

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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IN RE M/V MSC FLAMINIA

12-cv-8892 (KBF)

OPINION & ORDER

KATHERINE B. FORREST, District Judge:

This large, complex maritime matter concerns an explosion and ensuing fire that occurred aboard the M/V MSC Flaminia (“Flaminia”), on July 24, 2012. There are numerous parties who have asserted all manner of claims against one another, seeking to assign/avoid responsibility for liability and damages. The parties have agreed to a phased trial, with causation a first order of business. That trial shall commence on September 11, 2017.

Pending before the Court are a massive array of motions: motions for summary judgment, motions to preclude expert testimony pursuant to the principles set forth in Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), and motions to strike declarations. The volume of paper has run into the thousands of pages and has occupied a large section of the floor in the undersigned’s personal office. This opinion resolves the remaining Daubert motions.¹ The Daubert motions addressed herein are as follows:

¹ On July 12, 2017, the Court was informed that Deltech’s proposed experts Robert Harshman and John Fuller, and the corresponding motions to preclude these individuals, have been withdrawn. (ECF No. 1275.) On July 13, 2017, the Court was informed that Conti’s proposed expert Joseph Porcelli and the corresponding motions to preclude him had been withdrawn. (ECF No. 1276.)

1. Stolt Tank Containers B.V.'s and Stolt-Nielsen's USA, Inc.'s (together, "Stolt") and Deltech Corporation's ("Deltech") motion to preclude Paul Beeley (proffered by MSC Mediterranean Shipping Company S.A. ("MSC")), (ECF Nos. 1037, 1059);
2. Stolt's motions to preclude additional witnesses proffered by MSC: Robert Ahlborn, Michael Daum, David Hughes, Brian Ott, and Robert A. Richard, (ECF Nos. 1030, 1026, 1017, 1034, & 1013);
3. Deltech's motion to preclude David A. Robbins (proffered by Conti 11. Container Schiffahrts-GMBH & Co. KG MS and Niederlebe Schiffahrtsgesellschaft GMBH & Co., KG ("Conti/NSB")), (ECF No. 1053);
4. Stolt's motion to preclude additional witnesses proffered by Conti/NSB: David Robbins, Ian Wadsworth, and Edward Hammersley, (ECF No. 1009);
5. Stolt's motion to preclude John Walker (proffered by Conti/NSB), (ECF No. 1020);
6. MSC's motion to preclude S. Gregory Borossay (proffered by Stolt), (ECF No. 1043);
7. Conti/NSB's motion to preclude various firefighting experts: Sean Tortora (proffered by Cargo Claimants), Todd Duke (proffered by Stolt), and John Gow (proffered by Bulkhaul Ltd. and Bulkhaul USA (together, "Bulkhaul")), (ECF No. 1046);

8. Chemtura Corp., Chemtura Italy S.R.L., Chemtura Europe GMBH, (collectively, “Chemtura”), Rubicon LLC (“Rubicon”), and Bulkhaul’s joint motion to preclude portions of the report of Deborah Kaminski (proffered by Deltech), (ECF No. 1068); and
9. Conti/NSB’s motion to preclude David Gossman and other experts testifying that there was a preexisting fire.

In short, the Court rules on these motions as follows:

1. Stolt and Deltech’s motions to preclude Beeley are GRANTED in part and DENIED in part.
2. Stolt’s motion to preclude Ahlborn, Daum, Hughes, Ott, and Richard is GRANTED in part and DENIED in part;
3. Deltech’s motion to preclude Robbins is GRANTED in part and DENIED in part;
4. Stolt’s motion to preclude Robbins, Wadsworth, and Hammersley is GRANTED in part and DENIED in part;
5. Stolt’s motion to preclude Walker is GRANTED;
6. MSC’s motion to preclude Borossay is GRANTED;
7. Conti/NSB’s motion to preclude various firefighting experts is GRANTED in part and DENIED in part.
8. Chemtura, Rubicon, and Bulkhaul’s motion to preclude portions of Kaminski’s report is DENIED;

9. Conti/NSB's motion to preclude David Gossman and other experts testifying that there was a preexisting fire is DENIED.

At the outset, the Court notes that there are bases for preclusion common to many of the proffered experts. Some of these issues are potentially curable with a trial declaration. Others are not. The Court has directed the parties to submit trial declarations from proffered experts not later than **Monday, August 14, 2017**, and to file any motions for reconsideration of this Opinion & Order in light of the trial declarations not later than **Friday, August 18, 2017**. (ECF No. 1274.)

The Court briefly summarizes the common bases for preclusion as follows. As discussed further in this Opinion & Order, experts are not percipient witnesses to facts, and they cannot offer factual narratives in the form of expert testimony that would displace the role of the factfinder. The Court therefore precludes those portions of expert reports that simply present factual narratives about the events at issue in this action, or that make factual assertions regarding the cause of the casualty (or its extent) that are properly for the factfinder to make. Additionally, the Court will not admit opinions premised on speculation or that amount to ipse dixit, i.e., assertions that something is true because the expert says so.

The Court also precludes expert testimony in whole or part that is outside the proffered witness's established area of expertise; the Federal Rules of Evidence—and this Court—require that proffered experts confine their testimony to the subjects on which they are qualified to opine. In short, experts must stay in their lane, and this Court will police inappropriate drifting. Along these lines,

experts may not simply serve as a vehicle for the opinions of others, especially when the proffered witness does not possess the requisite expertise. The Rules of Evidence allow experts to rely upon inadmissible evidence or upon experts outside their field if it is the kind of data upon which an expert in their field would reasonably rely, but only if in doing so they develop their own, separate opinions applying their specific expertise. The rules also allow an expert to present the work of others if the expert supervised, directed, or participated in that work, and if the expert is qualified in the field and could perform the work themselves. By contrast, the Court will preclude proffered witnesses who simply aggregate or recite the opinions of others, especially if they are not qualified in the field in which they opine. A metallurgist may testify as to metallurgy; a chemist as to chemistry. They cannot speak for each other.

I. GOVERNING LEGAL PRINCIPLES

This is a complex case. It is complex both because of the number of parties asserting and defending against all manner of claims, but also because technical issues lie at the core of the dispute. How did the fire start in “Hold 4”? What caused the explosion? Was it caused by one type of cargo or several in combination? Once a fire had ignited, did those in positions of responsibility take the appropriate responsive steps? This is a classic case in which expert assistance is appropriate and the Court anticipates it will be of tremendous assistance. See United States v.

Bilzerian, 926 F.2d 1285, 1294 (2d Cir. 1991) (noting that the use of experts in complex, technical cases may assist the trier of fact).

The trial will be to the bench – and the Court looks forward to the trial as one in which very interesting issues will be addressed. But the fact that the trial will be to the bench does not diminish, let alone eliminate the requirements of Rule 702 of the Federal Rules of Evidence (“Rule 702”) and interpreting case law. In short, the fact that the trial is to the bench does not signal a “free-for-all” vis-à-vis expert witnesses. See State of New York v. United Parcel Serv., Inc., No. 15-cv-1136, 2016 WL 4735368, at *1 (S.D.N.Y. Sept. 10, 2016). Experts are entirely appropriate to assist the Court with complex, technical matters. But they are not percipient witnesses (except in atypical cases, not here applicable), and they are not a vehicle to provide a factual narration. See, e.g., SEC v. Tourre, 950 F. Supp. 2d 666, 675 (S.D.N.Y. 2013); Island Intellectual Prop. LLC v. Deutsche Bank A.G., No. 09-cv-2675, 2012 WL 526722, at *2 (S.D.N.Y. Feb. 14, 2012); Highland Capital Mgmt., L.P. v. Schneider, 551 F. Supp. 2d 173, 187 (S.D.N.Y. 2008); In re Rezulin Prods. Liab. Litig., 309 F. Supp. 2d 531, 551 (S.D.N.Y. 2004).²

Rule 702 is the primary locus of the principles governing appropriate use of experts. It provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

² Acting simply as a narrator of facts does not convey opinions based on an expert’s knowledge and expertise, nor is such a narrative traceable to a reliable methodology under Daubert. See Tourre, 950 F. Supp. 2d at 675; In re Rezulin Prods. Liab. Litig., 309 F. Supp. 2d at 551.

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. The overarching purpose of the Rule 702 inquiry is “evidentiary relevance and reliability—of the principles that underlie a proposed submission. The focus, of course, must be solely on principles and methodology, not on the conclusions they generate.” Daubert, 509 U.S. at 595; see also Major League Baseball Props., Inc. v. Salvino, Inc., 542 F.3d 290, 311 (2d Cir. 2008).

Once qualified, an expert is “permitted wide latitude to offer opinions, including those that are not based on firsthand knowledge or observation.” Daubert, 509 U.S. at 592; see also Major League Baseball, 542 F.3d at 310.³ This latitude is premised upon legal principles that assume a base level of reliability – leaving to the trier of fact ultimate determinations regarding, inter alia, weight. Daubert, 509 U.S. at 592. Threshold determinations regarding reliability are based on a review of a proposed expert’s qualifications, whether the proffered opinions are based on reliable data and methodology, and whether the testimony will assist the trier of fact rather than usurp his or their role. See, e.g., Nimely v. City of New

³ An expert may only testify with regard to matters disclosed in his or her report. Fed. R. Civ. P. 26; see U.S. Bank Nat’l Ass’n v. PHL Variable Life Ins. Co., 112 F. Supp. 3d 122, 132 (S.D.N.Y. 2015); Advanced Analytics, Inc. v. Citigroup Glob. Mkts., Inc., 301 F.R.D. 31, 36 (S.D.N.Y. 2014).

York, 414 F.3d 381, 396-97 (2d Cir. 2005); Arista Records LLC v. Lime Grp. LLC, No. 06-cv-5936, 2011 WL 1674796, at *1 (S.D.N.Y. May 2, 2011).

“Daubert motions” are routinely used to challenge an expert’s qualifications, data, methodology, or the propriety of his/her opinions. The Daubert motions described above assert challenges in each of these areas. The Court therefore reviews the particular principles applicable to these motions.

Even qualified experts may not, however, testify as to certain matters. For example, courts routinely preclude experts from testifying as to the credibility of other witnesses or evidence. See United States v. Scop, 846 F.2d 135, 142 (2d Cir. 1988), modified on reh’g, 856 F.2d 5 (2d Cir. 1988); In re Blech Sec. Litig., No. 94-cv-7696, 2003 WL 1610775, at *21 (S.D.N.Y. Mar. 26, 2003) (citing Scop, 846 F.2d at 142); LinkCo, Inc. v. Fujitsu Ltd., No. 00-cv-7242, 2002 WL 1585551, at *2 (S.D.N.Y. July 16, 2002). They also may not supplant the role of the factfinder by reciting factual narratives or by weighing the evidence to reach factual determinations. See Toure, 950 F. Supp. 2d at 675.

A. Qualifications

Determining that an expert is in fact an expert is the first step in ensuring reliability. Qualified expert witnesses enter the courtroom with a mantle of assumed expertise—“ahh,” a trier of fact may say, “he/she will be able to explain all of this to me.” It follows that a non-expert, playing the role of an expert, may induce misplaced reliance. Determining whether a witness is in fact qualified to

offer expert testimony is a necessary screening inquiry. See Daubert, 509 U.S. at 592 n.10; Arista Records, 2011 WL 1674796, at *2.

Expertise may be acquired in a number of ways, and most true experts have a combination of qualifying experiences: Most, but not all, experts have an educational background in a relevant field, and a qualified expert may have training or on-the-job experience that provided necessary skills to render the proffered opinions. See United States v. Tin Yat Chin, 371 F.3d 31, 40 (2d Cir. 2004) (citation omitted) (“To determine whether a witness qualifies as an expert, courts compare the area in which the witness has superior knowledge, education, experience, or skill with the subject matter of the proffered testimony.”); see also Cary Oil Co. v. MG Ref. & Mktg., Inc., No. 99-cv-1725, 2003 WL 1878246, at *2 (S.D.N.Y. Apr. 11, 2003). If, however, there is a mismatch between the area of expertise and the proffered opinions, there is a possibility of cloaked unreliability. An individual with expertise in one field may not offer opinions in another: the expertise and area of proffered opinions should be closely related. See Tin Yat Chin, 371 F.3d at 40.

In the Second Circuit, courts examine an expert’s qualifications in light of the “liberal thrust” of the Federal Rules and the Rules’ “general approach of relaxing the traditional barriers to ‘opinion’ testimony.”⁴ See Daubert, 509 U.S. at 588; In re Rezulin, 309 F. Supp. 2d at 559 (“The Second Circuit has taken a liberal view of the

⁴While the Daubert inquiry is “flexible” and intended to give courts the “discretion needed to ensure that the courtroom door remains closed to junk science,” it is also true that, to warrant admissibility, “it is critical that an expert’s analysis be reliable at every step.” Amorgianos v. Nat’l R.R. Passenger Corp., 303 F.3d 256, 267 (2d Cir. 2002).

qualification requirements of Rule 702, at least to the extent that a lack of formal training does not necessarily disqualify an expert from testifying if he or she has equivalent relevant practical experience.”). If an expert’s training and experience are in a field closely related to the subject matter of the proposed testimony, that showing may be sufficient to meet Rule 702’s qualification standards in appropriate circumstances. See Arista Records, 2011 WL 1674796, at *3 (citation omitted); Johnson & Johnson Vision Care, Inc. v. CIBA Vision Corp., No. 04-cv-7369, 2006 WL 2128785, at *5 (S.D.N.Y. July 28, 2006).

B. Reliable Data and Methodology

Even qualified experts must, however, base their opinions on reliable data and a valid methodology. Daubert, 509 U.S. at 592-93. In the absence of either, the expert’s opinions are unreliable and should not be allowed. See id. Whether the data and methodology meet the requisite standards “entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.” Id. Among the questions a court considers is whether the theory or methodology can be tested, whether it has been subjected to peer review and publication, whether it has a known or potential rate of error, and whether there is “general acceptance” of the methodology or theory. Id. at 593-94.

An opinion that is speculative or conjectural is not based on a reliable methodology and fails to comply with the standards in Rule 702. See Daubert, 509 U.S. at 590 (noting that “the word ‘knowledge,’” as used in Rule 702, “connotes more

than subjective belief or unsupported speculation”); see also Major League Baseball, 542 F.3d at 311 (citation omitted). Similarly, conclusory opinions—often referred to as ipse dixit—fail to provide a methodology that would allow a court to assess reliability. See Major League Baseball, 542 F.3d at 311 (citation omitted); Bridgeway Corp. v. Citibank, 201 F.3d 134, 142 (2d Cir. 2000) (citation omitted). Ipse dixit opinions are therefore excludable on that basis. See, e.g., Nimely, 414 F.3d at 396-97. It should be noted that there are instances in which qualified experts proffer only ipse dixit—when in fact it appears that they had the ability to support their opinions. However, the disclosure obligations set forth in Rule 26 do not provide for a “do over”—in most cases, what is done is done.⁵

C. Experts as Aggregators

From these principles flow another with particular relevance to this case: experts may rely on one another, but they may only do so if the requisite standards for reliability are met each step of the way.⁶ If one expert’s opinions are built upon

⁵ This Court has encountered numerous instances in which qualified experts proffer ipse dixit. This failing has an unnecessary financial as well as substantive cost to the client—who will have paid for that which cannot be relied upon. The case law in this area is so well developed that one wonders how this can occur in 2017.

⁶ Expert witnesses are entitled to rely on facts, opinions and data developed or prepared by another. U.S. Bank Nat’l Ass’n, 112 F. Supp. 3d at 131. This is so even if those facts, opinions or data are otherwise inadmissible. Id.; see also 29 Charles Alan Wright & Arthur R. Miller, Federal Practice & Procedure § 6274 n.50 (2d ed.) (“[T]he Advisory Committee clearly contemplated that experts can base opinions on the opinions of others.”).

a foundation laid by another, reliability of the latter requires reliability of the former.

There are instructive circuit court cases as well as a series of helpful district court cases that discuss the issues that arise in this regard. See, e.g., Forte v. Liquidnet Holdings, Inc., 675 F. App'x 21, 23-24 (2d Cir. 2017) (noting that a failure to independently verify data used in the report can itself constitute grounds for preclusion); Dura Auto. Sys. of Ind., Inc. v. CTS Corp., 285 F.3d 609, 614 (7th Cir. 2002) (“A scientist, however well credentialed he may be, is not permitted to be the mouthpiece of a scientist in a different specialty. That would not be responsible science.”); In re TMI Litig., 193 F.3d 613, 716 (3d Cir. 1999) (“Crawford-Brown’s failure to assess the validity of the opinions of the experts he relied upon together with his unblinking reliance on those experts’ opinions, demonstrates that the methodology he used to formulate his opinion was flawed under Daubert as it was not calculated to produce reliable results. Thus, the District Court did not abuse its discretion in excluding Crawford-Brown’s testimony.”); TK-7 Corp. v. Estate of Barbouti, 993 F.2d 722, 732 (10th Cir. 1993); U.S. Bank Nat’l Ass’n, 112 F. Supp. 3d at 131 (S.D.N.Y. 2015); Member Servs., Inc. v. Sec. Mut. Life Ins. Co. of N.Y., No. 06-cv-1164, 2010 WL 3907489, at *27 (N.D.N.Y. Sept. 30, 2010); Malletier v. Dooney & Bourke, Inc., 525 F. Supp. 2d 558, 664 (S.D.N.Y. 2007) (citing Dura Auto. Sys., 285 F.3d at 614) (excluding a critical conclusion based on a regression analysis that the proposed expert had not performed and was unqualified to do and explaining that “the regression analysis could only be admissible if [the excluded expert] is

permitted to give an opinion . . . of other experts to the extent that they are of the type that would be reasonably relied upon by other experts in the field But in doing so, the expert witness must in the end be giving his own opinion. He cannot simply be a conduit for the opinion of an unproduced expert.”).

