Statement of

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Mr. Chairman and Members of the Subcommittee, thank you for inviting me here today to address this body in reference to H.R. 5618, National Sea Grant College Program.

First, let me say that my testimony here today is reflective of the experiences that I have encountered while engaged in the Gulf and South Atlantic Shrimp fisheries and I would be remiss if I did not point out that this interaction only offers a small sampling of activities that the Sea Grant College program is involved in across this Great Nation as a whole.

My first encounter with Sea Grant came in the educational setting while I was in elementary school. I was in the 5th grade and was attending a Career Fair that the school was hosting to get youth thinking about their future. This is where I first met Charlie Moss with Texas Sea Grant. He was the Brazoria County Extension Agent and had a booth highlighting commercial fishing. This was of great interest to me since my father was an owner/operator of a gulf shrimp trawler for decades. While I must have been a certain pest to Mr. Moss, he diligently answered the myriad of questions that I and others threw at him. This type of educational work continues today and was highlighted with a field trip on May 8th of this year when kindergarten students from O.M. Roberts participated in an annual Field trip to the beach. I was there and participated as a volunteer father helping pull a biological sampling seine to collect specimens for the students to look at. For the vast majority of these students, this is the first and perhaps the only interaction that they will have with aquatic life in a living form that is literally at their doorstep on the beaches of coastal Texas. This field trip has become a much

anticipated right of passage for the students of O.M.R. and it's success is in great part due to the participation of Sea Grant and the current Brazoria County Extension Agent, Mr. Rich Tillman.

In much the same vane, the R/V Karma, better known as the Floating Classroom, has helped tens of thousands of Texans, most of whom are students from the 4th through 12th grade, who come to gain a higher appreciation of the vast ecological significance of our coastal estuaries and near shore waters since its arrival in 2002.

My professional interaction with Sea Grant has been both immense and rewarding. At Western Seafood, we have been actively involved with different Sea Grant led or sponsored initiatives since the mid 1970's. Almost all of these initiatives and projects involved two common themes. The first of these is becoming more efficient with our time, our production costs, and the resources we are harvesting. The second theme is helping us use our innate knowledge as fishermen to become better stewards of our marine environment.

In its early years, Sea Grant worked with fishermen such as my father to develop a very successful hang log of trawl obstructions. Through cooperative efforts with the shrimp industry over 12,000 hangs were identified from the Rio Grande River to the Mouth of the Mississippi. It should be stressed that this information was usually kept confidential among fishermen, but the cooperative spirit of Sea Grant convinced captains to share

their personal information so that every producer would have access to this collective industry wisdom. This hang log became a “Bible” aboard trawlers until the introduction of more sophisticated navigation systems. It is credited with significantly reducing gear lost or damaged from bottom obstructions, and has literally saved the industry hundreds of millions of dollars.

One of the first major breakthroughs that dealt with production efficiency was the introduction of the Quad-Rig trawl. Prior to that time, shrimp trawlers typically pulled one large net on each side of the vessel. With the advent of the Quad rig, it allowed operators to pull 4 smaller nets, reducing drag and fuel consumption, while increasing the amount of area covered due to an overall increase of head rope sweep of the nets involved. Production could be increased while costs of inputs actually went down. This work was pioneered by Sea Grant Fisheries Specialist Gary Graham working closely with industry.

In the mid to late 1980’s another hurdle was jumped with the help of Sea Grant. The implementation of Turtle Excluder Devices (TEDs) was a controversial issue. The vast majority of industry participants did not want anything to do with these devices, and the National Marine Fisheries Services (NMFS) was having a very difficult time implementing their use. At this time, Sea Grant stepped in to diffuse a very volatile situation. Using the goodwill built up over the last two decades of successful interaction with the industry, Fishery Specialists worked to calm fears of the fisherman and worked

with a few “High Liners” to show that the gear would not be as adverse to their operations as once feared. Once these trials showed success, the fleet started to adopt the devices and within a very short period of time came into full compliance of NMFS regulations.

When bycatch became a major issue in the mid 1990’s in the industry, Sea Grant was there to help industry not only become compliant with new Federal Mandates, but also encouraged development of industry based solutions to the problem. As a result, the most efficient device that is legal today, the Jones–Davis, was developed by two fishermen. At this same time Sea Grant Fisheries Specialist in the Gulf of Mexico spearheaded a massive effort that resulted in the shrimp fishery having what some have called the greatest data set of catch characterization of any fishery in the United States.

Sea Grant remains in the forefront regarding efforts to make our fishery more economically sustainable and efficient. During 1990 the Texas Sea Grant Program pioneered with Allied Chemical Company to evaluate the use of technologically advanced trawl fibers. As a result, over 500 trawlers converted to the use of Spectra netting which significantly increased trawl strength while creating less drag in the water. This transferred to better fuel efficiency and its application is now being used worldwide. Today, Sea Grant is demonstrating a less expensive high-technological fiber, Sapphire,

which is being rapidly adopted by shrimp vessels for its strength and contributions to energy efficiency.

During a 2001 trip to Iceland to visit vendors of processing equipment that we utilize in our shore-side operations, I became introduced to the Hydro Dynamic trawl door. I was intrigued by the concept and in 2004 started to seek out partnering manufacturers around the world so we could introduce these new trawl doors in the Gulf shrimp fishery. When I found none interested in doing so, I purchased an off the shelf model from an Icelandic company. When I was planning the sea trial I contacted Fisheries Specialist Gary Graham to see if he was interested in going along. He did and what he witnessed was pure failure, but he was supportive and urged me to continue. Two months later we regrouped with another size door and went on a second sea trial. Gary accompanied us and we came back successful, in most regards. We still had a production equivalency problem to deal with, but we overcame this in short order. After numerous trials and modifications to these new trawl doors, we where able to show catch rates that were equal to that of traditional gear, but with a fuel savings of 30%. At this time, Sea Grant stepped in with technology transfer in mind.

Gary Graham and Sea Grant Economist Mike Haby were able to secure funding from USDA and the Texas Governor's Energy office to fund two pilot demonstration programs. These projects funded the purchase of new high efficiency trawl doors and high strength netting for cooperative research and demonstrations within the shrimp industry for a scientifically based and statistically reviewed study to document the

potential savings the gear would produce. This effort alone introduced the gear to the fishery as a whole and lended it credibility. It is through this effort that the gear is being adopted rapidly by industry. Today in the ports of Brownsville and Port Isabel in south Texas, 50% of the 180-190 active vessels in the fishery will have converted to this gear prior to the opening of our Texas Shrimp Season on July 15th. One could extrapolate that the savings could approach 2 million gallons of fuel in just these two ports based on historical consumption averages of the fleet. At $4.00 per gallon, this will have a significant impact of the continued viability of fishing in south Texas.

In conclusion, I would like to stress that Sea Grant is a unique program that has provided a vital research and outreach link for the fishery. The savings to the fishery that the Texas program has consistently contributed through its research and educational efforts have far exceeded the costs for funding this worthwhile organization. I would ask that you continue to endorse Sea Grant and that serious support be directed toward its continued existence. Thank you for your time and consideration regarding my testimony.