Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

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Congressman Jim Saxton, Chairman
Subcommittee on Fisheries Conservation, Wildlife and Oceans
Washington, DC 20515

Dear Congressman Saxton:

Thank you for the invitation to testify before the Subcommittee on Fisheries Conservation, Wildlife and Oceans on Thursday, July 27, 2000, regarding the implementation of the Hydrographic Services Improvement Act of 1998.

By way of background, I have provided detailed applicable information on the disclosure statement. To summarize herein, I have been conducting hydrographic and seabed engineering surveys for industry and government agencies since 1975. My formal education has been in Marine Geology and Geophysics, with subsequent courses and training in hydrographic surveying and multibeam data acquisition. I have conducted survey operations along all of Alaska's coastlines and in many of its inlets and bays. In addition, I have conducted these same types of surveys throughout all of the rest of the coastal United States and most oceans in the world. I have authored or co-authored over 60 professional reports and written several professional papers.

I am a Vice President and Deputy General Manager at Racal Pelagos, Inc. (RPI) which is headquartered in San Diego, California and maintains a full time office in Anchorage, Alaska and various satellite locations around Alaska during the summer season. RPI is considered a world leader in conducting hydrographic surveys, producing and operating precision hydrographic survey software, and the conducting of seabed geophysical/seabed engineering surveys worldwide.

With specific consideration to the topics referenced in your invitation to testify, I have the following information. I will present the information in the same format as you requested and include several topics of discussion we would like to inform the Subcommittee about:

- Has the use of Contractors proven to be a successful and cost-effective way to reduce the backlog?

Absolutely - In Alaska, NOAA employs us with our large range of assets, ability to muster qualified crew and flexibility in platforms to attack areas that have particular or unique challenges. An example of this is Cook Inlet with 38-foot tides and high currents. We were able to put together a program that allowed for 24

hr operations operating 7 days a week to tackle this challenging area. We have completed the survey of the major shipping lanes that the large tankers routinely transit to supply the port of Anchorage. The use of Multibeam technology identified several uncharted hazards to navigation and reduced the safe charted depth in several areas. This information has been disseminated to users, significantly increasing the safety of navigation in the Inlet.

Our current task order includes Northwestern Fjord where, due to glacial retreat, there exisits a newly opened, 10-mile area, that has never been charted. The other area (Aialik Bay) has never been surveyed with multibeam and is charted at a scale that makes it difficult to derive much detail. Multiple tour boats bring tourists to this uncharted and sparsely charted area daily. NOAA has assigned us this area to update the charts for availability for boaters next year. NOAA plans to provide the commercial users with the more detailed smooth sheets prior to the release of the charts. NOAA works closely with local users to identify their priorities and seems to have their finger on the pulse of the real needs in the area.

We could be more cost effective by earlier execution of task orders. Early award of work orders, and larger survey areas, allows us to identify the optimum vessels and to reduce risk and cost with long term planning. This will be particularly important in the upcoming 4-year contract. NOAA should be able to identify the areas they intend for us to work in the long term and task us with developing cost options and operational approaches. Once this long-term plan is developed, tasks can be awarded as funds and requirements evolve. Small changes to this plan can be executed as required but if there is a basic long-term plan we can ensure the proper assets are available at the right price to accomplish the task.

We are firm believers that NOAA should maintain survey capability but also think that the contractor's role should be increased as time progresses.

- Will the data being collected by contractors help NOAA to produce electronic navigation charts?

Contractors software expertise could easily be employed to expedite the development of this technology. Our company has developed electronic chart solutions for specific navigation and dredging clients. Both NOAA and contractor crews are currently collecting and organizing their data in a way that will support this format when it is executed.

General Topics for the Subcommittee to consider:

1) RPI staff and personnel have been conducting seabed mapping and hydrographic services throughout Alaska and the world since the late 1960's. During this time, extensive experience has been gained in field data collection, instrumentation and software advancements, and the first -hand witnessing of the incredible growth in technology and its applications. At no time in history has this technological growth been greater than right now. The major stimulation for the advancement in technology has been the outsourcing of hydrographic charting by NOAA to commercial contractors. Direct advancements include:

- Implementation of new multibeam systems
- Software breakthroughs and refinement
- Implementation of motion sensors and US Government supported Global Positioning System
- Refinement of real-rime tide analysis and corrections

- Implementation of US manufactured UNIX based computer systems and data management techniques

RPI and its sub-contractors have developed or refined the use of these technologies in direct application to the NOAA charting requirements for Alaska waters. RPI has directly applied these technologies and methodologies for its other seabed mapping applications utilized worldwide, providing a technological and cost competitive advantage. Specifically, in the Fiscal Year preceding the first NOAA Alaska field year, RPI 's Survey and Sciences Division completed $2.9M in revenue. Two years later, we expect to complete over $25M in revenue, a better than 8-fold increase in sales.

