# **Committee on Resources** Subcommittee on Fisheries Conservation, Wildlife and Oceans

#### Statement

# Committee on Resources Subcommittee on Fisheries Conservation, Wildlife and Oceans Testimony Of Lieutenant Commander R. George Rey, USN (Ret) President, COTS Technology, LLC Representing Edison Chouest Offshore, Inc. Before the House of Representatives Committee on Resources Subcommittee on Fisheries Conservation, Wildlife and Oceans Washington, D.C. July 27, 2000

#### **INTRODUCTION**

Mr. Chairman and members of the Subcommittee, I am R. George Rey and today I am here representing Edison Chouest Offshore. I appreciate the opportunity to testify today on the "Implementation of the Hydrographic Services Improvement Act of 1998". Let me first start with telling you about Edison Chouest Offshore the company.

Edison Chouest Offshore (ECO) was established in 1960 during the burgeoning specialty vessel market in the Gulf of Mexico. This market continues to be significant; however, ECO's reach is now global and also services the government and academic sectors. ECO's business model is predicated on leasing Contractor-Owned-Contractor Operated (COCO) vessels under Long Term Time Charter (LTTC).

#### **COMPANY BACKGROUND**

ECO's companies are vertically organized to provide a full and complete range of services to the commercial, government, and academic sectors of the marine vessel lease market. ECO employs approximately 3,000 personnel and the company is headquartered in Galliano, Louisiana.

Personnel turnover is the lowest in the industry due in large part to their modern facilities, the lowest average vessel age in the industry (less than nine years) and one of the most attractive total compensation packages offered today. Moreover, to ensure that ECO personnel meet the highest standards in the industry all are trained at facilities located at ECO's headquarters.

ECO's vessels are constructed at the company's three shipbuilding facilities; North American Shipbuilding (NAS) LaRose, LA; North American Fabricators (NAF) Houma, LA; and Shreveport Fabricators (SPF), Shreveport, LA.

ECO's Vessels are provided operational and maintenance support by the company's Dry Dock Repair facility, C-Port and C-Port 2, Loading and Offloading facilities, as well as C-Logistic, which is integrated logistic support services--all located at Port Fourchon, LA.

The companies within the ECO family are tightly integrated to meet the industry demand to outsource their support requirements into a vertically oriented company having global reach. The oil and gas industries' impetus to refocus on their core competencies, while significantly reducing their operating costs, provided the paradigm shift and challenge that ECO rapidly responded to. ECO continues to meet and exceed the industry demands to provide the so-called "soup to nuts" support to the oil and gas industries' deep-water segment.

ECO's growing fleet of 125 vessels is Contractor Owned and Contractor Operated (COCO). Seventy five percent of the fleet is special purpose ships'. The company is the largest private owner of special purpose and research ships in the U.S. ECO has twenty special purpose vessels on LTTC with the Military Sea Lift Command (MSC) and two with the National Science Foundation (NSF). Our unique tractor designed tugs are located in New London, CT submarine base (1), Kings Bay, GA/Mayport, FL submarine base,(7) and Naval base San Diego(6). Our Tractor tugs provide services to the Navy's fleet from their strategic Trident class submarines to Nimitz class carriers.

Edison Chouest Offshore's vessel types are:

- Anchor Handling/Towing Supply Tractor Tug
- Seismic Survey Deep Submergence Elevator Support
- Floating Production Installation Submarine Support
- Large Supply Antarctic Research
- Fast Supply Antarctic Supply

A key factor that undergirds ECO's competitive cost structure is the three dedicated shipyards that construct, convert and maintain only ECO vessels. Clearly, ECO's shipyards meet and exceed their commercial, government, and academic customer mission requirements, provide best value at a cost-effective day-rate, and provide for a life-cycle maintenance plan that exceeds all mission downtime expectations. Over the past forty years ECO has designed, constructed/converted, and operated an eclectic mix of specialty vessel that set the standard for all try to emulate.