In Dura Automotive Systems, the district court disqualified Dura’s sole expert witness and, finding that the remaining evidence was insufficient to create a triable issue of fact, granted summary judgment for its adversary, CTS. The Seventh Circuit affirmed the court’s preclusion of the expert.

Dura Automotive Systems involved environmental contamination claims. A key issue involved the relative locations of the groundwater stream below the CTS plastic manufacturing plant versus the Dura Automotive plant. See 285 F.3d at 611. Dura’s expert offered opinions regarding whether CTS’s plant was within the “well field’s capture zone”—that is, whether groundwater could be expected to flow to the well field. See id. To determine the flow required mathematical modelling of soil porosity, pumping flow and other data. See id. Dura’s proposed expert sought to testify regarding the results of such modelling.

The Seventh Circuit noted that Dura’s expert was a hydrogeologist who was admittedly not an expert in mathematical models of groundwater flow and that he had further conceded that the modelling that he relied on for his conclusion had been done by other employees of his consulting firm using two models. Id. at 611-12. When CTS moved to exclude the expert, Dura responded by offering affidavits from the supporting personnel who had performed the underlying work, and CTS

moved to strike them; the district court had granted this motion and found that standing alone, Dura's expert could not support the reliability of the models. Id. at 612.

The Court agreed that the affidavits had been properly struck and that without them, the proposed expert lacked an adequate foundation for his testimony. Id. The Court stated that “[a]n expert witness is permitted to use assistants in formulating his expert opinion, and normally they need not themselves testify Analysis becomes more complicated if the assistants aren't merely gofers or data gatherers but exercise professional judgment that is beyond the expert's ken.” Id. at 612-13. While acknowledging that it is common for an expert to base his/her opinion in part on what a different expert believes, the Court found that the issue became more complicated if the soundness of the underlying expert judgment was in issue: “Suppose a thoracic surgeon gave expert evidence in a medical malpractice case that the plaintiff's decedent had died because the defendant, a radiologist, had negligently failed to diagnose the decedent's lung cancer until it was too advanced for surgery. The surgeon would be competent to testify that the cancer was too advanced for surgery, but in offering the additional and critical judgement that the radiologist should have discovered the cancer sooner he would be, at best, just parroting the opinion of an expert in radiology competent to testify” Id. at 613. The Court found that the principle was the same in the case before it: While Dura's proposed expert could testify as to the area he was an expert in, he could not

provide conclusions that depended on the modelling he had not and could not himself competently perform. Id. at 614.⁷

Similarly, in TK-7, the Tenth Circuit affirmed the preclusion of a proffered expert, Dr. Boswell, who had relied on projections performed by another individual whom Boswell had determined was an expert. The Court stated that Boswell lacked the expertise to perform the projections himself and there was no indication in the record that he had any familiarity with the methods of reasoning of the individual who had performed the projections. See 993 F.2d at 732. The Court stated that “Dr. Boswell’s lack of familiarity with the methods and the reasons underlying [the other individual’s] projections virtually precluded any assessment of the validity of the projections through cross-examination of Dr. Boswell.” Id. To satisfy Rule 703 of the Federal Rules of Evidence, which allows an expert to rely on hearsay, nonetheless requires expert validation subject to cross-examination. Id.

II. DISCUSSION

A. Stolt’s and Deltech’s motions to preclude experts

1. Robert Ahlborn

MSC has proposed Robert Ahlborn as an expert in domestic and international regulatory regimes applicable to the ocean carriage of dangerous goods. Ahlborn submitted both an initial and a rebuttal report. He attached his C.V. to his initial report at Appendix 1. (Ahlborn Rpt., ECF No. 1033-1 at 48.) His summary of

⁷ The Court further noted that the individuals who had assisted Valkenburg had not merely collected data for him; they had engaged in complex modelling that required an “iterative” process. Id. at 615.

qualifications states he has experience in regulatory compliance, among other areas. His professional experience includes almost eighteen years at the National Cargo Bureau, Inc., as Vice President of Liner Activities. His duties and responsibilities in that position include: to “[o]versee Hazmat policy and programs,” “[d]evelop and maintain various Hazmat / Dangerous Goods training courses,” and “[d]evelop and maintain internal Hazmat / Dangerous Goods training program.” (Id.) Prior to this position, Ahlborn worked as Director of Security and Dangerous Goods for Hapag-Lloyd (America), Inc. for over thirty years. (Id.) He lists among his “Key Accomplishments:” Co-Founder (and several terms as Chairman) of the International Vessel Operators Dangerous Goods Association,” his representation of that organization at the International Maritime Organization’s Sub-Committee on Dangerous Goods, Solid Cargos and Containers, and membership on the “Dangerous Goods Advisory Council.” (Id.)

Ahlborn’s executive summary states that “Deltech’s DVB is sensitive to heat and must be stabilized via a chemical inhibitor in order to prevent auto-polymerization.” He states further, “[Deltech’s] procedures included routing shipments of DVB through northern U.S. ports instead of New Orleans during warm periods of the year, chilling the DVB prior to loading it into tank containers, instructing carriers to keep DVB shipments out of direct sunlight and away from heat sources, and requiring that DVB not be loaded aboard vessels if its temperature was at or above 27 [degrees] C.” (Id. at 3.) Based on these procedures, Ahlborn offers the following opinion:

In my opinion, these procedures were flawed in that they did not account for a number of variables outside of Deltech's control, whereas many of these variables could have been controlled by the use of temperature-controlled equipment Despite having instituted these procedures to prevent future incidents of auto-polymerization, Deltech violated its own shipping procedures with respect to the casualty DVB shipments by routing them through New Orleans during the hottest part of the year.

(Id.) He offers an additional opinion: "Deltech also failed to fulfill a number of its obligations under the applicable hazardous material regulations: failing to properly test its DVB, failing to prepare valid shipping papers, failing to provide emergency response information, and failing to certify that the DVB shipments were in proper condition for transportation." (Id. at 2.) Ahlborn also makes a number of factual statements including:

Stolt knew that Deltech's DVB needed to be stabilized to prevent auto-polymerization Stolt also knew that temperature and oxygen availability were critical to preventing auto-polymerization of Deltech's DVB. However, Stolt entirely disregarded this information in terms of vetting the DVB. When Stolt booked the ocean carriage of the DVB with MSC, it did not advise MSC of any of these properties and risks and, in fact, misrepresented the DVB as posing no risk to persons, property or the marine environment under the applicable international regulations. Stolt did nothing to comply with the handling instructions and warnings provided by Deltech and likewise failed to pass on these instructions and warnings to MSC, with the result that MSC had no knowledge of these instructions. In its handling of the DVB shipments, Stolt failed to meet a number of its obligations under the applicable hazardous materials regulations.

(Id. at 3.) And,

As a result of the DVB being loaded into a sealed tank container, MSC relied solely upon the information provided by Stolt in its handling of the DVB shipments. Because Stolt misrepresented the properties and risks of the DVB shipments, MSC was unaware of both the prior incidents involving Deltech's DVB and the risks posed by the DVB shipments when it stowed the cargo aboard the Vessel . . . MSC

exercised reasonable care under the circumstances and had no reason to suspect that the DVB shipments were being misrepresented by Stolt.

(Id.) And finally, “[i]n summary, Deltech and Stolt both mishandled the DVB shipments, with the end result being that MSC was unaware of the true risks presented by the DVB shipments, including the risk of auto-polymerization and the potential for explosion and fire.” (Id.)⁸ Following this summary, Ahlborn’s report consists of forty-six pages of text, only eight pages of which discuss the regulatory scheme of the international carriage of dangerous goods. (See Ahlborn Rpt., ECF No. 1033-1 at 3-11.) Starting at page 11, and continuing for the remainder of his report, Ahlborn provides a lengthy factual narrative of Deltech’s and Stolt’s prior experience with DVB shipments, Deltech’s shipping procedures, a discussion of a tank container company’s alleged refusal to handle Deltech’s shipments of DVB, the relationship between Deltech and Stolt, booking requests and procedures between Deltech and Stolt, bookings by Stolt with MSC, and facts relating to the booking, loading and carriage of the DVB at issue in this case.

Stolt has moved to preclude Ahlborn (both his initial report and his rebuttal report) on the basis that he lacks the qualifications to provide the array of opinions and statements contained in his report, and because much of his report usurps the Court’s role as the finder of facts. With one narrow exception, the Court agrees with

⁸ Ahlborn’s rebuttal report contains statements and conclusions of the same general type. For instance, at one point in his rebuttal report he refers to a “glaring violation” by Stolt of applicable regulations (Ex. 2 at 20); he also refers to the Dangerous Goods Declarations (“DGDs”) – key documents in this matter—as “non-compliant.” (Ex. 2 at 3).

Stolt. The Court therefore precludes all but the narrow testimony from Ahlborn outlined below.

As an initial matter, the Ahlborn report is one of the many reports presented to the Court in connection with this matter in which “experts” purport to provide extensive factual narrative—to gather facts from throughout the record, to tell a story favorable to their client and with much advocacy embedded throughout, and to purport to “opine” on the ultimate fact issues that this Court must find only after trial. This is not a proper use of expert testimony. Thus, at the outset, the factual narrative that occurs from page 11 to the end of the report is improper. The law setting forth the applicable principles is discussed above. In addition, the Court notes that such an assembly embedded with advocacy is not what this Court needs from an expert—the lawyers can do all of that in opening or closing statements and proposed conclusions of fact and law. Simply put, this narrative may have been helpful for the lawyers to understand their case, or for the clients, but it is not helpful to the Court, and is also improper.

In addition, it is evident from the Court’s recitation of only some of the “opinions” that Ahlborn purports to present that his report exceeds the bounds of his role and qualifications as an expert. An expert does not “find” facts, an expert does not opine on a party’s state of mind (that a party “mislead” or “misrepresented” something to another), and an expert certainly cannot state that his client, MSC, was or was not aware of anything. Most egregious in this regard is the ultimate

statement, “MSC was unaware of the true risks presented by the DVB shipments, including the risk of auto-polymerization and the potential for explosion and fire.”

In addition to these major failings in Ahlborn’s report, he makes a number of statements as to which he lacks the requisite expertise. He is not an expert in chemistry—yet his report is full of statements of fact about auto-polymerization and the characteristics of DVB.

It is too late for Ahlborn to redo his report and limit his opinions to those that would have been proper. However, the Court does find that an overview of the regulatory environment would be helpful. It is likely that this can be the subject of conclusions of law as to which no testimony is necessary. However, for present purposes, MSC should assume that Ahlborn would only be allowed to testify as to the contents of pages 3-11 of his report.

2. Paul Beeley

MSC has proposed Paul Beeley as an expert in the cause and origin analysis of seaborne casualties. His C.V. is attached to his report at Appendix 1. (Beeley Rpt., ECF No 1039-1.) He is a “[s]pecialist in fire and explosion,” with “37 years [of] experience in forensic investigation.” (Id. at 135.) His qualifications include inter alia, a masters degree from the Graduate Centre for Studies in Combustion and Explosion at the University of Leeds in 1974, and a Doctorate in “high temperature ignition phenomenon” from the University of Leeds in 1979. (Id.) His professional experience includes almost twenty-four years as a consulting scientist at “Dr. JH Burgoyne and Partners,” a consulting firm where he became a partner in 1985,

twelve years as “Director and sometimes Chairman of Burgoyne Consultants Ltd., . . . a sister company to Burgoyne and Partners specializing in safety management and the provision of technical advice on avoid[ing] . . . fire and explosion,” and working at his own practice since 2003. (Id. at 136.) He asserts “[i]n addition to determining origin and cause[,] I am also familiar with factors relating to the development and spread of fire and smoke . . . ,” and “I have investigated fires resulting from a wide range of causes including mechanical and electrical failure, self heating, and intentional fire raising.” (Id.) Notably, he has no special expertise in chemistry. He proclaims to have “extensive experience of incidents where fires and explosions have resulted from the decomposition of thermally unstable chemicals or mixtures,” a majority of which involved industrial processes. (Id. at 137.).

Beeley’s report contains a lengthy recital of the incident, including the discovery of smoke and fumes, the crew’s emergency response, the release of CO₂, and the explosion. (Id. at 12-21.) He describes the cargo contained in Hold 4, the surveys, samplings, and inspections he conducted, and the results of analyses conducted on the samples (taken largely from the report prepared by FORCE Technology). (Id. at 24-90.) He then segues into a discussion of the physical and chemical properties of divinylbenzene (“DVB”), and a summary of previous incidents involving DVB (taken mostly from the internet). (Id. at 91-105.) In section 11.3.2 of his report, Beeley states:

Divinylbenzene . . . (is) capable of undergoing polymerization reactions which (is) accompanied by the release of heat. In order to prevent self

polymerization during storage the product has to be dosed with a chemical inhibitor. To be effective the inhibitor requires the presence of dissolved oxygen. In the process of chemical inhibition both inhibitor and oxygen undergo chemical reaction so that their concentration diminishes with time The polymerization reaction can start spontaneously if the concentration of inhibitor present in the product falls below the required concentration or if the concentration of dissolved oxygen in the divinylbenzene diminishes to the extent that the inhibitor can no longer be effective. Alternatively reaction can be initiated by contaminants, including water.

(Id. at 117.) He additionally states:

The source of the vapors and the divinylbenzene is considered to be a runaway polymerization involving one or more of the divinylbenzene containers shipped by Stolt/Deltech. This conclusion is supported by the analysis contained in the report by Exponent, which indicates that the properties of the product shipped by Stolt/Deltech were such that in the period when the consignments of DVB were at the terminal in New Orleans, and during the duration of the voyage, the material became unstable due to consumption of oxygen and consequent failure of chemical inhibition so that on the morning of 14th July it underwent runaway self polymerisation.

It is also noted that the Exponent report is critical of the manufacturing process carried out at Deltech and the failure to ensure that the product was adequately aerated at the time it was shipped from the factory.

(Id. at 121.) Beeley notes:

It is not possible on present evidence to be certain that thermal runaway resulting in the ignition of the plume emanating from the tank was the ignition source for the explosion, but it is noted that there are clear indications in the product literature that fires and explosions can occur as a result of the self polymerisation of DVB.

(Id. at 127.) Yet he does little to resolve the doubt than to conclude “to the extent that it affects liability[,] the identity of the ignition source is almost irrelevant.” (Id. at 128.)

In his conclusion, in addition to identifying the cause of the explosion, Beeley opines as to why DVB allegedly underwent polymerization:

12.3 The flammable aerosol was formed as a result of the divinylbenzene in one or more of the containers shipped by Stolt/Deltech undergoing an exothermic runaway self polymerisation process. Potential reasons why the material underwent this process include lack of adequate chemical inhibition and/or aeration at the time of loading, chemical contamination, and the exposure of the consignment to ambient temperatures which, whilst not abnormal for marine transportation, were sufficient to cause the material to undergo a runaway reaction. This is supported by:

- a. The study carried out by Exponent which indicates that the product produced by Deltech was likely to undergo runaway self polymerisation on exposure to the ambient temperatures encountered after leaving the factory.
- b. Previous instances of Deltech products undergoing runaway self polymerisation.
- c. The apparent lack of controls on the degree of aeration during manufacture and storage set out in the report by Exponent.

(Id. at 133.)

Stolt has moved to preclude Beeley on several bases: (1) much of his report consists of improper factual narrative, (2) his opinions lie beyond his area of expertise because he is a “cause and origin” specialist offering opinions about the chemical properties of DVB and the proper chemical inhibition and oxygenation of DVB, (3) his proposed testimony is speculative and lacks a reasonable degree of certainty. (Mem. in Support of Motion to Exclude Paul Beeley, ECF No. 1038.)

The Court agrees that Beeley’s report must be precluded in part due to his factual narratives, his conclusions that displace the role of the factfinder, his failure to stay within the lane of his expertise, and the portions of his report that are cumulative of other experts, particularly that of Brian Ott. First, as with many

other experts here, the Court precludes Beeley's extensive factual narrative presented on pages 7 to 104 of his report. (See Beeley Rpt., ECF No. 1038-1 at 8-105.) In addition, the Court precludes Section 12 of Beeley's report, which contains factual conclusions regarding what caused the casualty; such determinations are properly made by the factfinder, not presented by an expert. (See id. at 131-32.)

