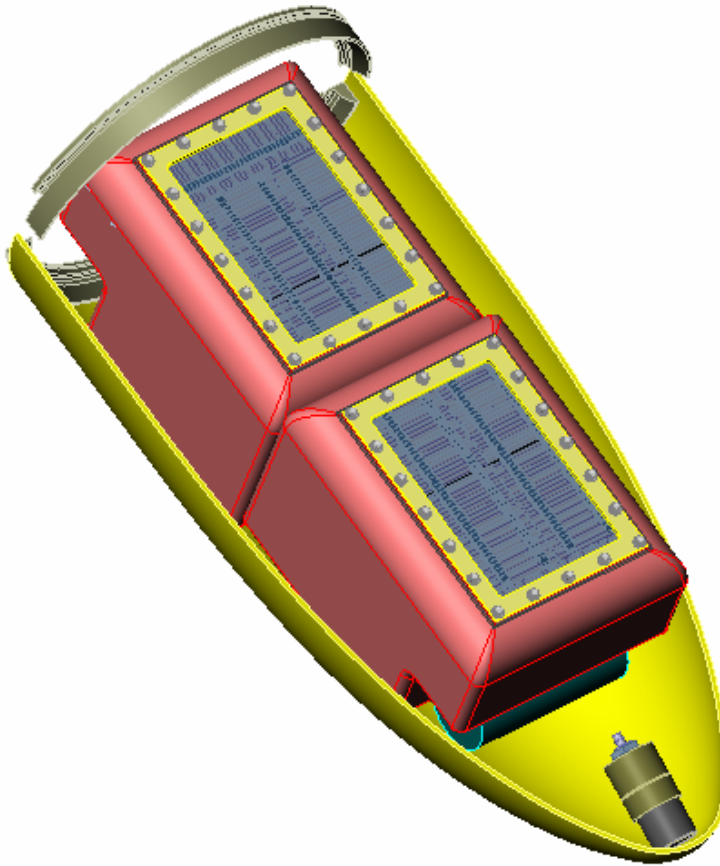
Excellent roll stability, and symmetric cable routing

Small forward junction box—a modified version of aft junction box

Burn wire drop-weight mechanism located in this section—3" bar stock is armed from underside



Preliminary Nose Section Configuration

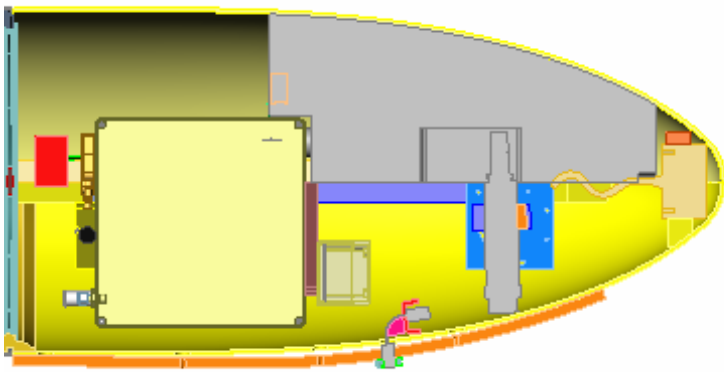


- Two (2) battery packs
- Thermoformed plastic container
- Flexible bladder for compensation
- Top-in assembly

