

# The Gentle Giant of the Adriatic

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The fact that the best known vessel in the recent history of navigation on the eastern coast of the Adriatic is a humble floating crane must be a surprise in today's world of incredibly big container ships, towering floating hotels and all kinds of futuristic shaped vessels. But the glory of Veli Jože is immortal, kept in stories and memories by generations of the Adriatic islanders and seafarers. Certainly, it is worth sharing with the readership of ToMS.

Many years ago this author discussed the phenomenon of Veli Jože with an old captain in San Pedro, California. Very quickly we came to the conclusion that the Adriatic motto 'Veli Jože is coming' (Stiže Veli Jože, in Croatian) is the same as the well-known American cry of relief 'Cavalry to the rescue'. In the movies, cavalry never failed to save the troops or settlers under siege, and in the Adriatic Veli Jože never betrayed ships or lives.

But who is this Veli Jože? It is the main character of the novel written back in 1908 by one of the greatest Croatian literates, Vladimir Nazor. He is a good giant living in the woods of Istria, symbol of strength as well as of Croatian identity of the peninsula. In English, he would be named Big Joe.

Veli Jože spent 54 years on active duty, and in ship's logs there are reports on hundreds of operations: rescuing of ships and lives, removing wrecks, lifting heavy loads, building ports and bridges... There is hardly another floating crane in the world with such an impressive biography.

The first lines of such an extraordinary ship's chronicle were written in the last months of 1948. The Government of Yugoslavia decided to order a state-of-the-art floating crane to facilitate cleaning of the Adriatic eastern coast. During the Second World War these pristine shores and all major ports became a graveyard of ships: from small coastal steamers to the giant Rex, a proud

holder of the Blue Riband of the Atlantic. Cleaning of ports and sea lanes was of the utmost importance for the post-war renewal of Yugoslavia.

In 1947 the state-owned Salvage & Towage Enterprise, best known by the abbreviation Brodospas, was established at Sušak (today a part of Rijeka) but with scarce and fully inadequate equipment for such a challenging task. After a lot of discussion the best decision was made: Yugoslavia will order an especially capable floating crane, the strongest in the Mediterranean. And the shipyard of choice was Rotterdamsche Droogdok Maatschappij N.V. in the Netherlands. Why RDM?

The shipyard, founded in 1902, had almost half a century long tradition and a great experience in building floating cranes. In 1910 RDM built Bison, its first floating crane with lifting capacity of 55 tons. In 1916 a crane Zwaan was built and three years later Moa was delivered. But that was not the only reason for choosing Rotterdamsche Droogdok Maatschappij.

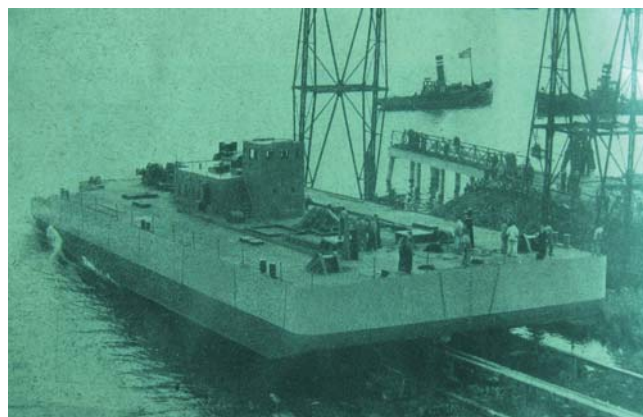
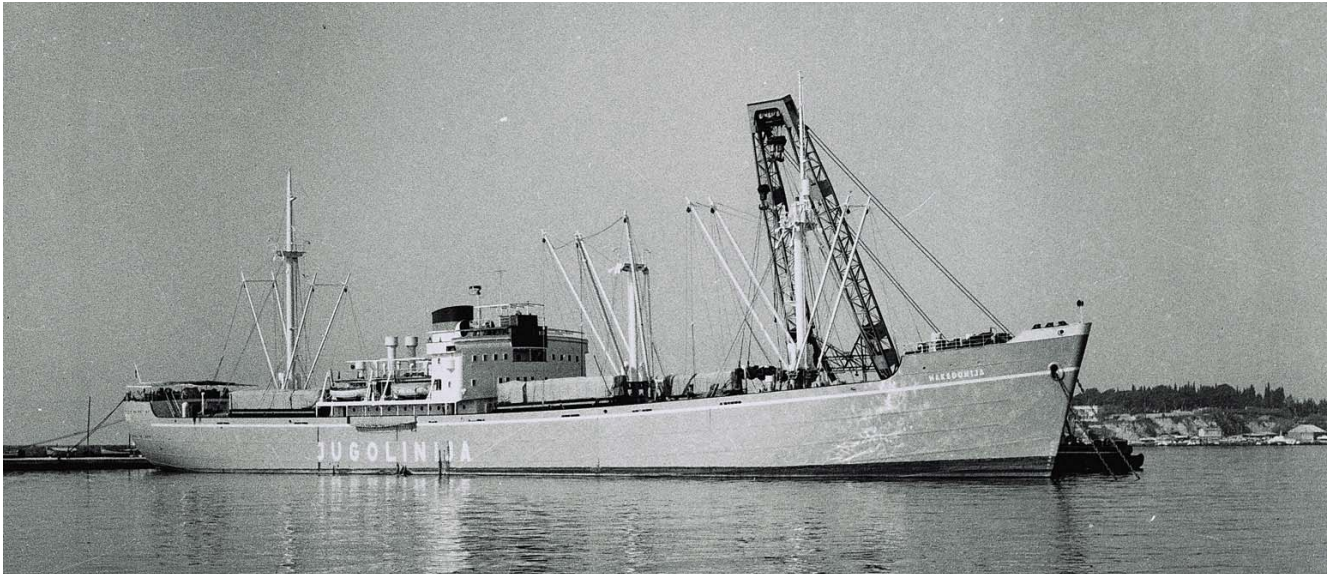