Second, Beeley is an expert in fire investigations and forensics; he is not an expert in chemistry or in self-reactant monomers. Section 10 of his report, in which he presents information about the properties of DVB and previous DVB incidents, is beyond his scope of expertise and cumulative of the testimony of Ott, who is a chemistry expert; is it therefore precluded. The Court also precludes: (1) Beeley's discussion of "self polymerization" of DVB beginning at the top of page 117 and ending after the first full paragraph of page 118 of the report, and (2) Beeley's discussion of the properties of DVB beginning with the first full paragraph on page 125 and through the first full paragraph on page 126. While Beeley may rely upon the opinions and analyses of others who are chemistry experts, he cannot present their expertise as his own.

The motion to preclude Beeley is therefore GRANTED in part as discussed above, and DENIED as to the remainder of his report.

3. David Hughes

MSC has proposed David Hughes as a metallurgical expert. His C.V. is attached to his report at ECF No. 1021-2. He is a "Consultant Metallurgist," with expertise in "providing metallurgical services in relation to major ship casualties"

involving “constructive total loss, hull and structural failures, cargo tank issues (corrosion)” etc. (Hughes Rpt. App’x, ECF No. 1021-2 at 1.) His educational qualifications include a Higher National Certificate (roughly equivalent to one year of university) in Metallurgy and a Graduateship in Metallurgy (equivalent to Honors degree). (Id. at 5.) Since 2006 he has worked at his own metallurgical consultancy providing services related to “metallurgical matters,” and “casualty investigation—structural, corrosion and machinery breakdowns.” (Id. at 4.) Prior to that he worked as a “Consultant Metallurgist/Director” at Taylor Marine TR Little (2002-2006), and a “Group Metallurgist” at Alfred H. Knight Consultancy (1997 – 2002), where he was employed as a “consultant metallurgist carrying out mainly marine casualty/ failure investigations,” and “provided managerial, technical and consultancy support in respect of ferrous related cargo matters.” (Id. at 4-5.)

Hughes’s executive summary explains that the “purpose of the metallurgical investigations was primarily to assist the Fire Experts and to try and determine any damages/conditions to the Tanks that may have pre-existed the explosion and thus may have contributed to, or been associated with, the cause of the explosion,” and determine which damages were consequential (occurred after the explosion) and which were causative. (Hughes Rpt., ECF No. 1021-1 at 5.) The report notes that much of the damage to the thirty-one tanks examined was caused after the explosion. (See id.) Hughes states “[t]he only tank(s) that could be considered as possibly causative would be, in my view, those that exhibited some form of damage

that could have breached the tank in some manner without any significant collapse of the stack. The obvious candidates are either by mechanical cracking of the tank shell, a chemical reaction causing overheating and melting through the stainless steel tank wall and/or a release of vapors” (Id. at 69.) Hughes discounts the possibility of the tanks having developed cracking prior to the explosion. (See id.) He also rules out over pressurization of tanks J, K, and I: “None of the visual damage observed to any of the thirty one tanks, including Tanks A, C, I, J and K was consistent with damage that might be expected if any of the tanks had failed due to a significant over-pressurisation event. Under such circumstances, expansion of the tank body and associated ruptures of the shell plate would be expected. I did not observe any such damage to any of the Tanks.” (Id. at 29.)

Regarding melting of the stainless steel, Hughes notes “[o]f the thirty one tanks recovered, the only ones that actually exhibited melting of the stainless steel and/or with holes/fractures not associated with the final crushed condition, are Tanks A, C, J, K and I. All five tanks exhibited melting from inside the respective Tank. It should be understood that where melting had occurred, this was not melting of the original wrought stainless steel plate, but melting of the plate that had already been degraded mainly by carburisation, which has the effect of significantly lowering the melting point of the alloy.” (Id. at 69.) With respect to tanks I, J, and K, which had carried DVB, Hughes made the following observations:

1. **Tank I:** “It is clear that this tank has been heated from the inside to significant temperatures. The appearance of the crushed melt holes indicates that the melting occurred prior to the substantial crushing. It is not possible to say precisely, relative to the explosion, when the

melt holes were formed. It is possible that some melt holes were (part) formed prior to the explosion and some were formed afterwards. It is also possible that all the melts holes were formed after the explosion.” (Id. at 57.)

2. **Tank J:** “The internal surface of the tank had undergone carburisation . . . The carburisation is very likely a result of the breakdown of the product inside the tank producing a carbon rich environment. The source of the heat could be external or internal.” (Id. at 60.) “It is considered likely that the hole [in the port forward side] was formed prior to ultimate collapse of this tank in this area.” (Id.) The report concludes “the damages to Tank J would appear to be consequential to the explosion and so this tank can be eliminated from further consideration with regards to causation due to a breach of the tank wall.” (Id. at 72.)
3. **Tank K:** “The internal surface of the tank had undergone carburisation and the shell plate in general was sensitized. The carburisation is very likely the result of high temperatures and the breakdown of the product inside the tank producing a carbon rich environment. The melt holes were associated with massive carbide formation.” (Id. at 63.) The report concludes “the damages to Tank K would appear to be subsequent, and consequential, to the explosion and so this tank can be eliminated from further consideration with regards to causation due to a breach of the tank wall.” (Id. at 73.)

Hughes concluded “[a]lthough melting had occurred to Tanks [] J, K, and I, and this had occurred before the final crushed condition as found during discharge, it is not possible to say when this heating occurred. It may well have all occurred after the first explosion but before further crushing occurred.” (Id. at 75.)

Stolt has moved to preclude Hughes on the basis that his testimony is not probative of the cause of the explosion and therefore irrelevant under Rule 402, and might also be unfairly prejudicial and misleading under Rule 403. (Mem. in Support of Motion to Preclude David Hughes, ECF No. 1018.) Stolt does not

challenge Hughes qualifications or the reliability of his methods, only the relevance of his findings.

Stolt argues that because Hughes's report concludes that the melting damages to tanks occurred after the explosion, it is not probative of the cause of the explosion. This is incorrect. Evidence that eliminates possible causes of the explosion may be probative of and helpful to determining the actual cause. In addition, Stolt does not discuss why Hughes's testimony should be precluded under Rule 403 except to say, without explanation, that it would be misleading. There is no danger of Hughes's testimony about misleading the factfinder here, particularly in the context of a bench trial. Stolt's motion to preclude Hughes's testimony is therefore DENIED.

4. Brian Ott

MSC has proposed Brian Ott as its chemical expert. His C.V. is attached to his report at Appendix 4. (Ott Rpt., ECF No. 1036-4). Ott holds a masters in chemical engineering from Michigan Technological University (2008) and a doctorate in chemical engineering also from Michigan Technological University (2009). (Id. at 284.) He currently works as a "Managing Engineer" at Exponent. According to his Professional Profile, Ott "uses his expertise as a chemical engineer to analyze chemical processes in the petroleum refining and petrochemical industries. He specializes in the investigation and prevention of process failures involving equipment, operations, and control systems. . . . He performs hazard and regulatory compliance analyses with an emphasis on implementing and improving

Job Safety Assessments (JSAs) and Standard Operating Procedures (SOPs) [and] has extensive knowledge in standards related to the chemical processing industry including OSHA, API, ASME, NFPA, CFR, and DOT codes and regulations.” (Id.) He previously worked as a “Research Assistant” at Michigan Technological University’s Center for Environmentally Benign Functional Material (2003-2009), where he conducted research on “polymerization reactions and polymer/solvent interactions.” (Id. at 284-85.) In 2009 Ott published his Ph.D. dissertation titled, “Phase equilibrium as modeled by the Statistical Associated Fluid Theory (SAFT) Equation of State,” and published “Towards the development of CO₂ separation membranes” in collaboration with another individual in the Journal of Minerals & Materials Characterization and Engineering in 2008. (Id. 285.) Notably, Ott has no special expertise in classifying chemicals under maritime regulations issued by the United Nations such as the International Maritime Dangerous Goods (“IMDG”) Code.

Ott was retained “to perform an engineering investigation into the manufacture, storage, and transport of DVB 80 shipped on the MSC Flaminia and to determine the potential for DVB 80 to have autopolymerized and created an explosive environment during the time frame of the incident voyage.” (Ott Rpt., ECF No. 1036-1 at 10.) In the Introduction of Ott’s report, a discussion of the chemical properties of DVB and the proper chemical inhibition and oxygenation of DVB, is interspersed with Deltech’s history with DVB:

Deltech has experienced prior incidents wherein DVB 80 autopolymerized. In an attempt to prevent further self-polymerization

incidents, Deltech implemented a process whereby DVB 80 would not be shipped from southern ports (e.g., NOT) during the summer period. However, prior to the incident voyage, Deltech violated their protocol and shipped DVB 80 from southern ports during summer months. After the protocol's April 16 cutoff, shipments of DVB 80 shipped out of NOT (a southern port) and arrived at Deltech's storage facility at ADPO at temperatures above 25[degrees] C.

(Id. at 13.) Ott engages in a similar discussion in his rebuttal report. (See Ott Rebuttal Rpt., ECF No. 1036-5 at 37-38.) While discussing the progression of Deltech shipping standards, Ott incorporates Deltech's past experience with DVB, including a list of previous Deltech DVB incidents. (See Ott Rpt., ECF No. 1036-1 at 27-31.)

At various points in the report, Ott qualifies his opinions with terms such as "likely," "possible," and "plausible:"

Since the ISO container is neither stirred nor agitated, any available oxygen in the headspace can only enter the DVB liquid by diffusion and natural convection. Exponent concludes that it is likely the lack of aeration by Deltech and the possible use of inert gas (i.e., nitrogen) to purge piping and storage tanks limited the amount of oxygen available for inhibition in their shipped DVB 80 product in the subject shipment.

(Id. at 14 (emphasis added).) Additionally,

There is no available information regarding the oxygen content of the subject shipment and our analysis above demonstrated that it is plausible that, given Deltech's lack of manufacturing controls, oxygen depleted DVB 80 could have been produced. . . . Although our hold model demonstrates that higher hold temperatures likely occurred in the subject voyage due to the heated DPA, this approach provides a conservative (lower) bound for the DVB temperature. Our analysis demonstrates that, under the assumptions used, the time to runaway is approximately 9 days at 31 [degrees] C. . . . The time to runaway is strongly dependent on the initial temperature . . . The initial oxygen concentration of the DVB 80 is unknown; therefore, the time for a tank to become oxygen depleted is also unknown.

(Id. at 64.) Ott partly relies on contingent likelihood in his proposed event hypothesis:

The DVB 80 in the ISO containers loaded onto the MSC Flaminia was likely above its SADT and, if it was uninhibited, the heat generated from the self-polymerization reaction outpaced the heat loss to the hold of the ship. . . . [I]f the DVB 80 was below the critical oxygen concentration shortly after being loaded on board the MSC Flaminia, it could begin to autopolymerize during the voyage. Even if the DVB contained some oxygen, the heat transfer from the heated bunker fuel and DPA tanks would increase the temperature of the DVB tanks, causing an increase in the oxygen consumption rate, followed by an [sic] self-polymerization reaction.

(Id. at 16.)

Ott's rebuttal report seeks to rebut opinions offered by other experts on matters ranging from the temperature of DVB to estimates of the inhibition times of DVB 80 and hypothetical sequence of events leading to the explosion, among other things. However, towards the end of his rebuttal report, Ott veers into a discussion of how DVB should have been classified consistent with the recommendation of the UN classification guidelines:

For international transport, Deltech designated DVB 80 as UN0382 Environmentally Hazardous Substance, Liquid, N.O.S. (not otherwise specified). This designation is used for liquid substances and mixtures that are dangerous to the aquatic environment and do not meet the classification criteria for any other class or another substance within Class 9.

(Ott Rebuttal Rpt., ECF No. 1036-5 at 39.) And concludes:

Based on having a heat of polymerization greater than 300 J/g and an SADT equivalent of less than 75 [degrees] C for a 50 kg package, the thermal stability of DVB 80 is consistent with a material that meets the definition of Division 4.1 self-reactive substance. Since Deltech did not measure the oxygen content of their DVB 80, they cannot ensure

their product would not behave in a fashion consistent with the labeling of a Class 4.1 self-reacting substance.

(Id. at 45.)

Stolt has moved to preclude Ott as an expert witness on several bases: (1) Ott lacks the necessary experience, qualification and expertise to offer opinions on the proper classification for DVB, (2) his proposed testimony includes improper factual narrative, and (3) his proposed testimony is speculative and conjectural. (Mem. in Support of Motion to Disqualify Ott, ECF No. 1035.)

The Court concludes that, like Ahlborn's report, Ott's report provides extensive factual narratives regarding DVB incidents and Deltech's past experiences with DVB that must be excluded. The same infirmities that require the preclusion of such factual narratives in the Ahlborn report require preclusion here. The factual narratives presented on pages 9, 13, 20-24, and 27-37 of ECF No. 1036-1 are improper and therefore precluded. Additionally, the factual narratives in Ott's rebuttal report (including factual rebuttals of other experts' factual narratives) at pages 37-38 of ECF No. 1036-5 are similarly precluded.

Stolt also argues that parts of Ott's report should be excluded because he refers to findings and conclusions as "plausible," "likely," "possib[le]," or based on contingencies and "assumptions," rendering his opinion speculative under Rule 702. (ECF No. 1035 at 10.) However, "there is no Federal Rule of Evidence barring the admission of expert testimony that acknowledges a quantum of doubt." Shepler v. Metro-N. Commuter R.R., No. 13-cv-7192, 2015 WL 5671856, at *4 (S.D.N.Y. Sept. 25, 2015.) As long as the offered testimony has a reasonable basis in the underlying

data and applies reliable methods, federal courts “allow experts to offer testimony that is less than entirely certain, trusting in opposing counsel’s ability to highlight any weaknesses in the proffered testimony” Id. Here, each selectively quoted portion of Ott’s report that Stolt accuses of speculation are grounded in thorough explanations for Ott’s estimation of the likelihood of an event and the data upon which he relies to arrive at his conclusion. (See, e.g., Ott Rpt., ECF No. 1036-1 at 10-14.) Moreover, Ott clearly states when an assumption must be made to facilitate a broader analysis supported by additional data and explains why he believes that assumption is appropriate. (See, e.g., id. at 64 (“There is no available information regarding the oxygen content of the subject shipment and our analysis above demonstrated that it is plausible that, given Deltech’s lack of manufacturing controls, oxygen depleted DVB 80 could have been produced. Therefore, [I] used the first order reaction parameters obtained from ARC testing to estimate the time to runaway for oxygen depleted DVB 80 with an initial temperature of 31° C.”).) Ott’s opinion therefore “rests on a reliable foundation,” Daubert, 509 U.S. at 597, and need not be excluded simply because he expresses some uncertainty or relies upon an expressed and explained contingency to conduct his fuller analysis. Stolt’s recourse for challenging the weight that Ott’s testimony should receive given the limited uncertainty or assumptions here is cross-examination, not exclusion under Rule 702.

Finally, Stolt argues that portions of Ott’s rebuttal report should be excluded because he lacks the requisite qualifications to opine on the “Shipping Classification

of Divinylbenzene” and the IMDG Code.⁹ (ECF No. 1035 at 7-8.) Ott’s experience and qualifications are as a chemical engineer working with chemical safety regulations and, as his proponents acknowledge, he is not an expert in classifying chemicals under the IMDG Code. (Mem. in Opp. to Disqualification of Brian Ott, ECF No. 1109 at 17.) Therefore, he would not be qualified to opine as an expert on how or why the IMDG Code classifies particular chemicals. However, most of Ott’s discussion in this section of his rebuttal report applies his expertise in chemical engineering to compare the properties of DVB to chemical properties described in the Code and thereby to evaluate such analyses presented by other experts. (See, e.g., Ott Rebuttal Rpt., ECF No. 1036-5 at 39 (“Divinylbenzene can undergo rapid, exothermic polymerization such that inhibitors are added to prevent polymerization during transport and/or storage. Based on this, [I] considered whether DVB 80 behaved similarly to a self-reactive substance as defined in Section 2.4.2.3 of the Recommendations on the Transport of Dangerous Goods promulgated in 2011.” (footnote omitted)).) Comparing descriptions of general chemical properties to the specific chemical properties of DVB is a properly within the scope of Ott’s expertise as a chemical engineer.

The regulatory implication of those comparisons for the purposes of applying the IMDG Code is a separate matter. Stolt is correct that some of Ott’s statements appear to exceed his expertise and swerve into the lane of opinions on the IMDG

⁹ Stolt also objects that Ott has never served as an expert witness before, but this fact is irrelevant to whether he is specifically qualified to provide the offered testimony in this case, and there is of course no presumption against first-time expert witnesses.

Code; however, with proper explanation, his chemical expertise may be used to interpret a definition of the Code. If Ott intends to offer opinions in this area, the Court requires Ott to carefully explain the following portions of Ott's rebuttal report: (1) the first paragraph on page 39 of ECF No. 1036-5, beginning "Exponent used product information;" (2) the last full sentence on page 40 of ECF No. 1036-5, beginning "Because the SADT methods;" and (3) the second full paragraph on page 41 of ECF No. 1036-5, beginning with "In April 2012"

Ott's testimony is therefore precluded in part and admitted in part, as discussed above.

