# INNER SPACE CENTER TECHNICAL SERVICES GUIDE

#### WHAT IS THE INNER SPACE CENTER?

The Inner Space Center (ISC) at the University of Rhode Island Graduate School of Oceanography uses advanced telepresence technologies to bring ocean science and exploration to the world in real time. Ocean science education, outreach, and communication are central to the mission of the ISC. We facilitate live communications and interactive engagement between scientists at sea and on shore as well as to classroom and public audiences around the world.









# **CORE SERVICES**

# Telepresence Services

- ★ At-sea telepresence support
  - Satellite and internet bandwidth management
  - Mobile Telepresence Unit (MTU)
  - On-site MTU technician
- ★ On-shore telepresence support
  - Custom video and audio delivery solutions
  - Video recording and data management
  - In-residence science team support in mission control

## **Education Services**

- ★ Live interactions
- ★ K-16 resources
- ★ Professional development

## Media Services

- ★ Video Production
  - o At sea or on location media specialist
  - Daily video highlight production
  - Live interaction coordination and hosting
  - Documentary filmmaking
- **★** Data
  - Imagery and video data management and distribution
  - Visualization and animation
  - Web content development
  - Web management

# **Custom Solutions**

★ Custom solutions for research missions on vessels or on shore. Contact us at <a href="info@innerspacecenter.org">info@innerspacecenter.org</a>



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### TELEPRESENCE SERVICES

We provide customizable telepresence solutions for any research mission.

- Assist with satellite and Internet bandwidth design, procurement, and management
- Receive live video, audio, and data feeds from a research vessel (or any mission location)
- Rebroadcast the video streams
  - o Provide private or public Internet streaming (YouTube, your website, Internet2 multicast, etc.)
  - o Implementation of Facebook Live and Google Hangout events
  - o Troubleshoot viewers' or venues' streaming issues
  - o Develop web pages and dashboards to broadcast the mission in real time to anyone with a web browser
- Record live video and share video files with mission stakeholders or the public
- Communicate among mission personnel with custom telephone and intercom solutions
- ISC Mission Control staffing for expedition support

#### MOBILE TELEPRESENCE UNIT (MTU)

If the research vessel or mission location does not already have telepresence equipment, the ISC can provide a Mobile Telepresence Unit (MTU). A MTU provides a stable solution for sending video and audio streams (from cameras and microphones) from the research vessel to the ISC.

• ON-LOCATION MTU TECHNICIAN: A MTU technician can set up and/or administer the MTU for the research mission. This technician will troubleshoot audio and video feeds, provide quality-control, and optimize the outbound streams. The technician will also provide assistance with voice audio communication and data streams or file transfers.

### IN-RESIDENCE SCIENCE TEAM SUPPORT IN ISC MISSION CONTROL

ISC Mission Control can host up to eight scientists and/or students per watch, where they can participate virtually in the cruise. Scientists/students can view all incoming video and data, communicate with ships directly via intercom, participate in onboard discussions, and direct operations. We can also assist with meals and housing arrangements.

### MEDIA SERVICES

#### ON-LOCATION MEDIA SPECIALIST

An ISC videographer with a field production kit can record project activities via still imagery, video, and audio. The videographer can conduct interviews with mission participants and assist with web content development and management. Video, image, and audio files will be delivered after the mission is completed.

VIDEO HIGHLIGHTS PRODUCTION: Deliver edited clips suitable for news outlets, social media, and other platforms to engage a variety of audiences.

LIVE INTERACTIONS: Coordinate and produce live interactions between the research platform and classrooms, museums, or other educational institutions. Interactions can be public or private events.

DOCUMENTARY PRODUCTION: The production team can produce short or full-length documentaries to communicate the science story for public engagement and broader impact.

## **EDUCATION SERVICES**

Research-specific educational programs can be developed, including live interactions, K-16 resources, and professional development. ISC education staff will tailor the products to the objectives of the project and the audiences involved. In addition, the ISC coordinates and produces a variety of online and printed education resources for K-16 audiences. Resources can be expedition-specific or cover broad ocean science topics.