Figure 1.  
Rotterdam 1949 – the moment of launching.

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**Figure 2.**  
Born together –Veli Jože and Makedonija.

In the war-torn Europe one of the most important issues was the restoration of merchant fleets of Allied countries devastated during the war. Almost all German merchant ships were seized and, as the war reparations, allocated to various countries by the Inter-Allied Reparation Agency (IARA). So, in 1947 IARA allocated to Yugoslavia German motorship Viktoria, almost brand new, but a war casualty.

She was built in 1941 by the famous Howaldtswerke shipyard in Hamburg and towed to Kiel for completion. But she was seriously damaged by Allied aircraft attacks during 1944. After being allocated to Yugoslavia Viktoria was towed to Rotterdamsche Droogdok Maatschappij. And while she was still under repairs, an annex to the contract was signed: building of a floating crane.

That was quite a big vessel: length overall 41.18 metres, length between perpendiculars 40 metres, breadth 18.02 metres, depth 3.8 metres. The crane arm was 32 metres in length. But the most important and the most impressive was the maximum lifting capacity of 350 tons. She was a sheer-leg type, meaning that the crane is fixed on the pontoon and can't rotate. The crane's winches were powered by three electric generators of a total of 1,000 HP i.e. 735 kW.

The basis of the crane was a steel pontoon divided into 17 spaces by two longitudinal and four transversal bulkheads. In the forward section there were stores for wire ropes, shackles and other gear, in the mid-section there was crew accommodation and aft there were the engine-room and ballast tanks. On the deck there was a superstructure with the bridge and wheelhouse,



**Figure 3.**  
In the arms of a giant – the Italian ship Fiorella.

ship's office, galley and messroom as well as the cabins for the master and chief engineer.

Unlike the majority of floating cranes, Veli Jože was self-propelled with a somewhat odd propulsion. The Dutch shipbuilders' choice was – outboard engines! Such propulsion, although popular in America, was extremely rare in Europe. So Veli Jože was one of the first outboard-engined European vessels. Like numerous other novelties of the 1940's, that propulsion was a battlefield invention.

In 1940 the United States Navy approached engine builders Murray & Tregurtha Inc. of Boston, Massachusetts asking them to develop outboard propulsion for military barges. Murray & Tregurtha was a highly respected company, established in 1885 as the steam engine builder and specialized for diesel engines since 1905. The Marine Outboard Drive Propulsion System (MODPS) was presented to the Navy in 1941. It proved a complete success, both on trials and later on the battlefields, especially in the Pacific. During the war several thousands of barges were built across America and powered by MODPS.

