APPENDIX V

AUV PRESENTATION

Harbor Branch Oceanographic Institution, Inc.

WHY CONSIDER AUVS?

THERE ARE MISSIONS THAT ONLY AUVS CAN PERFORM EFFECTIVELY

AND

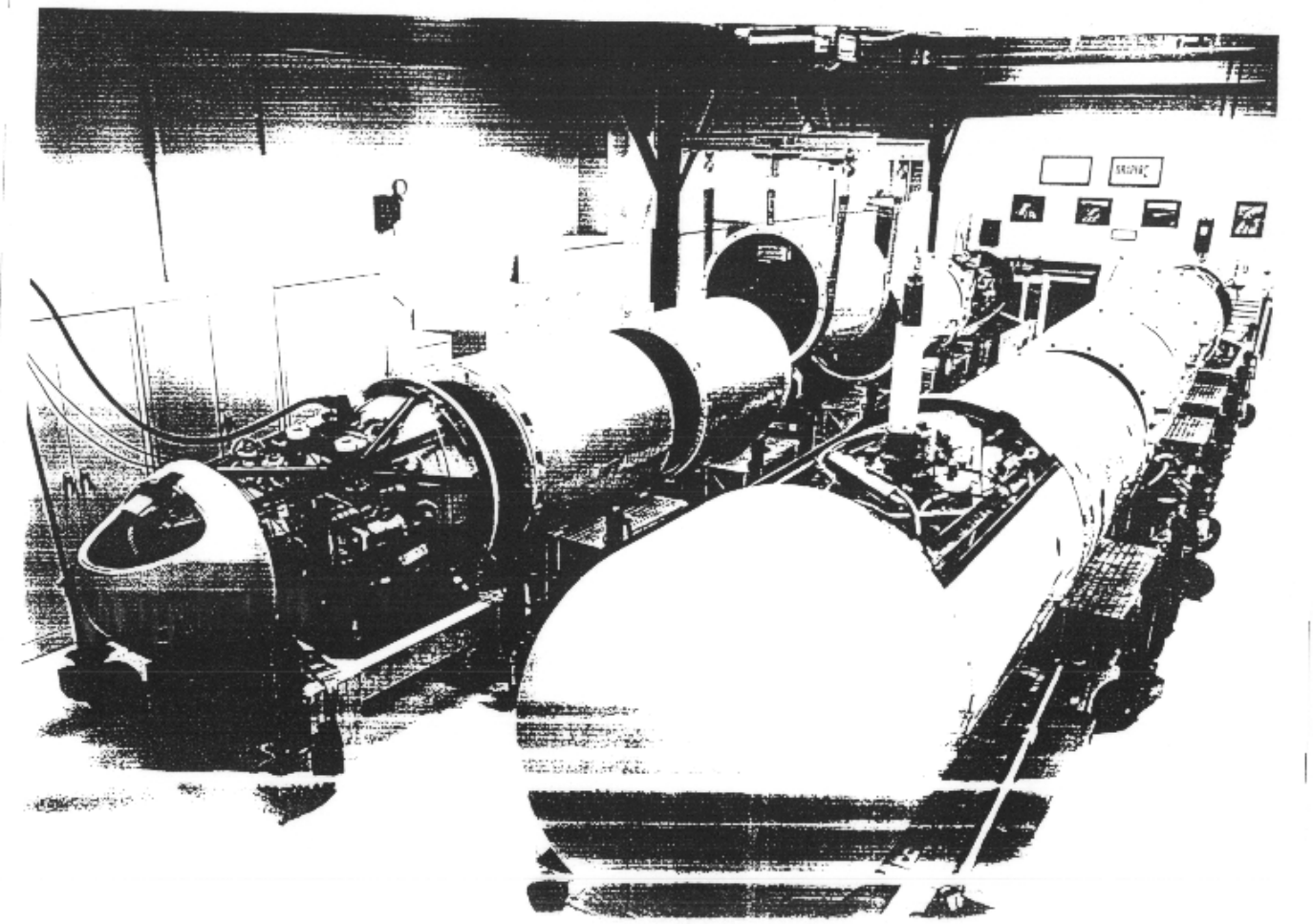
CAN REDUCE THE COST OF OPERATIONS SIGNIFICANTLY

THESE MISSIONS WILL HAVE TO BE PERFORMED FIRST IN ORDER FOR AUVS TO GAIN ACCEPTANCE

Harbor Branch Oceanographic Institution, Inc.