ECO's business model is predicated on controlling life-cycle costs throughout the three key phases: ship design, construction/conversion, and operation/maintenance. To achieve the tight control necessary to realize a cost-efficient vessel (that meets ECO's customers mission needs) requires a balanced approach through all phases from:

- high quality material design specifications and a significant level of remote control of vessel functions (minimize crew maintenance requirements and reducing the crew count)
- accuracy of production and material ordering (reduce on-hand inventory and ensure work force always has required materials significantly lowering impact to schedule)
- raw material management (ensure the quality/price performance to significantly reduce cost over-runs)

- modular indoor construction (minimize the weather's effect and reduce the construction time)
- continued capitalization in high tech tooling (lower manpower requirements and cost to construct a vessel)
- in-house training facilities (reduce training/travel cost going to outside facility for crew certification)
- early introduction of trained and qualified crew (this ensures deficiencies are caught and rectified thus ensuring on-time charter start)
- Industry leader in vessel maintenance (company policy is that all vessels will be vigorously maintained in both operation and appearance)

The competitive nature of the specialty vessel business demands significant improvement of our product quality by incorporating the best commercially available technology and innovations while reducing oversight and inspection costs. To paraphrase Vince Lombordi:

### Doing it right the first time is not the only thing; it's everything!

Edison Chouest Offshore strives to provide their customers with the best possible service throughout the entire LTTC process from vessel design, development, construction, maintenance, and operation. The inhouse design staff ensures the lowest possible cost by focusing on material life-cycle requirements to achieve the minimum vessel downtime. All aspects of the vessel design must provide the vessel operators highly efficient and effective capabilities, the minimum required shipboard maintenance, (by specifying the highest material quality), and on-demand reliability. ECO works closely with their suppliers to help achieve the desired high quality construction standards.

Edison Chouest Offshore's vertical integrated business model provides an organizational approach that extends from finding solutions for their customer needs to their operations managers and ships' crews. This team approach comprises experienced vessel operators focused solely on the needs of the assigned vessels. The operational support team starts its coordinating efforts once the LTTC is let. They work with the commercial, government, or academic representative and shipyard personnel to ensure the vessel meets all the requirements of the design specification. At the appropriate time they assemble a crew and commence the training via assignments to a similar class vessel. Prior to sea trials the assembled crew will began their work-up with the vessel in the shipyard. Hazardous training is conducted at the ECO training facility in Galliano, LA.

Due to ECO's historic low turnover of ship operators they can assure their clients continuity and experience throughout the life of the charter. A recent example is the Deep Submergence Vessel Laney Chouest. This vessel was on charter to the Navy's OPNAV code N-873 (Deep Submergence Division) via an MSC LTTC for slightly longer than eleven years. The same ship's master that arrived with the vessel stayed with the vessel and sailed it back into the Gulf of Mexico at the conclusion of the LTTC contract. When the Navy mission no longer required this vessel ECO quickly placed the vessel back into commercial industry use. During the life of this LTTC contract the Navy realized a low-cost and highly effective platform for over eleven years with neither the up-front capital investment nor costly improvements, while enjoying a level-loaded budget to the government sponsor with no surprises. Typical of the ECO vessels, the DSV Laney Chouest operated 360 days/year over the life of the LTTC.

# **Implementation of the Hydrographic Services Improvement Act of 1998:**

The four areas of interest to the Subcommittee are:

- What progress has been made in reducing the backlog of areas that need to be surveyed, and in producing up-to-date charts for heavily traveled areas?
- Has the use of contractors proven to be a successful and cost-effective way to reduce the backlog?
- Can contractors assist in implementing Physical Real Time Oceanographic Systems (PORTS) at heavily traveled United States ports?
- Will the data being collected by contractors help NOAA to produce electronic navigation charts? What assistance can contractors provide in hastening the production of electronic navigation charts?

ECO will address only the first two as they directly pertain to significantly increasing survey data collected, by increasing considerably the survey days at sea. In terms of survey data collected NOAA has made some modest gains through outsourcing contracts to the survey industry. I guess one can say that any and all survey data collected has reduced NOAA's survey backlog--but only in the smallest way.