Sparked with such a huge success Murray & Tregurtha designed the civil version of the System, and in 1947 trade-

marked it as the Harbormaster. Such propulsion, proved heavy-duty in the Pacific battles, was chosen for Veli Jože. So, the construction of the giant crane commenced. In the general appearance it was a modern version of the floating crane Moa built by Rotterdamsche Droogdok back in 1919. Officially, it was RDM's newbuilding number 276 and the Yugoslav authorities chose the name Heroj (Hero).

The crane's pontoon was finished at the end of 1949 and then towed for the completion to the RDM's subsidiary company Nieuwe Waterweg Scheepsbouw Maatschappij at Schiedam. The superstructure, mighty cranes, winches and other deck equipment emerged there and a vessel was delivered in September 1950. But the name Heroj was overpainted, and the new name emerged on the wheel-house – Veli Jože. Shortly prior to delivery it was decided to name the crane in honour of the mythic Croatian giant.

Towed by two powerful tugs of the Dutch company Smit Salvage, Veli Jože arrived in Dubrovnik on October 31, 1950. And only few weeks later she started never-ending work of cleaning the Adriatic. Certainly, the most famous was her role in breaking up of Rex, the giant Italian transatlantic. Indeed she was a big

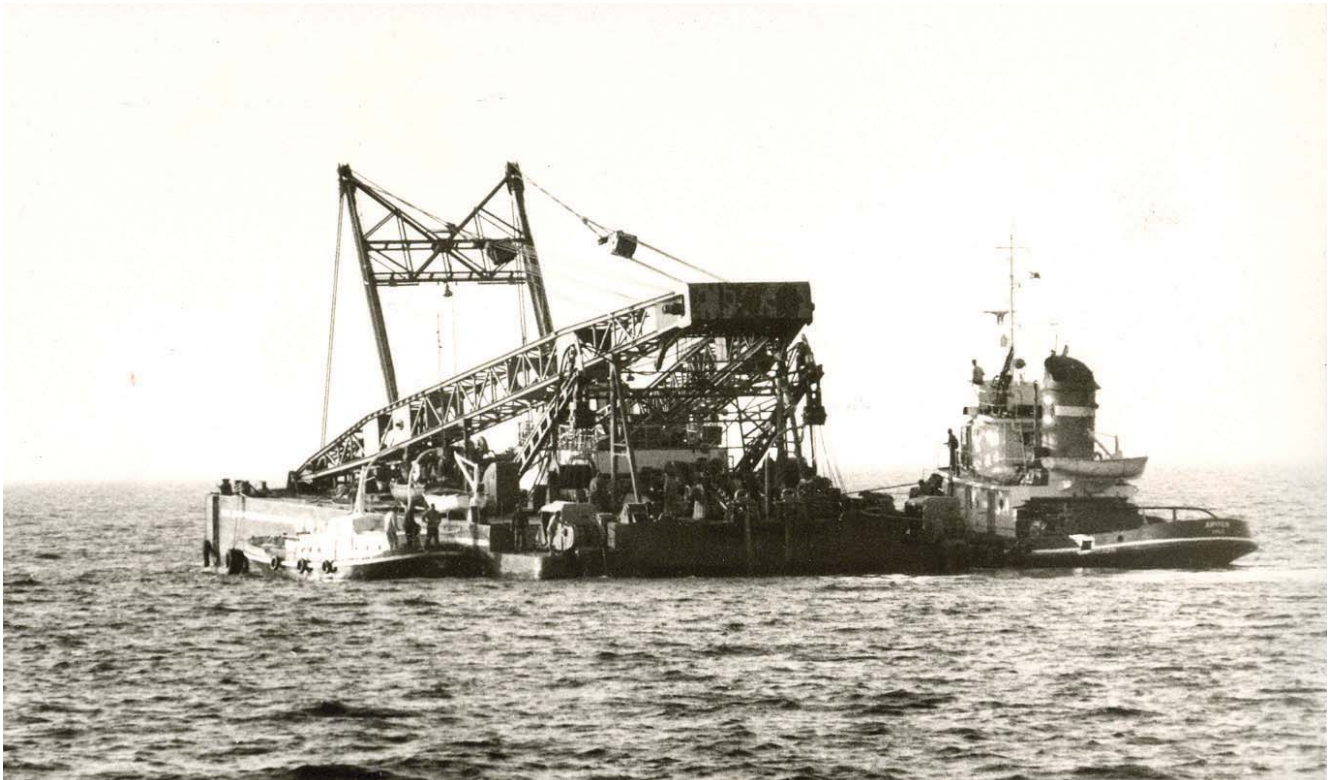


Figure 4.

