IN THE UNITED STATES DISTRICT COURT DISTRICT OF KANSAS

Raytheon Aircraft Company,

Plaintiff,

v. Case No. 05-2328-JWL

United States of America,

Defendant.

MEMORANDUM AND ORDER

This is an environmental case filed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., concerning trichloroethylene (TCE) contamination at the Tri-County Public Airport Site in Herington, Kansas. Plaintiff Raytheon Aircraft Company alleges claims against the United States (based on the Army Corps of Engineers status as an alleged co-PRP at the Site) for cost recovery under section 107(a) of CERCLA and for contribution under sections 107(a) and 113(f) of CERCLA. The United States alleges counterclaims against Raytheon for cost recovery under sections 107(a)(2) and 107(a)(4)(A) of CERCLA (based on costs incurred by the Environmental Protection Agency) and for contribution under section 113(f) of CERCLA.

This matter comes before the court on Raytheon's motions to exclude testimony from the United States' expert witnesses, including William Kime (doc. 270), Mary Sitton (doc. 273), Gerald Harris (doc. 277), John B. Robertson (docs. 281, 337, 372), and Jay Brigham (doc. 283); and the United States' motions to exclude testimony from Raytheon's expert witnesses, including Andrew Yacenda (doc. 265), and Michael Looney (doc. 274). As will be explained,

the motions relating to Mr. Harris and Mr. Looney are granted in part and denied in part and all other motions are denied.¹

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the Supreme Court instructed that district courts are to perform a "gatekeeping" role concerning the admission of expert scientific testimony. *See id.* at 589-93; *see also Kumho Tire Co. Ltd. v. Carmichael*, 526 U.S. 137, 147-48 (1999). The admissibility of expert testimony is governed by Rule 702 of the Federal Rules of Evidence, which states:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702.

In order to determine that an expert's opinions are admissible, the court must undertake a two-part analysis: first, the court must determine that the witness is qualified by "knowledge, skill, experience, training, or education" to render the opinions; and second, the court must determine "whether the witness' opinions are 'reliable' under the principles set forth" in *Daubert* and *Kumho Tire*. *See Ralston v. Smith & Nephew Richards, Inc.*, 275 F.3d 965, 969 (10th Cir. 2001). The rejection of expert testimony is the exception rather than the rule. *See* Fed. R. Evid. 702 advisory committee notes.

¹In resolving the motions, the court assumes familiarity with previous orders in this case which set forth in detail the factual background and procedural history of the case.

To qualify as an expert, the expert must possess such "knowledge, skill, experience, training, or education" in the particular field as to make it appear that his or her opinion would rest on substantial foundation and would tend to aid the trier of fact in its search for the truth. LifeWise Master Funding v. Telebank, 374 F.3d 917, 928 (10th Cir. 2004). In determining whether the proffered testimony is reliable, the court assesses whether the reasoning or methodology underlying the testimony is scientifically valid and whether that reasoning or methodology can be properly applied to the facts in issue. See Daubert, 509 U.S. at 592-93. The Daubert Court listed four factors relevant to assessing reliability: (1) whether the theory has been tested; (2) whether the theory has been subject to peer review and publication; (3) the known or potential rate of error associated with the theory; and (4) whether the theory has attained widespread or general acceptance. *Id.* at 592-94. In *Kumho Tire*, however, the Supreme Court emphasized that these four factors are not a "definitive checklist or test" and that a court's inquiry into reliability must be "tied to the facts of a particular case." Kumho Tire, 526 U.S. at 150. In some cases, "the relevant reliability concerns may focus upon personal knowledge or experience," rather than the *Daubert* factors and scientific foundations. *Id.* (quoted in *Bitler v.* A.O. Smith Corp., 400 F.3d 1227, 1235 (10th Cir. 2004)). The district court has "considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." *Id.* at 152.

A. Jay Brigham

Raytheon seeks to exclude the testimony of Jay Brigham, whom the United States has

designated to rebut Raytheon's expert witnesses, Mssrs. Doherty and Mesard, concerning the availability of TCE during World War II and the potential use of TCE by the Army Air Force at HAAF during World War II.

Raytheon first contends that Mr. Brigham lacks the requisite knowledge and experience to testify concerning the availability of TCE to the Army Air Force during World War II and aircraft maintenance activities during World War II. Raytheon's argument focuses primarily on the fact that Mr. Brigham, who holds a doctorate in American History, has not researched or written on any topic related to TCE or any topic related to World War II Army aircraft maintenance. In addition, Raytheon highlights an alleged "obvious" factual error in Mr. Brigham's report as further evidence of his lack of experience. The motion is denied. With respect to his opinions concerning the availability of TCE to the Army Air Force during World War II, Mr. Brigham's resume, as supplemented by affidavit submitted with the United States' response to the motion, reflects that he has expertise concerning the War Production Board's regulation and allocation of materials during the war and the processes by which those materials were then distributed to various industries and miliary branches. With respect to what Raytheon calls "aircraft maintenance activities," Mr. Brigham's opinions still focus on allocation issues and the processes by which materials were distributed throughout the Army Air Force to various facilities by virtue of the Army Air Force's "echelon maintenance system." To the extent Mr. Brigham discusses the echelon maintenance system, his report reflects that a factual basis exists for that discussion.

