

# MARINE SURVEYING

## Science, opinion and art Part II: Join us for another survey

By Tim Ellis  
JT Ellis & Associates

Part I of these articles about the “Science, Art and Opinion of Marine Surveying” allowed us the vicarious pleasure of accompanying the marine surveyor during a draft survey aboard an ocean-going vessel. This, the second part, is about two other kinds of surveys undertaken for a trading company. If you like, the types of marine surveys are essentially these: Inspecting, Measuring & Weighing but marine surveys are so many and so varied that it would be unwise to declare any list definitive.

### The *MV Esentepe*

The surveyor relies upon his client for instructions, ideally in writing, and it is up to the surveyor to be sure that he has a clear understanding of these instructions. When the instructions are general, as these were, then a certain degree of confidence is needed if one is to prevail against the odds as they cannot, at first, be measured. In this case, the best description of my duties would be “...the collection of evidence in the advance of a claim”. However, and as is so often the case, the

outcome of events is determined by diplomacy and a firm hand. As well, the job of the surveyor is to be impartial. A nice way to phrase this is to say that the surveyor is a friend of the court rather than of a plaintiff or a defendant, no matter that he is in the employ of any of these. In other words, the surveyor must stick to the facts: none omitted nor embellished. Opinions can be useful, but as a matter of fact they are merely “ifs” and “buts” and best left in the tool bag. So, here we are on a sunny day in New Orleans when I receive my instructions: “board the *MV Esentepe* and report back to me.”

For example, when the *Esentepe*, a conversion from a container ship into a bulk carrier (hence the exceptionally tall wheel house and the odd deck lay-out) went aground whilst entering the discharge berth at mile 141 on the Mississippi, the first thing the Master did was declare the berth unsafe — a pilot cannot be “neglectful” of his duties

as he is not in command (the Master is), so when she goes aground, someone has to be responsible and if the pilot is looking the other way, then the Master must make a protest and so on down the chain to the bottom link where it is held in place by a heavy bag of money — and, prompted by his agent, the owners called in their P&I Club surveyor. They in turn called out their legal team.

Now, some of us on what might loosely be called the disponent owner’s side — i.e., the charterer’s representative (myself), the berth owner’s representative, the stevedore’s superintendent, our draft surveyor, and so on — are attempting to deal with the dynamic and risky situation of a 62,000-ton vessel aground in soft mud with a draft of 13.50M, stern into

Team effort — seven tugs push to keep the *MV Esentepe* from moving further sideways.

Photo courtesy of Tim Ellis

the bank, sideways, in the Port of South Louisiana on the Mississippi River (at that time the busiest port in North America) and swiftly becoming mired in a rapidly building underwater berm of silt. Between us and the levee, about 25M distant, are perhaps 400 river barges, all the standard 195ft by 35ft type, open and closed hoppers, and with a conservative value of around \$500,000 each, three deck-mounted 150-ton cranes at about \$4.5 million each, and masses of other floating and fixed infrastructure that seems hardly an arm's length away. Oh, yes, and let's not forget the Marathon refinery loading volatile chemicals whose berth is about 800M away, downstream. The river is at 16ft on the Carrolton Gauge and the current is running nine knots, higher in eddies.

Time is of the essence. We have the two tugs alongside that were used to enter the berth straining hard at their limits and as other tugs become available we bring them alongside as well. Tension rises. At the end of the day, after much shifting around, we have five tugs from two different companies pushing and holding against the lee (port) side to prevent the *Esentepe* from moving further sideways. One is attached stern in on the starboard bow, upstream, pulling 45d into the stream and the last is balancing bow in at the port bow on a wire in case we get free and put her up on the West Bank, a mere two kilometers away. That is seven tugs altogether. The bow-most tug to port has a capacity of about 4,800 HP and is nearly new. There is no room for any others — the draft is not sufficient. Muddy water, churned up from the riverbed, is a worry for all as all vessels use river water for cooling or lubricating the shaft, including the *Esentepe* whose water intake is encased in soft mud.