Always on the move in 54 years.



Figure 5.  
Impressive bird's eye perspective.

ship: length overall 268.2 metres, breadth 29.6 metres, measured on 51.000 GRT. She was completed in 1932 by Ansaldo shipyard at Sestri Ponente near Genoa. Powered by twin gas turbines Rex captured The Blue Riband in August 1933 after crossing the Atlantic with an average speed of 28.92 knots.

The winds of war struck Rex as late as in September 1944 when the British aircrafts set her on fire in the Gulf of Trieste. She sank in shallow water near port of Koper / Capodistria. Such a big ship could not be salvaged, and breaking up started few

years after the war. But only the arrival of Veli Jože facilitated the enormous task. Finally, more than 20.000 tons of steel were recovered from Rex.

The last big operation of Veli Jože was the salvage of Italian liquefied petroleum gas tanker Brigitta Montanari loaded with 1,324 tons of dangerous vinyl chloride monomer (VCM). Once again she provided a great relief for the Adriatic. The gloomy story, that lasted for more than four years, began on November 14, 1984 when the ill-fated tanker capsized and sank in only two



Figure 6.  
Attracting crowd – raising of tug Zrmanja at Split.



Figure 7.  
Rare moments of giant's rest.

minutes while sailing near Murter Island. Of the 12 crew members 3 were lost and 9 were rescued by Grgo Carev, native of Murter Island, former master of Veli Jože.

That was the world's first sinking of ship carrying VCM and nobody had any experience in conducting such a tricky salvage. Furthermore, Brigitta Montanari was lying at the depth of 82 meters. In August 1985 the Yugoslav authorities decided to raise the wreck, considering that such a large quantity of toxic VCM was a catastrophic threat to the people and environment. The work commenced in September, but had been abruptly stopped after two Navy divers lost their lives and a third was seriously wounded. Almost three years passed before a new attempt was made. Finally, in May 1988 Veli Jože raised Brigitta Montanari to the depth of 30 meters and she was towed underwater to Remetić Cove on Kaprije Island.

There the dangerous cargo was pumped out to the Italian LPG carrier Capo Verde and Veli Jože concluded the story. The



Figure 8.  
Deneb emerges from the bottom.

