BULK SURVEYOR

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JOIN THE CONVERSATION!

THE HUMAN TOUCH

By Frans Voogt

Many years ago, I was a foreigner in this beautiful country, attempting to master the French language. Fortunately, a "long haired dictionary (wife) taught me some "tricks not in the book." Obviously, I'm not talking about language, but it became difficult when my mother-in-law came for a visit. She considered that I did not understand her (which, I admit was sometimes the case) and to get her message across she had the unfortunate tendency to speak louder and louder until my ears almost started bleeding! I became embarrassed by this behavior and I asked my beloved wife, "could you please share with your mother that I'm not deaf, just a bit...dumb?" Years have passed and I've finally managed to tame this very complicated language although I've never confirmed that my wife's mother ever reconsidered her opinion of my personal intellect.

The suffering I've endured is a small sample of what multicultural crews calling in foreign ports are being subjected; trapped in a floating tower of Babel and being required to be congenial with fellow crewmembers and shore side visitors including, but not limited to agents, government officials, stevedores and surveyors. Typically, English is the common language but not always the standard.

In 1986 the UK newspaper "Guardian" estimated the typical size of one's vocabulary as developing from roughly 300 words at age two to 5,000 words at five and evolving to 12,000 words at the age of 12. I don't know if someone has ever done statistics on maritime vocabulary, but I estimate that the number of words used in communication between the ship and the shore ranging between 500 and 1000; frankly thinking I'm being generous, with the level being perhaps, a proficiency of 4 years. How do we manage this?

To trainees I would say "when everything runs smoothly, anyone can do the job". But when things go wrong our mother in law suddenly appears on the scene! And as our message does not get across, the situation becomes increasingly complicated with communication shutting down because the ears cannot take it any longer and, well, we do not wish to start boxing!

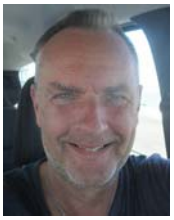
Aboard we must get things fixed nor are we 'talking literature' and we are defending many different, sometimes opposing interests. However, the only key word which enables us to accomplish our mission is "communication". No matter the mode of communication, be it words, drawings or hand signs, we must enter dialogue!

In communication, the crew often draws the short straw! Officials go on board and say whatever they like, have requests, remarks and loads of criticism. They amend stowage plans arbitrarily; do not understand why hold no. 3 should be loaded before hold no. 1, why the ship needs 8 hours deballasting time prior to loading and so on. In exchange the Master is merely entitled to listen and obey. His opinion is often disregarded in the bluntest way! Consequently, the situation may get totally stuck, letters of protest start flying around and even P&I may get involved! At the very end of this entire situation one often realizes that the only problem which has ever existed was: bad communication!

In cargo stowage and in many other fields "rules of thumb" are very helpful not to get "off track". In my opinion, similar standards should apply in communication, especially aboard ships.

The first and maybe most crucial rule for anyone going aboard a ship is to be aware that he or she is not only entering a "machine" or a factory but also a home! You do not necessarily have to take off your shoes, but should show some respect to crew members, at least as much as you think you deserve yourself in your own home!

The second rule is that the people you are dealing with are neither deaf nor dumb. They have many



skills, they know how to handle a very complicated vessel steering it safely around the world, but may not be conversant with English. This is a general problem in shipping and the only way you can get around it is to TAKE YOUR TIME. Sit down and relax! Show the Master that you are willing to explain things calmly, that you are not his superior (remember he is the boss!) and do not just grab some papers and run off! Explain again and again, use diagrams, drawings, whatever it takes to clarify your requests. If you are thinking, "I have no time to do this," you will soon understand that you will lose 10 times more of your precious time if you speed up the process which may soon be beyond control! Moreover your job will be boring as the communication element is often the most interesting part of it !

The third rule is: never shout. Shouting is always a sign of helplessness. On many occasions, problems aboard can be solved just by listening and trying to understand. Of course, this doesn't always work, but it is always worth a try! We're only human after all and we should not forget that we're all in the same boat!