6) RPI and its significant sub-contractors have targeted and achieved a majority of NOAA revenue dollars being spent in Alaska or with Alaska affiliated companies. As we move into the second year of the initial contract and plan for the next 4-years on the second contract, the team has targeted a larger percentage by identifying additional Alaska based companies that can successfully support the goals of the contract.

Specific to RPI, we have expanded our Alaska based representation with an additional three full time employees and numerous Alaska based temporary employees. In addition, due to the industrial community's understanding of the success and significance of the NOAA work in Alaska, RPI and its Alaska based sub contractors have already secured an additional $5M worth of survey work specifically in Alaska waters for the Calendar Year 2000 season. This includes five seabed telecommunications cable landings surveys and associated deep-water surveys. We believe that Calendar Year 2001 will increase on these opportunities by an additional 50%.

7) Specifically to the NOAA project, the spirit of cooperation and commitment to quality is shared by RACAL and its subcontractors and NOAA. This has allowed the multi-beam technology and field procedures to improve on the NOAA vessels and enabled contractors to collect data to realistic quality and standards. This has also been true in tidal zoning, where tidal models have been refined to minimize depth bins to meet the IHO and NOAA standards.

4) Multiple education programs have been put into place to train both contractors and potential employees to conduct hydrographic surveying. The University of Alaska School of Engineering maintains an annual Hydrographic Surveying Course to introduce geomatics students to hydrographic surveying. In the two years of classes, those interested in furthering their experience in hydrographic surveying have been hired by Racal, Terra, and LCMF for the contracted survey work.

5) Recent meetings, including the ASCE Technical Committee on Cold Region Engineering and the US DOT Marine Transportation Pacific Northwest Regional Dialog Session, noted the importance of accurate mapping for economic development, engineering, and regulatory decisions. The need for accurate mapping, particularly in Alaska, reflects the existing survey backlog. As a specific example, during negotiations and planning for one of the several seabed telecommunications cable route surveys RPI will be conducting in the summer of 2000 in Alaska waters, the London-based customer was forced to radically alter its survey plan for the approaches to Adak and Shemya Islands. While planning the route survey in their offices in London, RPI had to redefine the safe working limits for the drafts of the various vessels due to the lack of survey and sounding information available on the existing navigation charts.

6) During the past 24-months an additional application of the NOAA charting data has emerged in the field of Fisheries Habitat Studies. The high-quality of the NOAA multibeam data is identical to the requirements for NOAA and State fisheries research programs that utilize acoustic mapping techniques to better define the characteristics of known fisheries habitats. The utilization of NOAA quality multibeam and side scan type

imagery has been directly applied for jobs conducted by RPI. In addition, another four government funded projects have been solicited (some awarded) in the past 12 months, to use multibeam based technology and NOAA based specifications. RPI feels that there is a direct tie-in between NOAA funding to support charting and fisheries habitat assessment, and that these two disciplines can be combined to more efficiently utilize the funding and expand the overall data base for both interests.

7) RPI and its personnel have been conducting Federally funded projects since the early 1980's. At no time has a relationship with the Federal customer been more positive. The interaction with the NOAA technical staff and COTR is very positive and supportive. The information flow is extensive, educational and productive. Working with the NOAA contracting officer and staff has also been a very positive experience. This includes well-defined work specifications, rapid turn-around of Task Order awards and timely payments.

In closing, I would like to thank you, Mr. Chairman, and the Subcommittee for allowing us the opportunity to share our experiences and thoughts regarding the important issue of the implementation of the Hydrographic Services Improvement Act of 1998. We at Racal Pelagos, Inc. feel that the NOAA support contracts and charting services are an important service to the general sea-going community. We fully support the program and consider the process to be a success. We take great pride in knowing we are a part of the process.

Most Sincerely Yours;

Edward J. Saade
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Racal Pelagos, Inc.

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