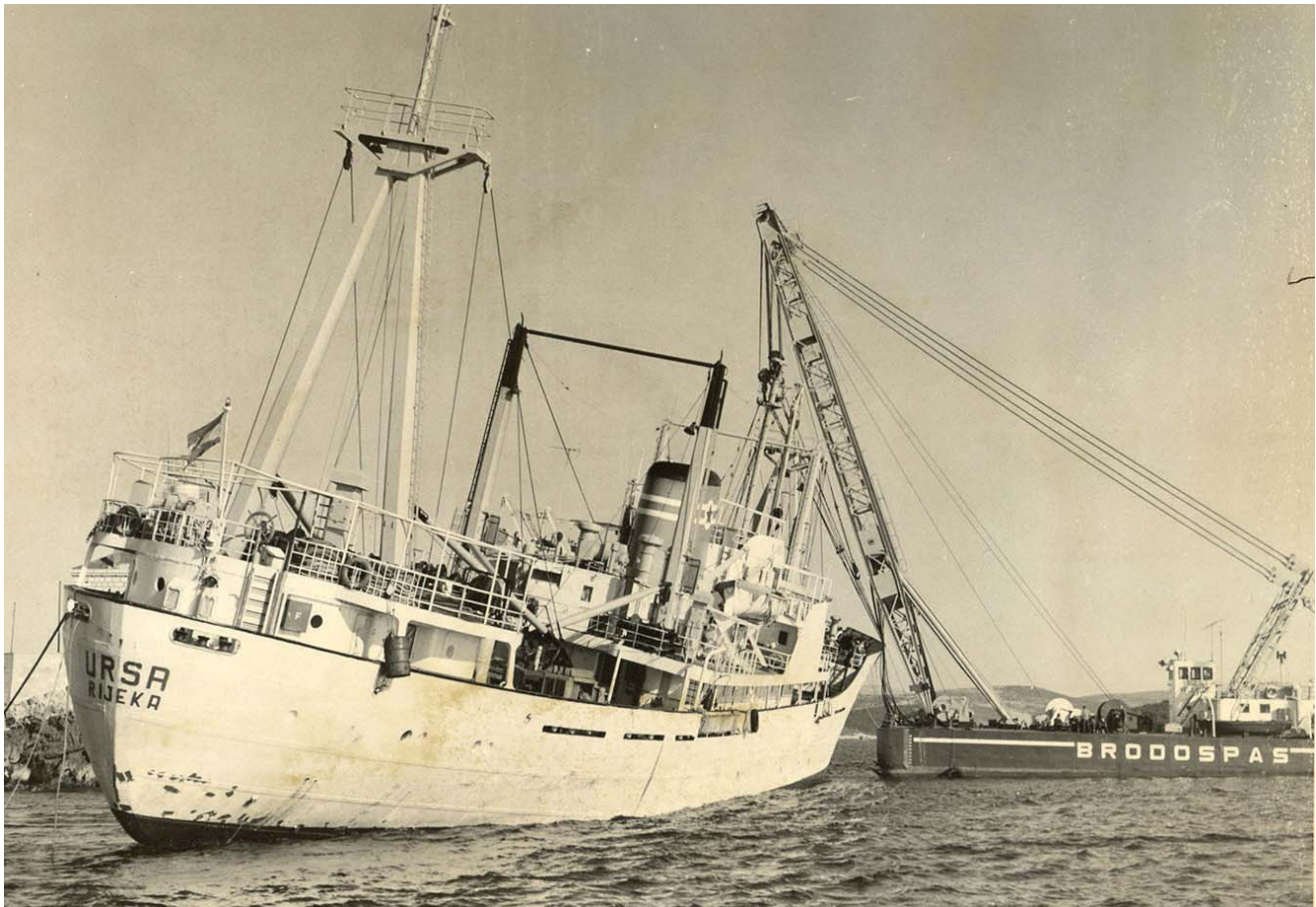
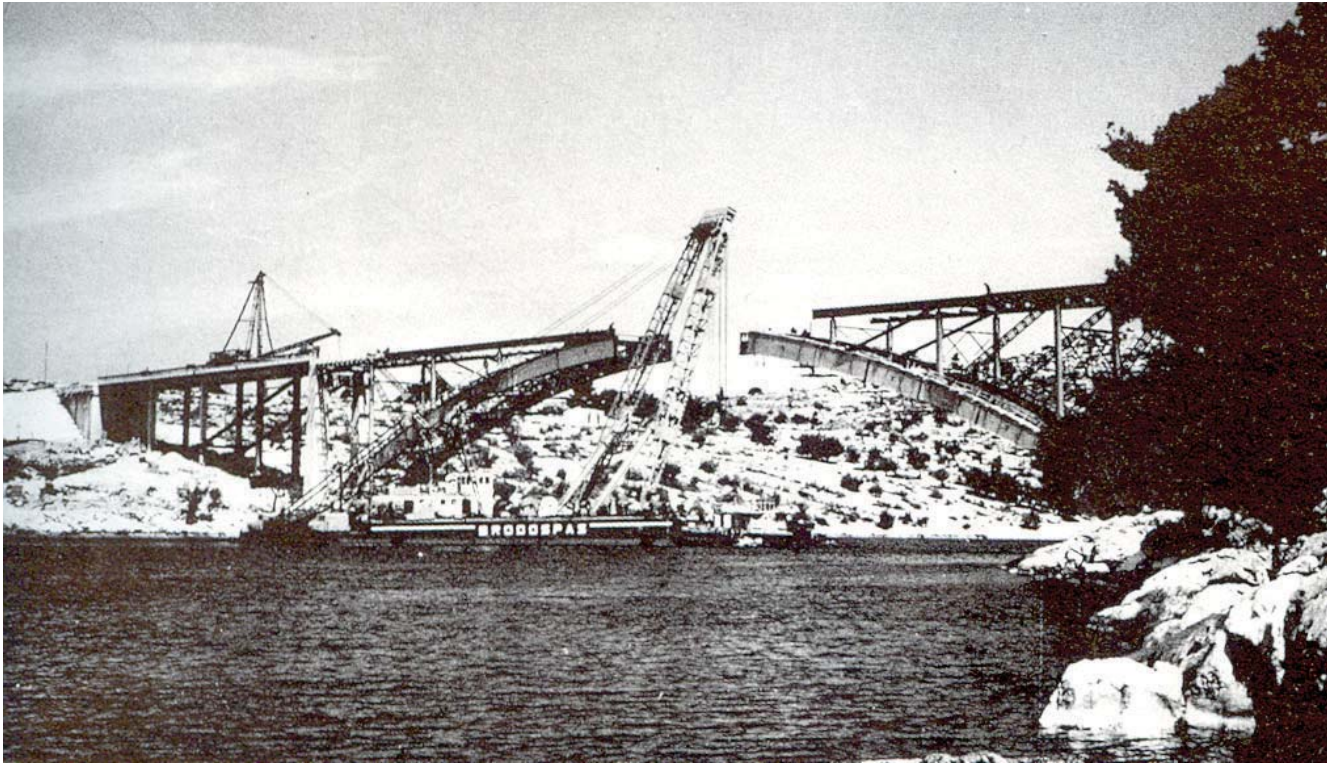