That said, the largest area of improvement has all but been ignored by NOAA; That is the Long Term Time Charter of industry vessels to significantly increase NOAA's survey days from approximately 190 days/year per survey vessel to 360 days/year provided by the industry via LTTC vessels. The largest contributors to NOAA vessels not operating more days per year are weather factors, old ship designs, and far too few current innovations and technologies incorporated into their vessels. One such example is incorporating passive anti-roll systems that can dampen 50 percent of roll and amplitude, thus allowing survey operations to be conducted in sea states having seven-foot seas. Also, pitch acceleration can be significantly lowered providing a vessel speed improvement of between eight to ten per cent.

NOAA has taken the position that using the University-National Oceanographic Laboratory Systems (UNOLS) vessels are the equivalent of industry designed, constructed, and operated vessels. This is far from the truth. Moreover, the UNOLS vessels were not designed to conduct much of the shallow water surveys that are the preponderance of the thirty to one hundred year backlogs *facing the nation's safety*. The only other activity was <u>"spot-hire"</u> leases that lasted for only a matter of weeks and not years. Again, NOAA's action demonstrates that in the last two years only modest outsourcing to survey companies and no outsourcing to the LTTC industry.

This timid approach by NOAA towards outsourcing can be tied directly back to the language in the Improvement act. A careful review of the act clearly does not address the highly cost effective model in use daily by the industry at large. That is a Long term Time Charter (LTTC) lease of Contractor Owned and Contractor Operated (COCO) vessels to NOAA.

In the most general terms, the Act states:

"... the Administrator may procure, lease, evaluate, test, develop, and operate vessels, equipment, and technologies necessary to ensure safe navigation and maintain operational expertise in hydrographic data acquisition and hydrographic services ..."

For more than a decade, congressional committees, public and private sector advisory groups, the National Performance Review (NPR), the Commerce IG, and the Government Affairs office have all urged NOAA to aggressively pursue cost-effective alternatives to its Government Owned and Government Operated (GOGO) vessels for acquiring marine data. The issue of chartering vessels for NOAA's support go back as far back as 1978 as cited by the by GAO.

Yet congressional language has not adopted the cost-effective strategy that has proven highly successful

with the U.S. Navy and the National Science Foundation.

This litany of government organizations, both within NOAA and on the outside, have called on NOAA time and time again to begin what in essence is **adding a third leg to their survey** operations.

This third leg will complement the current small effort to outsource the survey data collection to such companies as SAIC and RACAL; NOAA's three survey vessels; and LTTC/COCO vessels available to both the NOAA Corps surveyors and the contracted survey teams. However this reality will not come to fruition until Congress places specific language directing the leasing of COCO vessel under a LTTC in NOAA's budget. This paradigm shift mandated by Congress to a third-leg LTTC/COCO model will realize:

- Significant technology modernization
- 360 day survey capability
- No capital outlay Eliminating up front costs
- Fixed costs over the lease period
- Relieve NOAA's hydrographers to focus on their core responsibilities
- LTTC with a COCO vessel is the most cost-effective way to expand NOAA's capacity to perform the agency's vital mission.

The most important aspect of the Hydrographic Services Improvement Act of 1998 was putting to rest the past notion that only NOAA Corps officers and NOAA ships could legally collect hydrographic survey data for use in nautical charts. Hiring the various survey contractors has in ECO's opinion laid this old saw to rest. Also, another item that needs to be laid to rest is cited from the Mitretek Systems report (30 October 1998) to NOAA on Hydrographic Survey Data Collection. "Current Office of Management and Budget (OMB) budget scorekeeping guidelines are not a barrier to NOAA/NOS use of time charters for satisfying replacement or additional hydrographic survey vessel needs".

The next stumbling block is to direct NOAA to enter into a LTTC with a COCO company to prove the point that this model approach will be Cost-effective, Reliable, Maintainable, and Available (CRMA). LTTC charter of commercial vessels will provide the real spark to achieving a significant increase in survey miles accomplished.