Raytheon next contends that Mr. Brigham's testimony should be excluded because he

"cherry picked" data that supported his opinion while ignoring contrary information. Raytheon first complains that Mr. Brigham disregards certain findings of the War Production Board regarding the supply of TCE during World War II and relies on an inherently unreliable War Production Board policy document regarding the allocation of TCE. However, it is not at all clear that the first document contradicts Mr. Brigham's opinions or that the second document is unreliable. As evidenced by the parties' papers, the contents of both documents are susceptible to differing interpretations. These are matters for Raytheon to explore on cross-examination if it so desires. Raytheon next contends that Mr. Brigham's conclusion that no fourth echelon maintenance was performed at HAAF is unreliable because Mr. Brigham ignored evidence suggesting that fourth echelon maintenance may have been performed at HAAF. But as shown by the United States in its response, the evidence relied upon by Raytheon in no way compels the conclusion that fourth echelon maintenance was performed at HAAF. Thus, while Raytheon may inquire about that evidence during Mr. Brigham's cross-examination, Mr. Brigham's discounting of that evidence does not affect the admissibility of his testimony. Similarly, Raytheon's arguments concerning Mr. Brigham's opinion that fire extinguishers at HAAF did not contain TCE and his opinion concerning electroplating operations are proper fodder for cross-examination but are not a basis to exclude Mr. Brigham's testimony.

Finally, Raytheon moves to exclude Mr. Brigham's rebuttal opinion to Mr. Doherty's opinion that "supply issues did not significantly constrain the availability of TCE to HAAF between 1943 and 1945, inclusive." As stated in his report, Mr. Brigham opines that, contrary to Mr. Doherty's conclusion, "it is my opinion that for most of the World War II era, demand

for [TCE] exceeded the amount being produced." According to Raytheon, this rebuttal opinion should be excluded because it is entirely focused on overall supply issues concerning TCE and does not, in fact, rebut Mr. Doherty's opinion that supply issues did not constrain the availability of TCE to HAAF. The motion is denied. While it is true that the one-sentence overarching "opinion" set forth in Mr. Brigham's report does not, on its face, rebut the corresponding one-sentence opinion set forth by Mr. Doherty, a complete reading of Mr. Brigham's report concerning the basis for his opinion reveals that he does rebut Mr. Doherty's opinion and concludes that supply issues affected the availability of TCE to HAAF through the allocation of materials and the echelon maintenance system.

Raytheon also highlights that Mr. Brigham testified in his deposition that it is not his opinion that supply issues affected the Army Air Force's access to or use of TCE during World War II. According to Raytheon, this testimony evidences Mr. Brigham's agreement with Mr. Doherty's opinion. The court disagrees. Mr. Brigham's deposition testimony appears to be limited to supply issues affecting the Army Air Force's access to TCE and does not appear to touch on the availability or allocation of TCE to HAAF. The motion, then, is denied.

B. John B. Robertson

Raytheon seeks to exclude the testimony of John B. Robertson, whom the United States has designated as an expert witness and rebuttal expert witness regarding causation and cost allocation issues. As will be explained, Raytheon initially moved to exclude various opinions of Mr. Robertson on a variety of grounds and, ultimately, moves to strike Mr. Robertson as an

expert entirely based on alleged misrepresentations made by Mr. Robertson by affidavit filed with the United States' response to Raytheon's initial motion.

1. Mr. Robertson's Expertise

In its initial motion to strike John B. Robertson, Raytheon asserts that certain opinions in Mr. Robertson's expert report concerning the historical use of TCE at HAAF and vapor degreaser operations must be excluded at trial because Mr. Robertson has no expertise in military maintenance operations or vapor degreaser operations. In response, the United States has submitted the affidavit of Mr. Robertson in which he explains in detail the nature of his expertise in these areas. In its reply and subsequent motion to strike Mr. Robertson's affidavit, Raytheon concedes that the expertise delineated in Mr. Robertson's affidavit is sufficient to support the opinions it seeks to exclude, but urges that the court, pursuant to Rule 37(c)(1), strike that portion of Mr. Robertson's affidavit concerning his qualifications because that information was not disclosed in Mr. Robertson's report or his curriculum vitae. According to Raytheon, then, Mr. Robertson, in the absence of the qualifications set forth in his affidavit, remains unqualified to testify concerning historical use of TCE at HAAF and vapor degreaser operations.

The motion is denied. As an initial matter, the court is aware of nothing in the Federal Rules or governing case law requiring an expert to divulge the full panoply of his or her pertinent experiences in the expert report or the expert's CV. In this case, Mr. Robertson's report and CV are detailed and clearly reflect his expertise in the areas in which he offers opinions. Specifically, his report expressly references years of experience with environmental

investigations at numerous World War II-vintage military sites with TCE contamination. Mr. Robertson's report also identifies "historical industrial and military practices" and "industrial processes and associated wastes" as areas of expertise. Mr. Robertson's rebuttal report makes numerous references to Mr. Robertson's experience with vapor degreaser operations. By affidavit, Mr. Robertson merely expands upon this experience in the face of a challenge by Raytheon. Mr. Robertson, for example, identifies specific college courses that he has completed pertinent to vapor degreasing principles. He also explains how he gained knowledge of military maintenance operations through his numerous investigations at military sites and, more specifically, how his work required him to develop technical familiarity with maintenance operations in which TCE might have been used, including vapor degreasing operations. Simply put, the level of detail contained in Mr. Robertson's affidavit was not required to be disclosed in connection with his report or CV and the court will not strike those portions of his affidavit concerning his qualifications.

