2003 Proposal Form – Internal-only Projects

Project Number: 500055

Project START: Jan 1, 2003 **Project Duration (in years): 1**

Project Manager/PI: Nancy Jacobsen Stout

Project Title: Core Video Annotation Data - MDUC

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1) Abstract (new and continuing projects)

ROV "outline" video annotation has been designated a core data stream, which means that support for the collection, processing, and archiving of the data is provided on an institutional basis rather than through individual projects or divisional budgets. The primary elements of this ongoing effort include:

- Outline video annotation of all ROV dives through ITD.
- Data archiving and dissemination through ITD.
- Data validation through a Science data "champion".

The ROV outline video annotation team includes:

- Project manager: Nancy Jacobsen Stout (Video Lab Supervisor, ITD)
- Lead scientist: David Caress (MDUC, Science)
- Science data "champion": Jim Barry (Data Champion, Science)
- Science advisor: Kim Riesenbichler (MDUC, Science)
- Annotators: Judith Connor, Nancy Jacobsen Stout, Linda Kuhnz, Kyra Schlining, Susan Von Thun, Kristine Walz

This project will include only the resources and expenses required to support ROV video annotations in outline mode, which is mostly limited to annotation staff time and video tape budget. A small quantity of IAG and/or IS days may also be required for system hardware and database maintenance. All other Video Lab expenses and resources will be covered in the ITD Video Lab divisional budget. The final resource requirements for this project will be generated once the total number of 2003 ROV dives has been finalized. The ongoing annotation program is expected to operate as in past years, including submission of quarterly progress reports to the MDUC chair and data "champion".

The Video Lab staff members also remain available to participate in research cruises, assisting the science crews and contributing to post-dive data and sample processing. Gaining this exposure to advanced scientific theories and field procedures facilitates improved understanding of the research mission, ultimately enriching the quality of the video-related data.

2) Proposal

a) The problem addressed (for new projects only)

- Statement of the problem
- Why it is important
- Present state of art/understanding
- How it relates/contributes to MBARI's mission and strategic plan

b) Approach to the problem (new and continuing projects)

- Engineering/technology development

  The existing VICKI software is being used while the new annotation software is being developed through the current VARS project.

- Field programs

  All MBARI ROV missions continue to be recorded on Digital Betacam (standard for all footage) and HD-D5 (selects only). Video annotation software tools are currently being used aboard the Point Lobos and Western Flyer and in the Video Lab. They are also used on some in individual desktops (without a video player connection).

- Data reduction and analysis

  All ROV dive video recordings are annotated in 'Outline' mode by the Video Lab staff. The resulting database is used by MBARI science staff and their colleagues for hypothesis generation, object or event identification, and further scientific analysis.

- Proposed duration of project and approximate plan of action

  This project will continue to operate annually as it has in past years.

c) Specific deliverables (new and continuing projects)

- Products from research and development (instruments, tools, documentation, publications, presentations, etc.)

  The video tape archive and related annotation database serve to document the events of MBARI's ROV missions. These results contribute to the production of scientific, educational, and technical publications and presentations.

- How success will be measured

  Feedback from scientists, management, and the MDUC committee will be used to measure the success of the annotation database and related products and systems. Modifications to this core data stream will be approved through MDUC.

d) Project team (new and continuing projects)

Project manager: Nancy Jacobsen Stout (Video Lab Supervisor, ITD)
Lead scientist: David Caress (MDUC, Science)
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e) Project Lab Space (new and continuing projects)

MBARI Video and Digital Labs and tape vault in Building A
Video Tape Vault in Building G
Off-site storage of video tape copies (Iron Mountain, Hollywood, Ca)

3) Budget Justification (new and continuing projects)

Resources and Expenses

This project is expected to operate in 2003 as it currently does. The project budget will include only the primary resources and expenses required to annotate the ROV video in outline mode and to maintain the annotation database, including annotation staff time and video tape expenses. All other Video Lab expenses will be covered either in the ITD Video Lab divisional budget, or in other project budgets (e.g. projects requiring video annotation in "full" rather than "outline" mode).

The following budget estimates are based on 150 *Ventana* (average 5-hour duration) and 150 *Tiburon* (average 10-hour duration) dives projected for 2003:

- Approximately 300 days for video analysis and processing by video annotation staff.
- Approximately $75,000 will be required to purchase Digital Betacam video tapes (@ $27.50 each), which is the primary video archive format required for 'Outline' annotation (includes dubs).

4) Milestones (new and continuing projects)

- Daily: Each video annotation staff member will annotate 4 hours per day each day she/he is at work. The video staff will work with the Video Annotation Data Champion as needed to address questions and concerns regarding the annotation process or scientific value and usefulness of this data.

- Quarterly: The video data "champion" will validate the quality of the video data by providing reports to the MDUC committee.

	Milestone 1	Milestone 2	Milestone 3	Milestone 4	Milestone 5	**Total Resources** [1] for each resource category for all milestones listed here
Milestone date						
Milestone description						
EE						
SE						
ME						
IAG						
Machine Shop						

[1] This number should be same as the number you entered on the resource requests for this particular resource