As far back as 1988 Mr. David Graham wrote in a Sea Technology editorial ... "other government agencies such as NSF, USN, USGS, and EPA have found that LTTC are effective means to obtain sophisticated and cost effective services. One example is ECO's R/ V Palmer (classic COCO LTTC) compared to the USCGC-Healy (WAGB-20)."

In 1992 the National Science Foundation (NSF) followed this path (R/V Palmer) and again in 1998 (R/V Gould). Clearly NSF saw the LTTC model as both cost-effective and mission-effective platforms meeting and in many cases exceeding mission requirements.

The commercial LTTC model has an eight-year history providing cost-effective heavy icebreaking capabilities for the NSF. The Edison Chouest Offshore's (ECO) R/V Palmer was placed on lease-charter commencing 13 March 1992. Due directly to the operational success of the R/V Palmer meeting all NSF mission requirements ECO was awarded a second LTTC award and the heavy icebreaking platform R/V Gould commenced operations on 16 January 1998. To date the both assets meet or exceed all mission requirements levied by NSF.

These vessels are testaments to the commercial industries innovative and cost-effective approach to capital investment, sound risk management, and highly successful management of polar platform operations. One of the best examples to demonstrate the superior cost management control between GOGO and COCO LTTC is between the USCGC Healy and the Research Vessel Palmer. Looking at the cost to build and operate the USCGC-Healy (WAGB-20) as compared to ECO's R/V Palmer a direct cost comparison can be made:

USCGC-Healy R/V Palmer

Time to Design & build > 9yrs Time to build 2 yrs.

Cost > \$350\* million dollars Cost < \$50 million dollars

Icebreaking Req. 4.5ft continuous at 3kts Icebreaking Req. 3.5ft continuous at 3kts\*\*

Ice ramming up to 8 ft. Ice ramming up to 8 ft.

LOA: 420ft. LOA: 303ft.

Beam:82ft. Beam:60ft.

Draft:29ft. Draft:22ft.

#### Note:

\* USCGC-Healy's costs continue to climb through the testing and acceptance phase

\*\*Both model and insitu testing demonstrated that the R/V Palmer could and did break 4.5ft of ice at 3 kts. In terms of cost benefits, the taxpayers assumed the risk for the USCGC-Healy and industry assumed the risk for the R/V Palmer. Taxpayers assumed the entire \$350M plus cost for the Healy, and ECO assumed the cost for building the R/V Palmer. ECO's dayrate did not commence until after the vessel met all design and mission requirements and certified by NSF.

# USCGC-Healy's >\$60k/dayrate R/V Palmer 's <\$24k/dayrate

The dayrate for the USCGC-Healy does not include debt servicing, overhaul costs, and unscheduled maintenance.

The benefit to NSF was the quick delivery of ships precisely tailored to all mission requirements without fronting the construction costs, budgeting for annual maintenance, or budgeting for the five-year overhaul throughout the life cycle of the vessel. Moreover, they were provided a level-loaded LTTC based on a fixed day rate throughout the contract period.

During the construction phase NSF requested 80 major engineering changes to the approved R/V Palmer design. There were no additional costs to NSF and the build time was extended by only two months.

#### ECO's question is, why not NOAA?

To date, NOAA has not implemented a budget line item for LTTC leases of vessels having the advanced all weather technologies that can operate both in the shallow and deep areas that NOAA must survey.

# INDUSTRY IS CAPABLE OF SIGNIFICATLY EXPANDING NOAA'S SURVEYS

Companies that provide LTTC services have seen a quite revolution in vessel types and capabilities improvement through rapid innovation and automation technologies. As the decades have rolled through to the new millennium, the commercial industry rapidly reorganized to incorporate the most-cost-effective, and most-reliable-of-technologies. Those companies that were unwilling are incapable of adopting these business models were, simply put, out of business.

Today those business lessons from the last three decades of the twentieth century have developed companies supporting the vessel LTTC segment that continually outperform government and academic institutions. When comparisons between Contractor Owned and Contractor Operated (COCO) and Government Owned and Government Operated (GOGO) are made in terms of Cost Effective, Reliability, Maintainability, and Availability (CRMA) it is clear the GOGO model demonstrates time and again its gross inefficiencies, higher cost, far fewer survey days completed at sea.

