Special Anniversary Issue
Moran’s Mexican Debut Is Up and Running
miles north of Ensenada, Mexico, in Pacific waters just off the Mexican Baja. Moran’s SMBC joint venture (the initials stand for Servicios Maritimos de Baja California) has been writing a new chapter in the company’s history. SMBC, a joint venture with Grupo Boluda Maritime Corporation of Spain, has been operating at this location since 2008. It provides ship assist, line handling and pilot boat services to LNG carriers calling at Sempra LNG’s Energía Costa Azul LNG terminal.

SMBC represents a new maritime presence in North American Pacific coastal waters. Each of its tugs bears dual insignias on its stacks: the Moran “M” and Boluda’s “B”. The “B” is as ubiquitous in European and African ports as Moran’s insignia is on the U.S. Atlantic and Gulf Coasts. The partnership is further reflected in the names of the tugs, which are preceded by the letters SMBC.

Based at the Port of Ensenada, SMBC comprises four ocean escort tugs and several support vessels. It is managed by Captain Miguel Mockabee, a master mariner whose more than twelve years of general cargo sailing experience includes a stint as general manager of marine operations/ Latin American service for Hapag-Lloyd, the shipping conglomerate. Mockabee oversees a modest office staff of six and 47 professional mariners.

Costa Azul, he says, presents a special challenge for escort tugs. Located on a remote but exposed section of Baja coastline, it frequently experiences sea conditions that produce nearly 10-foot swells. To ensure the safe handling of LNG carriers calling at the terminal, the tugs needed to be of a radically new design that would provide not only exceptional power, but also extraordinary seakeeping ability.

Moran and Boluda turned to the naval architecture firm Robert Allan Ltd. of Vancouver, British Columbia, for a solution. The vessel the architects delivered, an enhanced RAstar 3200 Class, answered Sempra’s needs and in the process expanded the envelope of escort tug performance, Mockabee says.

Its most groundbreaking innovation is a computer-assisted, render-recover hawser winch designed and built by Markey Machinery in collaboration with Robert Allan. The first of its kind, it is, according to Markey, the most advanced high-performance electric winch afloat. The company describes it as a double-drum “waterfall” design, the most powerful and responsive unit it has ever built. The winch’s most outstanding feature is a unique render-recover system that automatically keeps the line tension constant, compensating for the tug’s motion, thereby preventing snap-loads and breakage. This enables the tug to perform optimally, at safe working loads for the hawser, under a very wide range of sea state and weather conditions. The function is facilitated by sensors that continuously detect excess slack or tension on the line, and automatically compensate by triggering either spooling or feeding out of line in precisely the amounts necessary to maintain a pre-set standard of tension.

To a hawser-connected tug and tanker snaking over the crests of nine-foot swells, this equipment is as indispensable as a gyroscope is to a rocket; its stabilizing effect on the motion of the lines and vessels gives the mariners complete control.

As part of this capability, upper and lower load ranges can be digitally selected and monitored from the wheelhouse, along with line speed, tension and scope-out feedback. Under optimal weather conditions and smooth seas, the winch is capable of render-recover speeds of up to 100 meters per minute. Mounted on the foredeck, it is a massive, in-line unit that is specifically designed to handle escort operations through a single bow staple.

A single automatic level wind serves both drums. Each drum has the capacity of 656 feet of 10-inch UHMW-PE soft line, a high-strength, low-stretch Plasma rope manufactured from Honeywell Spectra fiber by Cortland Puget Sound Rope in Anacortes, Washington.

The winch, as they say in Hollywood, has gotten major press. But the tug itself is hardly less impressive. Moran and Boluda had four of the class built — identical sisters — at Boluda’s world-renowned shipbuilding subsidiary, Union Naval Shipyard, of Valencia, Spain. The first tug to be completed, the SMBC Monterrey, was delivered to Ensenada in April 2009. Sister tugs SMBC Tijuana, Mexicali and Rosarito followed soon after.

All four are FiFi-1 escort tugs. Design requirements stipulated that in addition to being able to operate in significant swells, each vessel and its winch had to be able to provide a sustained bollard pull of 75 tons, throughout the approach to the terminal. And each tug had to weigh less than 500 GRT, a specification that influenced the

Opposite page: The SMBC Mexicali assisting the LNG carrier Tangguh Towuti.