5. Robert Richard

MSC has proposed Robert Richard as an expert regarding the "regulations related to the transport of dangerous goods on marine vessels in accordance with the IMDG Code and the U.S. Hazardous Material Regulations" (Richard Rpt., ECF No. 1015-1 at 3.) His qualifications are provided at the beginning of his report and his C.V. is attached at Appendix 1. (See id. at 3-5, 17-19.) He holds a masters degree in engineering management from the New Jersey Institute of Technology (1990), and a Ph.D. in Safety Engineering from the Kennedy Western University (2002). (Id. at 18.) He claims to have authored "numerous technical articles," for "The Chemical Packaging Review," "Hazmat Packager and Shipper," and "Journal

of Commerce” etc., but no further details regarding the titles or years of publication are provided. (Id.)

Richard is Vice President of Regulatory Compliance at Labelmaster Services, Inc., a “consulting services company that assists clients worldwide in hazardous materials compliance matters.” (Id. at 2.) He previously served as “Deputy Associate Administrator” within the Office of Hazardous Materials at the Pipeline and Hazardous Materials Safety Administration (PHMSA), where he “managed PHMSA’s national safety program for the transportation of hazardous materials by all modes of transportation” and was responsible for “the day-to-day operation of the agency’s safety program” and “overseeing regulatory development including publishing, interpreting and enforcing the HMR [Hazardous Material Regulations].” (Id. at 3, 17.) He asserts he has “been involved in the development and implementation of hazardous materials safety regulations for more than 30 years and [has] been responsible for a broad range of domestic and international hazardous materials safety initiatives including the development and interpretation of regulations.” (Id. at 2.) In a section of his C.V. titled Awards and Honors, Richard states he has received “the Al Gore ‘Hammer Award’ in recognition of international leadership and regulatory development efforts” and “the George L. Wilson Award for outstanding achievement and contributions to the safe transportation of hazardous materials from the Dangerous Goods Advisory Council.” (Id. at 19.)

Richard was retained to “review the report of Steven Charles Hunt, the Engineering Investigation performed by Exponent Engineering P.C.[,] and the results of testing a sample of DVB-80 conducted by Chilworth Technologies, Inc.” (Id. at 3.) His “conclusions and opinions are based on the information gained from [his] review of the materials and activities and analysis listed in this report or in references, appendices, or attachments to this report. [His] conclusions and opinions are based on years of experience serving a senior regulatory official with the PHMSA, United States Department of Transportation (U.S. DOT), [and] representing the United States at international meetings” (Id.)

Richard offers his opinions on the conclusions reached by other experts and his conclusions are essentially re-statements of the opinions of other experts, as is evident from the following excerpts:

1. “In my opinion the DVB-80 that was offered and loaded aboard the M/V MSC Flaminia was not appropriately classified. I agree with Mr. Steven Charles Hunt’s assessment that the material was misclassified. My expert opinion is based on report # M018315BR from Chilworth Technology Inc.” (Id. at 9.)
2. “The results of the Chilworth Technologies Inc. testing calls [sic] into question whether Deltech exercised their due diligence in classifying their DVB-80 product. Furthermore, on the basis of the List of Previous Deltech DVB incidents prior to the MSC Flaminia casualty in Table 1 of the Exponent Report “Engineering Investigation of the MSC Flaminia Explosion and Fire –July 14, 2012” in my opinion, a reasonable person, acting in the circumstances and exercising reasonable care, would have taken appropriate action to ensure the product was tested and appropriately classified.” (Id. at 11-12.)
3. “I agree with Mr. Hunt that the DVB-80 offered by Deltech Corporation may have been forbidden for transport. On the basis of the Chilworth Technologies Inc. test results the DVB-80 product offered for transport by Deltech Corporation would have been

forbidden from transport unless the material was stabilized or inhibited in a manner to preclude such evolution.” (Id. at 12.)

Stolt has moved to preclude Richard on two bases: (1) that he lacks the necessary qualifications for testifying as an expert witness because he received his Ph.D. from an unaccredited university investigated by the federal government and found to be a “diploma mill,” and (2) that his report is merely duplicative of Hunt’s opinions and adds no value. (Mem. in Support of Motion to Disqualify Robert Richard, ECF No. 1014 at 4-6.)

As a threshold matter, the Court rejects the argument that Richard’s receipt of his Ph.D. from Kennedy Western University necessarily disqualifies him from serving as an expert witness. There is no requirement that an expert witness hold a Ph.D. at all, and Stolt does not challenge Richard’s bachelor’s degree in industrial engineering or graduate degree in engineering management from the New Jersey Institute of Technology, a well-regarded technical university. Nor does Stolt challenge Richard’s decades of experience involving compliance with hazardous-materials safety regulations and the transport of dangerous goods. Stolt argues that Richard is “not an expert in chemistry,” (id. at 8.), but he is not proffered as an expert in chemistry. He is proffered to opine on “the regulations related to the transport of dangerous goods on marine vessels in accordance with the [IMDG Code] and the . . . Code of Federal Regulations . . .” (Richard Rpt., ECF No 1015-1 at 3.) Regardless of which institution conferred Richard’s doctoral degree, his other degrees and extensive professional experience qualify him as an expert on regulatory compliance in the area of the transport of hazardous materials.

Stolt also moves to preclude Richard on the basis that the “majority” of his report “was direct quotations lifted from the report of another expert, Mr. Steven Hunt,” and therefore “his report adds nothing and is merely cumulative of Hunt’s opinions.” (Mem. in Support of Motion to Disqualify Robert A. Richard, ECF No. 1014 at 8.) Like other kinds of otherwise admissible evidence, expert testimony is excludable if its probative value is “substantially outweighed by a danger of . . . needlessly presenting cumulative evidence.” Fed. R. Evid. 403. There is no such danger here. Like Richard, Hunt offers opinions on the requirements of the CFR and the IMDG Code as they relate to dangerous cargo on the M/V MSC Flaminia, and the proper procedures for booking such cargo for transcript. (Hunt Rpt., ECF No. 1008-1 at 5.) The Hunt Report was prepared for the Cargo Interests in this matter, and MSC—against which the Cargo Interests had asserted claims—retained Richard specifically to review, inter alia, the Hunt report when opining on regulations related to transport of dangerous goods on marine vessels. (See Richard Rpt., ECF No. 1015-1 at 2, 3.) While Richard does refer to the Hunt report and quotes from it extensively on pages 11 to 14 of ECF No. 1015-1, it is simply inaccurate for Stolt to assert that this constitutes the “majority” of the Richard report. In addition, each instance in which Richard quotes the Hunt report, he offers his reaction and independent assessment based on his experience and additional data. The Richard report is therefore not cumulative of the Hunt report, and in the context of this bench trial there is no significant danger of an

inappropriate impact on the factfinder under Rule 403. The motion to preclude Richard in his entirety is therefore DENIED.

There are, however, portions of the Richards report in which he veers from his zone of expertise into the areas reserved for the finder of fact. For example, on page 7 of his report, Richard offers an appropriate expert opinion—“that DVB-80 was offered for transportation in violation of the HMR and the IMDG Code in that the material was not properly classified,” (*id.* at 7)—followed by an inappropriate and inadmissible statement that this alleged misclassification “likely contributed to the incident,” (*id.*). The latter is a factual determination regarding the cause of the incident that is properly left to the finder of fact. In addition, Richard sometimes labels Deltech’s behavior as “negligent” in taking appropriate safety or classification measures. (*See, e.g., id.* at 10.) Whether or not any party was negligent is a question of liability for the factfinder. Therefore, while the Court will not preclude Richard’s report, it will disregard statements in which Richard swerves into the lane of the factfinder, and the Court warns Richard that any such trial testimony is inadmissible and will be precluded.

6. Michael Daum

MSC has proposed Michael Daum as an expert in the responsibilities of a Non-Vessel Operating Common Carrier (NVOCC), regarding the acceptance and documentation of hazardous goods in the cargo, specifically DVB. His personal qualifications and C.V. are attached to his report at Appendix 2. (Daum Rpt., ECF No. 1029-1 at 49.) He holds a Ship-Master’s License for Seagoing vessels from the

University of Nautical Sciences, Germany and a Diplom-Kauffman (German M.B.A. equivalent) from the Mannheim University, Germany. (Id. at 51.) He currently works as a “Corporate Compliance Manager” at Seafair USA LLC, prior to which he worked as “Hazardous Materials/Compliance Manager” (1991-2005) and “Tank Equipment Manager” (1989-1991) at Leschaco, Inc., which is a freight forwarder, tank container operator and Non-Vessel Operating Common Carrier specializing in the transportation of chemicals. (Id. at 49-50.) While at Leschaco, Daum was responsible for “monitor[ing] and interpret[ing] domestic and international hazardous material and hazardous waste regulations,” “instruct[ing] employees, customers, and vendors as to applicable regulations,” “provid[ing] technical and regulatory expertise for tank container and hazardous materials shipments,” “assist[ing] authorities and customers in the handling and mitigation of hazardous materials incidents” and “effect[ing] and control[ing] compliance with domestic and international hazardous materials regulations.” (Id. at 50-51.) He “regularly conduct[s] hazardous materials training seminars at the Storck Academy in Germany” and “performs[s] hazardous materials training in the United States for tank container operators, freight forwarders, and the German Armed Forces stationed in the United States.” (Id. at 49.)

Daum’s executive summary states his conclusions as follows: “Stolt’s practices relating to the manner in which it handled the divinylbenzene shipments fell below the standard of care that would have been employed by a prudent, diligent, and safety conscious tank container operator under similar circumstances,”

and “Stolt’s handling of the DVB shipments was in violation of applicable hazardous material regulations.” (Id. at 4.)

After providing an account of Stolt’s role as an NVOCC and a tank container operator, Daum delves into a lengthy exposition of the facts, regarding the history of Deltech’s DVB shipments. (See id. at 10-14.) While discussing what was required of Stolt under the applicable regulatory framework, i.e., the IMDG Code, HMR, and the International Convention for the Safety of Life at Sea (“SOLAS 74”), Daum also offers several legal conclusions: “To the extent that the DVB Shipments are found to have been improperly classed, or to not be in condition for transport, Stolt would be in violation of the HMR,” (id. at 27); and “Stolt’s conduct violated various provisions of SOLAS 74, the IMDG Code, and the HMR,” (id. at 33).

Daum’s report is also replete with extensive factual narratives about Stolt’s procedures and its alleged knowledge based on information from Deltech and past DVB incidents. (See, e.g., id. at 25 (“[T]he Proper Shipping Name in Deltech’s Booking Requests failed to include the word STABILIZED. As discussed above, Stolt knew that the DVB Shipments were stabilized through the use of a chemical inhibitor and that absent such stabilization the DVB Shipments could polymerize or otherwise dangerously react.”).)

Stolt has moved to preclude Daum’s testimony on several bases: (1) his report contains improper factual narrative, (2) his proposed testimony includes improper legal conclusions, (3) his testimony lies beyond the area of his expertise, and (4) his report contains ipse dixit opinions. (Mem. in Support of Motion to Exclude Michael

Daum, ECF No. 1028.) The Court agrees. While the Daum report includes some discussions of regulatory requirements and industry practice that are within the realm of his expertise and consist of proper expert testimony, the significant majority of the report consists of factual narratives about Stolt's practices and legal conclusions regarding Stolt's knowledge and the reasonableness of its procedures. An expert report may provide insight about specialized practices in an industry, but it must not substitute for the factfinders own findings, nor may it present opinions in the form of legal conclusions regarding the reasonableness or prudence of a defendant's actions, or the scope of a defendant's knowledge. The Court therefore excludes the Daum report and the Daum rebuttal report in their entirety, with the following exceptions:

1. "Introduction" and the last full paragraph of page 4 of ECF No. 1029-1.
2. "Stolt's role with respect to the transportation of DVB Shipments," ECF No. 1029-1 at 5-9.
3. On page 12 of ECF No. 1029-1, the final sentence beginning "One of the basic requirements . . ." and continuing through the end of that paragraph on page 13.
4. The third full paragraph of page 13 of ECF No. 1029-1, beginning "For example . . ."
5. The last full paragraph of page 16 of ECF No. 1029-1, beginning "The HMR provide . . ."

6. The first two sentences on page 17 of ECF No. 1029-1, beginning “The IMDG Code also forbids”
7. The second sentence of the second full paragraph on page 24 of ECF No. 1029-1, beginning “The HMR requires . . .” and continuing only through “by a representative of the shipper” on that page.
8. The second-to-lase full paragraph on page 24 of ECF No. 1029-1, beginning “The certification should not be considered”
9. The second full paragraph on page 25 of ECF No. 1029-1, beginning “The IMDG Code requires”
10. The first sentence only of the fourth full paragraph on page 25 of ECF No. 1029-1, beginning “While the HMR allows”
11. The third, fourth, and fifth full paragraphs on page 28 of ECF No. 1029-1, beginning “Under Chapter VI . . . ,” except that the final sentence of the fifth paragraph is excluded. Footnote 103 is not excluded.
12. The final sentence of the first full paragraph on page 29 of ECF No. 1029-1, beginning “Further, since the DGD forms . . .” and continuing through the end of the second full paragraph on that page.
13. Appendices 2 and 3 to the Daum report.

Outside these specific exceptions, the remainder of the Daum report is excluded under Rule 702 for the reasons discussed above.

7. David A. Robbins

Conti/NSB has proposed David Robbins as an expert to testify regarding the cause of the explosion. His Career Summary/C.V is attached to his report at Appendix 1. (Robbins Rpt., ECF No. 1011-1 at 152.) Robbins is an “expert in the investigation of fires and explosions” and has “carried out the investigation of over 1000 fires and explosions, including some 80 incidents involving fires, explosions or cargo incidents on ships.” (Id. at 7.) He holds a B.Sc. Hons. in Biology from the Southampton University (1983), and attended external courses in “Fire Investigation” at Edinburgh University (1990). (Id. at 152.) Since 1990 he has been employed at “Dr. JH Burgoyne and Partners LLP,” a “scientific consultancy specializing principally in the investigation of fires and explosions, material and mechanical failures,” and he currently holds the position of “Principal Member.” (Id.) Robbins has investigated marine incidents involving “fires . . . and explosions in cargo spaces, engine rooms and accommodation,” has carried out explosion investigations involving “oil product and chemical carriers” and has advised on “alleged cargo contamination and [] self-heating of oil seed and grain cargoes.” (Id. at 152-53.) He contributed a chapter on cargo spoilage (Microbes in Cargo) for a book published by the Institute of Marine Engineering, Science and Technology (Microbes in the Marine Industry) in 2003. (Id. at 154.) Notably, Robbins has no

special expertise in chemistry, engineering, international shipping rules and regulations, or metallurgy.

Robbins prefaces his report by providing a lengthy factual description of the vessel, including its cargo spaces, its CO2 flooding fixed fire-fighting systems, and computer systems, (id. at 9-22), and follows with a detailed factual account of the circumstances surrounding the explosion (id. at 23-48.) At various points during his report and rebuttal report, Robbins reiterates and summarizes opinions of other experts at Burgoyne (Wadsworth, and Hammersley etc.):

A. Opinions related to chemistry:

1. In section 3.3.02 Robbins discusses the chemical properties of DVB. (Id. at 28; see also id. at 5, 28-30.)
2. In sections 3.3.06, 7.6.15, 7.11.1.22, 7.11.7, Robbins presents a history of Deltech's DVB shipments, in addition to appending a review of previous known auto-polymerization incidents at Appendix 12 of his report. (See id. at 30, 95, 124, 144-46.)
3. Section 6.1 summarizes the techniques and results of chemical analyses conducted at Intertek MSG Laboratory. (See id. at 66-68.)
4. In sections 6.2.08 – 6.2.21 and 6.2.25 – 6.2.30 Robbins outlines the results of chemical analyses carried out at FORCE and the chemical analysis of samples of debris materials and adopts the opinions of Hammersley in these respects. (See id. at 69-75.)
5. In section 7.1.01 Robbins makes his ultimate factual determination based on the chemical analyses: “The information and analysis results obtained during my investigation provide compelling evidence that it occurred in cargo hold 4 due to the release and ignition of a volume of hot, flammable vapor from one or more of the three tanks of Deltech DVB 80 carried on the vessel.” (Id. at 77.)
6. In sections 7.6.04 – 7.6.09, Robbins adopts Hammersley's conclusions regarding the chemical analyses conducted by Intertek and FORCE on the PVC tubing connected to Hold 4 and the chemical cargoes in Hold 4. (See id. at 93-94.)
7. In sections 7.6.12 – 7.6.14 Robbins recounts Hammersley's conclusions with respect to chemical analyses conducted on the PVC tubing from the smoke detection and the CO2 flooding system. (See p. 95 of 166.)