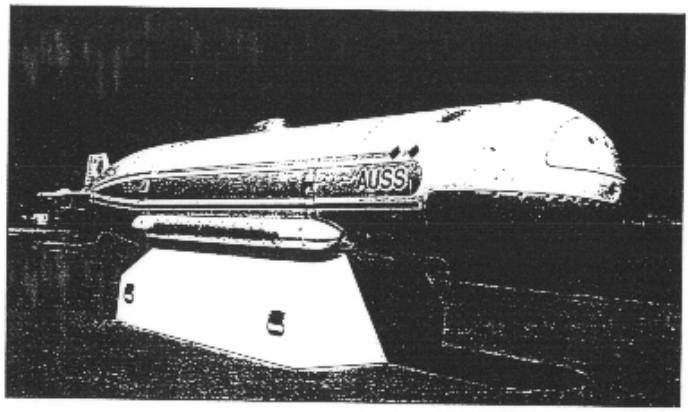
DUAL-USE APPLICATIONS

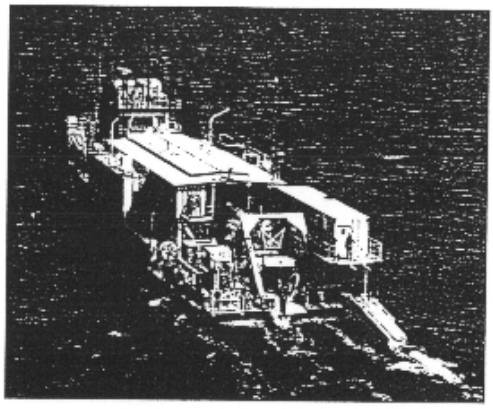
APPLICATION	COMMERCIAL USE	MILITARY USE
Long Horizontal Excursions	• Under ice survey • Seafloor mapping • Oceanographic data • Routine surveys	• Under ice surveillance • Mine countermeasures • Reconnaissance missions • Search missions
On-Site for Long Periods	• Hydrothermal vents • Biological sites • Dump sites • Seismic/volcanic sites • Platform/riser inspection	• Harbor entrances • Mine countermeasures • Surveillance • Weapon delivery • Decoy
Rapid Response	• Oil spills • Seismic/volcanic activity • Lost plane/ship/sub	• Acquire intruder • Drug interdiction • Lost plane/ship/sub
Weather Tolerant	• Storm monitoring • Coastal site monitoring	• Storm monitoring • Coastal surveillance
Very Hazardous Inspection	• Hazardous waste sites • Oil field blowout	• Mine field survey • Sunken nuclear sub



Naval Command,
Control and Ocean Surveillance Center RDT&E Division San Diego, CA 92152-5000