Even assuming, solely for the sake of argument, that those portions of Mr. Robertson's affidavit concerning his qualifications should have been disclosed in connection with his initial report, the court would not strike the affidavit. Rule 37(c)(1) provides that "[a] party that without substantial justification fails to disclose information required by Rule 26(a) or 26(e)(1)

²Mr. Robertson's rebuttal report was filed on May 4, 2007. Despite the fact that it contained information concerning Mr. Robertson's experience with vapor degreaser operations and Raytheon's contention that this experience was absent from Mr. Robertson's initial report, Raytheon did not move to strike any information from the rebuttal report and did not complain at that time that Mr. Robertson's experience with vapor degreaser operations was newly disclosed.

shall not, unless such failure is harmless, be permitted to use as evidence at a trial, at a hearing, or on a motion any witness or information not so disclosed." The "determination of whether a Rule 26(a) violation is justified or harmless is entrusted to the broad discretion of the district court." *Woodworker's Supply, Inc. v. Principal Mut. Life Ins. Co.*, 170 F.3d 985, 993 (10th Cir. 1999). The following factors, however, should guide the court's discretion: "(1) the prejudice or surprise to the party against whom the testimony is offered; (2) the ability of the party to cure the prejudice; (3) the extent to which introducing such testimony would disrupt the trial; and (4) the moving party's bad faith or willfulness." *Id.*

The court discerns no prejudice to Raytheon resulting from the delayed disclosures concerning Mr. Robertson's expertise. While Raytheon asserts that it has not had the opportunity to cross-examine Mr. Robertson concerning his "purported expertise," the record reveals that Raytheon deposed Mr. Robertson for three full days (including one day of testimony after the issuance of Mr. Robertson's rebuttal report) and had ample opportunity to inquire about Mr. Robertson's experiences concerning environmental investigations at military sites with TCE contamination and his expertise in vapor degreaser operations. Raytheon also claims prejudice in its inability to engage a rebuttal expert "to address these previously undisclosed areas of expertise." Raytheon, however, has not sought leave to obtain a rebuttal expert and, in fact, has secured experts concerning all areas of Mr. Robertson's expertise, including historical use of TCE at HAAF, vapor degreaser operations and aircraft maintenance. Thus, despite the delayed disclosures concerning Mr. Robertson's expertise, there appear to be no gaps in Raytheon's lineup of experts.

2. The *Aragon* Case

In Opinion Four of his report, Mr. Robertson states that the distribution of TCE in soil and groundwater at the Site is consistent with releases from the documented use of TCE at the Site by Beech and is inconsistent with alleged uses of TCE by the Army. In support of this opinion, Mr. Robertson questions Raytheon's suggestion that the Army washed World War II aircraft at wash racks with TCE and states that, in his investigations at many other World War II military aircraft facilities, he has "never come across evidence that TCE was used to wash down aircraft or major sections of aircraft." Raytheon moves to exclude Opinion Four at trial because, according to Raytheon, Mr. Robertson's statement is entirely contradicted by his testimony in another case, Aragon v. United States, 950 F. Supp. 321 (D.N.M. 1996), thereby demonstrating "an utter lack of scientific method and reliability." In response to the motion, the United States has submitted an affidavit of Mr. Robertson in which he avers that he is familiar with the evidence presented in the Aragon case and he is "aware of none that indicates TCE was used to wash aircraft during WWII" such that his opinions in this case are consistent with his opinion and testimony in Aragon.

Thereafter, Raytheon filed a motion to strike Mr. Robertson's affidavit and a second motion to strike Mr. Robertson as an expert witness and for additional sanctions based on Mr. Robertson making "affirmative and fraudulent misrepresentations" regarding the evidence in the *Aragon* case. According to Raytheon, the evidence in *Aragon* demonstrates that the Army used TCE during World War II at Walker Air Force Base in Roswell, New Mexico to wash aircraft. Based on Mr. Robertson's "attempt to defraud" the court, Raytheon seeks its attorneys' fees and

costs relating to Mr. Robertson's depositions and all motions to strike and asks the court to find as an established fact that the Army used TCE at HAAF during World War II to wash aircraft and that the TCE ran onto the ground thereby causing contamination at HAAF.

The motions are denied. The parties' papers on this subject clearly reflect the existence of factual disputes concerning the nature of the evidence presented in *Aragon* and the meaning of Mr. Robertson's testimony. For example, the parties dispute whether *Aragon* even addressed maintenance activities during World War II or whether *Aragon*'s evidence was limited to post-World War II activities. In addition, Mr. Robertson's testimony appears to be limited to the wholesale washing down of aircraft with TCE while much of the evidence from Aragon highlighted by Raytheon appears to contemplate the cleaning or degreasing of engines or other aircraft parts with TCE and then spraying the whole aircraft with water to rinse off the TCE. To resolve these factual disputes, the court needs to hear Mr. Robertson's testimony in context and evaluate that testimony in conjunction with whatever evidence the parties submit from the *Aragon* case.³ If this case were to be presented to a jury, the court would resolve the matter prior

³Raytheon contends that both the district court opinion in *Aragon* and the Tenth Circuit opinion affirming the district court, 146 F.3d 819 (10th Cir. 1998), clearly demonstrate that TCE was used to wash down aircraft. Raytheon bases this argument on one or two sentences from the "factual background" portions of those opinions. The district court wrote that "[t]hroughout operation of the base, the military washed and degreased aircraft and engines in areas on or near runways. Trichloroethylene ("TCE") is known to have been used by the Air Force as a degreasing agent in washing aircraft and engines." 950 F. Supp. at 322. Similarly, the Circuit wrote: "Throughout [the operation of the base], the military washed aircraft and aircraft engines with trichloroethylene ("TCE"), on or near Base runways." 146 F.3d at 822. Unlike Raytheon, the court is unwilling to assume from these sparse sentences, wholly removed from any evidentiary context, that the evidence at trial reflected the wholesale washing down of aircraft with TCE during World War II.

