

UNITED STATES
DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Region
State, Federal & Constituent Programs Division



FINAL REPORT

Grantee: EDWARD BOYNTON

Project No: 94-FIG-023

Grant No: NA56FK0096

Project Title: TO DEVELOP AND CONDUCT AN ALTERNATIVE SOURCE OF
BUSINESS OPPORTUNITIES TO SUPPLEMENT TRADITIONAL
FISHING ACTIVITIES

Period Covered: FEBRUARY 1, 1995 - JANUARY 31, 1996

Prepared by: EDWARD BOYNTON

Approved by: _____

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Statutory Funding Authority: Anadromous Fish Conservation Act
(P.L. 89-304)

- ☐ Chesapeake Bay Studies
- ☐ Endangered Species Act
- ☐ Interjurisdictional Fisheries
Act (Title III of P.L. 99-659)
- ☐ Magnuson Act
- ☐ Oyster Disease Research
- ☐ Saltonstall-Kennedy
- ☒ Unallied Industry Projects
- ☐ Unallied Science Projects
- ☐ ACFCMA

FINAL PROGRESS REPORT FOR HARBOR WELDING

Grant Award No. NA 56 FK 0096

April 16, 1996

Edward D. Boynton
Key Investigator

FINAL PROJECT REPORT

I. Executive Summary:

The prime objective of this project was the adaptation of a small fishing vessel to a small business operation of welding for the purpose of supplementing the owner's income.

II. Introduction:

Because fishing stocks have decreased while government regulations have increased in an effort to restore the fishing resources, gaining an income from fishing has become increasingly difficult. The Fig.1 Grant Program from National Marine Fisheries Service has enabled the key investigator to utilize the fishing vessel in a unique way as a base of operation to supplement income lost due to the decline of fishing.

III. Purpose:

A. Detailed description of problem to be addressed:

Because of the stated decline in fish stock landings by the fishing industry and the increased government regulations designed to restore fishing resources it is advantageous to diversify from the role of fishing. It was determined that it would be wise to use the vessel in some capacity of alternative supplemental employment as opposed to letting the vessel sit idle. Because I had taken a welding course and had been doing welding repair work on my own vessel it was a logical approach to expand my repair work to other marketable areas.

B. Objectives of the project:

The diversification from traditional fishing employment was focused on three overall categories of potential employment.

The first avenue of potential employment was to provide a full service mobile marine welding and repair service to the present fishing fleet.

The second avenue of services to be developed was to focus on repairs to residential and commercial wharfs along the waterfront.

The third avenue of services to be developed was to focus on contractual services to government owned wharfs and facilities.

IV. APPROACH:

A. Actual accomplishments and findings:

The project began by making several necessary changes to the vessel's physical layout and powerplant. The deck was reinforced and the gallus frames moved to allow more deck space for welding activities. A deck crane was manufactured and installed. The crane had to have a lifting capacity of at least 2,000 lbs. and not interfere with fishing activities when it was not needed. (Please refer to the photo display of work performed.) Lastly a source of electrical power was needed to perform welding. It was determined that a Lincoln Diesel Generator Welder, Ranger 10LX would be the best source of power. This afforded safety and dependability to the success of the project. The welder was installed in a special frame in the aft section of the fish hole next to the lazarette bulkhead. Exhaust venting was accomplished through the deck and support structures for the gallus frame and deck crane.

B. Project management:

This project was designed as a small business operation and the key investigator had the sole responsibility of its operation. I did consult with other welders that I know on several jobs that I undertook. I also consulted with a firm in Gloucester, Speedway Welding (Steve Newman, 16 Old County Rd.) on welding supplies and techniques.

V. FINDINGS:

A. Actual accomplishments and findings.

The necessary vessel changes of physical layout and structural changes to the deck, deck crane and powerplant were accomplished without any major difficulties. The key investigator refers the reader to the enclosed photo display of these accomplishments.

The fishing fleet was targeted as a source of potential work which proved to be a successful venture. Nearly every kind of fishing vessel was worked on; from small inshore and large off shore draggers, to lobster boats and slime-eel boats. Actual jobs covered a large range of fabrication and repair work; from hull repairs caused due to fishing activities, to the repair of worn out equipment. This included the fabrication of new equipment such as pump stands to new davits for fishing operations. A large number

of repair jobs centered around the reshoeing and balancing of otter trawl doors.

Residential and commercial wharfs were also perused as a source of work. The work completed in this area included the modification of a crane and the manufacturing of large heavy duty wharf ladders. Both of these jobs were completed in East Gloucester. Hardware for several floating residential wharfs were manufactured. In addition the project also repaired several pieces of heavy duty construction equipment, (including a bobcat tractor) plus snow plows in the winter.