While this is going on, we have been joined by the disponent agent, the P&I Club surveyor, the vessel's agent, the vessel owner's lawyer, the berth owner's superintendent, marine surveyor and their lawyer and sundry hangers-on who never are identified. The terminal moves valuable barges, cranes, and other gear. Push boats literally scrape under the stern of the *Esentepe* whilst maneuvering. Marathon is on alert — now it's getting interesting. Time passes, night comes and goes, another marine surveyor joins us on our side, slightly evening the odds in the event of a pitched battle. The belligerent attitude of some on the other side is extremely

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distracting. This, I tell them all, is my ship and you will not interfere with the activities we are undertaking: keep quiet and stay out the way — observe, comment, contribute, but do not obstruct. I reserved particular attention for the owner's P&I Club lawyer who is boundless in his enthusiasm to corner me and consign us all to hell before breakfast. This is deemed unco-operative of me and not much appreciated, and so I instruct the disponent agent to remove them, by negotiation if possible, by force if necessary. Calm is instantly restored. The lawyers sleep rough on the floor of the wheelhouse amongst our feet. I have told the Master that the disponent owners will have available quarters to which he smirks and nods. The surveyors bicker and the

rest of us cat-nap amongst reams of calculations and sketches of ideas. New York calls me every 15 minutes for 24 hours and I can hardly blame them given that this could wipe out a year's trading profits.

Twenty-four hours later, seven tugs and a couple of hundred thousand-plus in tug costs, fifty-ish thousand in pilotage and a few grey hairs to boot and, no further ahead, we are contemplating tying off floating derricks to the upstream mooring and tethering them on lines to hold them against the starboard side of the *Esentepe* while we lighten her. This is foolish talk, and dangerous, but the options are few.

I happen to look downstream and I see a great cloud of dust rise 200 metres into the air from the Cargil terminal, maybe five kilometers downstream. Perhaps



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*The tugs have been maintaining their position for some time, swapping-out as needed, allowing their equipment to cool, go and refuel and come back, shutting down for maintenance in turn, and by some fluke everyone is ready and paying attention.*

it is a some kind of Katabatic wind disturbance but whatever it is it seems to be coming our way. The tugs have been maintaining their position for some time, swapping-out as needed, allowing their equipment to cool, go and refuel and come back, shutting down for maintenance in turn, and by some fluke everyone is ready and paying attention. Push, I say, angle all downstream sterns toward the bank, pull down stream on the port bow and pull directly on the starboard bow towards the mid-stream, everyone at 100 per cent. The gust arrives and, in far less than 30 seconds, achieves what 14,000 HP could not do. The pilot takes over. We slide gratefully into the mid-stream and start again.

This was not the first time on this voyage that the *Esentepe* caused us to pause for thought. My client, a gentlemen of steely determination and prescient in his trades, had already decided this one must be watched. Indeed, when she sailed from Greece she was eerily silent for a while and, as a precautionary measure, it was decided that I would board her just above Belle Chasse and join the Crescent City pilot for a look see. As we approached the Crescent, where the *Brightfield* had ploughed into the mall beside the Hilton Hotel the year before, marooning 40

American school children in the collapsed ruins of the mall (none hurt I am pleased to say), the *Esentepe* appeared, to the pilot anyway, to lose steerage.

The pilot didn't have much choice in his situation, he sounded the ship's horn every three seconds as we watched, stunned and horrified, from the bridge. The *Natchez* sternwheeler, under our starboard bow, started to empty of passengers, all at a run. Later, we learned it was the Area 8 Coast Guard Admiral hosting his farewell event. Oops. Just when all seemed lost, the *Esentepe* responded to the wheel and on we went. The Captain growled: "no patience, these people!" The pilot — a Hulk Hogan look-a-like — does not handle comedy well and is rather un-pilot-like as compared to those I had interacted with before in other situations. I believe he was an exception as many others I knew were complete masters of their trade. We changed pilots in New Orleans from a Crescent City Pilot to the New Orleans Baton Rouge Pilot (NOBRA). The new pilot was unimpressed, notwithstanding the climb of seven flights on top of the Jacob's Ladder, and immediately put the vessel into Ama Anchorage and restricted her pending a Coast Guard inspection. Dusk was fast approaching.

