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Loss Prevention Bulletin - AVA/2015/0020

DEALING WITH POST-BUNKER DISPUTES

About Bunker Detective:

Bunker Detective is an exclusive division of AVA Marine Group Inc.

AVA Marine is a professional marine surveying and consultancy firm – founded and led by its principal marine surveyor Kaivan H. Chinoy. The Company provides a comprehensive range of specialist marine surveying, marine loss control & consultancy services primarily in Western Canada and the West Coast of the United States

To learn more about our marine surveying capabilities, visit our website at ava-marine.com / bunkerdetective.com

AVA Marine | Bunker Detective is also the member of the **AIMU** (American Institute of Marine Underwriters), **CBMU** (Canadian Board of Marine Underwriters) and **MIABC** (Marine Insurance Association of British Columbia) and the **IBIA** (The International Bunker Industry Association)



With Bunker Detective's expansion into the Chinese and South Korean markets more and more potential clients are requesting us to attend to post-bunker disputes – when it is often too late for us to do anything. Disputes arising over bunker quantity “after” delivery (hence the term post-dispute) are usually inconclusive if the shipboard personnel are not properly trained and if no surveyor is present or the surveyor is not experienced in dealing with disputes. The result of which is the vessel often ends up with an incorrect supplied quantity with losses for the Owners/Charterers.

This brief article explains what clients can do to prevent the losses from occurring in the first place and if a dispute does arise the important steps to take in order to safeguard their rights.

While no one can guarantee that these losses / discrepancies will not occur; one has to understand why disputes over bunker quantity occur in the first place. There are many reasons for this. Firstly we are dealing with “fluids”, similar to bulk commodities such as grain and not containerized cargo hence one has to rely on manual measurements (where a bunker surveyor or the Chief Engineer would measure the quantity of fuel transferred using the ‘dip’ method and look-up tables). In other words, the final results will only be as good as the surveyor who performed the calculations.

Some of the contributing factors for the loss:

- Too much reliance on the vessel's staff where no surveyor would be employed
- Experience of the surveyor / ship crew to carry out accurate calculations – there are many factors that can contribute to errors like incorrect temperature, density etc. and these errors can be compounded quickly giving rise to large errors in the final quantity of mass delivered.
- The calculation also depends on the accuracy of the sounding/ullage tables – often we find this incorrect (interpolating sometimes does not even make sense). Many new vessels rolled out are similar in design to the previous vessel in their fleet or “sister ship” and we have often found incorrect calibration tables onboard copied from one of the sister vessels in the fleet.
- Sometimes the vessel has no list / trim corrections onboard or the trim corrections given are only up to 3.5 m whereas for a typical Aframax tanker bunkering at the port of Rotterdam it is not uncommon to achieve a trim of 4.5~5 m in order to facilitate crude oil discharging – so how do you account for such corrections?
- Checking of all 6 drafts accurately – this is often not possible if the bunkering is in port
- No ‘bunker stem audits’ are conducted prior bunkering which involves elaborate detective work checking for all known malpractices.
- Malpractices by either party whether the ship or the barge which would not have been checked for prior receiving bunkers (as described in Malpractices in Bunkering Operations earlier)
- Bunker tank(s) would have been modified in dry dock with no revised calibration table available
- C/E or Surveyors not checking for VNET or not aware of it.

So in other words discrepancies can occur even from small variances on either side's data's or situation.

Loss Mitigation:

In case in the event of a short fuel delivery remember that time is of the essence as any post-bunkering investigation is many times futile and inconclusive. The first and foremost goal should be through proactive approach settle any disagreement on the spot and to avoid turning a disagreement into a dispute with the aim to increase the client's profits by mitigating and / or bringing down their losses.

Most shipping companies will engage the services of an independent surveyor to protect their interest in case of discrepancies; however, how many companies actually give clear instructions to the attending surveyor to measure all non-nominated tanks (non-receiving tanks)? Or how many surveying firms actually carry out the measurements diligently? Failing to do so leaves the operator vulnerable. We Bunker Detective have been requested many times to attend a post-bunker dispute despite the fact that the bunkering would have been witnessed by an 'independent surveyor' – where the surveyor would have done nothing against preventing malpractices nor investigate into the cause of shortage but just issue a standard 'before and after ullage report' and leave the vessel!