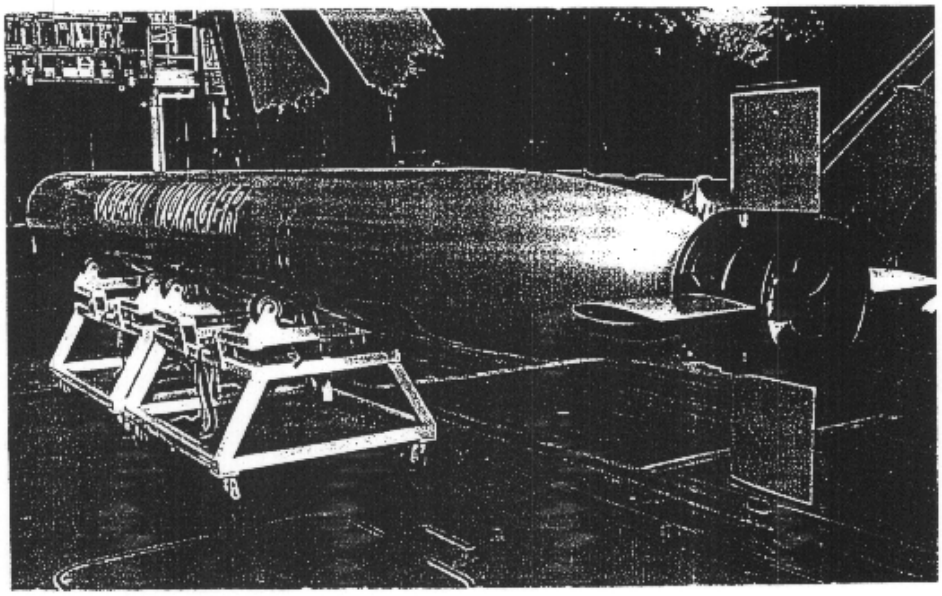
ADVANCED UNMANNED SEARCH SYSTEM





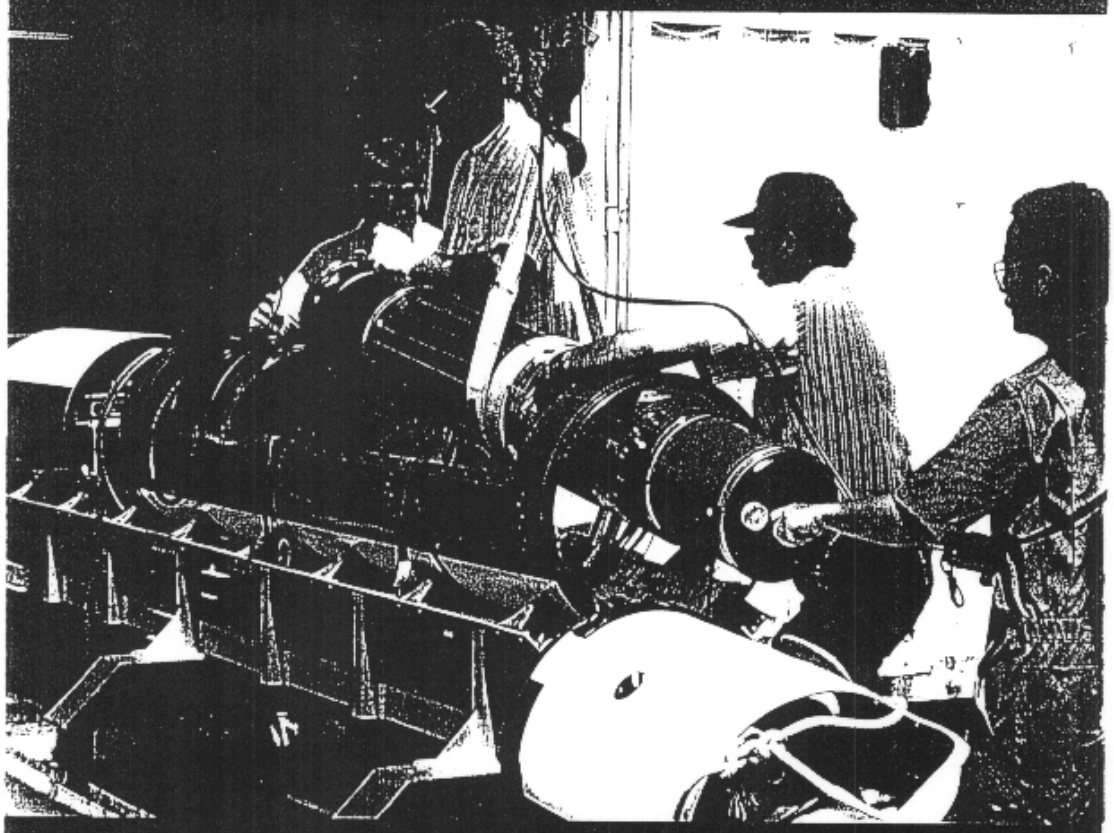
OCEAN VOYAGER I

Autonomous Undersea Vehicle

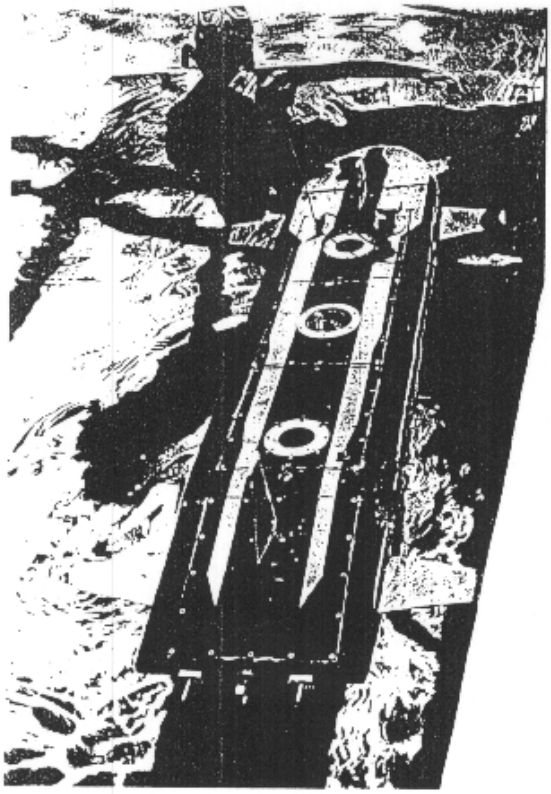


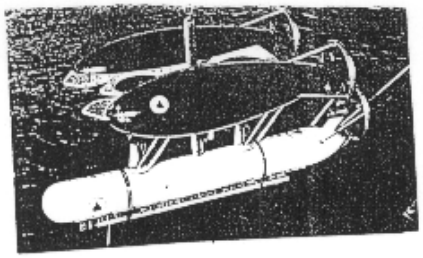