Figure 9.  
Salvaging Ursa.



**Figure 10.**  
The bridge builder – in action on the Šibenik bridge.

mighty crane pulled out the empty tanker to the surface and Brigitta Montanari was towed to her final resting place, the shipbreaking yard at Sveti Kajo.

And, what happened between Rex and Brigitta Montanari? Thanks to the motto 'Help anyone and anywhere', the floating crane became a legend for the people in the Adriatic. There was no difference between salvaging an ocean liner and a humble wooden coaster. The best example is Karmen. She was a small vessel, only 25 metres in length, built back in 1933. On January 4, 1966, while sailing from Omiš to Makarska fully laden with sand, she was caught by the gale force northerly wind (bora). The helpless ship sank near the island of Brač at the depth of 77 meters. Two of her crew perished.

Who could expect that the 33-year-old wooden ship loaded with a worthless cargo of sand will be raised from such a depth by the mightiest crane in the Mediterranean? Certainly no one! But there was Veli Jože and the diver team of Brodospas salvage. Working at the biggest depth theretofore they raised Karmen and transported her to the shipyard at Sumartin for repairs. Another reason for spreading the fame of a gentle giant!

Veli Jože also played an uncommon role in the double salvage of the same ship. On May 30, 1956 the Italian cargoship

Antonio Altiero was passing through the Kornati Archipelago on voyage from Oran to Trieste with a cargo of scrap steel. She ran aground on the islet of Oključ and sank in a short time due to the serious damages sustained. Raised by Veli Jože she was towed to Punat shipyard and repaired. In February 1959 the same ship, now under Yugoslav flag and name Lun, sank near Biograd after being struck by the steamship Pašman in dense fog. Again she was raised by Veli Jože and towed to Punat for repairs!

So beloved in the Adriatic, the crane soon became famous in foreign waters. As early as in 1954 Veli Jože sailed to Greece to help cleaning the Ionian Sea of war victims. In 1954 and 1955 9 sunken ships were raised. But a year later the world glory for a crane lied in the warm waters of the Suez Canal! In July 1956 the Egyptian Government nationalized the Canal and three months later the United Kingdom, France and Israel attacked Egypt. The heavy fighting during the so-called Tripartite Aggression resulted in the large number of sunken ships in the Suez Canal. So the fast cleaning of the world's most important waterway was of the utmost importance.

Shortly after the fighting ceased, tender for the removal of all the wrecks was invited by the United Nations. The best offer came from the seven-member consortium led by Dutch company



Smit Salvage and Danish Svitzer. Brodospas Salvage & Towage Co. was a member of the consortium and Veli Jože played the leading role. Works in the Canal started on November 27, 1956 and were completed in May 1957. Acting alone Veli Jože raised 90-ton floating crane, Dredger No.6 of 1,200 GRT, Dredger No.23 of 1,600 GRT, Dredger No.19 of 1,900 GRT, pilot vessel Le Hardi and, finally, tug Hercules of 1,200 GRT. Working together with Dutch floating cranes Condor and Arend she raised 150-ton crane and a giant suction dredger Louis Perrier. For that outstanding achievement Veli Jože was especially awarded by the United Nations.

But the Suez job was not finished yet. On the tender invited by Suez Canal Authority Brodospas won again and Veli Jože successfully raised a brand new dredger Paul Solente. That huge vessels, 112 metres in length, was sunk in Port Said, out of the Canal. It is very interesting to know that Veli Jože played the very same role after the Arab-Israeli War of 1967, well-known as the Yom Kippur War. In 1968 she spent many months in Alexandria clearing the port of sunken ships.

