

IBEW Local 48 marine electrician Ken Oerther, a recently graduated apprentice, inspects a motor control center on the *Esperanza*, a 124-megawatt power barge project at the

Portland Ship Repair Yard.

Recent decades have
been turbulent times for
all union workers
employed in the North
American shipbuilding
and ship repair industry,
both government
and private.

Marine Electricians In Portland Exhibit Specialized Skills For Changing Times

ith the shutdown of four government-owned U.S. Naval shipyards within the past decade, thousands of union members lost their jobs or now face uncertainty about future employment. Beginning some 40 years ago, countless jobs were lost as the U.S. commercial shipbuilding industry lost ground in the world market due, in part, to the emergence of heavily subsidized shipyards in Asia and Europe.

However, privately owned shipyards are now striving to rebound, and four U.S. Naval shipyards remain in operation. "In recent years, the U.S. shipbuilding industry is working hard to regain a foothold," said Gilbert Bateman, director of the IBEW Government Employees Department. "The industry is making modest gains, but it still faces big obstacles." Even with the job losses of past years, thousands of dedicated and highly skilled

IBEW marine electricians still work in the U.S. shipbuilding industry.

The marine electricians of Local 48 in Portland, Oregon, like others in the IBEW, have seen firsthand the decline of the ship repair industry in the United States. They have been center stage to witness the sale and closure of several union shipyards in the Pacific Northwest and have felt the repercussions of ship-

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A partial view of the *Esperanza* V-18 engines.

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yard sales and closures on the South and East Coasts as well.

Approximately 60 Local 48 members work at the largest ship repair facility on the U.S. West Coast—the Portland Ship Repair Yard, located on Swan Island. The 94-acre, state-of the-art facility, operated by Cascade General Inc., provides full-service repairs and conversions for tankers, cruise ships, bulk carriers, container ships, government vessels, tugs, barges and work boats. The shipyard comprises more than 7,000 feet of full-service repair berths and three floating dry docks, one of which is the largest in the Americas.

As have numerous U.S. shipyards, the Portland Shipyard in recent decades has undergone much change and has faced an uncertain future. "IBEW Local 48 electricians have learned new skills, adapted new technologies to ship repair, and embraced some nontraditional construction methods to remain competitive," said Business Manager Gerald Bruce.

"IBEW Ninth District International Vice Pres-

ident Michael S. Mowrey saw the need to actively organize this industry. He worked with the Pacific Coast Metal Trades on an action plan to recover the market the union has lost, and is researching options to rebuild the industry on the West Coast."

Turbulent Decades

The late 1980s saw the last of the big U.S. military ship refit programs for the Portland Shipyard. Declining oil prices further reduced the amount of oil tanker repair business, as companies delayed tanker modifications and mothballed older vessels. The emergence of several government-subsidized Pacific Rim shipyards in Asia made for a fiercely competitive industry and led to some wildly cyclical repair business that was difficult to forecast. In the mid-1990s Congress lifted a ban on Alaskan oil exports, and Bruce said that action made it more economically feasible for oil companies to have their tankers repaired overseas, where they now off-load the Alaskan oil. "The Port-



land Shipyard went from a three-contractor facility with about 200 (peak) electricians, to a single contractor with an average of about 60 electricians now working," he said.

Rebounding and Redefining the Ship Repair Industry

Cascade General emerged from the ashes of two decades of decline and has been the sole operator of the Portland Shipyard since 1995. The company remains signatory with Local 48 and with Pacific Coast Metal Trades.

"With a progressive Labor-Management Cooperation Committee, Cascade General is not only growing, but also redefining the ship repair industry," noted Bruce. "Mar-Com is another signatory contractor, but they operate at their own facility, and are mainly involved in barge and tug work."

IBEW Local 48 has served as a model for keeping pace with new technologies as they emerge. "Evaluating input from our members," said Bruce, "Local 48 strives to keep pace with technologies as they emerge and find their way into new and updated applications on the jobsite."

A Floating Power Barge

The marine electricians have proved up to the task at hand by keeping abreast of changes in their specialized and unique industry, enabling the contractor to remain competitive.

One of the most notable recent projects is a floating power barge, the *Esperanza*, bound for Guatemala. The *Esperanza* is designed to provide a reliable electric power supply to the Guatemala power grid.

The self-contained mobile power plant was constructed on a deck barge 279 feet long by 104 feet wide and will be transported on a submersible cargo ship. It is the largest diesel-powered, mobile unit ever built in the United States. The system is powered by seven V-18 MAN B&W diesel engines, each weighing 330 tons and producing 25,000 hp, coupled to seven Siemens 13.8 kV generators, with a total output of 124 megawatts—enough to power a community of about 5,000 people.

Fuel capacity is approximately 264,000 gallons of heavy fuel oil and 70,000 gallons of light fuel oil. The barge has two parallel cooling systems, giving the operators a choice between salt water- or radiator-cooling, depending on site conditions.

"This is the largest marine construction project to come to Portland in 25 years and represents an important step forward for this company," said Cascade General CEO Frank Foti. "It is a landmark in the long history of the shipyard. The power barge project is a key element in our strategy to diversify and develop the full potential of the yard."

Cascade General and its union employees completed construction and trials of the power barge and delivered it on time for shipment to Guatemala in April 2000. The project's advanced modular design, the shipyard's extensive facilities, and the experience of the workers enabled the entire project to be completed in less than 11 months.

Cascade General has also made gains in the competition to serve international flag ships, providing fast, cost-effective service to the international fleet. The oil tanker business continues to provide quite a bit of work for the marine electricians. "Fuel valves, lighting, winches and tank-level indicators are some of the equipment that use the power provided by the complex system of power distribution," Bruce said. "When an oil tanker is being worked on, the equipment and wiring methods must all be explosion proof, requiring the highest levels of knowledge and skill provided by union electricians." For more information on these and other projects at Cascade General, check web site www.casgen.com.

Challenges Ahead

Business Manger Bruce noted that one of the biggest hindrances to rebuilding the U.S. ship repair business involves political and legislative issues. "Federal legislation which allows (and even promotes) the repair of U.S. Navy ships to be performed overseas is one of the first things that must be changed," Bruce noted. "U.S. taxpayers are paying for this work to be done overseas. There is other legislation—such as the Flag of Convenience, Passenger Safety, and Jones Acts—which should be reviewed and possibly changed."

Effective and progressive legislation can help rebuild and revitalize the ship-building and repair industry. "IBEW members must work to elect legislators who will support working people and this industry," said Bruce. "The right legislation would provide decent, family wage jobs, not only for IBEW marine electricians, but also for other trades and all the workers providing tools and material for the industry." [The Journal thanks Local 48 Press Secretary Lee Duncan and Local 48 member Roger Haslett for providing information contained in this article.]