Frans Voogt is director of OCEANCARE, an independent Marine Survey Company servicing the ports of Bordeaux, Bayonne and La Pallice on behalf of P&I Clubs, Shipowners and Insurance Companies.

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Editor's note: The author definitely gets the point across that a little diplomacy goes a long way on the working waterfront . What an excellent opportunity to serve as ambassadors to the ports we service!

The Elusive LCF

by Chaz Leeuwenburg

The electronic version of this newsletter contains links to additional resources and may be accessed at bulksurveyor.com

Although mistakes can occur at any point during draft survey calculations, after many years of training draft surveyors and auditing other surveyor's work, it's my observation that locating a vessel's Longitudinal Center of Flotation (LCF) is a more common source of error. LCF is defined as the geometric center of the ship's waterline plane. ***In less wordy terms, it is the point about which a ship will trim, i.e., its tipping point.*** It may be forward or aft of the midship point depending on the shape of the hull at the waterline and the volume of water actually being displaced by the vessel. Once observed, drafts are corrected to their corresponding perpendiculars and draft corrected for deflection is calculated using the equation [(6 x MD) + FD + AD] /8, where MD = midship draft, FD = forward draft and AD = After draft., LCF can then be referenced in the vessel's hydrostatic data.

Unfortunately, there is no standard of expression for the location of a vessel's LCF in vessel publications. Ideally the location of LCF should be stated as the distance from the exact position halfway (midship) between the forward and after perpendicular (Length Between Perpendiculars or LBP) and as a negative (-) value if located forward and a positive (+) value if located aft of this midship point although this is not always the case. The only standard that has always held true regarding the presentation of ship data is that there is no standard! It is not unusual to see the signs reversed (LCF expressed as a negative value for being positioned aft and a positive value for being positioned forward of midship). Another common practice is to reference the position of LCF as a distance from the after perpendicular. In this particular case, it would be necessary to subtract this value from one half the LBP to determine its position relative to midship to convert it as an expression of the position of LCF. This value can then be used to determine the 1st of two trim corrections applied to a vessel's apparent displacement. The 1st trim correction is calculated using the equation: **(TPC x LCF x Trim x 100) / LBP where TPC = Tons per Centimeter, Trim = Aft Draft - Forward Draft and LBP = Length Between Perpendiculars**. The end result, expressed as tons can be either a positive (+) or negative (-) value depending on two variables: Location of LCF and trim. As mentioned previously, LCF will be expressed as a distance from midship and be negative (-) value if located forward and positive (+) if located aft of midship, Trim, calculated as aft draft - forward draft will be a positive value (+) if vessel is trimmed by the stern and a negative value (-) if down by the bow.

Using an example of a vessel with an apparent displacement of **9,000 tons, TPC = 42.15, LCF = -1.45, Trim = +2.48 meters and LBP = 185 meters.** The 1st trim correction would be calculated as (-)70.498 metric tons using the equation:

(42.15 x (-)1.45 x 2.48 x 100) / 185
TPC LCF Trim LBP

This value is applied to apparent displacement:

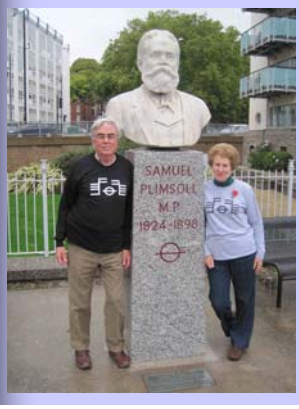
9,000 + (-) 81.930 = 8,918.070 Tons

The error of the above calculation would be 163.860 tons if LCF was incorrectly entered as a positive (+) value, demonstrating the importance of properly determining the position of LCF relative to the vessel's midship point and assigning the proper sign negative (-) if forward or positive (+) if aft of its midship location.

Note from the author: Special attention is focused on this particular subject during our draft survey course.