Ocean Voyager I aboard ship

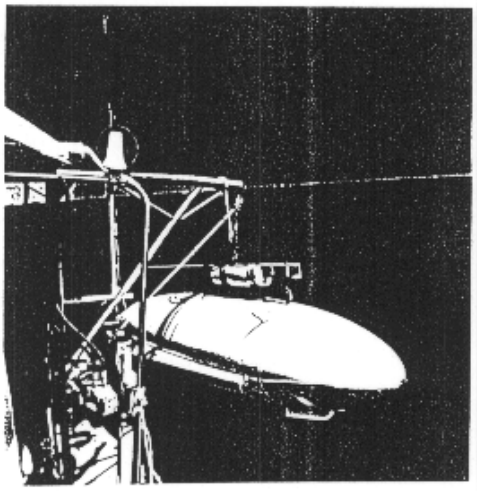
ART's sea trials of LS-4096 laser system in XP-21

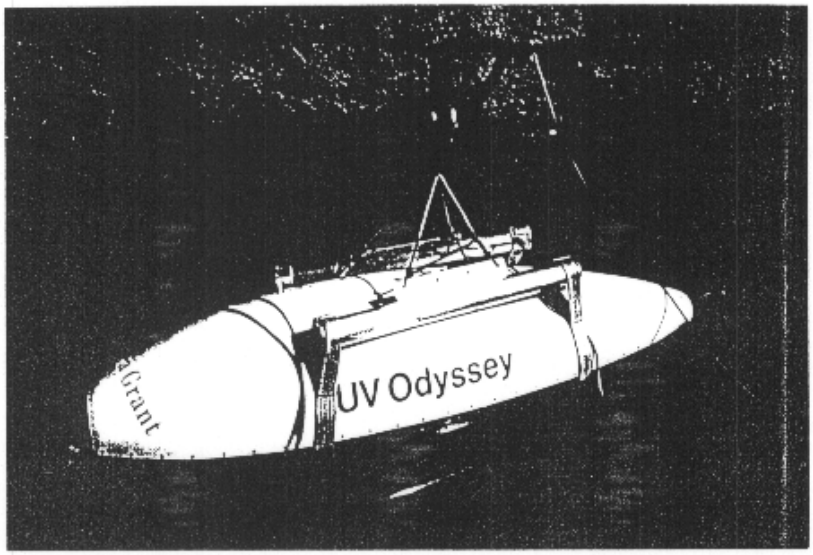


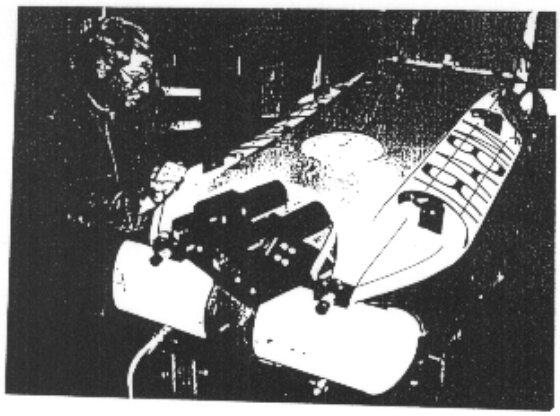
The International Underwater Industry Magazine