8. In sections 7.7.01 – 7.7.09 Robbins relies on Hammersley’s opinions in his discussion of the release of DVB 80 Vapor from the tank containers. (See id. at 96-98.)
9. In sections 7.8.01 – 7.8.24 Robbins posits alternative causes for the explosion based on chemical properties of compounds and Hammersley’s review of chemical analyses. (See id. at 101-08.)
10. Sections 7.11.01 – 7.11.1.16 discuss why the divinylbenzene auto-polymerized, based upon a review of its chemical properties and the attendant temperature. (See id. at 117-22.)
11. In section 7.11.2 Robbins renders his opinion on the dissolved oxygen content of a liquid chemical based upon his review of available literature and Fuller’s report. (See id. at 133-36); see also Robbins Rebuttal Rpt., ECF No. 1011-21 ¶¶ 13.39, 16.10, 19.05, 19.06, 20.05, 22.12, 22.13)
12. Sections 7.11.3.01 – 7.11.3.04 discuss the maintenance of inhibition in divinylbenzene. (See Robbins Rpt., ECF No. 1011-1 at 136-37.)
13. Sections 7.11.6.01 – 7.11.6.02 outline the composition of divinylbenzene stored in tank MV804. (See id. at 144.)
14. In sections 8.03, 8.05, 8.07, 8.08, 8.09, 8.11, 8.12 and 8.17 Robbins offers his conclusions on matters delineated above. (See id. at 147-50.)
15. In sections 1.06, 2.01 – 2.07 of the rebuttal report, Robbins summarizes the results of Self-Accelerating Decomposition Testing and Accelerating Calorimetric Testing that Hammersley had arranged to be performed by Dekra. (See Robbins Rebuttal Rpt., ECF No. 1011-21 at 7-9.)
16. In sections 13.01 – 13.64 of his rebuttal report Robbins counters opinions of Scott Davis on matters ranging such as the effect of temperature on auto-polymerization of DVB80 (See id. at 47-69.)

B. Opinions regarding heat transfer and temperature determinations:

1. In sections 7.11.1.01 – 7.11.1.24 Robbins recounts the results of experiments carried out by Deltech to “determine the periods for which DVB 63 and DVB 80 could be stored at different temperatures with different headspaces” and offers his own opinion on the methods employed. (See Robbins Rpt., ECF No. 1011-1 at 117-24.)
2. In sections 7.11.1.48 – 7.11.1.58 Robbins offers a heat transfer analysis to determine the temperature of divinylbenzene during transit. This analysis is based on temperature measurements taken by Deltech in 2015 on a different ISO tank container of DVB, which was not carried on Flaminia, and the assumption that the “temperature probes . . . were placed so as to give accurate indications of the surface temperature of the container and the temperature of the bulk liquid.” (See id. at 131-33.)

3. In sections 7.11.1.25 – 7.11.1.43 Robbins posits another heat transfer analysis in support of his opinion on the effect of Chemtura’s heated diphenylamine (“DPA”) cargo on the temperature of the DVB. (See id. at 124-29.)
4. In sections 8.01 – 8.11 and 19.01 – 19.06 of his rebuttal report, Robbins comments upon heat transfer calculations and analyses performed by other experts. (See Robbins Rebuttal Rpt., 1011-21 at 27-30, 91-92.)

C. Opinions related to metallurgy:

1. In sections 6.2.01 – 6.2.07 Robbins outlines the results of metallurgical analyses conducted by FORCE and adopts the conclusions of Wadsworth. (See Robbins Rpt., ECF No. 1011-1 at 68-69.)
2. Sections 7.7.10 – 7.7.14 references metallurgical testing conducted by Wadsworth to postulate that “DVB 80 vapor escaped from Tank I,” despite acknowledging the evidence as inconclusive in his rebuttal report. (See id. at 99-100, 136; see also Robbins Rebuttal Rpt., ECF No. 1011-21 at 44.)
3. In sections 21.01 – 21.07 of his rebuttal report Robbins controverts opinions offered by Petty-Galis on metallurgical and material testing. (See Robbins Rebuttal Rpt., ECF No. 1011-21 at 95-99.)

D. Opinions regarding proper release of CO2:

1. In sections 7.10.01 – 7.10.10.9 and 8.18 – 8.20, Robbins discusses whether proper release of CO2 could have inerted the explosive atmosphere in Hold 4. (See Robbins Rpt., ECF No. 1011-1 at 111-17, 150.)
2. Similarly, in sections 7.01 – 7.07, and 13.27 – 13.38 of his rebuttal report, Robbins comments on the CO2 flooding system. (See Robbins Rebuttal Rpt., ECF No. 1011-21 at 25-27, 55-61.)

E. Opinions regarding shipping regulations and stowage:

1. Sections 2.4.02 and 3.1.05 – 3.1.09 discuss whether the vessel’s computer programs were compliant with the IMDG code and outline the procedures for stowage of dangerous goods, respectively. (See Robbins Rpt., ECF No. 1011-1 at 20-21, 23-25.)
2. In sections 2.07 and 23.07 of his rebuttal report, Robbins discusses how the divinylbenzene should have been classified. (See Robbins Rebuttal Rpt., ECF No. 1011-21 at 9, 112.)

Stolt has moved to preclude Robbins as an expert witness on several bases:

- (1) his opinions lie beyond his area of expertise, (2) his proposed testimony contains improper factual narrative, (3) his opinions are based on speculation and conjecture,

(4) his proposed testimony contains improper factual determinations and usurps the province of the court. (Mem. in Support of Motion to Exclude David Robbins, ECF No. 1010.) Additionally, Deltech has moved to preclude Robbins on the following bases: (1) Robbins' proposed testimony is not helpful to the court, (2) Robbins adopts opinions of other experts and offers opinions on matters outside of his area of expertise, (3) his proposed testimony is unreliable and speculative, (4) the report contains improper factual narrative, and (5) Robbins relies on the opinions of undisclosed individuals. (Mem. in Support of Motion to Exclude David Robbins, ECF No. 1056.)

As with other experts discussed thus far, the Court will exclude any factual narratives presented by Robbins that do not form the basis for his expert conclusions but, rather, displace this Court's role as factfinder. While an expert must lay a factual foundation for his or her opinion, Amorgianos, 303 F.3d at 266-67, narrative opinion testimony is inadmissible if it weighs the evidence or if it is offered "solely for the purpose of constructing a factual narrative based upon record evidence." Highland Capital Mgmt., 379 F. Supp. 2d at 468-69.

The lengthy factual narratives of Sections 2 ("The Vessel") and 3 ("Circumstances Surrounding the Explosion") are excluded as improper factual narrative unnecessary to lay the foundation for Robbins's expert opinions. By contrast, Section 5 ("Inspections") consists of Robbins's firsthand knowledge as a post-accident inspector and is therefore admissible; in addition, Robbins restates the facts that form the data that is the basis for his expert analysis in the portions

of his report that contain his analysis, which adequately lays the factual foundation for those portions of his report containing proper expert opinion. Sections 2 and 3 are by contrast unnecessary, inadmissible factual narrative.

It is well established that an expert may rely upon another expert to form an opinion under Rule 703, which provides that an expert may rely upon the opinion of another “[i]f experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject.” Fed. R. Evid. 703; Member Servs., 2010 WL 3907489, at *27; see also Dura Automotive Systems, 285 F.3d at 613 (“[I]t is common in technical fields for an expert to base an opinion in part on what a different expert believes on the basis of expert knowledge not possessed by the first expert . . .”). Rule 703 “does not predicate admissibility on the source of the facts or data or, in particular, on whether the source is employed by either of the parties.” Apple, Inc. v. Motorola, Inc., 757 F.3d 1286, 1321 (Fed. Cir. 2014), overruled on other grounds by Williamson v. Citrix Online, LLC, 792 F.3d 1339 (Fed. Cir. 2015). Rule 703 allows an expert to rely on inadmissible evidence in developing his or her expert testimony. Fed. R. Evid. 703 (Facts or data relied upon “in forming an opinion . . . need not be admissible for the opinion to be admitted.”).

However, Robbins cannot himself become a vehicle to convey opinions of other experts—though in rendering his own opinions he may rely on those opinions. There is a line between Robbins acting as a mouthpiece or “aggregator” for other experts—neither of which is allowed—and relying upon another expert to form his own conclusions. “[A]n expert may not merely recite another expert’s opinion as his

own.” Member Servs., 2010 WL 3907489, at *27; see also Auther v. Oshkosh Corp., No. 09-cv-527, 2013 WL 5272959, at *3 (W.D.N.Y. Sept. 16, 2013) (“[T]he expert witness must in the end be giving his own opinion.”) (emphasis in original). If an expert simply presents the findings and experts opinions of others, that expert must be independently qualified in the subject. For instance, an expert may certainly present the findings and conclusions of those whose work he or she supervised and that he or she could personally replicate if necessary. But a proffered expert may not simply pass off as their own, or serve as a vehicle for presenting, the opinions of others in subjects on which the proffered expert is not personally qualified.

Therefore, to the extent that Robbins’s report simply repeats the findings of other experts and proffers them as his own despite his lack of qualifications in the relevant field, the Court agrees those portions must be excluded. Robbins admitted at deposition that he is not an expert in chemistry, chemical engineering, heat transfer, industrial engineering, gas engineering, or shipping rules and regulations. (See Robbins Dep. 133:16-18; 119:21-25; 62:19-21; 92:12-16; 120:2-7; 173:25; 231:10-12.) Thus, for example, as a fire investigator and not a chemist, Robbins cannot give opinions on the traits and properties of chemicals and therefore cannot present the findings of chemistry expert Hammersley. (See Robbins Rpt., ECF No. 1011-1 at 69-71.) Similarly, Robbins cannot assert the metallurgy findings of Wadsworth as if they were his own. (See id. at 69.) While Robbins may rely upon the reports of others in developing and presenting his own opinions, he cannot simply present the opinions of others—he must let them speak for themselves. The Court therefore

excludes the entirety of Section 6 (“Laboratory Tests an Analysis”), which summarizes the procedures and findings of other experts but does not provide significant additional analysis.

The portions of Robbins’s report that rely upon the findings of other experts to reach his own conclusions employing his independent expertise are, however, admissible. Therefore, most of Section 7 (“Discussion”) is admissible because, although Robbins explicitly discusses and repeatedly relies upon the expert opinions of his colleagues who have expertise different from his own, he does so to support his own analysis and conclusions based upon his own expertise in fire investigation. See Dura Automotive Systems, 283 F.3d at 613. However, the Court excludes Sections 7.10 and 7.11, which discusses heat transfer calculations performed by an undisclosed individual, Matthew Suddards, and in which Robbins does not have sufficient expertise to opine. Similarly, the Court excludes Section 7.7-7.7.06, 7.7.15, and 7.8.14, which present calculations performed by an undisclosed gas expert, Richard Siddons, that Robbins is not qualified to present as his own opinion.

Stolt and Deltech also move to exclude Robbins’s testimony on the basis that he presents opinions that consist of speculation or conjecture. (See, e.g., Mem. in Support of Motion to Preclude, ECF No. 1010 at 17 n.7.) As discussed above, an expert need not testify with certainty or eliminate all other possible conclusions; it is up to the factfinder to determine what weight to give an expert’s conclusions and it is up to an adversary cross-examine the witness or to rebut the testimony with a different expert. Movants’ examples of allegedly speculative testimony are

unpersuasive. For instance, Stolt describes Sections 7.5.05 through 7.5.07—which span six pages, present possible alternative conclusions, and explain why Robbins rejected them based on his inspection of the ship and other data—as “speculation that no cargoes were wrongly declared.” (*Id.*) While Robbins acknowledges gaps in the data and uncertainty for some of his conclusions in Section 7, his conclusions are neither baseless nor speculative, and he consistently grounds his analysis in specific facts, observations, and other data. Whether or not the Court will credit his testimony is a separate matter from whether or not it is unmoored and speculative.

Finally, Stolt and Deltech challenge Robbins’s rebuttal report on similar grounds as their challenge to his primary report. They argue that he is entirely unqualified to offer the vast majority of his rebuttal opinions in areas such as chemistry, chemical engineering, heat transfer, and gas engineering, and that he simply presents the opinions of other Burgoyne experts in rebuttal.

The Court agrees that Robbins’s rebuttal report suffers from the same problem that plagues his primary report: He serves as an aggregator and mouthpiece for other experts, and he opines in areas beyond his expertise. For example, Robbins’s rebuttal report responds to David Grossman, a chemical expert who opined that DVB could not have been the origin of flammable gas that supported the explosion, by reiterating chemical analysis performed by a third party (DEKRA Insight) and overseen by Hammersley. (Robbins Rebuttal Rpt., ECF No 1011-21 at 24.) Robbins does not use this as a basis for forming an independent opinion using his own expertise—a proper purpose under Rule 703—but instead

restates the findings of others in a field in which he does not himself possess expertise. Robbins also attempts to rebut expert reports on, *inter alia*, of gas engineering, (*id.* at 24-27), and heat-transfer calculations and modeling, (*id.* at 27-31)—topics on which he is admittedly not a qualified expert. The Court therefore precludes the vast majority of Robbins’s rebuttal report because Robbins lacks the requisite expertise to rebut experts outside his field.

As an expert in fire causation and origin, however, Robbins is qualified to respond to other experts and testimony in that area. As a percipient witness who directly inspected the vessel, he is also qualified to respond to the testimony of experts who testified as to the condition of the ship after the explosion and theories of causation related thereto. His rebuttal testimony responding to proffered experts Beeley, Cayias, and Dellasala on fire origin and causation is therefore admissible as it is within the realm of Robbins’s expertise and does not simply present the opinions of other experts as his own. His rebuttal testimony responding to Jamie Petty-Galis in Section 4 is therefore also admitted on the basis that it discusses visual inspections of the vessel, although his testimony rebutting Petty-Galis’s metallurgical opinions in Section 21 is excluded as he does not have the requisite expertise to opinion on the topic of metallurgy.

In sum, Sections 2, 3, and 6 of Robbins’s report are excluded in their entirety. The Court also excludes those portions of Section 7 that rely upon undisclosed experts and that presents opinions outside the realm of Robbins’s expertise, as discussed above. Finally, the Court precludes all of Robbins’s rebuttal report except

for Sections 4, 10, 12, and 14, responding to Petty-Galis, Beeley, Cayias, and Dellasala, respectively.

8. Ian Wadsworth

Conti/NSB has proposed Ian Wadsworth and Edward Hammersley as experts and members of the fire investigation team led by Robbins. Their expert reports are submitted both to support their admission as expert witnesses and as background that in part forms the basis for Robbins's report as the lead investigator.

Wadsworth is offered as a metallurgical expert who investigated the remains of containers that had been discharged from Hold 4 following the explosion. His report does not include a CV or resume; however, his signature indicates that he has a bachelor's degree in engineering and a Ph.D. in chemical engineering, and he is a partner at Burgoyne. (Wadsworth Rpt., ECF No. 1011-9 at 45.) Stolt moves to exclude Wadsworth's report but does not challenge his qualifications as an expert metallurgist.

Wadsworth's report focuses on the results of metallurgical investigations conducted on tanks A and I "due to their unique features" and tanks C, J, and K as they "exhibited substantial breaches;" he notes however, that "the metallurgies of these, or any other, tanks do not speak to the cause of the explosion." (Id. at 13.) After providing an overview of the techniques and methods employed in the investigation and testing, Wadsworth makes the following conclusions:

1. The conditions of the Tanks do not inform on the pre-fire conditions of the Tanks and therefore the cause of the explosion. (See id. at 44.)

2. None of the shells or domed ends of the Tanks exhibited any evidence of rupture due to over-pressurisation or to manufacturing defects. (Id.)
3. All of the breaches and perforations of the Tanks that I examined had occurred as a consequence of the environment to which they were exposed during the ensuing fire and thereafter. (Id.)
4. The intensity of the fire, combined with predominantly internal carburisation of the stainless steel barrels caused localised areas of Tanks A, C, I, J and K to undergo substantial metallurgical changes that brought about wastage, embrittlement and localised internal melting at temperatures of the order of 1150 [degrees] C or above. (Id.)
5. There were two regions associated with each of Tanks A and I that exhibited features not observed elsewhere. The overall pattern of damage and the metallurgical condition of the remnant steel at these locations is entirely consistent with an intense flame having issued out of the manway of Tank I. (Id. at 45.)
6. This flame that issued from Tank I caused the manway of Tank I to increase in diameter as a result of melting/ consumption of the surrounding steel and eventually for the manlid to also be consumed/ melted. It also caused part of the lower surface of the shell of Tank A to carburise, to melt and to perforate. (Id.)

Wadsworth identifies distinct areas of localized melting tanks A and I, including localized burning around the man-lid of tank I, but in his deposition was admittedly unable to determine when these holes developed. (Wadsworth Dep. Tr., ECF No. 1011-25 at 51:1.18-52:1.4; 62: 1.11-15; 67:1.2-12.)

Stolt has moved to preclude Wadsworth on the following basis: (1) his report contains irrelevant opinions, and (2) his proposed testimony is unfairly prejudicial. (Mem. in Support of Motion to Exclude Ian Wadsworth, ECF No. 1010.) The Court disagrees.