# Long-Term Time Charter provides:

LTTC does not demand NOAA capital investment.

Vessel chartering companies will provide one hundred (100%) per cent of the capital dollars required to acquire these vessels.

LTTC will eliminate NOAA risk in vessel design.

Vessel chartering companies will receive from NOAA minimum vessel specifications and an operating profile. The vessel chartering company takes all the risk to design the correct vessel to meet these specifications and operating profile.

LTTC will eliminate construction cost overruns.

Vessel chartering company assumes the risk for all construction cost increases based on the approved design.

LTTC will improve vessel quality and safety.

Chartered vessels will be constructed and operated under American Bureau of Shipping (ABS) class and loadline and meet all U.S. Coast Guard Regulations. NOAA vessels are not.

LTTC will reduce operating costs.

Vessel chartering company as owner/operator of this vessel has only one mission, that is to operate safely and efficiently in support of NOAA's requirements.

LTTC will improve crew quality.

Professional, licensed seamen and officers will man the chartered vessel.

NOAA does not require its officers and seamen to be licensed.

LTTC will improve performance.

Vessel charterers, owners and operators of these vessels, operate in a very competitive environment. Unlike NOAA's current fleet, if companies providing LTTC do not perform, they do not get paid and they are quickly replaced by their competitors.

LTTC will provide NOAA greater flexibility.

Vessel charterers would entertain a number of variations in the term of charter allowing NOAA to pay for these assets only when needed. Unlike NOAA's current policy, once you have purchased the vessel, the cost continues for the life of the vessel, whether these assets are productive or not.

LTTC will allow NOAA to maintain a modern fleet.

NOAA will have the unilateral option at the end of the primary term of charter to extend that charter term or to release this vessel and go back into the market place for a newer or different type of vessel. Never again will NOAA find itself in a position where it is operating old, inefficient, technically obsolete vessels.

LTTC will result in more of NOAA's budgeted funds being available to perform its charting mission. Moreover, more survey data will be collected for each dollar spent.

In the private sector, not a single, major offshore oil and gas company maintains or operates its own small vessel fleet. They all recognize the advantages of chartering vessels to meet their requirements and allowing them to concentrate on their core businesses. Not unlike NOAA, the offshore oil and gas companies also have a clearly defined mission.

#### **Summary:**

The LTTC/COCO approach will provide the greatest CRMA through increased reliance on the Past Performance/Best Value Contracts model. This is the predominant model employed to great success by the commercial oil/gas industry today. The oil/gas industry success has helped to ameliorate the impact of job layoff and company shutdown during this latest oil slump.

The marketplace will quickly weed out those companies that demonstrate poor management, high crew turnover, or lack of integrity.

The thirty to one hundred years survey backlog will continue to loom large due to the current restrictive model of using GOGO NOAA vessels. NOAA hydrographic fleet of three ships will never meet the backlog challenge of over 39,000 square miles. If significant progress on this challenge is to be realized, then a large ship count conducting a survey operations tempo of 360 days per year must be implemented now. Clearly, the U.S. Navy, NSF, USGS, EPA et al and industry have set the gold mark for highly successful OPS tempo through implementation of the LTTC/COCO model. Taxpayer savings are large and a newfound level of mission accomplishment is now the standard. Multiple ships coupled to the new AUV survey data collection vehicles will be the new paradigm to quickly complete the backlog and maintain our shores and ocean approaches at a new found level of safety. Moreover, the ECO model of NOAA Survey Ships, out-source of surveys to industry, and chartering COCO vessel under a LTTC will maintain Federal expertise in hydrographic survey and provide the latest in survey data collection technology. Congress must provide

language that specifically moves NOAA from a two-legged-unbalanced model to a three legged-balanced model.

And in conclusion ECO would urge the Congress in the strongest language possible to specifically direct NOAA in the budget to move forward in fiscal year 2001 and enter into a LTTC contract with a COCO company.