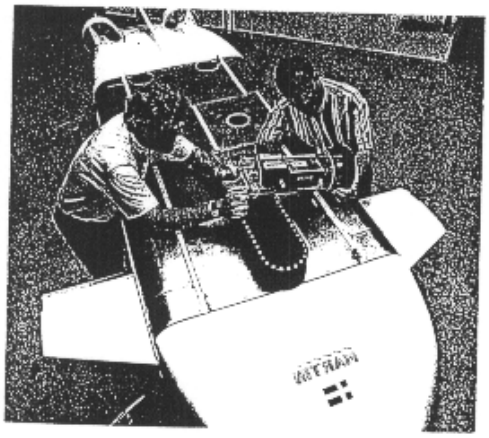


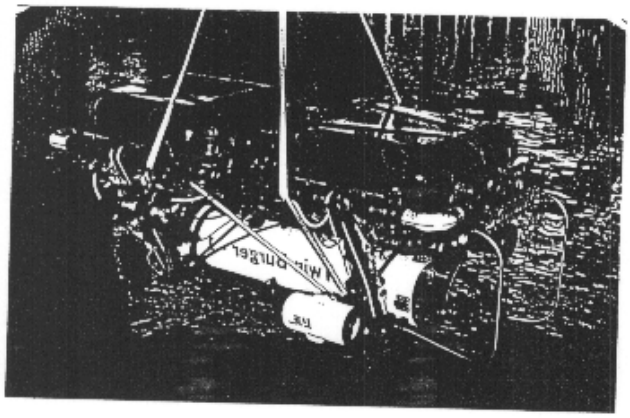





Grant
UV Odyssey







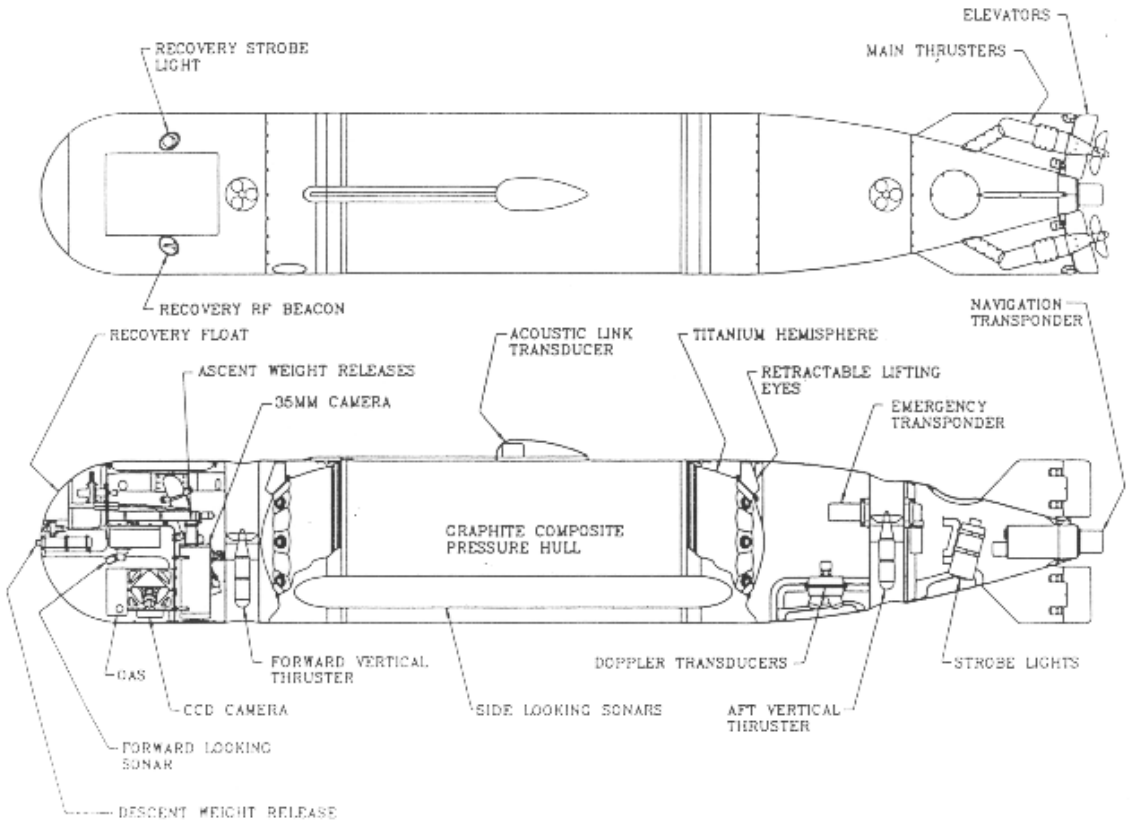


Figure 1. AUSS vehicle.