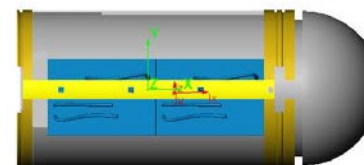
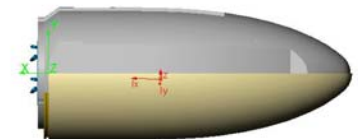
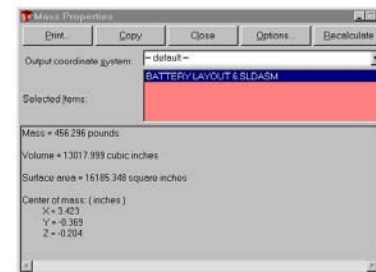
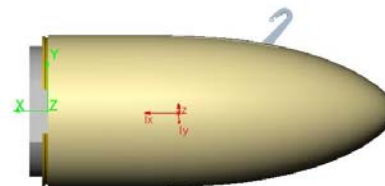
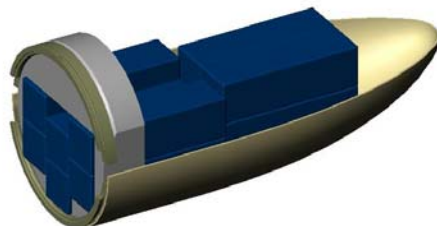
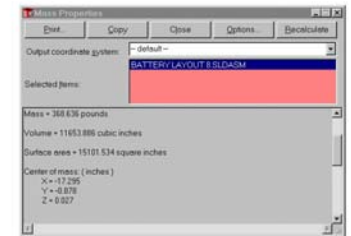
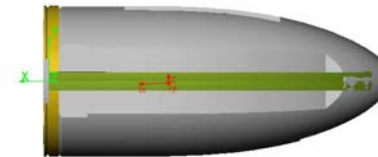
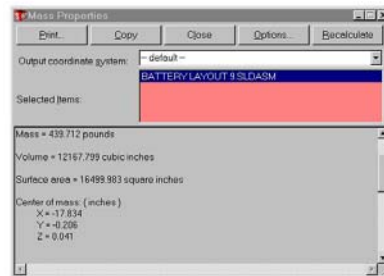
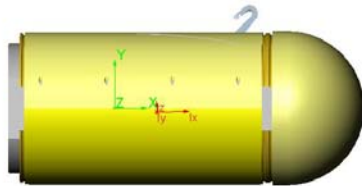
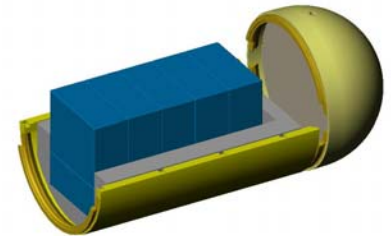
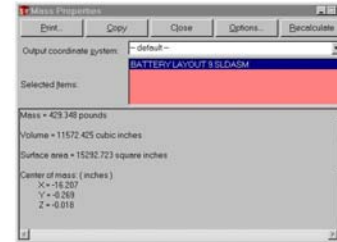
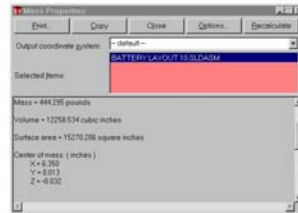
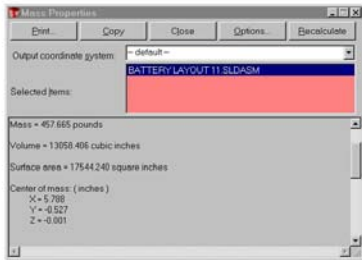
Deep Water Prototype Nose

Tested batteries, switches, drop weights, homing, latching, etc.