to trial in the context of a separate hearing so that the jury would not be forced to wait mid-trial for the court to resolve the issue. But because this case will be presented to the court in the context of a bench trial, the same case management concerns are not implicated and the court will resolve the issue in connection with the testimony at trial. While the court understands that there might be some benefit to the parties if the court were to resolve the issue prior to trial (*e.g.*, for settlement purposes), the court is not sufficiently persuaded by the information presented thus far that Mr. Robertson has defrauded the court to justify requiring the parties to bear the cost and spend the time associated with conducting an evidentiary hearing prior to trial.⁴ Simply put, then, the court will wait and consider Mr. Robertson's testimony on this issue in context at trial.

Raytheon, in its initial motion, also includes an argument in the section concerning the *Aragon* dispute that Opinion Three of Mr. Robertson's report (that "no direct documentary evidence has been found of any use of TCE by the US at HAAF during WWII") is similarly unreliable because he ignores contrary evidence. It is unclear whether Raytheon has abandoned this argument as it fails to mention the argument in any respect in its reply brief and, in fact, expressly limits its argument to the Aragon dispute when summarizing the grounds on which it seeks to exclude Mr. Robertson's testimony. In any event, the court rejects the argument because the documents and testimony that Raytheon contends Mr. Robertson ignored do not

⁴While the court makes no findings on the issue at this juncture, it is highly unlikely that the court, even if it determined that Mr. Robertson's affidavit were untruthful, would adopt factual findings adverse to the United States (findings that would amount to a liability determination against the United States) as a sanction in the absence of a showing that the requested sanction bears some relationship to the alleged misconduct and that less drastic remedies would not suffice to deter the alleged misconduct.

appear to contradict Mr. Robertson's opinion or, at best, are appropriate topics for cross-examination. By way of example, documents reflecting that there was no difficulty procuring TCE for the Army Air Force during World War II do not, contrary to Raytheon's assertion, contradict Mr. Robertson's statement that TCE would not have been allocated to a base like HAAF because of the level of work performed there. The opinion concerning documentary evidence also does not conflict with the fact that one eyewitness, Colonel Bickerstaff, recalled the use of a vapor degreaser by the Army at HAAF and Mr. Robertson fully addresses that testimony in his report.

3. Mr. Robertson's "Size-Use" Theory

Opinion Five of Mr. Robertson's expert report states that, if it is assumed that the Army used a small TCE vapor degreaser at HAAF, then "the fair share, if any, of US responsibility for the environmental harm at the facility should be, at most, only a fraction of 1 percent." Mr. Robertson arrives at this conclusion by multiplying vapor degreaser volume by years of vapor degreaser use and then comparing the resulting "size-use" factor of the Army to that of Raytheon. Raytheon asserts that this opinion must be excluded because Mr. Robertson's "size-use" theory is untested, unpublished and unaccepted in the scientific community.

In response to Raytheon's argument, the United States again directs the court and Raytheon to the affidavit submitted by Mr. Robertson in which he avers that technical allocation experts faced with environmental cost allocation issues commonly look to (1) the relative size of operations or facilities that used the contaminant; and (2) the length of time those operations

or facilities were employed. He further avers, and explains in some detail, that the principles he relied on in connection with his size-use theory are generally applied by engineers, in the absence of direct quantitative evidence, to estimate relative magnitudes of likely causation to the harm at a particular Site.

While the court may not ultimately agree with Mr. Robertson's approach, the court is comfortable that it is reliable under *Kumho Tire*. Because environmental contamination cases present unique issues of causation, the court is not concerned that Mr. Robertson's theory has not been tested, published or subject to peer review. *See Kumho Tire*, 526 U.S. at 150 (court's inquiry into reliability must be "tied to the facts of a particular case" and, in some cases, "the relevant reliability concerns may focus upon personal knowledge or experience," rather than the *Daubert* factors and scientific foundations). Moreover, Raytheon's concerns that Mr. Robertson's theory may not take into account the quantity of TCE actually utilized or spilled in connection with the vapor degreaser and does not take into account other uses of TCE by the Army are appropriate subjects for cross-examination. Raytheon's motion is denied concerning Opinion Five.

4. Plume Maps

In Opinion Two of his report, Mr. Robertson states that the majority of the TCE in groundwater at the Site originated from releases in the vicinity of Hangar 4. Raytheon moves to exclude this opinion on the grounds that it is not grounded in scientific method or based on actual knowledge. Raytheon challenges one specific statement made by Mr. Robertson as the

basis for his opinion—that "[a]pproximately 5 to 10 times greater mass of TCE is contained within the portion of the plume apparently originating in the Hanger 4 area, based on approximate relative plume areas and TCE concentrations." During his deposition, Mr. Robertson testified that he did not do a quantitative analysis to determine that the Hangar 4 plume was 5 to 10 times larger than the Hangar 1 plume but that he "eyeballed" the lengths of the plumes as depicted in standard plume maps prepared by Raytheon's contractor, Shaw Environmental and, later, enhanced plume maps prepared by McLane Environmental at Mr. Robertson's request. Raytheon complains that Mr. Robertson's informal "eyeballing" methodology renders the potential for error significant and that McLane Environmental's enhanced plume maps are inaccurate and unreliable.