The next morning, during numerous cups of Turkish Coffee, the US Coast Guard conducted steering tests and eventually yet another NOBRA pilot boarded — just long enough to put us aground in the berth as I have described above — before he too left to be replaced by yet another. They came and went without number during the night. Our second-to-last pilot claimed to be nearly 80 years old and watching his passage from the crew boat up the Jacob's Ladder and then up the seven flights to the bridge, this would seem to be about right — "I will," he said 20 minutes later, after our last sighting, clinging tightly to the bridge rail, "continue to pilot until I can no longer climb a Jacob's Ladder". Our last pilot was from a family long associated with the river and with all the attributes one associates with

these gentlemen — a true professional, thank heavens!

So, safely in the berth, I consign the lawyer to the crew boat with a cheery good afternoon and no hard feelings — well, none to talk about anyhow — and the rest of us go to work discharging 62-odd thousand tons of bulk into 46 river barges for the long haul up to Cairo and beyond.

## The *MV Haydar*

New York called to say that the *Haydar* reported that she was inbound from Sriacha around the capes (only 12M of draft in the Canal that year) and anchored by Walvis Bay, off the Namibian coast for repairs. I struggled with flights to Namibia only to be told she was underway again and to stand down until she entered the Mississippi.

She was in a desperately sorry state when I boarded just by Audubon Park Zoo: as she approached Cape Agulas, she was shipping green water from the SW and fully three meters over the hatches in a Force 9 and later a 10 that blew continuously for two weeks. Too dangerous to turn back, her rolling exacerbated by huge seas, unable to turn north towards the lee shore and shallow graveyard of the South West African Coast (the "Skeleton Coast"), nor south and broadside into the fearsome seas, she could only plough on, steadily forced south by the current and pounded from the south and the WSW by massive seas crossing over one another.

After several days, the port-side cleats holding her side-opening Hyundai-Mcgregor hatches started to fail entirely, displacing hatches from the coamings of four holds. The hatches lifted off their coamings but none went overboard as they were held by the trailing ends of failed hydraulic cylinders and their sheer weight. Green water filled the ullage space of the number one hatch. Men, drenched and exhausted, bucketed water up through the Australian ladder hatches while others stood on top of the cargo filling buckets hauled up by lines through the narrow gap along the port side of the hatch. The bosun, supported by everyone from the captain and cook down, assisted each other with the 12 six-ton hydraulic jacks, long wire led to windlasses, millimeter by millimeter, and somehow brought them through the shadow of death with security enough to continue her voyage after a brief respite at anchor to re-secure the hatches, all without any outside

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assistance. She carried 17 crew all-in. We knew none of this, just that she had gone quiet and was now en route to New Orleans.

As soon as I boarded her, there was no doubt she'd been through hell and worse. After effusive greetings, we proceeded up river to the berth in which the *Esentepe* went aground. By then I had the ship's story in my mind. During the remaining hours before dawn, while the floating derricks were brought alongside and the formalities completed, the Captain begged me to get him the cheapest watch around as his had broken in the fight of their lives and that, unbelievably and for the same reasons, there was not a single working wristwatch on the ship. Of course, I gave him mine. We worked about 53,000 metric tons off the ship, the remaining 17,000 MT was rejected. We removed some of it, put it through grizzlies, and sold it for salvage. Then we broke carapaces of hardened cargo attached to the frames, sometimes more than a metre thick, scraped and banged away with excavators and front-end loaders, crane buckets, shot-guns and sledge hammers always bearing in mind the ship's structure and her tank tops, and eventually it was all done — \$3 million and three weeks it took. They cleaned themselves and off they went (a receiver is responsible for removing all cargo from a vessel, even when it is the subject of a claim). Turks, already high on my list of likable people, I can tell you, are stubborn.

*JT Ellis opened a surveying practice in Taipei in 1977, after a brief career with a U.K. shipping & forwarding company and postings in London, Vienna and Hong Kong, and has lived and worked in Vancouver since 1993. He can be reached at timothy.ellis@icloud.com*

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