COURSE INFORMATION

Draft Survey School Scheduled for February 8 — 9, 2020



Presented at the NC State Port Authority, Morehead City, NC and limited to 5 students, the two-day school of instruction will take the mystery out of the science of accurately determining a vessel's weight by water displacement. Designed for inspectors having little or no previous experience performing surveys of this type, the program will be presented by Chaz Leeuwenburg in a fun, relaxed and easy to understand format. Adhering to standards established by the United Nations and the Economic Commission for Europe (ECE) and using surveys and publications collected from actual vessels attended by the instructor, attention will be directed toward practical application rather than textbook theory. Throughout the entire course, the student can expect to be challenged with real-life scenarios while acquiring the fundamental skills necessary to properly perform a draft survey. Members of the National Association of Marine Surveyors (NAMS) and Society of Accredited Marine Surveyors (SAMS) are approved for 13 CE credits for course completion. International Institute of Marine Surveyors are approved for 3 CPD points. Program information and enrolment information may be accessed at easydraftsurvey.com

A gang of Gulf Coast surveyors are all smiles after completing a course delivered at their home office.

"Just say no to CC-ing the world and Reply-All emails!

MARITIME HISTORY

LIBERTY MEATS

By Henk van Hemmen

Looking into the history of warfare and battle ground victories it is a well-known fact that in general terms, the army that is well-fitted out and well-fed will have a tremendous advantage over the poorly equipped hungry enemy.

This is a story about the ingenuity that comes natural to the American individual, particular in time of distress and under the pressure of facing the sheer impossible. An achievement we can be proud of.

One particular story that sticks in my mind is one I heard in a New York City Lunch Club when I had just been transferred to the USA some decades ago. I grew up in Europe during the German Nazi occupation. At lunch my colleagues inquired about our experiences, which of course included conversation about the US military liberating that section of Europe where I lived. The enormous supply bases to keep the Second World War going and which were established along the US East, Gulf and West Coast were the topic of conversation.

One of my friends walked over to a gentleman on the other side of the bar, brought him over to our group and introduced him as the man who kept our soldiers overseas well "provisioned with hamburgers".

The military was faced with one of many enormous problems namely "How do we get deep frozen meat from the Midwest slaughterhouses to the boys in the front line?"

This gentleman, a low-key man and stevedore supervisor, developed the key to that problem.

There were hardly any fully refrigerated cargo vessels available. In the years before WW II there were fruit and banana carriers but sophisticated deep freeze, high-speed reefer ships were still in the far away future. Besides those fruit carriers were totally useless to carry deep frozen meat products. The transportation across the ocean was maintained by the pre-war existing General cargo fleet and tank vessels and … the "Liberty" ships that were built in great numbers to assist the war.

The plan that was developed by this single person's brain wave and in a very short period of time was the following:

Meat could be deep frozen in Chicago and other meat production centers. However, how to get it to the frontline soldiers somewhere remote in Europe and the Pacific? Peace time mattress manufacturers were engaged to produce ordinary bed mattresses at a high speed of production. Saw mills were engaged to produce large quantities of sawdust.

A "Liberty" ship cargo hold which only has a 5/8" steel hull plate between the inside cargo hold and the ocean was lined with these mattresses. Simultaneously the meat was extra deep frozen to the bone in the slaughterhouses and transported by train to the ocean loading terminals where the large sections of beef and pork were loaded in a bulk cargo fashion. While filling the cargo hold layer by layer with arbitrarily dumped meat the void spaces in between were filled by blowing in sawdust. In that manner, the full load of meat that was still deep frozen and far away from thawing, became one big solid block together with the sawdust that had turned wet because of the surface condensation on the meat.

Once the hold was closed and the vessel went underway to the discharge point, of course due to the difference in temperature inside and outside the hull of the vessel, the cargo temperature increased somewhat. However, the absence of internal air circulation due to the first wet, later frozen sawdust practically eliminated, certainly retarded the thawing process. Actually the load had turned into one big block.

Upon arrival at the unloading port or beach landing location the meat had to be removed by jack hammers and was quickly distributed to the various spots in battle zone. Manpower not being a real factor in the army, an efficient transportation battalion certainly got the meat unspoiled where it had to be, namely in the stomach of the GI who was encouraged by realizing that there were people at home who fought besides them by just using their brains, applying hard work and good old USA ingenuity.

Be proud of that in today's hard trying times!

Henk van Hemmen 1932-2010

Editor's note: This article is reprinted by permission of the author's son, Rik van Hemmen, President of Martin & Ottaway, Marine Consultants, Engineers, Surveyors, Naval Architects & Appraisers .

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Quotable Waterfront Quotes

"If you're early, no one cares but if you're late, it's front page news!
Louis Batuyios,
International Shipping
Wilmington, NC

Problem Corner

Submitted by William George

Test your knowledge: On a vessel at a specific draft, what two locations can a weight be loaded or discharged in order that the draft changes only at one end?

CHECK YOUR ANSWER

STABILITY & TRIM COURSE


William George

William George, author of "Stability and Trim For the Ship's Officer" retired earlier this year from the National Cargo Bureau (NCB) after 38 years of service. Retired but not "Finished With Engines," he now works as an educator, consultant and expert witness.

Produced in conjunction with The Pacific Maritime Institute and The Maritime Institute of Technology and Graduate Studies (MITAGS), Mr. George will be presenting a Stability and Trim Workshop May 5-7, 2020 in Seattle, WA. This workshop is for anyone desiring more practical working knowledge in regards to managing a cargo vessel's stability and trim. With William George's unique instruction methods, all that is required is a vessel's hydrostatic table, capacity plan, simple calculator and a few sheets of paper. Participants will be able to eliminate the "trial and error" methods now used with loading computers by employing these direct "Old School Methods" addressed in the program.

This curriculum is not only intended for ship masters and chief officers, it's highly recommended for junior officers, students and / or anyone that is remotely responsible for the stability of a vessel.

For additional program information, contact the instructor via email.

WilliamEGeorge@gmail.com

TALES FROM THE TRANSOM

It's very rewarding seeing pupils from our previous training events working in the field as competent and well-regarded surveyors, suggesting our programs are working and the curriculum is not just another "Diploma Mill."

Occasionally, I'm contacted by a former student for advice. In this particular case, during an initial survey on a bulker, the surveyor's calculations didn't agree with that of the Chief Officer. After reviewing everyone's paperwork, I noted that although my colleague's calculations were correct, there was a problem with the vessel figures. Specifically, the ship's two onboard draft survey programs had no provision for a midship draft correction. The Panamax was in excessive trim, yielding a difference in draft corrected for deflection of approximately 2 centimeters, equating to an error of about 120 tons. The CO refused to budge, calling the master (always trouble) who insisted ***since both vessel programs were in agreement and approved by the owner's P&I Club, the applications had to be correct***. Subsequently, the surveyor disembarked the vessel befuddled, dreading his return and ultimately enlisted my services for the final survey.

Needless to say, "Daddy Rabbit" boarded the vessel loaded for bear, expecting a confrontation. Fortunately, by the time of my arrival, a savvy Port Captain was aboard. We both manually performed our calculations, confirming there was a problem with the vessel's program. The master questioned how both vessel programs could have an error, yet were both approved by the club. I could only speculate both programs originated from the same source and the P&I representative reviewing and approving the application didn't have a clue!

When questioned by the principal how everything went during the final survey, I responded, "Much ado about nothing." I also added, "You're an extremely proficient draft surveyor but you're young and handsome, appearing to the casual observer as being inexperienced." On the other hand, "I'm old and ugly and even if I was incompetent, my appearance suggests I look like I know what I'm doing."

"Old age and treachery will often overcome youth and skill."

Surveyors typically use computers to automate work in the field. Although this practice expedites the turnaround of paperwork, the practice will turn your brain into mush! Make a habit of performing the calculations manually often to keep the noodle sharp! Chaz Leeuwenburg