All evidence must be relevant to be admissible; evidence is relevant if it has a tendency to make a consequential fact more or less probable. See Fed. R. Evid. 402.

An expert report need not be dispositive on the issue of causation to be relevant here; it need only make a theory of causation more or less probable. Wadsworth's report, if credited, is consistent with a particular theory of causation—that the DVB was the cause of a fire and a resulting explosion—and is therefore relevant.

Specifically, Wadsworth's conclusions that localized metallurgic changes on tanks A and I is consistent with DVB as a cause; the lack of metallurgic evidence inconsistent with this theory would also be relevant.

In addition, Stolt's allegation of unfair prejudice under Rule 403 is easily denied because Stolt has not explained what, if any, unfair prejudice they would suffer from the admission of this metallurgist report in a bench trial. Stolt's objection appears simply to repackage Stolt's objection to Robbins's opinions as speculative, which the Court has also rejected. (See Mem. in Support of Motion to Exclude Ian Wadsworth, ECF No. 1010 at 20.) The motion to preclude Wadsworth's report is therefore DENIED.

9. Edward Hammersley

Conti/NSB has proposed Edward Hammersley as an expert in chemistry to conduct the chemical analysis of samples and exhibits collected during an investigation into the cause of the explosion on the vessel. He is an "analytical chemist with experience in a range of analytical techniques and interpretation of results," and his C.V. is attached to his report at Appendix 1. (Hammersley Rpt., ECF No. 1011-8 at 4.) Hammersley received his Masters in Chemistry from the University of York in 2002. (Id. at 72.) He currently works as a "Fire and Explosion

Investigator” at Burgoynes Management Ltd., where he provides “specialist chemistry and analytical chemistry support to other colleagues” and has “carried out detailed scientific investigations of approximately 200 incidents, including fires, explosions, chemical reactions, contamination and personal injuries.” (Id.) Prior to joining Burgoynes, he worked at Pfizer Ltd. from 2005-2013 as “Senior Scientist” where he was “responsible for managing several projects throughout the early development process and supporting projects with laboratory work.”

(Id. at 73.) His publications include two articles in the periodical “Chromatography Today,” namely “Ionic Liquids: Sensitivity Enhancement in Headspace Gas Chromatography” (August/September 2011) and “Hydrophilic Interaction Liquid Chromatography – A Potential Alternative for the Analysis of Dextran-1” (May/June 2011). (Id.)

Hammersley conducted his analyses and inspections at the request of David Robbins, who was, as discussed, responsible for the principal investigation of the incident. (Id. at 4.) Hammersley attended the laboratory of FORCE technology “during the testing of samples in 2015 to participate in the analyses carried out and to inspect the various exhibits and samples tested,” “reviewed the results of other analyses carried out by FORCE and Intertek,” and “reviewed the data generated during the course of thermal testing” carried out by Libra and Butterworth. (Id.)

Hammersley’s report outlines the techniques and results of tests conducted on samples of deposits (PVC tubing, dust-collector caps, the steel pipes between the three-way valve and the tee-piece, and debris and tank samples) at Intertek and

Force. (See id. at 6-34.) Hammersley reviewed the results contained within reports produced by Intertek and Force, “interpreted the results where . . . relevant to the investigation, and which were not covered in the reports” (id. at 11), and made the following conclusions:

1. “Experiments [commissioned by Burgoynes] to simulate an autopolymerization of DVB 80 indicated that a closely similar range of alkylbenzene compounds to those observed in the cargo hold 4 PVC tubing were formed as part of the autopolymerization reaction. This constitutes compelling evidence that the observed alkylbenzene compounds were formed during an autopolymerization reaction in one of the DVB 80 tanks.” (Id. at 64.)
2. “The temperatures attained in a DVB autopolymerization reaction could result in the generation of sufficient pressure within the tank to cause the PRV to open and vent the contents of the tank into the cargo hold. The alkylbenzene compounds are flammable and venting the tank could therefore have formed an explosive fuel/air mixture within cargo hold 4. The alkylbenzenes detected in the analyses cannot be accounted for as a result of the self-reaction of any of the other cargoes, or reactions between the cargoes known to have been carried in cargo hold 4. The presence of the alkylbenzenes and their relative amounts cannot be accounted for by a dangerous substance that was not declared on the manifests unless it was another undeclared container of DVB or very similar chemical compound, which may not be plausible.” (Id. at 65.)
3. “The results of all of the other chemical testing on the dust-collector caps, particles contained therein, steel pipes, debris samples and tank components did not provide any positive evidence to indicate an origin of the explosion.” (Id.)

Stolt has moved to preclude Hammersley on the basis that Hammersley was not familiar with the standard “reasonable degree of scientific certainty;” hence, Stolt argues, his opinions are unreliable since they could not have been made with that standard in mind. (Mem. in Support of Motion to Exclude, ECF No. 1010 at 27.) However, this is not the standard for admissibility of expert testimony, and it

is unclear to the Court why Stolt believes it is.¹⁰ As discussed above, as long as the offered testimony has a reasonable basis in the underlying data and applies reliable methods, federal courts “allow experts to offer testimony that is less than entirely certain, trusting in opposing counsel’s ability to highlight any weaknesses in the proffered testimony” Shepler, 2015 WL 5671856, at *4. Stolt’s motion to exclude Hammersley is therefore DENIED.

10. John Walker

Conti/NSB have proposed John Walker as an expert in the installation, certification, and maintenance of the fixed CO2 firefighting system aboard the *Flaminia*. (Walker Rpt., ECF No. 1023-1 at 6.) Appendix 1 to Walker’s report is his C.V. His career “summary” describes him as a marine engineer, surveyor and consultant with 23 years of experience in the marine industry. (Id. at 55.) He is a “[c]hief Engineer with proven experience of project management, fleet maintenance and new construction; cruise ships, mega yachts and refrigerated cargo ships.” He asserts that he has “[i]n depth knowledge of marine insurance claims from a technical perspective.” (Id.)

A separate section of Walker’s C.V. lists “Specialist Knowledge.” The areas he lists are:

- Cruise ships and super yachts; building and repair management;
- Casualty investigation;

¹⁰ This allegation is made in the same breath as to Robbins and Wadsworth, and Stolt offers no specific reasoning as to Hammersley to support this objection other than that he, like the other experts, was unfamiliar with the “reasonable degree of scientific certainty” standard.

- Root cause analysis of major incidents and failures;
- Diesel electric and pod propulsion;
- Gas turbines propulsion, large crosshead type diesel engines, medium speed diesels;
- Refrigerated cargo ships / cellular container ships;
- Pre purchase and condition surveys;
- Dry dock and terminal risk assessments.

No special expertise in firefighting or fire-safety systems is listed. The final section in his report sets forth additional facts regarding his qualifications. He states that he has worked on containerships as a second engineer and on passenger vessels in the rank of Chief Engineer: “The majority of these vessels were fitted with fixed CO2 installations for the extinguishing of fire in cargo holds and machinery spaces.” (Id. at 51.) He states further that “[d]uring my time sailing on container vessels, I was familiar with the cargo hold CO2 systems and release procedures, including attending drills involving cargo hold fires.” (Id. at 52.) He also states that “[c]argo hold fires formed part of the drill matrix and involved the ships engineers convening at the CO2 room to simulate release of CO2” (Id.) Walker also states that during his education at the Warsash Maritime Academy in the United Kingdom, “fixed fire extinguishing systems was covered in detail.” (Id.) In addition, as a casualty surveyor, he has had occasion to investigate and report on fire related incidents “where the use of CO2 was necessary.” (Id.) He lists three such incidents, each of which was an engine room fire. (Id.)

In response to Stolt's motion to preclude Walker, he submitted an additional declaration containing further specifics regarding his professional qualifications. (ECF No. 1095.) In this declaration, he states that he has investigated numerous fires over the course of his career, including "several" fires and explosions on ships. As a technical superintendent, he inspected vessels on a regular basis and observed crew drills.

The bulk of Walker's report consists of a factual narrative of the vessel's fixed firefighting system. (Walker Rpt., ECF No. 1023-1at 6-44.) Section 7 is entitled "Expert Opinions"—but much of the content consists of additional facts. However, certain opinions are conveyed including:

1. "The guidance to continue release of CO₂ every thirty minutes cannot take into consideration the actual situation on the vessel at the time. Assuming there was actually a fire in the hold before the explosion (which evidently there was not), the fire may already be extinguished or, if the situation is not worsening, the crew may assess that maintain a reserve of CO₂ is preferable to continuous release." (Id. at 46.)
2. "The use of firefighting assets on board will always be dependent on the situation in hand. The person in command is tasked with making judicious use of the extinguishing equipment available. Therefore it is considered that the deviation from the posted guidelines, i.e. to release every thirty minutes, was a result of the crew's judgment of the situation unfolding at the time and not a dereliction of their duties." (Id. at 46-47.)
3. "It is my opinion, based on this timing, that there was not any unusual delay in the release of CO₂ due to unfamiliarity of the system or lack of clear posted guidelines. The timing of the release of CO₂ was performed without undue delay." (Id. at 49.)

Various statements about maintenance and inspection appear to be more factual than opinion – but there are statements regarding regularity of both. In section 7.5, Walker proffers a series of statements and opinions regarding the certification,

training and familiarization of the crew. The first is “[t]he certification and training of the crew was as required under the international standards.” (*Id.* at 54.) He also opines, “[t]here is no indication that the training and certification of crew was inadequate. The certification, familiarization, and training process of the crew did not likely cause issues with the release of the CO₂ to cargo hold no. 4.” (*Id.*)

Stolt has moved to preclude Walker on several bases: (1) his experience does not match the areas in which he now seeks to opine because he is “an experienced marine engineer and surveyor” who has offered opinions “on the operation, installation, certification, maintenance of the fixed CO₂ firefighting system aboard the vessel;” (2) much of his report is improper factual narrative, (3) where the report is not a factual narrative it engages in fact finding, (4) he improperly speculates as to the state of mind of the crew – including their level of familiarity with the vessel’s firefighting system and their judgment of the unfolding of events on the vessel, based on credibility determinations that he assigns to testimony that he has reviewed. (Mem. in Support of Motion to Exclude John Walker, ECF No. 1022 at 2-3.) The Court generally agrees with these arguments and precludes his testimony.

As an initial matter, while Walker has demonstrable marine experience, the Court finds that he does not have sufficient demonstrated experience in the areas of crew training and drilling to provide opinions on those matters. Attending drills—even a lot of them—does not make one an expert in how to drill, what to drill or why. Walker was never himself a trained drill instructor. Nor does he have the requisite expertise based upon a combination of experiences such as having fought

fires as well as participated in drills. Instead, he has watched drills – and now seeks to opine from a cold record as to whether in the context of an actual fire, appropriate protocols were followed. This takes Walker’s experience beyond its reasonable limits.

Walker concedes that he has never before rendered an opinion as to whether a crew was properly trained to fight a fire. And while he had some experience on board passenger ships, he did not supervise firefighting training or drilling and conceded he is not a professional firefighter.

The Court also agrees that the vast bulk of the Walker report is improper factual narrative. He cannot replace a percipient witness who will offer evidence as to, inter alia, the firefighting system in place on the vessel, the level of familiarity the crew had with that system, the type and regularity of maintenance and inspection, how drills were or were not conducted, and the actual deployment of CO₂ during the incident itself. Thus, if Walker was otherwise qualified to offer the opinions or if they otherwise had a reliable basis, the Court would nonetheless preclude his lengthy factual narrative.

In addition, to the extent that certain statements that Walker makes are effectively his fact finding, they usurp the role of this Court. It is possible that based on experience, certain facts are known to follow—but they could only be stated in that way, not as facts found and derived. No expert has that role. For instance, “[i]t is my opinion, based on this timing, that there was not any unusual delay in the release of CO₂ due to unfamiliarity of the system or lack of clear posted

guidelines. (Walker Rpt., ECF No. 1023-1 at 49.) The timing of the release of CO₂ was performed without undue delay.” And, “[t]he certification and training of the crew was as required under the international standards.” (Id. at 51.) He also opines, “[t]here is no indication that the training and certification of crew was inadequate. The certification, familiarization, and training process of the crew did not likely cause issues with the release of the CO₂ to cargo hold 4.” (Id. at 51.)

Stolt’s motion to preclude Walker is therefore GRANTED.

11. S. Gregory Borossay

Stolt has retained Borossay as an expert to “address the obligations of an ocean carrier in vetting, researching, and approving the carriage of dangerous cargo and the proper operational measures to be taken, as a result of such vetting, research, and approval of the carriage of dangerous cargo” and “assess whether MSC . . . met the industry standards expected from ocean carriers with regard to the divinylbenzene (‘DVB’) cargo shipped by Stolt aboard the [v]essel.” (Borossay Rpt., ECF No. 1044-1 at 4.)

Borossay earned a J.D. from Whittier Law School in 2002 with a focus on maritime transportation law and finance. (ECF No. 1044-3 at 2.) He holds an M.B.A. from the American Graduate School with a focus on international trade and finance (1988) and a B.A. in Political Economies of Industrial Societies from U.C. Berkeley (1984). (Id. at 2.) He currently works as “General Manager, Liner Development” at the Marine Division, Port of Portland, where he is responsible for the “maintenance and development of the Ports container cargo business, rail

marketing development and management of the overseas offices” and has “led container terminal container negotiations,” “initiated port review of long-standing operating model at the Port of Portland,” and “spearheaded a major turn-around of the Port of Portland container franchise.” (Id.; ECF No. 1044-6 at 2.) Borossay previously worked as “Operations Manager” at Hapag-Lloyd, where he was “responsible for comprehensive hazardous materials procedures for Hapag-Lloyd’s US West Coast operations” and “formulated and implemented ISO 9002 quality program and procedures for Southern California office, terminals, depots, trucking firms and vendors,” “drafted contract language for Southern California chassis pool” and “resolved local claims issues with truckers, depots, railroads and terminals.” (ECF No. 1044-6 at 2.) Between 1988 and 1994, he worked at Hanjin Shipping and Sea-Land Services as “Intermodal Operations Manager” and “Equipment and Cargo Control Supervisor” respectively. (Id. at 2-3.) At Hanjin Shipping, Borossay “established systematic rail system for East/West traffic in North America,” and “implemented policies and procedures for intermodal operations for global systems and formulated business transportation plans for global customers.” (Id. at 2.)

Borossay’s knowledge of port operations is based upon his experience of working with terminals on the West Coast:

Q. Your knowledge about the practice in terminals in the United States is limited to just those terminals that you mentioned earlier on the West Coast; right?

A. That’s right. That's where I worked is on the West Coast my entire career.

* * *

Q. So . . . you could not say that you had specific knowledge about the practices of terminals in the Gulf region of the United States; correct?

A: I haven’t worked in a Gulf terminal in the United States. That is correct.

(Borossay Dep. Tr., ECF No. 1044-2 at 217:25-218:6; id. at 218:23-219-6.)

The report begins with a factual background regarding MSC's operations and its knowledge concerning DVB. The report mostly consists of factual narrative regarding MSC's access to information about the hazardous characteristics of DVB. Specifically, the Borossay report states that prior to the voyage, MSC received a material safety data sheet (MSDS) detailing the hazard information for DVB on multiple occasions and that the director of MSC's dangerous cargo department confirmed possession of this material safety data sheet, and reviews the information in the data sheet. (See Borossay Rpt., ECF No. 1044-1 at 5.) The report also discusses MSC's access to a global chemistry database with information regarding "dangerous" goods such as DVB, and hazardous-material information that MSC had received for previous shipments of DVB. (Id. at 8.)

This extensive factual recitation is followed by the crux of Borossay's opinions on the matter: "[D]espite the extensive information which MSC had in its possession and available to it concerning the hazards of DVB from the [data sheets] and multiple other sources, MSC ignored that information." (Id. at 11.) Borossay opines that "MSC failed to follow industry practices relating to the carriage of DVB" because MSC "(1) ignored warnings and instructions related to the hazards of DVB which were provided to MSC and which MSC had; (2) failed to incorporate those warnings and instructions in a centralized database; (3) failed to share those warnings and instructions with its terminal agent New Orleans Terminal; and (4) failed to act on those warnings and instructions with regard to stowage of the DVB

aboard the Vessel.” (*Id.* at 4.) Borossay’s conclusions rely upon general reference materials that MSC had access to, and documents regarding other shipments of DVB or rate request inquiries made in the past. He states, “[m]ost container ocean carriers have policies that provide for a comprehensive review of a hazardous cargo to be shipped prior to accepting bookings of such a cargo for carriage.” (*Id.* at 11.) He also asserts that “[p]roper practices for an ocean carrier transporting dangerous cargo include assembling all information received by the carrier into on centralized location that is updated as more information becomes known to the carrier,” and that this database “can” be used “to plan proper pre-loading storage and onboard stowage of dangerous cargo.” (*Id.* at 13.)

MSC has moved to preclude Borossay on the following bases: (1) his proposed testimony lies beyond his area of expertise because his professional experience cannot and does not inform his conclusions; (2) his opinions are not reliable; and (3) his proposed testimony is not helpful. (Mem. in Support of Motion to Exclude S. Gregory Borossay, ECF No. 1045.) The Court agrees with points (2) and (3), and therefore precludes Borossay’s proffered testimony.