The court will accept Mr. Robertson's "eyeballing" of the Shaw plume maps for what it is—a general conclusion regarding the relative levels of contamination emanating from Hangar 4 and Hangar 1 based a visual examination of the plume maps. Indeed, Mr. Robertson avers that plume maps are generated for the precise purpose of providing a readily available visual inspection of the locations and concentrations of contaminated groundwater and that such visual inspection of plume maps is a widely used technique by scientists and engineers tasked with making semi-quantitative comparisons. Raytheon does not dispute this portion of Mr. Robertson's affidavit and offers no contrary evidence.

With respect to Mr. Robertson's reliance on the McLane enhanced plume maps, the parties dispute whether Mr. McLane (who has not been identified as an expert) independently interpreted and analyzed data from the Shaw maps in preparing the enhanced plume maps

(Raytheon contends that he did so and did so inaccurately rendering Mr. Robertson's use of the enhanced maps unreliable) or whether Mr. McLane simply performed "clerical" work involving superimposing the Shaw maps on an aerial photograph under the close supervision of Mr. Robertson such that the enhanced maps are reliable and accurate. The court believes that the factual disputes surrounding the enhanced plume maps are best resolved in the context of Mr. Robertson's full testimony at trial.

5. Rebuttal Opinions

Raytheon moves to exclude Mr. Robertson's Rebuttal Opinions One, Three and Four on the grounds that they are based on the opinion of another expert, Mary Sitton, whose testimony should be excluded and is the subject of a separate motion. As an initial matter, the court, as explained below, is denying Raytheon's motion to strike Mary Sitton, thus rendering moot much of Raytheon's argument in this regard. In any event, to the extent Raytheon complains that Mr. Robertson relies too heavily on the work of Ms. Sitton, that argument is also rejected. Significantly, Raytheon does not challenge the reliability of Ms. Sitton's analysis and Mr. Robertson's use of Ms. Sitton's analysis is perfectly appropriate. *See Nutrasweet Co. v. X-L Engineering Co.*, 227 F.3d 776, 789-90 (7th Cir. 2000) (argument that expert inappropriately relied on data obtained by others rather than using data he himself generated went to weight rather than admissibility (citing Fed. R. Evid. 703 ("The facts or data in a particular case upon which an expert bases his opinion or inference may be those perceived by or made known to the expert at or before the hearing."); *Walker v. Soo Line R.R. Co.*, 208 F.3d 581, 588 (7th Cir. 2000)

(expert testimony may rely on the opinions or data of others unless the testifying expert's opinion is too speculative or the underlying basis is faulty))).

C. Michael Looney

The United States seeks to exclude the testimony of Michael Looney, whom Raytheon has designated as an expert witness regarding cleaning and maintenance of B-29 aircraft and to rebut the testimony of Mr. Robertson in two specific respects. Mr. Looney authored a written report dated August 9, 2006, in which he opines that B-29 aircraft required frequent cleaning and degreasing; that B-29 maintenance at HAAF would have included cleaning and degreasing; and that HAAF maintenance crews would have used the most efficient and effective degreaser available. Mr. Looney, in this report, does not mention the use of TCE as a degreaser. Mr. Looney authored a second report dated December 11, 2006 which is nearly identical to the first report but for the addition of two paragraphs in which he opines that maintenance personnel at HAAP would have frequently performed oil cooler maintenance, which would have required the use of TCE per an Army Air Force technical manual. Finally, Mr. Looney authored a rebuttal report dated May 2, 2007 in which he rebuts Mr. Robertson's opinion that engines after World War II were improved so that TCE could be used to clean and degrease them while World War II engines were not capable of being cleaned with TCE.

According to the United States, Mr. Looney lacks the requisite expertise to testify concerning the cleaning and maintenance of B-29 aircraft at HAAF because he is simply a volunteer who has worked on a single, reconstructed antique B-29. The court disagrees with the

United States' characterization of Mr. Looney's experience and, after carefully reviewing Mr. Looney's reports, concludes that his extensive experience maintaining and flying B-29 aircraft is sufficient "to make it appear that his . . . opinion would rest on substantial foundation and would tend to aid the trier of fact in its search for the truth." *Lifewise Master Funding*, 374 F.3d at 928. Of course, the United States is free to cross-examine Mr. Looney about any differences it perceives between Mr. Looney's specific experience and experience concerning the B-29 aircraft cleaned and maintained at HAAF.

The United States next asserts that Mr. Looney lacks the requisite expertise to opine about the use of TCE in connection with the maintenance of B-29 aircraft at HAAF. The court rejects this argument as well. Mr. Looney's report indicates that, based on his experience, overheating problems with the B-29 engine would have forced HAAF personnel to change numerous engines on B-29s at HAAF and that, when an engine is changed, the oil cooler must be cleaned. According to Mr. Looney's interpretation of an Army Air Force (AAF) technical manual, the AAF required the use of TCE to clean the various oil cooler components during engine changes

⁵By way of example, Mr. Looney's reports indicate that he has spent almost 30,000 hours working on and flying B-29 and B-24 aircraft. He was a maintenance officer for the B-24-/B-29 Squadron of the Commemorative Air Force from 1994 to 2002 and he has logged over 500 hours of flight time as a B-29 flight engineer. He is currently the only licensed flight examiner for the B-29 aircraft.