Next page, top: The Mexicali escorting the Towuti into the terminal.

Next page, bottom: The view from the foredeck of the Mexicali.
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At its opening, Energia Costa Azul was the first operational LNG receipt terminal on the West Coast of North America. Including planning and construction, it was seven years in the making. It received its first shipment of LNG, from Qatar, in April 2008, aboard the LNG carrier Al Safliya (at the time, a new, state-of-the-art tanker). That first call was followed by a second shipment from Trinidad, aboard the carrier Bluesky. As of June 2010, seventeen LNG carriers have delivered their cargo safely and on schedule to Costa Azul with the support of SMBC vessels and crews.

The operation reflects SMBC’s commitment to new technology and training, Mockabee observes; these attributes are part of a sound strategy for growth in the company’s LNG activities business segment. In addition to its long-term contract with Energia Costa Azul, SMBC is also providing services at the terminal to Shell Mexico Natural Gas, Sempra LNG Marketing Corporation, Tangguh LNG and Gazprom LNG.

The natural gas processed at the terminal supplies markets in Mexico, California and the American Southwest, helping to meet rising demand fostered by economic growth in Mexico and depleting reserves in the U.S. As the LNG industry expands, the need for new tugs and skilled mariners to assure the safe delivery of LNG will expand with it. Moran is currently positioned for growth as a leader in the field.
Mary Ann Moran, Moran’s First Dry Bulk ATB Tug, Is Christened

Moran’s newest ATB tug wet her hull in the Damariscotta River at the Washburn & Doughty shipyard in East Boothbay, Maine this past June. The Mary Ann Moran joins three sister tugs and three “cousins” in Moran’s marine transportation fleet, with one key distinction: partnered with the barge Virginia, the Mary Ann will be dedicated to carrying dry bulk cargo.

Named for her sponsor Mary Ann Redmann, wife of ConAgra grain merchandiser Gary Redmann, the tug was christened by the Redmanns’ daughter-in-law Bianca Bersani with the obligatory breaking of the champagne bottle.

Once in service, the Mary Ann-Virginia will provide a vital link between New Orleans, Louisiana and ConAgra’s flour mill and customers in San Juan, Puerto Rico. According to Mr. Redmann, in the past the regular run to Puerto Rico entailed conventional towing of the barges Virginia and Carolina, which took about 23 days for a round trip voyage. “Time is money,” he said, excited that the new, faster ATB promises to shave at least two days per voyage off the year-round run. “[The converted Virginia] will have five holds and a total cargo capacity of 27,000 short tons,” he said. “It will haul wheat and various classes of grain — also soy, corn, oats, and alfalfa pellets…”

The Mary Ann was built to ABS Class A-1 Towing Service, AMS standards, and is fully SOLAS compliant. The tug boasts accommodations for twelve crew members, along with spacious common areas and a day head. Its massive 52-foot wheelhouse features a standard complement of marine electronics, including a Global Maritime Distress Safety System (GMDSS). Deck equipment includes a Markey CEW-60 capstan forward, and a Markey CEWP-90 capstan aft.

At 120 feet and 5,100 hp, the twin-screw Mary Ann is well partnered with the Virginia, Moran’s largest dry bulk barge. The barge is 531’10” in length and weighs 27,000 tons. The vessels couple with an INTERCON “C” system. The tug weighs 264 gross tons (domestic), and is powered by twin EMD 12-645F7B marine diesels with a Lufkin RHS2500HG 4.458:1 reduction gear. Individually, the engines are rated at 2,650 hp @ 800 rpm. They turn five-blade, 115-inch Rolls Royce New Generation Workwheel propellers. Fuel capacity is 142,000 gallons.

Mary Ann Redmann was born in Cokato, Minnesota, and currently lives in Omaha, Nebraska with husband Gary. They have two grown sons and one grandchild. Mary Ann has been a special education paraprofessional and full-time mother, as well as an active member of several boards associated with her church and community. She enjoys making salsa every summer, an activity that became a cottage industry when her irresistible recipe began attracting customers from throughout the United States.

Left: Mary Ann Redmann (granddaughter Eloise and son Nathan are visible in the background). Center: Gary Redmann. Right: The hull of the Mary Ann awaits launching.