There are at least two significant problems with Borossay’s report. First and most importantly, the subject matter of Borossay’s asserted expertise—the utility of a centralized database of information about hazardous cargo—is not a subject on which the Court needs an expert. Most of Borossay’s report presents a detailed factual recitation of what information MSC or its agents received regarding the characteristics of DVB from various sources. The report also contains repeated

factual assertions regarding MSC's failure to create and maintain a centralized database or otherwise track this information over time. These are simply facts to be proven by the parties and found by the factfinder; the Court does not need the assistance of an expert on these matters. Nor does the Court need an expert to testify regarding the utility of a centralized informational database as a general proposition or as applied to these alleged facts here. The parties should establish, as a factual matter, whether such a database existed for MSC or not (which cannot be done with expert testimony), and then present arguments as to whether the existence or nonexistence of such a database is relevant to MSC's liability.

Second, to the extent that Borossay claims to present expert testimony on industry practice regarding centralized databases, the basis for his opinions on standard industry practice is unclear. Unlike the factual narratives and general assertions of the utility of a centralized database, specialized or technical industry practice can be a topic on which a Court may find expert testimony helpful. However, because he cannot adequately explain the basis for his opinions on industry practice, Borossay's testimony on this topic is not sufficiently reliable under Rule 702.

Borossay's deposition indicates that his knowledge regarding how ocean carriers review dangerous goods shipments is based on the training he received at Sea-Land:

Q. What portion of [the nine month training period] did you spend at the dangerous goods department?

A. It was a portion of a week or two when we were in Elizabeth.

* * *

Q. And what did you learn? What did the dangerous goods department of Sea-Land do in 1989?

A. That was an introductory training, just information about what that department did, how they checked on hazardous information, what research they did.

* * *

Q. . . . Do you have a firm understanding as you sit here today as to what functions Sea-Land's dangerous goods department performed?

A. I know they vetted the initial hazardous bookings that were new bookings to the company, and I know that they were involved in researching new shippers. I'm not familiar with every aspect of what they did back in 1989.

Q. . . . What does vetting mean to you?

A. Reviewing new hazardous bookings for acceptance for booking by the company.

(Borossay Dep. Tr., ECF No. 1044-2 at 48:12-16; id. at 48:24-49:7; id. at 49:19-50:6.)

Yet Borossay appeared unable to explain how Sea-Land's dangerous goods department reviewed bookings of dangerous goods shipments:

Q. Do you know what the DG department would do on receipt of a fax from a local booking person of that nature?

A. They would review whether Sea-Land could accept that cargo for carriage on a Sea-Land vessel.

Q. Do you know what criteria they would employ in determining whether or not Sea-Land could accept that cargo?

A. I know that they would review whether the cargo could be safely handled and I know that they would review whether the cargo can be stowed safely on the vessels.

Q. Do you know how they would determine whether the cargo could be safely handled and could be stowed safely on the vessels?

A. They conducted a review. I spent a limited time in the Elizabeth, New Jersey, office so I don't know all the things that they reviewed. We know they had reference material there.

Q. And do you know what rules they had about when they would consult reference materials for this purpose?

A: I don't know specifically when they would and would not consult reference materials.

(Id. at 55:18-56:25.)

In addition, Borossay concludes:

“MSC failed to implement proper procedures with New Orleans Terminal.” (Borossay Rpt., ECF No. 1044-1 at 14.) Borossay opines that “[m]ost container ocean carriers ask that shippers deliver the hazardous declaration, dock receipts, and MSDSs to the terminal facility when the container is delivered for export . . . [which] is then input into the terminal operating system and cross-checked for inconsistencies against information in the carrier’s operating system. . . . MSC should have directed NOT to require submission of an MSDS with each shipment of dangerous goods received [And] should have also directed the terminal to provide those MSDSs to the Vessel’s Master.”

(Borossay Rpt., ECF No. 1044-1 at 15.) However, in his deposition, Borossay conceded that the carriers he was directly familiar with did not have any practice of requiring shippers to provide MSDSs to terminals, could not name a carrier that asks shippers to provide MSDSs to terminals and admitted that his conclusions were out of line with industry standard:

Q. Sea-Land Services never had an actual rule requiring shippers to provide MSDSs with respect to all dangerous goods shipments; correct?

A. I don’t believe they had a rule to provide—requiring an MSDS be delivered, no.

* * *

Q. And Hanjin never had a rule specifically requiring that its shippers provide MSDSs during the in-gate process at terminals; right?

A. That’s right; no requirement per se.

Q. And Hapag-Lloyd never had a requirement that its shippers must provide an MSDS to the terminal during in-gating of dangerous goods shipments; correct?

A. That’s right; not a requirement.

* * *

Q. Can you name a single carrier that you know for a fact asks shippers to provide MSDSs to terminals? It’s a “yes” or “no.”

A. No.

* * *

Q. Mr. Borossay, is it the custom and practice, in your opinion, that a terminal would require submission of an MSDS with each shipment of dangerous goods that it receives?

A. I think you've asked that. I don't think it's the custom and practice at this time.

Q. Do you think it's the custom and practice that a terminal would provide MSDSs to a vessel's master with respect to each dangerous cargo to be loaded aboard the vessel?

A. I think at this time it's at the master's request, to my understanding.

(Borossay Dep. Tr., ECF No. 1044-2 at 214:19-25; id. at 215:9-14; id. at 215:24-216:4; id. at 338:2-6; id. at 343:4-21.)

In addition, Borossay concludes:

MSC failed to exercise due care in stowing the DVB aboard the vessel. Most container ocean carriers utilize computer software for vessel stowage that incorporates hazardous cargo regulations as defined by the IMDG Code and SOLAS. However, these software programs while highly sophisticated should not be relied upon exclusively. . . . MSC[']s exclusively [sic] reliance on an IMDG Code-driven computer program for hazardous cargo stowage fails to account for the hazardous characteristics of cargo which may not be captured by the IMDG Code designations. . . . MSC did not follow industry practices in careful stowage and planning.

(Borossay Rpt., ECF No. 1044-1 at 15.) However, in his deposition Borossay stated that he had not reviewed MSC's stowage program and had no reason to think that the stowage of the casualty DVB shipments was not in compliance with the IMDG Code:

A. I haven't reviewed the stowage program for MSC.

Q. Why not?

A: I think that the scope of what I was asked to address didn't involve that.

Q. I'm sorry. You gave opinions, strong opinions that MSC's stowage of DVB aboard the vessel did not comport with the industry practice; right?

A: Their procedures in handling dangerous goods did not comport with the precautions that most lines take for hazardous cargo receipt and delivery.

Q. How can you give opinions like that if you don't even know what the actual capabilities of the stowage planning program used by MSC are?

A: It's evident from the reading that I did that they haven't taken all the precautions that they should take.

Q. Are you aware that MSC's stowage of the DVB shipments aboard the FLAMINIA complied with the IMDG Code requirements?

A: I read that in one of the reports, yes.

Q. Do you have any reason to disagree with that?

A: I don't have any reason to disagree with that specifically.

(Borossay Dep. Tr., ECF No. 1044-2 at 320:10-321:22.)

Finally, Borossay's deposition testimony indicates that his proffered expert testimony may not be a reliable basis for the Court to understand existing industry practice because he concedes that he is "recommending a standard of care," making it unclear whether he is actually testifying about real-world practice or whether he is opining on a legal conclusion regarding the proper legal standard for negligence liability. (See id. at 314:11-16). Borossay's report concludes that "MSC failed to properly assemble the information it received and had concerning DVB for review and operational implementation." (Borossay Rpt., ECF No. 1044-1 at 13.)

According to Borossay, "[p]roper practices for an ocean carrier transporting dangerous cargo include assembling all information received by the carrier into one centralized location that is updated as more information becomes known to the carrier." (Id.) Borossay opines that all the material and information in MSC's possession (MSDSs from Dow Chemical and Deltech, the BIG chemical database, the Hawley's Chemical Dictionary, a request for a quote to transport DVB, the dock receipts provided to New Orleans Terminal, the inland bills of lading with attached MSDSs provided to New Orleans Terminal, and the master bill of lading

instructions provided to MSC) should have been incorporated into a centralized database. (Id.) However, when asked about what he meant by “proper practices” in his deposition, Borossay testified that he was “recommending a standard of care,” not describing an existing industry practice in the real world:

Q. First of all, what do you mean by “proper practices”?

A. I mean safe practices for accepting hazardous cargoes on ocean-going vessels.

Q. When you say “proper practices,” are you describing a practice that exists today in the real world or are you describing a hypothetical practice that you’re recommending should be employed by a carrier?

A. I’m recommending a standard of care that would ensure the safety of the vessel operation, the crew, et cetera.

* * *

Q. What carriers are you aware of that incorporate warnings and instructions in a centralized database, as you state here?

A. The carriers that I’ve worked for and am familiar with have had that practice or have developed information about the cargoes they handle.

* * *

Q. Are you referring to the booking database when you say that you think Sea-Land had a centralized database?

A. Yes.

Q. And that booking database only had information provided by shippers in connection with a specific shipment of dangerous goods; right?

A. Correct; shippers and whatever the shippers delivered to the carrier.

Q. They didn’t have information from BIG in their database at Sea-Land, did they?

A. Not to my knowledge.

Q. They didn’t have information from a Hawley’s Condensed Chemical Dictionary in their centralized database, did they?

A. Not to my knowledge.

Q. They didn’t have information from prior shipments of dangerous goods in their centralized database, did they?

A. That’s beyond what I would be aware of.

Q. They didn’t have an MSDS from a different manufacturer of a different product in their database entry for a particular dangerous good, did they?

A. I wouldn’t know that.

(Borossay Dep. Tr., ECF No. 1044-2 at 258:20-259:9; id. at 314:11-16; id. at 315:12-316:22.) The Court therefore cannot conclude that Borossay’s testimony is reliable evidence of existing industry practices rather than testimony regarding a legal conclusion—the standard of care according to which legal liability must be determined.

Because Borossay’s report presents factual findings for which the Court does not need expert testimony, and because the basis and content of his testimony about existing industry practice regarding centralized databases of hazardous goods information is not sufficiently reliable, the Court precludes his proffered expert testimony.

12. Sean Tortora

Cargo claimants have retained Sean Tortora to assess whether the owners/managers of the vessel were adequately prepared for a fire emergency and whether their response was appropriate. Tortora holds a masters in “International Transportation” from the State University of New York Maritime College and has served as a “Commissioned Captain” in the United States Maritime Service. (Tortora Rpt., ECF No. 1051-1 at 40.) He is an Associate Professor in the Department of Marine Transportation at the U.S. Merchant Marine Academy at Kings Point, which is a federal service academy with the “goal of educating and graduating licensed Merchant Marine officers,” and has previously worked as “Military Sealift Command (MSC) ship’s Master (1991-2012), leading diverse, challenging at-sea missions directing underway replenishment, logistics policy,

procedures and systems, special operations, vessel towing, salvage, and rescue operations.” (Id. at 41.)

In the introduction of his initial report, Tortora opines “[t]he MSC FLAMINIA was put to sea in a condition not prepared to respond to the explosion and fire With a properly prepared ship and crew there would have been a very different outcome.” (Id. at 4.) “My overall impression is that owners/managers showed a surprising level of ambivalence with respect to fire preparedness and training.” (Id.) According to Tortora, “[d]elay in sounding the fire signal to summon crew to fire stations,” “[d]elay in ordering release of CO2 to Hold 4,” and “[d]elay in carrying out CO2 release order and actually releasing CO2 to Hold 4,” resulted in “failure to stop [the] explosion from happening. (Id. at 5.) He also opines that the crew was out of compliance with legal requirements regarding fire preparation. (See id. at 14.)

In his supplemental rebuttal report Tortora opines that based upon his estimated position of the ship, several firefighting and salvage vessel resources, equipped with water cannons, were available nearby that could have been “used to fire water into Hold 4 and, check its spread to adjacent holds, limit damage to the ship, and ultimately extinguish the fire.” (Tortora Supp. Rebuttal Rpt., ECF No. 1051-3 at 3-4.)

In section one, Tortora relies on testimony of Captain Langer, Chief Engineer Tarnowski, and Second Engineer Pokusa to determine the exact time the captain gave the order to release the CO2. (Tortora Rpt., ECF No. 1051-1 at 7.) He

additionally posits, “Tarnowski did not know how to use the [CO2 fire-extinguishing] system and tried to figure it out in the middle of an emergency,” but also notes that Tarnowski testified that he did not need to review the [CO2] manual,” as “[i]t’s an easy system to operate.” (Id. at 12, 24.) At his deposition, Tarnowski stated that at the time he received the order to release the CO2, he knew how to operate the system. (See Tarnowski Dep. Tr., ECF No. 1051-57 at 65:21-69:22)

Tortora postulates that the main engine shutdown following the first CO2 release “caused chaos in the engine department, as everyone focused their attention on restoring the engine room to operating condition.” (Tortora Rpt., ECF No. 1051-1 at 12.) However, at his deposition Tarnowski stated that after delegating the task of restarting the main engine to the second engineer and electrician, he remained in the CO2 room himself, awaiting further instructions, and the orders on the timing and release of CO2 came from the bridge. (Tarnowski Dep. Tr. at 88:9-89:4; id. at 98:17-24; id. at 212:17-24.) More importantly, Tortora’s opinions regarding the mental state of the crew are speculative, and based on inferences from depositions of crew members rather any special expertise on the matter.

Conti/NSB has moved to preclude the following opinions from Tortora’s proposed testimony: (1) opinions about the speed with which the crew released CO2 upon detection of smoke because they are purely ipse dixit statements; (2) opinions regarding confusion and chaos among the crew and its perceived contribution to any delay in the release of CO2 since they are speculative factual determinations and

not based on any technical expertise; and (3) legal conclusions regarding alleged violations of governing laws and regulations. (Mem. in Support of Motion to Exclude Sean Tortora, ECF No. 1047.)

The Court agrees with Conti/NSB on these points. First, Tortora's opinion that "the explosion in [Cargo Hold 4] could have been prevented with a prompt release of CO₂" and that "CO₂ would have inerted the atmosphere in hold 4 and prevented any explosion or fire from developing" is unexplained and unsupported, rendering it inadmissible ipse dixit. (Tortora Rpt., ECF No. 1051-1 at 5.) Indeed, his only stated basis for this opinion is a "Study Guide for Marine Firefighting, Fire Prevention, and Fire Safety," which he authored. (Id. at 5 & n.1.) See Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1977) ("[N]othing in either Daubert or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the ipse dixit of the expert."). Tortora's conclusion that "[i]f the CO₂ fixed firefighting system on the FLAMINIA were used properly, it would be impossible to have combustion, fire, or an explosion in Hold 4" is precluded for the same reason. (Tortora Rpt., ECF No. 1051-1 at 8.)

Second, Tortora repeatedly offers factual determinations regarding the crew's state of mind and the atmosphere on board while the crew was responding to the emergency. For example, Tortora states that a shutdown of engine equipment "caused chaos in the engine department, as everyone focused their attention on restoring the engine room to operating condition." (Tortora Rpt., ECF No. 1051-1 at 12.) He also testifies that part of the alleged delay in activating the ship's CO₂

firefighting system occurred because “[c]learly Chief Engineer Tarnowski did not know how to use the system and tried to figure it out in the middle of an emergency. His unexplained delay in getting the system into operation after receiving the order to release CO₂ indicates that he was not knowledgeable in its use.” (*Id.*) While Tortora may testify as to proper marine firefighting techniques and training, he is not a percipient witness to the events at issue and cannot opine on what any member of the crew was thinking or feeling at the time. Tortora’s opinions as to the knowledge of the crew or any “chaos” on board are speculative and involve no application of particular “technical or other special skills,” and are therefore precluded. *Sciallo v. Tyco Int’l Ltd.*, No. 03-cv-7770, 2012 WL 2861340, at *5 (S.D.N.Y. July 9, 2012).

Finally, at various points during his report, Tortora offers legal conclusions based on his interpretation of the governing laws and regulations and their alleged violations. While offering his opinion on the required minimum concentration of CO₂ aboard the vessel, Tortora engages in a discussion of “minimum standards of time needed to reach the required discharge concentration saturation for marine fixed CO₂ fire-extinguishing systems” under SOLAS, IMO Fire Safety Systems Code, the Code of Federal Regulations and the National Fire Protection Agency Standard on CO₂ Extinguishing Systems, and concludes “there should have been no delay in ordering the release of CO₂ into Hold 4 as soon as a smoke alarm sounded and smoke was visually confirmed from the bridge.” (*Id.* at 8-10.)