⁶The United States sets forth a general objection to Mr. Looney's reliance on hearsay (namely, his discussions with World War II veterans who were experienced with the B-29) as the basis for his opinions and asserts that his reliance does not satisfy Federal Rule of Evidence 703. Because the extent of Mr. Looney's reliance on those discussions in forming his opinions and the scope of those discussions is not clear from the record, the court will deny the objection without prejudice to it being raised again at trial.

or during cleaning of the oil cooling unit. Mr. Looney's opinion concerning the frequency of engine changes satisfies Rule 702 in light of his extensive experience, subject again to the United States' cross-examining Mr. Looney on the relevance of his experience with respect to B-29 aircraft at HAAF. Mr. Looney's opinion concerning the use of TCE, which derives solely from the technical manual, rests on an appropriate foundation and would tend to aid the trier of fact. The United States may cross-examine Mr. Looney concerning his interpretation of the manual and the relevance or applicability of the manual.

Finally, the United States moves to exclude an opinion contained in Mr. Looney's rebuttal report in which Mr. Looney opines that, contrary to a statement made by Mr. Robertson in his deposition, the reciprocating radial aircraft engines used and manufactured before, during and after World War II were essentially the same. The United States contends that Mr. Looney has no expertise concerning the post-World War II redesign of reciprocating radial aircraft engines. While the court generally agrees that neither Mr. Looney's rebuttal report nor his deposition reveals an appropriate factual basis for his opinion, it is equally unclear from the record whether a factual basis exists for Mr. Robertson's statement in the first instance and whether Mr. Robertson was speaking about improvements to engines or improvements to aircraft generally. The pertinent portion of Mr. Robertson's deposition that has been provided to the court is only one page in which Mr. Robertson asserts, in essence, that TCE would not be used to spray down engines of aircraft during World War II because of "problems in terms of potential chemical attack on rubber parts" but that those problems were not as significant after World War II because "the aircraft were improved to a point where it became less of a problem." It is not clear, then, whether Mr. Robertson is even intending to testify regarding the redesign of reciprocating radial aircraft engines. To the extent he is speaking about the redesign of such engines, the record before the court is insufficient to establish an appropriate factual basis for doing so. Thus, in the absence of hearing Mr. Robertson's testimony in the full context of trial, it is premature and unnecessary to decide whether Mr. Looney's rebuttal opinion is admissible. The motion is denied on this issue without prejudice to the United States reasserting its argument at trial.⁷

D. Andrew Yacenda

The United States seeks to exclude the testimony of Andrew Yacenda, Raytheon's senior financial manager for operations, whom Raytheon has designated as an expert witness regarding the response costs incurred by Raytheon addressing contamination at the Site. Mr. Yacenda authored a written report dated December 13, 2006, in which he states that Raytheon has incurred \$6,316,502.06 responding to contamination at the Site. In reaching that conclusion, Mr.

⁷In his rebuttal report, Mr. Looney also purports to rebut Mr. Robertson's statement that, in his investigations of other World War II facilities, he had never come across evidence that TCE was used to wash down aircraft or major sections of aircraft. The United States moves to exclude this opinion on the grounds that Mr. Looney lacks any cognizable basis to render it. The court doubts that Mr. Looney would have the knowledge or experience to testify concerning Mr. Robertson's personal observations or recollections and further doubts whether such testimony would aid the trier of fact in any respect. Nonetheless, the court need not decide the admissibility question as Raytheon has not addressed the United States' argument or this specific rebuttal opinion in its response. It is apparent, then, that Raytheon does not intend to have Mr. Looney testify concerning Mr. Robertson's statement about the washing of aircraft. The United States' motion is granted in this respect.

Yacenda essentially supervised a review of Raytheon's accounting system to identify invoices relating to cleanup work done at the Site and corresponding checks indicating payment by Raytheon.

In its motion to exclude, the United States first contends that Mr. Yacenda lacks the requisite knowledge to assist the court in determining the amount of costs incurred by Raytheon at the Site. According to the United States, Mr. Yacenda has no knowledge whether invoices were, in fact, paid by Raytheon because certain invoices lack an approval signature. Similarly, the United States contends that Mr. Yacenda has no knowledge whether claimed costs actually related to the Site at issue because certain invoices lack a site-specific accounting code utilized by Raytheon to track expenses at various Superfund sites. While the United States is free to cross-examine Mr. Yacenda about specific invoices, the mere fact that Mr. Yacenda lacks firsthand knowledge that each and every invoice was, in fact, paid or related to the Site is insufficient to render Mr. Yacenda incompetent to testify as to Raytheon's response costs. See City of Wichita v. Trustees of APCO Oil Corp. Liquidating Trust, 306 F. Supp. 2d 1040, 1092-93 & n.48 (D. Kan. 2003) (Belot, J.) (court accepted testimony of City's expert for what it was-"a verification that sufficient documentation exists to show that the money paid by the City was properly billed and the paperwork indicates that the work is related to the Site").

The United States next contends that Mr. Yacenda's opinion is unreliable because it is based on a summary of costs that Mr. Yacenda did not prepare which, in turn, is based on invoices about which he has no personal knowledge. This argument is rejected. Mr. Yacenda's opinion is not based solely on the summary of costs attached to his report; it is clear from Mr.