After the Suez success Veli Jože became welcome worldwide. Among numerous operations the best known is salvage of Italian tanker Luisa at the Iranian port of Bandar Mashur in the Persian Gulf. In June 1965 the tanker was struck by a terrifying explosion and 30 crew members were killed. Burning ship, 200 meters in length, drifted and finally sank just amidst narrow seaway leading to the oil terminal. Three months later Veli Jože was on route to the Persian Gulf having the main role in an extremely dangerous and demanding operation. Until the spring of 1966 Veli Jože transferred to the shore more than 10,000 tons of steel from the wreck of Luise.

From the Persian Gulf she sailed as far as Cartagena in the western Mediterranean. From an American ship she unloaded 300-ton nuclear reactor for the very first Spanish nuclear power plant Jose Cabrera at Almonacid de Zorita. In 1987 at Alexandria Veli Jože unloaded 326-ton generator for a nuclear plant near Cairo. Back in 1969 the crane was on duty in Italy, first to build the breakwater at port of Castellammare di Stabia, and later to



Figure 11.  
Dangerous task – salvaging of Brigitta Montanari.



**Figure 12.**

Last time in the home port – at Split in 2006.

unload equipment for oil refineries on Sicily. It is curious that on three occasions Veli Jože sailed deep into the river Danube for the transshipment of heavy industrial equipment.

Serving as a bridge builder is less known but a very important role of the gentle giant. Newspapers' chronicles mention that back in 1959 Veli Jože gave full support in building bridge connecting Trogir and Čiovo Island. But the sixties of the past century were the highlight of her bridge building on the route of the Adriatic Highway (Jadranska Magistrala) all along the coast.

In 1965 and 1966 she was engaged in building of the Šibenik Bridge at the mouth of Krka River flowing into the sea. The reinforced concrete arch bridge of 390 meters was the first in the world of the cantilever design. Instead of traditional scaffolding resting on the ground, builders used steel scaffolds moved by Veli Jože. Almost the same bridge, but 301 metres in length, was completed in November 1968 at the narrows of Ljubačka Vrata, connecting Pag Island to the mainland. Two years earlier she had an important role in the completion of 414 meters long bridge over the Neretva River near Rogotin as well as the bridge in the Bistrina Cove near Dubrovnik.

The greatest challenge came in 1976 in the form of 1,430 meters long bridge between Krk Island and the shore. Bridge consisted of two arches, one spanning distance between the Krk Island and Sveti Marko Islet, and the other between the Islet and the mainland. The most interesting fact is that the Krk Bridge was designed relying on Veli Jože's active role. Bridge was opened in 1980 and is still the longest reinforced concrete bridge in the world!

But in the late 1990's the glory began to fade. The long goodbye for Veli Jože started in April 2004 when the ship's certificates expired and the crane was withdrawn from service and laid-up. Only temporarily, it was said. But the whole Croatian maritime community was aware that there was no future for that fine crane. Overhead expenses for 54 years old vessel were too high and Brodospas Salvage & Towage Co. was not ready to pay them. Repeatedly the help was asked from the Croatian Government, but in vain.

Firstly, Veli Jože was laid-up at Split and since 2006 at NCP-Remontno Brodogradilište shipyard at Šibenik. Years were passing by and finally in August 2010 the death sentence came.



Figure 13.  
Near the end – laid up at Šibenik.

Brodospas sold Veli Jože for scrap! Dismantling at NCP shipyard already commenced when the Croatian public became aware that a beloved giant was going to die. A public outcry spread all along the Adriatic coast: the legendary crane had to be saved! The official response was immediate and on August 25 the Croatian Ministry of Maritime Affairs, Transport & Infrastructure and the Ministry of Culture stopped further activities.

The importance of Veli Jože for the Croatian maritime history and heritage must be permanently marked, was a clear message from the Government. But the crucial question emerged: to preserve the whole vessel or some significant parts only? After many pro-et-contra discussions the second option was confirmed in September 2010. A complete bridge and wheelhouse will be preserved at the Croatian Maritime Museum in Split together with winches, pulleys, crane hooks, steel ropes and one of the propellers of the crane's outboard engines. But three and a half years later, in April 2014, remnants of the gentle giant are still in a warehouse waiting for a place in the museum...



Figure 14.  
Removed wheelhouse still waits for a place in museum.