In addition, Section 3 of the report, which deals with Tortora's opinions on the owners' failure to properly man the vessel and train the crew, contains a number of legal conclusions regarding compliance with SOLAS and Seafarers' Training, Certification and Watchkeeping Code and Convention ("STCW"): "Deficient firefighting training and fire drills, in violation of STCW and SOLAS" (Id. at 14; see also id. at 14-20); "[t]he FLAMINIA Violated SOLAS When It Sailed on the Voyage in Question. Insofar as I have established that the training [of] the officers of the FLAMINIA did not meet STCW requirements for training, they also, therefore, were in violation of SOLAS." (Id. at 20-22); "[t]he extreme time gap between the dates of the FLAMINIA officers training certificates for Basic Safety Training and Advanced Firefighting the July 14, 2012 incident is a direct violation of owners/managers' ISM QMS requirement to thoroughly check all crewmembers for proper qualifications," (id. at 21); "Proper new crewmember familiarization was not performed in violation of SOLAS," (id. at 22; see also id. at 22-25.); "the incompetent response by the Master, Officers, and crew on July 14, 2012 . . . was the direct result of their lack of training, insufficient fire drills, lack of familiarization, and owners/operators' general ambivalence to fire safety and preparedness. Each of the failures [misuse/nonuse of the NAVECS program; nonuse of fire pumps; failure to boundary cool; disorder [sic] CO2 Room; disorder on Scene; decision to stop the vessel; disorder during abandon ship] directly flows from owners/mangers' failure to hire properly trained officers and ensure proper fire drills and familiarization aboard the FLAMINIA was executed." (See id. at 25-30.)

These portions of Tortora's report are therefore excluded as presenting improper legal opinions.

The Court therefore GRANTS Stolt's motion to preclude Tortora in part as discussed above, but DENIES the motion as to the remainder of Tortora's three reports.

13. Todd Duke

Stolt has proposed Todd Duke as an expert to "evaluate the response procedure employed by the crew in attempting to extinguish or contain the smoke condition prior to the explosion." (Duke Rpt., ECF No. 1051-41 at 4.) Duke is the "Director of Fire Response" for Resolve Marine Group, which "specializes in shipboard fire and emergency response and worldwide salvage." (Id.) He has "over 30 years of experience in marine casualty response" and has been "involved in a large number of vessel fires either during the firefighting phase or post casualty investigation including two cargo hold fires where we continued CO2 deployment for several days." (Id. at 4-5.)

Duke's report also discusses the failures by Conti/NSB to "properly train and drill the Vessel's crew for CO2 deployment and their failure to test the Vessel's CO2 system." (Id. at 4.) With regard to the crew's response, Duke concluded:

[T]he crew allowed an inordinate amount of time to pass between the initial smoke alarm and the first deployment of CO2, as well as between the second and third deployments of CO2. In addition, the crew failed to discharge the required number of CO2 cylinders during the second and third deployments prior to the explosion. I understand that fire and explosion expert Scott Davis has concluded in a separate report that had the crew discharged CO2 without multiple delays and

in the required quantity, it is likely the explosion would not have occurred.

(Id.)

Conti/NSB has moved to preclude the following opinions from Duke's proposed testimony: (1) opinions about the speed with which the crew released CO₂ upon detection of smoke because they are allegedly ipse dixit; (2) opinions regarding confusion and chaos among the crew and its perceived contribution to any delay in the release of CO₂ since they are speculative and not based on any technical expertise; and (3) conclusions as to how the explosion could have been prevented by a faster release of CO₂. (Mem. in Support of Motion to Exclude Todd Duke, ECF No. 1047.)

The Court agrees that Duke impermissibly opines on crew members' state of mind and the atmosphere on board the ship while the crew attempted to respond to the emergency. Much like Tortora, Duke speculates on the mental state of the crew and its effect on the response effort based solely on statements made during crew members' depositions: "The improper installation of the CO₂ system resulted in a shutdown of various equipment in the engine room, including the auxiliary boiler and ventilation fans, which contributed to delays and confusion between the second and third CO₂ deployments. This confusion included multiple crew members not being able to perform their assigned duties based on the Vessel's muster list." (Id. at 9 (emphasis added).) The report consists largely of a narrative of the crew's response based on excerpts taken from the crews' depositions, and is followed by the conclusion:

Other than the crew's unfamiliarity with the Vessel's CO2 system due to insufficient training and drilling, and the crew's failure to employ the NAVECS, there does not seem to be a logical explanation for the extensive length of time (1 hour) between the initial smoke alarm and the first deployment of CO2. The Vessel's improperly installed CO2 system, which had not been tested properly, resulted in a shutdown of equipment in the engine room and contributed to the delay (nearly 1 hour) between the second and third deployments. There is also no satisfactory explanation for why the recommended number of CO2 cylinders were not discharged.

(Id. at 10 (emphasis added).) These are factual determinations regarding the crew's state of mind that must be left to the factfinder. While Duke may present expert testimony regarding the appropriate response time, or appropriate training levels, he cannot offer a speculative factual conclusion about the crew's knowledge. Those portions of Duke's report that present factual determinations regarding the crew's knowledge, "confusion," or other states of emotion or states of mind are therefore precluded. In addition, the Court agrees that Duke's conclusion that "without delay [in the deployment of the CO2 system], the explosion would not have occurred" is not admissible because, as with Tortora's similar conclusion, it displaces the role of the factfinder in determining the cause of the casualty.

The Court disagrees, however, that Duke's opinions as to the appropriate timing of the release of CO2 are ipse dixit. Conti/NSB argues that these opinions must be precluded because Duke cites the report of another expert, Scott Davis, which Duke did not attempt to independently verify. (Mem. in Support of Motion to Preclude Various Firefighting Experts, ECF No. 1047 at 9.). However, Rule 703 allows an expert to rely upon the opinions of other experts in reaching his or her own conclusions, as long as those opinions are the type of data on which an expert

in the field would reasonably rely. See Fed. R. Evid. 703. In addition, Duke presents his own detailed analysis of the response timing of the crew, including alleged delays in deployment of the CO2 system, for which he does not significantly rely upon the Davis report. (See Duke Rpt., ECF No. 1051-41 at 7-9.) Duke's opinions on the training on, deployment of, and testing of the CO2 system are therefore admissible.

14. John Gow

Bulkhaul has proposed John Gow as an expert to “consider whether the firefighting response and use of the fixed firefighting installations on board the MSC FLAMINIA were adequate” and “evaluate [whether] the training and monitoring of the crew prior to the incident led to any inadequacies in their response.” (Gow Rpt. ECF No. 1051-45 at 6.) His C.V. is appended to his report at Appendix I. (Gow Rpt. App'xs, ECF No. 1051-46 at 54.) Gow has been involved in the fire industry for the past thirty-seven years, first as a “professional fire officer,” then as a “full time fire investigator in the second largest brigade in Europe,” and is currently employed as a “Senior Investigator” at IFIC Forensics. (Gow Rpt. ECF No. 1051-45 at 5.)

The first few sections of the report are dedicated to a description of the vessel, the sequence of events culminating in the explosion, the alarm timeline, an overview of the regulatory framework and company procedures, and the testimony of the vessel's crew regarding their response to the emergency. (Gow Rpt., ECF No. 1051-45 at 9-23.) Gow concludes, inter alia, that the crew “did not act promptly to

tackle and control the developing situation within Hold #4,” that “there was a breakdown within the command structure,” that “the deployment of the CO₂ into Hold #4 was delayed” without good reason, and that “the crew training with NSB was inadequate.” (Id. at 67-69.)

Conti/NSB has moved to preclude the following opinions from Gow’s proposed testimony on similar bases as Tortora and Duke. As with the other firefighting experts, the Court precludes Gow’s report in part and admits it in part. First, Section 3 (“Description of the Vessel”) is precluded as inadmissible factual narrative. Second, the Court agrees with Conti/NSB that Gow’s statements regarding crew members’ state of mind, such as his conclusion that “the Captain, in effect, was unaware of the actions been [sic] taken by, and the location of his command crew,” must be precluded. (See id. at 67.) Third, Gow’s conclusion that “not implementing a rapid and material firefight response after the alarm was raised . . . led to the explosion occurring” must be precluded as displacing the role of the factfinder in determining the cause of the casualty. (Id. at 28; see also id. at 43 (“Had this occurred, the fire would have been controlled or extinguished.”); id. at 67 (“[H]ad the response been in accord with the principles set out in the Manual of Ship Safety Service it is likely that the fire would not have been as severe and that the explosion and abandonment of the vessel would have been prevented.”).) This is also true for his conclusion that “[t]he fire in Hold #4 grew because there was a delay in the release of the CO₂. Had the CO₂ been released earlier, more rapidly in greater concentrations, the released CO₂ would have inhibited the fire growth,

retarding fire spread and development, and preventing the circumstances from which an explosion could occur.” (Id. at 37.)

Conti/NSB’s motion to preclude Gow’s report is therefore GRANTED in part as to the portions discussed above, and DENIED as to the remainder of the report.

15. Deborah Kaminski

Deltech has proposed Deborah Kaminski “to offer [her] expert opinions regarding the thermal analysis of Deltech’s [DVB],” including “the temperature history of the DVB containers from the time they were filled at the factory until the time the fire alarm went off aboard Flaminia.” (Kaminski Rpt., ECF No. 1070-1 at 6, 9.) Her C.V. is attached as Appendix A to her expert report. Kaminski is a professor emerita of mechanical engineering at Rensselaer Polytechnic Institute, where she taught for over two decades. (Id. at 24.) She earned a bachelors of science degree in physics in 1973, a masters degree in chemical engineering in 1976, and a Ph.D. in mechanical engineering in 1985. (Id.) She has co-authored a textbook on thermal engineering and eighty-two articles in refereed publications. (Id. at 6.) In addition to her academic career, Kaminski’s professional experience includes “five years at the General Electric Research and Development Center” where her work “focused on heat transfer in electrical machinery,” her “doctoral research on computational fluid dynamics,” and her service as Program Director of Thermal Transport and Thermal Processing at the National Science Foundation. (Id. at 6, 24.)

Kaminski's report analyzes what she deems "the most important factors affecting the DVB temperature" and "calculate[s] the remaining life of the DVB, that is, the number of days until the onset of polymerization" in order to predict a temperature history for the DVB on the Flaminia voyage. (Id. at 9.) The report presents experimental and theoretical simulations of the thermal history of the DVB containers, both while they were stored on the docks at New Orleans Terminal and after they were loaded into Cargo Hold 4, in order to determine whether given factors such as the initial temperature of the DVB, exposure to sunlight, exposure to ambient air temperature, and the heat transfer among containers, the DVB could have been expected to autopolymerize during the Flaminia voyage. (Id. at 17-21.) Kaminski also analyzes the potential impact of heat transfer from Chemtura's diphenylamine ("DPA") to the DVB, with which the DVB was stored both at New Orleans Terminal prior to the voyage and in Cargo Hold 4. (Id.) In short, Kaminski concludes that the DVB would not have autopolymerized quickly enough to fit the timeframe of the casualty without an additional heat source. (Id. at 22.)

Chemtura, Rubicon, and Bulkhaul jointly move to preclude portions of Kaminski's report as unreliable due to its allegedly erroneous factual premises or alleged failure to consider facts the movants argue are necessary to a reliable analysis. For example, movants argue that Kaminski's temperature reconstruction is unreliable because she "begins her heat transfer calculations with a DPA temperature . . . substantially above . . . temperature reading collected by Rubicon loaders" at the time the DVB was loaded onto the Flaminia. (Mem. in Support of

Motion to Preclude Portions of the Report of Deborah Kaminski, ECF No. 1069 at 13.) In addition, they object that her calculations are “unreasonable” because they “did not include elevated air temperatures in the cargo hold” and assumed temperatures in the hold were the same as “ambient air temperatures of the vessel at sea,” (*id.* at 14), and unreliable because her calculations did not account for the “thermal conductivity of solid DPA” as the DPA cooled from liquid over time. (*Id.* at 16.) They do not challenge Kaminski’s qualifications as an expert or the alignment of her expertise with the scope of her proffered testimony.

Even if movants are correct that there are flaws in Kaminski’s factual premises, “[u]nless the information or assumptions that [the] expert relied on were so unrealistic and contradictory as to suggest bad faith, inaccuracies in the underlying assumptions or facts do not generally render an expert’s testimony inadmissible. Less egregious suggestions that the assumptions are unfounded go to the weight, not the admissibility, of the testimony.” Washington v. Kellwood Co., 105 F. Supp. 3d 293, 306 (S.D.N.Y. 2015) (internal citations and quotation marks omitted). Nothing in Kaminski’s report or movant’s submissions indicates egregious factual errors; indeed, disputes about facts such as the temperature in Cargo Hold 4 while the *Flaminia* was at sea are exactly the kinds of issues to be resolved by the factfinder at trial. The Court declines movants’ invitation to predetermine these facts as a basis to preclude an expert. Movants’ objections to the Kaminski report therefore go to how much weight her analysis and conclusions should be given, not the reliability of her methods or her qualifications to serve as

an expert on the topics upon which she opines. See Amorgianos, 303 F.3d at 267 (“Only serious flaws in reasoning or methodology will warrant exclusion.”). The appropriate means to test any alleged weaknesses in her data, calculations, or factual premises is therefore cross-examination, not preclusion.

The joint motion of Chemtura, Rubicon, and Bulkhaul to preclude portions of the Kaminski report is DENIED, and her report is admitted in its entirety.

16. David Gossman

Conti/NSB has moved to preclude various experts who have opined that a separate, preexisting fire in Cargo Hold 4 contributed to the casualty. In particular, Conti/NSB seeks to preclude David Gossman, who has been proffered by Stolt as a chemical-forensics expert to opinion on the cause of the casualty. Gossman holds bachelors and masters degrees in interdisciplinary physical science. (Gossman Rpt., ECF No. 1101-3 at 3.) He is a Fellow of the American Institute of chemists and a Certified Fire and Explosion Investigator, and he currently serves on the American Institute of Chemists Editorial Review Board. (Id.) He has over three decades of experience in forensic chemistry, and “[o]ver the last sixteen years [has] provided expert witness and investigation services in matters of fires, explosions, chemical releases, personal injury, enforcement actions, and similar issues.” (Id. at 3-4.)

Gossman’s report states he has examined chemical samples taken from the smoke detector lines of Cargo Hold 4 and from elsewhere on the Vessel. According to Gossman, analysis of these samples “shows that the DVB signature in the hold 4 smoke lines is not the product of the polymerization process, but is the product of

pyrolysis of [polymer DVB],” meaning that polymer DVB was “thermally decomposing” due to a preexisting fire rather than suffering a “runaway reaction” of autopolymerization. (See id. at 5, 50-51.) Gossman also opines that chemical signatures of PVC and paper pulp in the smoke lines indicates that these materials were burning in the hold “prior to the actuation of the smoke alarm.” (Id. at 5.)

Conti/NSB does not challenge Gossman’s qualifications or methods; rather, it objects that his opinions are “speculative and either not based on any evidence or contrary to the evidence.” (Mem. in Support of Motion to Exclude the Expert Testimony that There was an Pre-Existing Fire, ECF No. 1055 at 4.) Yet it is clear from Gossman’s report that his opinions are based on the results of extensive laboratory testing, including of chemical samples from the Flaminia, and there is no indication that they are, as Conti/NSB alleges, “not based on any evidence.” (Id. at 4.) Conti/NSB’s quarrel is with Gossman’s conclusions, not his methodology or lack of factual basis. (See, e.g., id. at 17 (“Mr. Gossman’s opinion that an external heat source was necessary to raise the internal temperature of the DVC to above 400°C is contradicted by the evidence and should be excluded.”).) The admissibility inquiry under Rule 702 is directed to “evidentiary relevance and reliability The focus, of course, must be solely on principles and methodology, not the conclusions they generate.” Daubert, 509 U.S. at 595. If Gossman’s opinions are “contrary to the evidence,” as Conti/NSB asserts, that is properly addressed on cross-examination. See Daubert, 509 U.S. at 596 (“Vigorous cross-examination, presentation of contrary

evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.”).

The motion of Conti/NSB to preclude the testimony of Gossman and other experts that there was a preexisting fire is DENIED.¹¹

III. CONCLUSION

The Court has set forth herein precise explanations of which parts of which expert reports it has excluded, and why. The motions to preclude experts Borossay and Walker are GRANTED in their entirety. The motions to preclude experts Richard, Kaminski, and Gossman are DENIED in their entirety. The motions to preclude the remaining proffered experts are GRANTED in part and DENIED in part as detailed in this Opinion & Order.

Any further motions regarding any expert must be made by single letter motion of not more than **ten pages** per expert, e.g., if a party brings an application relating to two or more experts, both should be addressed in a single submission.

¹¹ Conti/NSB's motion also argues for preclusion of any other expert that shares Gossman's conclusion that there was a preexisting fire. On its face this argument suffers the same deficiency of objecting to the result of an expert's analysis rather than qualifications or reliability.

The Clerk of Court is directed to close the motions at ECF Nos. 1037, 1059, 1030, 1026, 1017, 1034, 1013, 1053, 1009, 1020, 1042, 1046, 1052, and 1068.

SO ORDERED.

Dated: New York, New York
July 28, 2017

A handwritten signature in black ink that reads "K. B. Forrest". The signature is written in a cursive style with a large initial "K" and a stylized "B".

KATHERINE B. FORREST
United States District Judge