Yacenda's deposition testimony that he and his staff reviewed specific invoices in calculating the total of Raytheon's costs. The summary appears to reflect a break down of the total amount of costs by contractor, purchase order and "task description," presumably in an effort to show that the invoices and amounts paid reflect work that is related to cleanup at the Site for purposes of recoverability. Notably, aside from its own expert testifying that certain categories of costs reflected in the summary are not recoverable under CERCLA, the United States does not argue that the summary itself is inaccurate or that any figures or descriptions contained in the summary are inaccurate. To the extent, then, that Mr. Yacenda does rely on the summary in his testimony at trial, the United States is free to examine Mr. Yacenda about his knowledge concerning the preparation of the summary and whether and how certain invoices or specific dollar amounts reflect work related to cleanup at the Site.

Finally, the United States argues that Mr. Yacenda's testimony is unreliable because it was not prepared independently from the litigation. While this factor may have significance in those cases involving scientific or technical methodologies, *see*, *e.g.*, *Daubert v. Merrell Dow Pharms.*, *Inc.*, 43 F.3d 1311, 1317 (9th Cir. 1995) (*Daubert II*) ("[I]n determining whether proposed expert testimony amounts to good science, we may not ignore the fact that a scientist's normal workplace is the lab or the field, not the courtroom or the lawyer's office."); *Johnson v. Manitowoc Boom Trucks*, *Inc.*, 484 F.3d 426, 434-35 (6th Cir. 2007) (applying *Daubert II* to "technical or engineering experts" and affirming magistrate judge's exclusion of engineering expert in part because expert's opinions on design defect were "conceived, executed, and invented" solely in the context of the litigation); *Norris v. Baxter Healthcare Corp.*, 397 F.3d

878, 886 (10th Cir. 2005) (affirming exclusion of plaintiff's medical experts whose efforts to discredit epidemiological evidence were not developed independent of litigation and were not peer-reviewed), it has little application to Mr. Yacenda's testimony concerning whether Raytheon was billed for and paid certain costs relating to cleanup of the Site. Indeed, the court cannot discern what prior research or field work Mr. Yacenda could have completed that would render more reliable Mr. Yacenda's testimony concerning Raytheon's cleanup costs. Simply put, the nature of Mr. Yacenda's testimony—which is more akin to that offered by a fact witness—does not lend itself to independent research. This argument, then, is rejected.⁸

In sum, the court denies the United States' motion to exclude Andrew Yacenda.

E. Gerald Harris

Raytheon seeks to exclude the testimony of Gerald Harris, whom the United States has designated to rebut the testimony of Mr. Yacenda concerning Raytheon's response costs. Mr. Harris authored a written report dated May 4, 2007, in which he states that certain costs incurred by Raytheon are not "necessary response costs" because those costs are not related to Site cleanup. Raytheon moves to exclude Mr. Harris's testimony on the grounds that the testimony (as reflected in the report) concerns the legal standard for recovery of response costs and whether and to what extent Raytheon's costs satisfy that legal standard. The motion is granted in part and denied in part.

⁸Of course, any potential bias stemming from Mr. Yacenda's employment with Raytheon is a proper subject for cross-examination.

While Raytheon is correct that an expert witness generally may not provide legal opinions, courts are more concerned about an expert who presents legal conclusions to a jury rather than to a judge. *See, e.g., Lozano v. City of Hazleton*, 241 F.R.D. 252, 256 (M.D. Pa. 2007); *Suter v. General Acc. Ins. Co. of Am.*, 424 F. Supp. 2d 781, 793 (D.N.J. 2006) ("If the Rule 403 balancing test tilts to the side of admission in the case of a bench trial, it would follow that the rule against legal conclusions should become less stringent in the case where the factual findings are to be made by the Court."). In this case, because there is no jury to instruct, the danger of permitting Mr. Harris to "stray out of bounds and into the rightful territory of the Court" is significantly diminished. *Crowley v. Chait*, 322 F. Supp. 2d 530, 550 (D.N.J. 2004). Indeed, the Tenth Circuit has suggested that a district court conducting a bench trial may, in drawing its own conclusions, consider the legal conclusions of an expert. *Autoskill Inc. v. National Educational Support Sys., Inc.*, 994 F.2d 1476, 1493 (10th Cir. 1993).

That having been said, Raytheon is also correct that certain portions of Mr. Harris's report read like a legal opinion. Mr. Harris, for example, states: "Generally, fees incurred for Legal and Technical Regulatory Support are not recoverable response costs because the work done is not closely related to the Site cleanup."; "In order to be viewed as necessary response costs, [Raytheon] must demonstrate that the actions are closely tied to the actual Site cleanup. [Raytheon] has failed to do this."; "It has been my consistent practice to exclude fees related to redacted descriptions and it is my opinion that [Raytheon] has not demonstrated that the redacted [law firm] costs are recoverable costs." The court will not permit Mr. Harris to testify to the governing legal standard for recovery of response costs under CERCLA and will not permit Mr.

Harris to testify as to whether Raytheon's costs satisfy that legal standard. Raytheon's motion, then, is granted to that extent. The court, however, will permit Mr. Harris, through the form of responses to hypothetical questions, to opine (assuming he is qualified to do so⁹) as to whether Raytheon's costs are consistent with a hypothetical legal standard described by counsel. The court also notes that other portions of Mr. Harris's report reflect that Mr. Harris can provide testimony that will assist the court in resolving certain factual issues concerning the nature and purpose of various tasks pursuant to which Raytheon incurred costs and the nature and extent of Raytheon's liable party investigation. To this extent, then, the motion is denied.