Incorporated COTS junction boxes to house batteries in potting and oil



Nose Configuration Range



Proprietary

Bluefin

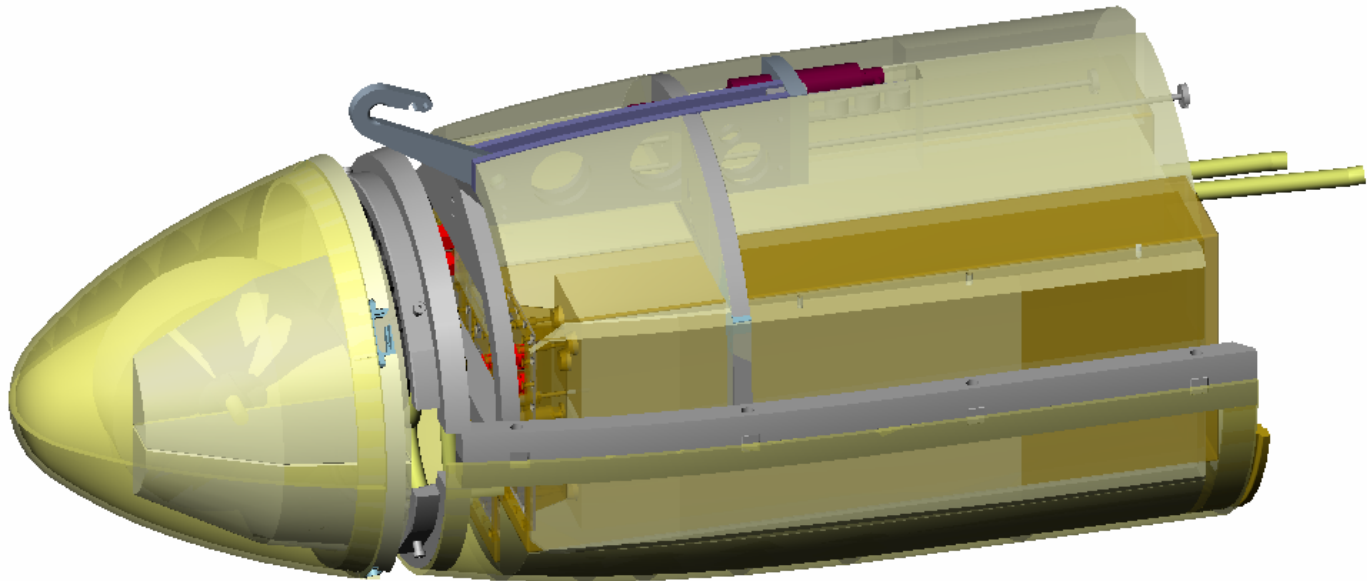
Nose Section Overall

Removable nose-cone with bayonet style attachment

Easy access to batteries for charging or removal

OAS mounted in nose-cone

Easy access to recharge descent dropweight



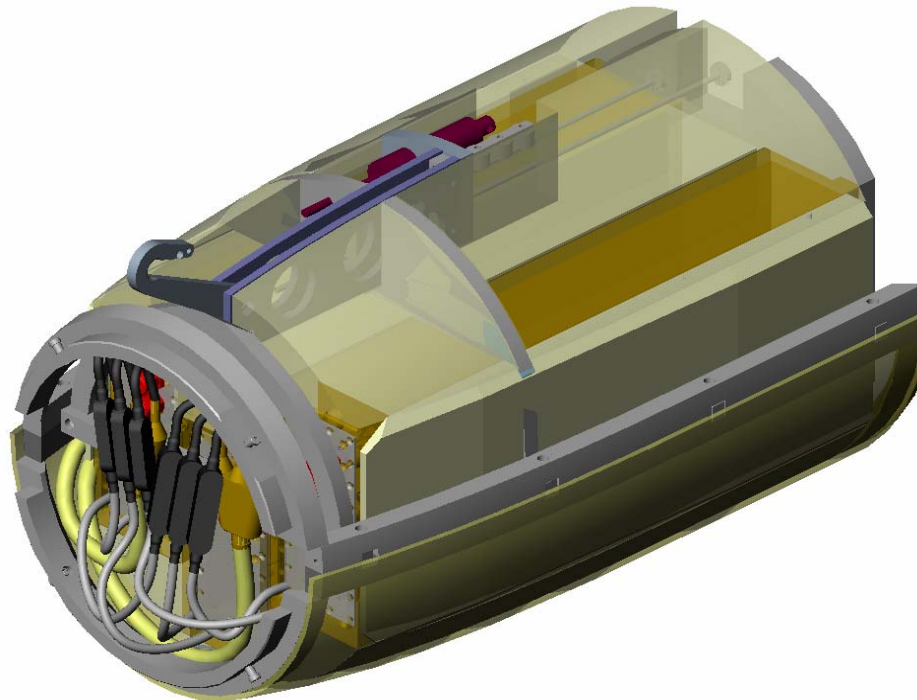
Battery Packaging

All connectors are mounted at the front of the aft nose section

Packs may be slid out front after nose-cone removal, or recharged in-situ

Each pack (3 total) has PBOF-to-molded 3-way splices

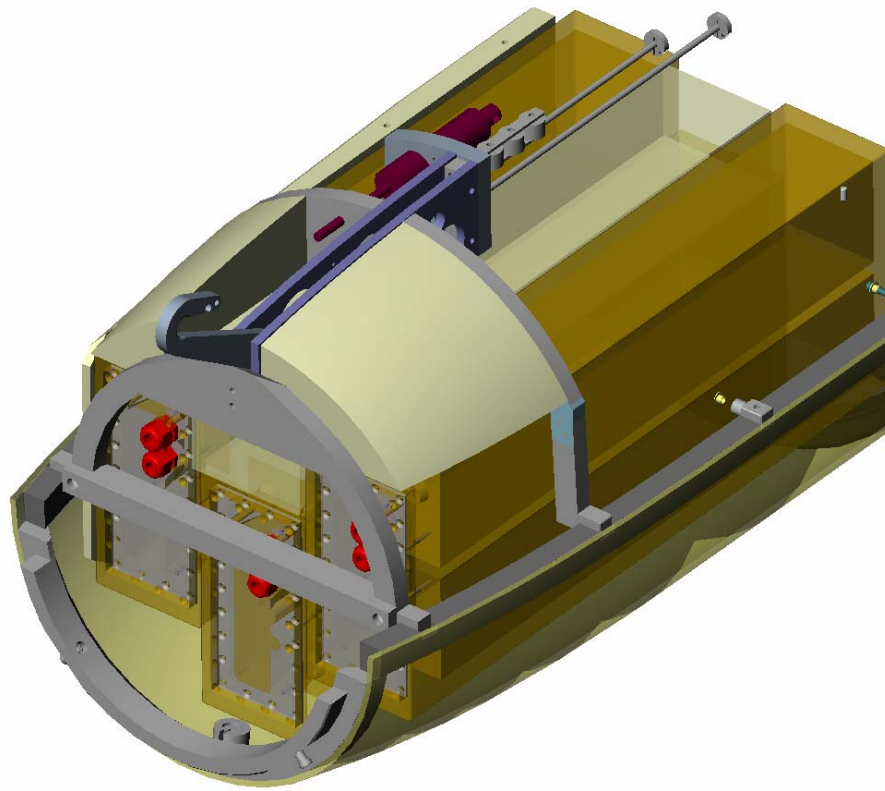
Positive and negative cables run aft along starboard side



Tow Hook Assembly

Mounted to shell rails for strength and serviceability

Serviceable by removal of top shell



Nose Cap Assembly

Foam mounting provides required baffling

Single piece design is stronger, and replaceable in the event of collision

Space efficient for maximum foam volume

OAS can be rotated from 15° to 45°