As mentioned above no one can guarantee short delivery during a bunker transfer operation but key precautions iterated below (more detailed explanation is given in 'Malpractices in Bunkering Operations') if followed will rule out many of the malpractices in play today and should a dispute still occur assist the surveyor/chief engineer in dealing with the situation more efficiently.

- Valves to bunker tanks checked shut on both the barge and ship before gauging
- Inter-tank transfers (gravitating of fuel)
- Flow meter tampering and quantity measurements by volumetric flow meter only
- Pipework tampering, bypass connections etc.
- Questionable tank calibration tables
- Tampering with gauging equipment such as sounding tapes, temperature equipment
- Inflated / deflated tank volume during gauging
- Sealing of QCV (quick closing valves) in engine room to storage tanks during transferring operations
- Clear understanding of fuel density and weight relationship
- Clear understanding of fuel temperature and volume relationship
- Clear understanding of Zero Dip Volume application (un-pumpable fuel in empty tanks)
- Under-Declaring actual ROB and Deliberate Short-Supplying of Fuel

The following guidance/checklist should not be construed as exhaustive and is aimed primarily for vessel operators and ship owners to educate their shipboard personnel for better detection and prevention of these malpractices for occurring in the first place.



BUNKER DISPUTE RESOLUTION

Item No.	Description	Barge	Ship
01	Exact date/time/location and quantity in dispute recorded?		
02	C/E advised not to allow hose disconnection?		
03	Commercial operator management office contacted immediately for advice?		
04	C/E advised not to sign BDN unless advised by the Principals?		
05	Agent notified and pilot boarding postponed if applicable?		
06	All written evidence is immediately preserved, even scratch notes?		
07	Photographs (where permitted) taken as evidence?		
08	Bunker delivery hose checked blown-through and clear?		
09	QCV (quick closing valves) in engine room to storage tanks (if sealed prior bunkering) still intact?		
10	Drafts visually checked again; trim corrected and documented?		
11	List ascertained again and verified by clinometer; list corrections applied and documented?		
12	Bunker tank modifications (if any) ascertain and revised calibration table for the same sighted?		
13	Calibration tables checked for tampering, corrections, insertions, loose pages?		
14	Tank calibration tables checked for Class endorsement?		
15	Number of tanks / locations verified from Tank Arrangement Plan?		
16	Tank capacities verified from Tank Capacity Tables (Machinery Part)?		
17	Sounding tape / bob checked for condition, tampering, alteration if not using own equipment?		
18	Temperature thermometers checked for tampering if not using own equipment?		
19	All valves to bunker tanks checked shut on both the barge and ship before re-gauging?		
20	Reference heights / gauging heights verified from calibration tables and same checked against actual measurements during gauging?		
21	All tanks visually checked for Cappuccino Bunkers?		
22	At least three consecutive gauges taken for each tank and average value used?		
23	Inside of sounding pipes checked for dissimilar metals?		
24	Sounding pipe flanges/coupling/bolts checked for tampering?		
25	Level of oil on the tape accurately ascertained?		

26	Density used by barge and vessel the same?		
27	Drafts / list re-checked if loading/discharging/ ballasting operations are been carried out at rates to cause appreciable change in trim / list?		
28	Entire before and after delivery calculations re-checked for correct interpolation and jointly verified by the C/E and the surveyor?		
29	All non-nominated tanks re-checked for any increase / decrease of sounding /ullage?		
30	All ballast tanks, cofferdams, void spaces checked for any contamination/leakages?		
31	If the discrepancy still remains; supplier's Stock Movement Log Book scrutinized / copies obtained to ensure that the original supplied quantity tallies with the quantity at the time of opening gauge?		NA
32	Barge Vessel Experience Factor (VEF) records obtained?		
33	C/E advised to issue letter of protest for each incident and have it acknowledged by the barge?		
34	The surveyor given his own detailed statement of facts leading to the short delivery?		
35	Photocopies of all relevant pages of the calibration tables obtained?		