F. William M. Kime

Raytheon also seeks to exclude the testimony of William M. Kime, whom the United States has also designated to rebut the testimony of Mr. Yacenda concerning Raytheon's response costs. Mr. Kime authored a written report dated May 4, 2007, in which he states, in pertinent part, that any recovery by Raytheon of its costs should be reduced by the amount of certain insurance proceeds received by Raytheon and other amounts otherwise reimbursed

⁹In its motion, Raytheon also contends that Mr. Harris is unqualified to offer any legal analysis because he, for example, does not possess a law degree and did not attend law school. In its reply, Raytheon contends that the United States has conceded Mr. Harris's lack of qualifications by not addressing this argument in its response. While the United States has not expressly addressed this argument, the court will not strike Mr. Harris based solely on a procedural misstep when the report of Mr. Harris indicates that he is otherwise qualified to opine as to whether Raytheon's costs are consistent with a hypothetical legal standard described by counsel. The court, then, will entertain arguments about Mr. Harris's qualifications in connection with the trial of this matter.

through "cost reimbursable" government contracts. Raytheon moves for an order precluding the testimony of Mr. Kime on the grounds that CERCLA section 114(b) does not apply to insurance proceeds and the collateral source rules bars the United States from claiming any setoff based on insurance proceeds. The court, however, has previously rejected Raytheon's argument and has concluded that it will consider, in calculating any judgment in favor of Raytheon, amounts that Raytheon has already received through insurance payments or through cost-reimbursable government contracts. Because Raytheon's motion to exclude Mr. Kime is based solely on Raytheon's legal argument concerning the application of section 114(b) and the collateral source rule, the court denies the motion for the reasons stated in prior orders addressing this issue.

G. Mary Sitton

Finally, Raytheon seeks to exclude the testimony of Mary Sitton, whom the United States has designated to rebut the testimony of Peter Mesard concerning likely sources of TCE releases to the environment in the vicinity of Hangars 1 and 4 at the Site. By way of background, Mr. Mesard concludes in his report that, based on the results obtained from soil and groundwater sampling, TCE was released in the vicinity of Hangar 1. Mr. Mesard further states in his report that, based on currently available data, he cannot determine the specific date (or time frame, in terms of years) of the release of TCE to the environment. The United States disclosed Ms. Sitton's report on May 4, 2007, the deadline set for the disclosure of rebuttal expert witness reports. In her report, Ms. Sitton rebuts Mr. Mesard's opinion that he could not determine the timing of the contamination at the Site. To do so, Ms. Sitton analyzed and interpreted aerial

photographs of the Site and concludes, based on that analysis and interpretation, that the timing of contamination can be determined and she opines that the contamination occurred during Beech's operations at the Site.

Raytheon moves to strike Ms. Sitton's testimony in its entirety on the grounds that Ms. Sitton is not a true rebuttal expert but, in fact, is an affirmative expert, that is, one whose report should have been disclosed by the initial disclosure deadline and its untimely disclosure on the deadline for filing rebuttal reports was without substantial justification and has prejudiced Raytheon. *See Miller v. Pflizer, Inc.*, 356 F.3d 1326, 1332 (10th Cir. 2004) ("Failure to make proper disclosures may require exclusion of the expert as a witness." Fed. R. Civ. P. 37(c)(1). ("A party that without substantial justification fails to disclose information required by Rule 26(a) or 26(e)(1) . . . is not, unless such failure is harmless, permitted to use as evidence at a trial, at a hearing, or on a motion any witness or information not so disclosed.")).

Raytheon's motion to strike Mary Sitton is summarily denied because it is untimely filed. The motion was filed on October 19, 2007, the deadline established in the Fourth Amended Scheduling Order and the Pretrial Order for the filing of motions to exclude the testimony of expert witnesses pursuant to Rule 702, *Daubert* and *Kumho Tire*. Raytheon's motion concerning Ms. Sitton does not challenge the admissibility of her testimony under Rule 702, *Daubert* or *Kumho Tire*. Rather, the motion is a "technical" objection related to the report and whether the report is a true rebuttal report. As such, pursuant to the initial scheduling order in this case, it was required to have been filed within 11 days of the service of the report and the objection was subject to the "meet and confer" requirements of D. Kan. R. 37.2. *See* Sch. Ord., para. 2.g. (doc.

19). The purpose of that provision in the scheduling order, of course, is to ensure that objections are raised at an early enough phase of the litigation that remedies short of exclusion will still be available in the event of an objectionable report or disclosure. Raytheon's motion, then, is denied.

IT IS THEREFORE ORDERED BY THE COURT THAT the United States' motion in limine to exclude the testimony of Andrew Yacenda (doc. 265) is denied; Raytheon's motion to exclude William M. Kime (doc. 270) is denied; Raytheon's motion to exclude Mary Sitton (doc. 273) is denied; the United States' motion to exclude the testimony of Michael Looney (doc. 274) is granted in part and denied in part; Raytheon's motion to exclude Gerald Harris (doc. 277) is granted in part and denied in part; Raytheon's motion to exclude John B. Robertson (doc. 281) is denied; Raytheon's motion to exclude Jay Brigham (doc. 283) is denied; and Raytheon's motion to strike the testimony of John B. Robertson and portions of his affidavit (doc. 337) is denied; and Raytheon's second motion to strike John B. Robertson and for sanctions (doc. 372) is denied.

IT IS SO ORDERED.

Dated this 4th day of March, 2008, at Kansas City, Kansas.

s/ John W. Lungstrum
John W. Lungstrum
United States District Judge