B. Discuss problems that developed a negative result.

Only two problems developed during the course of the project. However, they did not have a serious impact on the project. The first problem was encountered in the third area of potential employment: contractual services for government facilities. In order to work on government projects it is often necessary to be certified as a welder. Because I am not a certified welder I was not able to explore this avenue of employment. I am currently exploring the possibility of becoming certified as a welder. It will be necessary to attend certification classes and passing the required testing program. Once certification is obtained, more work may be available and the rate of pay may be increased. The second problem encountered a medical condition the key investigator developed that required abdominal surgery and eight weeks of recovery was necessary. This did not hamper changes to the vessel, it did decrease the amount of welding I was able to give customers during this period in October and November of 1995.

IV. EVALUATION:

A. Description of the original project goals and objectives, and the context in which the project was to benefit the fishing industry.

1. What were the original project goals and objectives?

The project was designed to provide an alternative source of employment or a new business opportunity to supplement traditional fishing activities.

This project benefitted the fishing industry by giving vessel owners an additional source of welding and fabrication services. These services were designed to be mobile so that the vessels to be worked on would not have to arrange wharf space for repairs. Instead the project vessel

is able to raft next to the vessel anywhere in the harbor and complete the work.

Lastly, anytime the project vessel was welding, it was not partaking in the active role of fishing. It benefitted the fishing industry by not landing fish.

2. To what extent were goals measurable or quantifiable?

The major goals of the project were obtained and they are scheduled to continue into the future. First the vessel was modified to properly accommodate the welding machinery, hydraulic crane, and welding deck space. Photos are supplied showing this completed work.

The following is a list of typical vessels and work performed: VINCIE & JOSEPHINE, trawl door work, engine room welding, structural deck welding, net reel repairs, winch repairs; RITA B, trawl door balancing and reshoeing, winch repairs, gallus frame repairs; MAUREEN, gallus frame repairs, hatch repairs; STELLA G., net reel repairs, winch work; CONSTILATION, winch repairs, deck modification and repairs; CARA LYNN, trawl door repairs, gallus frame modification, SKIMMER, reshoeing trawl doors and repairs to trawl doors. This represents a partial but typical listing of work performed on fishing vessels. Residential work included wharf fixtures of steel braces and rollers. The rebuilding and modification of a large boat trailer. Commercial accounts included the building of wharf ladders for a fish dealer, and the repairing of a Bob Cat tractor for a landscaping company. The project also included the modification of a crane for a marina in East Gloucester.

The project continues to perform these kinds of services. It is the opinion of the key investigator that the project was a success and that it will continue to benefit the investigator and the fishing industry in general. It is the opinion of the investigator that more funding designated in this manner would be successful and helpful to the fishing fleet as it needs to diversify until fishing stocks are rebuilt.

3. Were modifications made to the project goals and objectives and, if so, what was the cause for the modifications?

No changes to the project were made.

4. Were the goals and objectives attained?
How? If not why?

The major goals and objectives of the project were successfully attained. Two of the three main sources of employment were very successful. Please refer to the listing of vessels worked on in the above #2 paragraph. The third avenue of employment; contractual services to government facilities, often require certified welders. I am currently exploring the requirements of becoming certified and hope to complete a course for certification. Once certified, many more jobs will become available to me.

B. Description of the specific accomplishments (information, products, or services) of the project and relationship of these to the project's goals and objectives:

1. List the specific information, products or services produced by this project.

The one service that this project supplied was welding of mild metals. The product that welding yielded to customers of Harbor Welding had a wide variety ranging from simple deck repairs to more complex products of balancing and reshoeing extremely heavy otter trawl doors. A representative listing of vessels and projects and typical products has been listed in this report under part IV. EVALUATION paragraph #2.

2. Describe the relationship of the products and services produced by this project.

The main product of Harbor Welding was a service of welding new fabricated pieces of metal into functional equipment for the fishing industry, commercial and residential wharf owners. In addition Harbor Welding also repaired existing equipment with welding techniques.

3. Describe the extent to which the products and services to the original project goals and objectives.

Activities of Harbor Welding allowed the key investigator to supplement his traditional avenue of income from commercial fishing. This was accomplished by focusing

on two of the three targeted markets of employment: the fishing fleet and commercial and residential wharfs.

4. Describe the value of the products or services by themselves or in concert with other activities.

Harbor Welding began by charging customers a flat rate of \$25. per hour for labor, including welding rods and cutting gases. Steel stock was charged by the job basis. Steel stock was purchased in the local area, benefiting the local economy. The investigator was able to supplement his income by \$5511 in 1995.

C. Description of how the project benefited the fishing industry.

1. To what extent did the industry have access to the products or services produced by the project?

I found that reputation by word of mouth was the best method of advertisement in the fishing fleet. Any vessel owner or captain that wanted work done on his vessel was scheduled for work. During the course of the grant project Harbor Welding has only two vessels that have not paid their bill in a timely manner. A total of \$355 is outstanding in bad debt. I believe that eventually one of these debts for \$225. will be collected. The other will not as the vessel was from Maine and is no longer in Gloucester, and has since been sold.

2. To what extent have the fishing industry and associated infrastructure (universities, financial institutions, etc.,) used the project's products or services to satisfy a need or lessen business or other risks?

Initial targeted markets did not include universities or financial institutions as viable. However they will be used in the future. Example being the establishment of an aquatic center in Gloucester by Salem State College as a teaching facility. I hope that the vessel can be used in some function for manufacturing needed aquatic equipment or doing research with them.

3. To what extent are project results likely to be used by the industry in the future?

I feel very strongly that this was a highly successful grant. It has produced a method to supplement my income from fishing by using (1.) the equity of the vessel when not fishing combined with (2) the knowledge and skill of welding to provide a needed product to the fishing industry. I ABSOLUTELY HAVE EVERY INTENTION OF CONTINUING

AND BUILDING UPON WHAT WAS STARTED BY THE AVAILABILITY OF THIS GRANT.

4. To what extent are project results likely to be used by others in the future to provide benefits to the fishing industry?

There are two results of the project that can benefit the fishing industry in the future. First, the activities and products of Harbor Welding will continue in the future thus serving the fishing industry in a positive manner. Secondly, it is the opinion of the key investigator of this study that the funding of this grant was a very positive example of how to help an ailing industry that is in need of help. The ability to use an economically valuable vessel to diversify fully or partially is a method to consider for others in the future. It should be beneficial for the industry to use its assets in different ways to diversify from a total commitment of fishing for declared endangered resources.

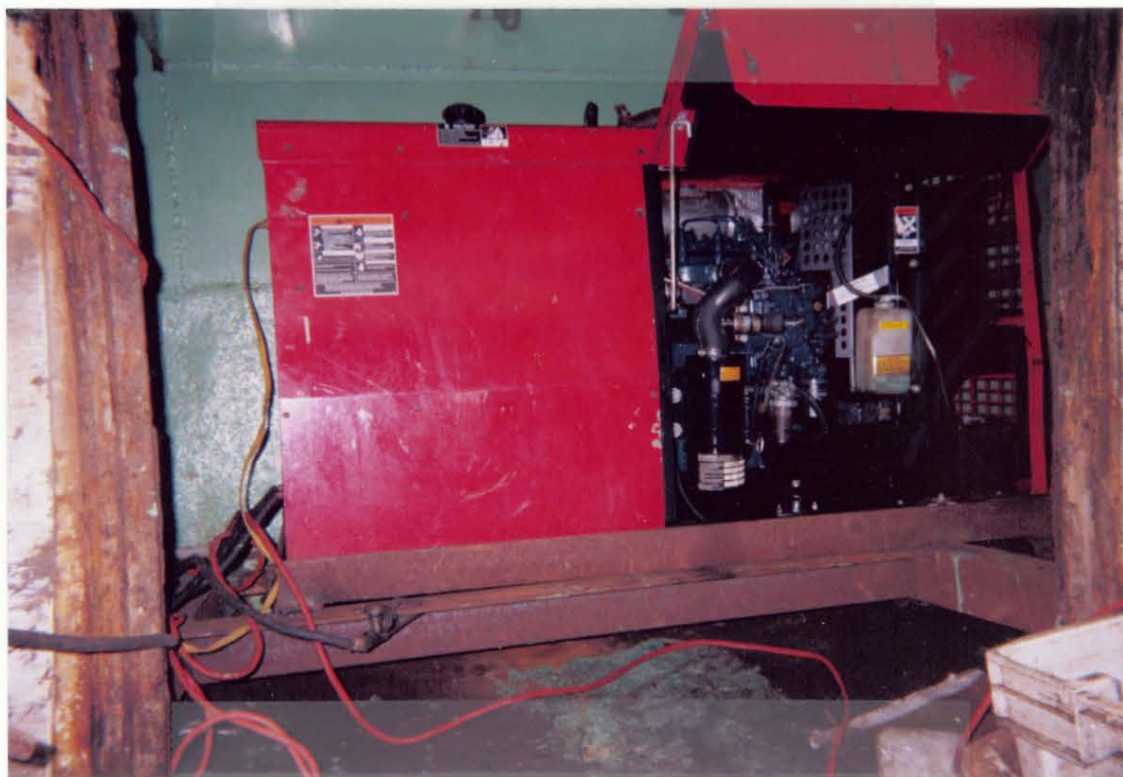
D. Description of the specific economic or other benefits the fishing industry received as a result of its use of products or services of the project as a result of others using the products or services.

1. If economic benefits are demonstrable, how?

Harbor Welding has two definable economic benefits to the fishing industry. First, it allows the key investigator to supplement his traditional way of earning a living from the sea and decrease his effort of fishing for depleted stocks. Secondly, the services of Harbor Welding do not require a large overhead of expenses. Therefore, the services can be completed at a lower cost than at some shore side facilities. These savings can be and has been past on to the customer.



Overall view of the vessel Sisser B.



View of the installed welding unit below deck

Right: Hydraulic crane in the
lifting phase:

Below: Hydraulic crane stored in
the racked position:

