

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS

UNITED STATES OF AMERICA ex rel.)	
TAYLOR SMITH, JEANNINE PREWITT,)	
and JAMES AILES,)	
)	
Plaintiffs-Relators,)	CIVIL ACTION
)	
v.)	No. 05-1073-MLB
)	
THE BOEING COMPANY and)	
DUCOMMUN, INC.,)	
f/k/a AHF-Ducommun,)	
)	
Defendants.)	
)	

MEMORANDUM AND ORDER

Before the court are the following:

1. Boeing's Motion for Summary Judgment on Liability (Docs. 644, 645); Relators' Response (Doc. 703); Boeing's Reply (Doc. 733).
2. Boeing's Motion for Partial Summary Judgment on Damages (Docs. 646, 647); Ducommun's Joinder in the Motion (Doc. 659); Relators' Response (Doc. 702); Boeing's Reply (Docs. 731, 735).
3. Boeing's Motion for Summary Judgment on Retaliation Claim (Docs. 648, 649); Prewitt's Response (Doc. 701); Boeing's Reply (Doc. 732).
4. Relators' Motion for Partial Summary Judgment on Liability (Doc. 650); Boeing's Response (Doc. 691); Relators' Reply (Doc. 728).
5. Ducommun's Motion for Summary Judgment (Docs. 657, 658); Relators' Response (Doc. 704); Ducommun's Reply (Doc. 734).
6. Relators' Motion to Strike Eastin Testimony and Declaration (Doc. 682, 683); Defendants' Response (Docs. 711, 713); Relators' Reply (Doc. 715).
7. Relators' Motion to Strike 2004 and 2005 SUP Reports (Doc. 687, 700); Defendants' Response (Docs. 712, 714); Relators' Reply (Doc. 716, 720).

8. Relators' Notice of Supplemental Authority and Supplemental Expert Report (Doc. 737); Defendants' Response (Docs. 745, 747); Relators' Reply (Doc. 749).

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1. Boeing's Motion for Summary Judgment on Liability (Doc. 644).

Relators filed this action under the qui tam provisions of the False Claims Act ("FCA"), 31 U.S.C. § 3729, et seq.¹ They claim that Boeing and one of its suppliers, Ducommun, manufactured and incorporated a number of nonconforming parts into aircraft sold to the U.S. Government. The complaint alleges that defendants knowingly and falsely certified to the Government, in connection with claims for payment, that the parts conformed to contract specifications and to applicable Federal Aviation Administration (FAA) regulations. In large part Relators claim the parts were nonconforming because they were produced with manually controlled machine tools rather than with computerized machine tools that used statistical control methods. Based on a total purchase price of over \$1.6 billion for twenty-four specified aircraft, relators seek treble damages under the FCA of more than \$4.8 billion. In addition, relator Prewitt claims Boeing unlawfully retaliated against her because she pursued an FCA claim. Defendants deny the allegations and contend that relators' claims fail as a matter of law.

Boeing's motion for summary judgment on FCA liability asserts three main points. First, it argues that Boeing met its contract requirements by delivering aircraft that were certified as airworthy by the FAA. Boeing denies that the contracts required it to

¹ A private person may bring a civil action for a violation of the FCA for themselves and for the United States Government. If the person prevails, they may be entitled to a percentage of the proceeds recovered. 31 U.S.C. § 3730(b). The Government may intervene in such an action if it wishes; it has declined to do so here. When the Government elects not to intervene, the person who initiated the action shall have the right to conduct it. § 3730(b)(4)(B).

additionally certify compliance with all FAA regulations. Although it denies that any violations occurred, it says if any did occur they should be addressed by the FAA through its regulatory enforcement powers. According to Boeing, "[m]ere regulatory violations do not give rise to a viable FCA action." (citing United States ex rel. Conner v. Salina Reg'l. Health Ctr., Inc., 543 F.3d 1211 (10th Cir. 2008)). Second, Boeing argues Relators have no evidence that any of the claimed regulatory violations were material to the government's payment of claims. Boeing says this point is emphasized by the government's eventual rejection of Relator's allegations and its decision to continue certifying and purchasing Boeing aircraft despite knowledge of relators' allegations. Third, Boeing contends relators have at most shown a genuine dispute about how certain engineering drawings should be interpreted, but they have failed to show that Boeing acted with the scienter required for an FCA claim.

A. Uncontroverted facts.

This qui tam action was brought by Jeannine Prewitt, Taylor Smith and James Ailes, three former employees of Boeing in Wichita. It relates to fuselage parts produced by Ducommun, a Boeing supplier in California.

Ducommun supplied parts mainly for Boeing's 737 Next Generation (or New Generation) aircraft ("737NG"). Ducommun delivered the parts to Wichita, where Boeing workers assembled them with other parts to form aircraft fuselages. The fuselages were shipped to Boeing's facility in Renton, Washington, where complete 737s were assembled. The completed 737 aircraft at issue were sold by the Boeing Commercial Airplanes business (BCA) to the Boeing Defense and Space Systems

company (BDS). BDS then modified the aircraft for use by the U.S. Air Force and U.S. Navy. Finally, BDS personnel submitted claims for payment to the Air Force and Navy for the aircraft.

FAA Regulatory Overview. An overview of the FAA's regulatory scheme is necessary for an understanding of the claims. The following summary is taken largely from United States v. S.A. Empresa de Viacao Aerea Rio Grandense (Varig Airlines), 467 U.S. 797 804-06 (1984).

In the Federal Aviation Act of 1958, Congress directed the Secretary of Transportation to promote flight safety by establishing minimum standards for aircraft design, materials, workmanship, construction, and performance. Congress established a multi-step certification process to monitor the aviation industry's compliance with these requirements. Authority over the process rests with the FAA.

The FAA has promulgated comprehensive regulations setting out the minimum safety standards that aircraft designers and manufacturers must meet before marketing their aircraft. At each step of the certification process, an FAA employee or an FAA-designated representative evaluates materials submitted by the aircraft manufacturer to determine whether it has satisfied these regulatory requirements. Upon a showing that the requirements have been met, the FAA issues an appropriate certificate permitting the manufacturer to continue with production and marketing. Varig Airlines, 467 U.S. at 804-06. There are three main steps in the certification process: a type certificate, a production certificate, and an airworthiness certificate. 49 U.S.C. § 44704. Type certificate. A manufacturer wishing to introduce a new type of aircraft must first obtain FAA

approval of the plane's basic design in the form of a type certificate. After receiving an application for a type certificate, the FAA typically requires the applicant to make such tests as the FAA deems necessary in the interests of safety. By regulation the FAA makes the applicant itself responsible for conducting all inspections and tests necessary to determine that the aircraft comports with FAA airworthiness requirements. The applicant must submit to the FAA the designs, drawings, test reports, and computations necessary to show that the aircraft satisfies FAA regulations. It must certify that it has complied with the applicable requirements. 14 CFR § 21.20. The "type design" that must be submitted includes the drawings and specifications necessary to define the configuration and design features of the product, as well as information on the materials and processes necessary to define the structural strength of the product. 14 CFR § 21.31.

The manufacturer must produce a prototype of the aircraft and conduct ground tests and flight tests on it. FAA employees or their representatives review the resulting data and make such inspections or tests as they deem necessary to ascertain compliance with the regulations.² If the FAA finds that the proposed aircraft design meets the minimum safety standards, it signifies its approval by issuing a

² In order to obtain a type certificate, Boeing completes an extensive compliance checklist to demonstrate that the airplane complies with the requisite regulations for a type certificate. It lists all of the regulations complied with, the means of compliance, and the underlying documents demonstrating compliance. The checklist itself may be hundreds of pages long and may reference hundreds of underlying documents, some of which consist of hundreds or thousands of pages. Similarly comprehensive information is required to obtain production and airworthiness certificates.

type certificate. Varig Airlines, 467 U.S. at 805-06.

Production certificate. Production may not begin until a manufacturer obtains a production certificate from the FAA authorizing the manufacture of duplicates of the prototype. To obtain a production certificate, the manufacturer must prove to the FAA that it has established and can maintain a quality control system to assure that each aircraft (including parts purchased from suppliers) will meet the design provisions of the type certificate. When it is satisfied that duplicate aircraft will conform to the approved type design, the FAA issues a production certificate, and the manufacturer may begin mass production of the approved aircraft. Regulations require a production certificate holder to notify the FAA of any changes in its quality control system that may affect the inspection, conformity, or airworthiness of its product.

Airworthiness certificate. Finally, before any aircraft may be placed into service, its owner must obtain an airworthiness certificate (or its military equivalent, a "conformity certificate") from the FAA. Such a certificate signifies that the particular aircraft in question conforms to the type certificate and is in condition for safe operation. It is unlawful for any person to operate an aircraft in air commerce without a valid airworthiness (or conformity) certificate.

Because the FAA does not have near the number of engineers needed to complete this elaborate compliance review on its own, the law allows the FAA to delegate certain inspection and certification responsibilities to properly qualified private persons. These "designated engineering representatives" (DERs) and other

representatives³ assist in the FAA certification process. They are typically employees of the aircraft manufacturers themselves who possess detailed knowledge of an aircraft's design based on their day-to-day involvement in its development.

The FAA may reexamine a certificate at any time and may modify, suspend or revoke it. See 49 U.S.C. § 44709. The FAA may investigate a suspected violation of safety regulations and may issue an order to compel compliance if it finds a violation. It also has the power to impose fines and can bring a civil or criminal action against persons who violate the regulations.

The Purchase Contracts

When the Air Force and Navy contracted with Boeing for the planes at issue, it had the option of using military procurement procedures. It opted instead to buy commercial airplanes and to modify them.

Each of the contracts at issue contained the following language or something similar to it requiring Boeing to obtain the appropriate FAA certificates:

1. FAA Certificates

a. Boeing will obtain from the Federal Aviation Administration (FAA):

(a) a Type Certificate ... issued pursuant to Part 21 of the Federal Aviation Regulations for the type of aircraft covered by this Agreement, and

(b) a Standard Airworthiness Certificate for each Basic Aircraft

³ The regulations also authorize designated manufacturing inspection representatives (DMIRs) and designated airworthiness representatives (DARs) to act as surrogates for the FAA. See 14 CFR Part 183.

issued pursuant to part 25 of the Federal Aviation Regulations or in the alternative a Conformity Certificate - Military Aircraft, FAA Form 8130-2, which will be provided to Buyer with delivery of the Aircraft.

b. Boeing will not be obligated to obtain any other certificates or approvals for the Basic Aircraft. * * *

The contracts required that Boeing provide the Government an FAA Standard Airworthiness Certificate Form 8100-2 or a Conformity Certificate Form 8130-2. Both of these forms included a certification that the aircraft was manufactured in conformity with data forming the basis for the type certificate and required disclosure of any deviations from the type certificate.

Each of the contracts also contained language similar to that set forth below pertaining to quality control and FAA oversight:

The production facilities of the aircraft Contractor ... shall be FAA approved and in compliance with 14 CFR 21 (FAR Part 21). Quality Assurance requirements shall be in accordance with FAA Advisory Circular 00-41B, "Quality Control System Certification Program", FAA STD 13[D], "Quality Control Program Requirements", and FAA STD 16[A], "Quality Control System Requirements". Compliance is evidenced by the Production Certificate.

See Doc. 643, Exh. F-1.⁴

⁴ Some of the contracts added the following paragraph: "Contractor's manufacturing and quality systems are under the cognizance of the Federal Aviation Agency and are monitored as necessary to meet FAA requirements for commercial aircraft production. These designees include Designated Engineering Representatives (DERs) listed in Advisory Circular (AC) 183.29-1Z, Designated Airworthiness Representatives (DARs) listed in AC 183.35B, and Designated Manufacturing Inspection Representatives (DMIRs). These designees and assigned FAA officials perform necessary inspections, verifications, and evaluations to ascertain conformance to certification requirements and the adequacy of the implementing procedures and records." See

Boeing also warranted that each airplane would be free not only from defects in material and workmanship, but also "free from defects in ... process of manufacture" and "free from defects in design, including selection of ... process of manufacture, in view of the state of the art at the time of design."

Boeing did, in fact, hold a type certificate and production certificate with respect to each model at issue, and it obtained from the FAA airworthiness or conformity certificates for each aircraft. Each certificate is signed by a Boeing employee who was an authorized FAA designee.

The contracts also incorporated Federal Acquisition Regulation (FAR) 52.212-4 (48 CFR). Among other things, this regulation allows the Government to terminate a contract for cause in the event of a default by the contractor or if the contractor fails to comply with any terms and conditions of the contract. Upon such a cancellation, the Government shall not be liable for any amount for supplies or services not accepted.⁵

Development of 737 Next Generation

Boeing first obtained a type certificate for the 737 in 1967. In subsequent years, it obtained type certificate approval for several 737 derivatives. Boeing refers to these later derivatives, including the 737-600, 700, 800 and 900 series, as the Next Generation, or

e.g., Doc. 643, Exh. F-1, p. TBC 080439.

⁵ § 52-212-4(a) also allows the Government to require repair or replacement of nonconforming supplies at no increase in contract price. If repair or replacement is not possible, the Government may seek an equitable reduction in price. The Government must exercise its post-acceptance rights within a reasonable time after the defect was discovered.

737NG, as opposed to the original 737 Classic. All of the 737 derivatives are listed under a single FAA type certificate number.

The 737 Classic was manufactured using traditional design and manufacturing methods, including two-dimensional drawings, labor-intensive hand-directed machine tools, and manual measurement and inspection of tools and parts to ensure quality control. Assembly of parts into the fuselage required the use of massive, complicated and expensive assembly equipment.

Design, development and manufacture of the 737NG models incorporated newer technologies, including Computer Aided Three-Dimensional Interactive Application (CATIA) design software and Computer Aided Design (CAD) drawings to define detail parts and assemblies. The CATIA-created designs use solid modeling, a three-dimensional computer process that allows for interface of parts and computer-based structural analysis. Solid modeling requires that suppliers like Ducommun have the technical capability to work with and implement the new electronic designs. The relevant engineering drawings in this case were delivered to Ducommun in CATIA format, although they could also be printed out as conventional two-dimensional drawings.

ATA. One of the manufacturing processes used by Boeing in making its newer planes, including the 737NG, was "Advanced Technology Assembly" (ATA). ATA requires the drilling of precision-located and coordinated fastener holes in detail parts. The holes are placed and "toleranced" from other part features such as surfaces, edges and other holes. The accurate placement of these ATA holes establishes the location and orientation of a part relative to its "mate-with" part.

This allows for a simplified assembly process that does not require large and expensive assembly equipment and may reduce the need for frequent measurement and inspection. It also reduces the need for shims and potentially damaging force (i.e. "make it fit") in the assembly process.

Machine tools were traditionally hand-directed and controlled. The use of automated numerically-controlled ("NC") machines has now become widespread, with many NC machines controlled by computer ("CNC"). Due to the close tolerances required for ATA parts and the ability of CNC machines to perform precision drilling, ATA holes are typically drilled on CNC machines. These machines automatically collect statistical data during the manufacturing process. The data can be used in applying "statistical process controls" (SPC), a quality control tool that employs statistics to track, predict and minimize variations in the manufacturing process.

Boeing's guide for assessment of its suppliers' ATA capability (Doc. 669-13) provides in part:

In order for ATA to be successfully implemented, several tools and processes are required. Among the most critical are a digitally engineered model as the controlling "drawing" used in conjunction with CNC machine tools. This marriage allows us to ensure accurate, first generation engineering to drive reliable, accurate production methods. The final element is the acceptance of the product and the assurance of product integrity. While not required for ATA production, coordinate measuring machines (CMMs) have proven to be invaluable in performing highly accurate, complex, repeatable verification of engineering requirements.

The ultimate goal of this program is to obtain a position whereby precise, consistent products are obtained at reasonable cost with a minimum of actual piece part inspection. No part or product

has ever been improved by the inspection process. As such, it is our desire to move reliable processes to the mode of process acceptance and sampling. In order to obtain this goal it is necessary that each process be characterized as to capability and repeatability. Once established, and improved as necessary to meet product requirements, the process must be stabilized to the point of "reliable", and then a method to periodically validate continued reliability must be implemented. Through this, the process can be proven to be statistically stable and the products, by inference, acceptable. This process acceptance can then be done without using 100% inspection.

The same guide also states, however, that a supplier has alternatives for establishing an ATA process:

Certainly the preferred process would be one in which the supplier uses CATIA for their CAD system, a CNC mill for establishing part geometry and hole placement, and a programmable CMM for verification of engineering requirements, prior to obtaining a sampling approval plan. None of these is a requirement, however. In place of CATIA, Boeing supports nearly all CAD systems via IGES. Precision drill jigs may, and in some instances should, replace the CNC mill. Many parts can be validated very effectively using digital height gages, digital calipers, etc., with proper certification. This means you are not required to have a CMM.

* * *

Precision drill jigs may be used for the ATA program to install and inspect the ATA holes. These drill jigs must meet the requirements of [certain specified standards⁶]. This is not the Boeing preferred method due to the potential for higher non-recurring cost associated with part configuration changes. It is however a viable alternative and in some instances provides the best value approach. Use of drill jigs requires the production of five parts, which must be validated independently by a secondary measurement, and a periodic maintenance plan to insure continued compliance to the engineering requirements.

⁶ Identified as D33200-1, D31013-1, and D800-10438-1.

The guide provides that a supplier must demonstrate its ATA production capability. As indicated above, if it elects to use drill jigs for the ATA program, it must produce five parts with the drill jig and have them independently verified on a certified CMM prior to Boeing acceptance. If it elects to use CNC machine tools, it must drill a prescribed test plate. The supplier's production plan must identify the method by which it will install ATA holes, and it must supply either measurement results from the CNC test plate or from the five items produced with a drill jig.

HVC. Boeing also implemented a quality control process called HVC (Hardware Variability Control). Although "no single definition of HVC exists," (Doc. 669-11 at p.3), the concept focuses on defect prevention rather than defect detection. It involves several steps: product definition and analysis; development and documentation of "Key Characteristics"⁷ on engineering drawings; development, documentation and implementation of a supporting manufacturing plan and a tool indexing plan; and use of SPC methods to measure performance and process capability, as well as an effective method of improving processes based on findings. Defendants point to Boeing documents citing the importance of HVC - including one describing it as "the foundation to ATA" - and argue that ATA necessarily required the use

⁷ "A feature whose variation has the greatest impact on the fit, performance, or service life of the finished product from the perspective of the customer. Key characteristics are a tool to help decide where to focus limited resources. They are intended to be used for process improvement purposes. Key characteristics should not be confused with flight safety or design features that are sometimes called critical characteristics in the aircraft industry. Key characteristics may or may not also be categorized as critical characteristics." (Doc. 668-4 at 46).

of HVC methods including collection and use of SPC data.

Quality Assurance; SPC. The quality control procedures adopted by Boeing pursuant to FAA standards are in Boeing's Advanced Quality System (AQS) D1-9000 Revision A, dated 1996, and the Boeing Quality Assurance Detailed Instruction Manual (Quality Manual) containing revisions beginning in 1997. Boeing's D1-9000 AQS system is divided into two sections: the basic quality system and the advanced quality system. Section 1 describes the basic quality system that must be in place to be a Boeing supplier. It does not necessarily require HVC or SPC. Among other things, it provides that the supplier "shall perform 100% inspection, acceptance sampling[,] or statistical process control for in-process inspection or final inspection for each characteristic of a product." Section 2, the advanced quality system, "describes a process for improving quality by systematically reducing the variation of key characteristics." (Doc. 668-4). For a supplier to obtain Boeing approval under Section 2, it must have the ability to determine and measure the variation of key characteristics and show statistical control and capability⁸ of the key characteristics. When a key characteristic is not in control and/or not capable, corrective action must be taken by the supplier to identify and establish control of key

⁸ Process capability is a statistically derived number indicating the spread of a process, customarily plus or minus three standard deviations (99.73%), into which measured items (i.e. parts) fall. It is also referred to as the "natural spread" or common cause variability in process output. (Doc. 669-5 at 5). Statistical control occurs when results fall within these statistical limits. Results falling outside of these limits indicate some special cause variability that must be identified and removed from the process.

Cpk is the process capability index, which measures the ability of the process to produce output within the engineering specification limits for the part.

sources of variation, and 100% inspection may be required until the characteristic is back in control and the process is capable. Under either section, the supplier is required to take corrective action when noncompliances are identified by a Boeing audit.

According to Boeing's ATA design guide (Doc. 669-5), use of reliable processes for ATA key features is critical to the success of ATA assemblies, because tolerances for ATA key features are significantly smaller than for traditional designs. Using force to make ATA parts fit can damage or deform the assembly, so accuracy of the detail parts and adherence to specified tolerances is essential.

The ATA design guide (Doc. 669-5) also states that successful implementation of ATA requires control of random variations in manufacturing processes. Manufacturers often use tolerance analysis to establish and verify such control. If an assembly consists of numerous manufactured parts, the acceptable variation or "tolerance level" for each part must be considered in determining whether the overall assembly will be acceptable. Variations in individual parts can accumulate or "stack up" and cause critical features of the final assembled product to be unacceptable.

Two common methods of tolerance analysis are arithmetic (or "worst case") and statistical (or "RSS"⁹) analysis. Arithmetic analysis adds up the maximum possible variation for each part to show the "worst case" scenario for an entire assembly. Because it anticipates the worst possible outcome, a design using arithmetic

⁹ RSS or "root-sum-squared." Boeing may actually use more complex statistical methods, but for purposes of this motion the foregoing description is sufficient.

analysis requires the smallest or "tightest" manufacturing tolerance for individual parts to ensure that the total assembly does not exceed acceptable limits. Statistical tolerance, by contrast, relies on the concept of a normal distribution or bell curve to predict that random variations will usually fall toward the middle of a range rather than at the extremes. Using statistical tolerance, a manufacturer can prescribe "looser" individual part tolerances and still have confidence that the final assembly will be within acceptable limits.¹⁰ To use this method, the manufacturer must monitor the process to identify the normal range of variation and must ensure that the process stays within that range.

Flag note S3. Boeing's ATA Design Guide provided that ATA key feature tolerances "are determined by a statistical tolerance ... or a worst case analysis of the assembly. This document [the Design Guide] contains a brief discussion of statistical analysis." An ensuing section on statistical tolerancing states:

When statistical tolerancing is used on an engineering drawing, the corresponding arithmetic tolerances may also be shown. The statistical tolerances will be identified with an "S" series Flag Note. If Manufacturing elects to build to statistical tolerances rather than arithmetic tolerances, the part features must be fabricated using statistical process controls; and Quality Assurance shall accept/reject parts based on statistical acceptance methods. Part acceptance requirements for statistically toleranced parts is based on evaluation of process data or lot

¹⁰ According to Boeing's ATA design guide, statistical tolerancing also "takes advantage of the high probability that the features in a tolerance path on any given assembly will deviate from nominal in both directions such that the deviations negate each other and are not all additive." This results in "a larger tolerance band" for individual details. This method accepts a small probability (typically .27%) that the final assembly will be non-conforming.

measurement data. Each coordinate axis is analyzed independently If the results of the analysis require statistical tolerancing to predict good assemblies/installations, the following notes shall be used on the drawings that specify these tolerances:

FLS2 FEATURES IDENTIFIED AS STATISTICALLY TOLERANCED SHALL BE PRODUCED WITH STATISTICAL PROCESS CONTROLS, OR THE MORE RESTRICTIVE ARITHMETIC TOLERANCES ON THE DRAWING. THE STATISTICAL TOLERANCE APPLIES ONLY WHEN PROCESS MEASUREMENTS MEET THE FOLLOWING REQUIREMENTS: 1) THE PROCESS CONTROL CHARTS SHOW THAT THE ASSOCIATED MANUFACTURING PROCESS IS IN CONTROL. 2) THE MEAN DEVIATES FROM NOMINAL NO MORE THAN 10 PERCENT OF THE SPECIFIED TOLERANCE. 3) THE MINIMUM Cpk IS 1.0, WITH 90 PERCENT CONFIDENCE. * * *

FLS3 FEATURES IDENTIFIED AS STATISTICALLY TOLERANCED SHALL BE PRODUCED WITH STATISTICAL PROCESS CONTROLS. THE DRAWING TOLERANCE APPLIES ONLY WHEN PROCESS MEASUREMENTS MEET THE FOLLOWING REQUIREMENTS: 1) THE PROCESS CONTROL CHARTS SHOW THAT THE ASSOCIATED MANUFACTURING PROCESS IS IN CONTROL. 2) THE MEAN DEVIATES FROM NOMINAL NO MORE THAN 10 PERCENT OF THE SPECIFIED TOLERANCE. 3) THE MINIMUM Cpk IS 1.0, WITH 90 PERCENT CONFIDENCE. WHEN THESE REQUIREMENTS ARE NOT SATISFIED, INDIVIDUAL PRODUCT MEASUREMENT MUST FALL WITHIN +/- THIRTY PERCENT OF THE SPECIFIED TOLERANCE, CENTERED ON NOMINAL. * * *

FLS4 FEATURES IDENTIFIED AS STATISTICALLY TOLERANCED SHALL BE PRODUCED WITH STATISTICAL PROCESS CONTROLS. PROCESS MEASUREMENTS MUST MEET THE FOLLOWING REQUIREMENTS: 1) THE PROCESS CONTROL CHARTS SHOW THAT THE ASSOCIATED MANUFACTURING PROCESS IS IN CONTROL. 2) THE MINIMUM Cpk IS 1.0, WITH 90 PERCENT CONFIDENCE. * * *

Application notes in the guide indicate the usage of Flag S2 is for "any ATA drawing with both arithmetic (worst case) and statistical tolerances for a feature." Flag S3 is for "any ATA drawing with only statistical tolerances for a feature."

Boeing's engineering drawings or data sets for many of the 737NG ATA parts manufactured by Ducommun included flag note S3. Relators and their experts contend flag note S3 mandated the use of NC machines and the collection of statistical process control data in making these ATA

parts.¹¹

Boeing cites the testimony of the two authors of the Design Guide's discussion of Flag Note S3. Michael Kuss states that he and colleague Bob Atkinson wrote these provisions recognizing that Boeing does not dictate particular methods of drilling ATA holes and that suppliers might use NC machines or they might use drill jigs. If a supplier used NC machines and collected enough SPC data to show that the process was in control, a wider tolerance for ATA holes was allowed because it could be determined statistically that the holes would rarely mismatch. If the supplier used drill jigs, however, the process "was not conducive to data collection for SPC purposes data" and so "we provided a tighter tolerance - forty percent tighter, to be exact, if SPC data were not used for product acceptance." Kuss said the line next to Flag S3 [i.e., $.0300 \times .60 = .0180$] means that the hole center must fall within a circle with a .03" diameter centered on the nominal location, but if the supplier does not have sufficient SPC data, then the tolerance is only 60% of that, or .018. Kuss states that Flag Note S3 "was not meant to require SPC in every instance" and that they inserted the phrase "when these requirements are not met" to explain that different methods of manufacture would result in different tolerances depending on whether or not SPC data was generated. According to Kuss, "the use of drill jigs by Ducommun, or any other supplier, was acceptable, so long as the hole location

¹¹ Relators' brief asserts that Flag Note S3 "was only the tip of the ice berg," arguing that Boeing was also responsible for Ducommun's failure to collect and use SPC data to measure key characteristics, for its poor tooling made from the wrong materials, for its use of ball peen steel hammers on ATA parts, and for failing to require proper first article inspections and reports.

tolerances stated in the drawings were satisfied." (Doc. 645-11). Co-author Atkinson similarly states that they knew "suppliers would have options for the method of drilling" and that they provided different tolerances depending on whether the supplier conducted a statistical analysis. If SPC data was collected, a 40% wider tolerance was permitted, but "when holes were drilled using other methods, such as drill jigs, that did not lend themselves to collection of statistical data," a tighter tolerance was required to ensure that holes would line up properly. (Doc. 645-12). Boeing cites further evidence in support of the same conclusion, including expert testimony from former Boeing design engineer Theodore Gladhill, who says he interprets Flag Note S3 in the manner described above and that he is "aware of no engineer at Boeing who interpreted flag note S3 differently." (Doc. 645-10). He adds that after Ducommun stopped supplying these parts for Boeing, the new supplier used some of the same drill jigs to fabricate 737NG ATA parts for Boeing.

Relators' experts, meanwhile, opine that Flag Note S3 required the use of NC machines and SPC data, emphasizing the note's first sentence providing that "FEATURES IDENTIFIED AS STATISTICALLY TOLERANCED SHALL BE PRODUCED WITH STATISTICAL PROCESS CONTROLS." Relators contend this made application of SPC (and therefore use of NC machines) mandatory. (Doc. 702-4 at 7¹²). Relators concede that the

¹² Dreikorn states: "This engineering and type design requirement did not give Ducommun a choice of using computers or not using computers to fabricate the part. Ducommun did not have an option to choose between using computerized machinery and using hand forming manufacturing processes that were not capable of satisfying 'statistical process control' requirements. It is understood within the aviation industry that the use of 'shall' in engineering drawings is mandatory and requires strict conformity. Boeing/Ducommun was

flag note sometimes allows acceptance of parts where statistical control has been lost, but argue the parts must still be produced using SPC and, in any event, they say the circumstances allowing drill jigs to be used for acceptance were not satisfied, a point they say is shown by the tooling audit report. Relators' expert Dr. Dreikorn argues that the language of the design drawings speaks for itself and cannot be "reinterpreted" retroactively by Boeing's witnesses. He further opines that the failure to use SPC to control key characteristics other than ATA holes was also a violation of Boeing's production certificate.¹³

Ducommun production

Ducommun supplied Boeing with over 200 different types of parts for the 737NG aircraft, including chords, fail-safe chords, and frames. All but 16 formed at least part of principal structural elements. Ducommun was the single source supplier (i.e., the only manufacturer) for nearly all the structural fuselage parts it contracted to produce for Boeing between 1996 and 2004. It was a primary source manufacturer of bear straps, which reinforce the skin and frame around door openings. Boeing incorporated the component

required to use computerized machinery to produce these parts." (Doc. 702-4 at 7).

¹³ See Doc. 702-4 at 17, asserting that the FLKEY flag note in drawings "relates to Key Characteristics identified in the engineering drawings that are integral to Hardware Variability Control (HVC). [] HVC cannot be controlled without SPC data. The utilization of electronic datasets and computer controlled equipment for production and inspection purposes are derived from the overall requirements of ATA and Hardware Variability Control (HVC), as provided for in relevant design, production, inspection and purchasing documents (as defined by both relevant type design and production certificate requirements), as well as, geometric datum being represented in space through electronic datasets."

parts it received from Ducommun into the fuselage structures of the 737NG aircraft at issue that it sold to the government.

The contracts between Boeing and Ducommun required Ducommun to implement and maintain a quality system that met or exceeded the requirements of Boeing's AQS D1-9000. The latter system required suppliers to establish procedures to ensure that non-conforming products were not used or installed and to notify Boeing of such non-conformities. It required the supplier to provide a detailed "first article inspection" (FAI) on a new part that was representative of a first production run to verify that the prescribed production methods produced an acceptable item in accordance with engineering specifications. Boeing's Quality Assurance Manual (Doc. 652-6) provided that non-conforming material was to be marked and dispositioned by a Material Review Board (MRB) consisting of representatives of quality assurance and engineering departments. By regulation, the MRB had the responsibility of determining whether parts withheld as non-conforming were in fact serviceable, needed to be reworked, or should be rejected.

Ducommun was also required under its contracts with Boeing to obtain and maintain ATA qualification. Ducommun was supposed to measure all Key Characteristics and validate that they met engineering tolerances. Boeing's contracts with Ducommun provided that Ducommun "may utilize SPC control charts ... in an effort to provide process improvements." Ducommun was required to submit a sampling plan (i.e., less than 100% inspection) for ATA parts.

Ducommun obtained ATA qualification from Boeing after demonstrating that it had NC machine and CMM capability to manufacture

and measure ATA parts. On May 10, 1995, Boeing delegated to Ducommun authority to perform quality assurance inspections of Ducommun's work product on Boeing's behalf. This authority did not extend to ATA parts until a first article inspection was completed by Boeing. In May of 1996, Boeing extended Ducommun's delegated authority to include inspection of ATA parts. This delegation saved Boeing the cost of inspecting Ducommun parts.

Ducommun initially produced the contracted-for ATA parts on NC machines. First article inspection was performed on the initial NC machined items. Apparently because it could not keep up with demand using only NC machines, however, and because it was a cheaper alternative, Ducommun began sometime in 1996 to use what are referred to here as hand-directed "wagon wheel tools"¹⁴ to produce ATA parts. (Relators dispute whether these tools qualified as "drill jigs" but they cite no evidence that Boeing did not consider them as such.) Ducommun opened a "Boeing cell" in its manufacturing facility where it hand-drilled and ground ATA parts on wagon wheel tools. There were no NC machines in the Boeing cell. Ducommun did not collect or keep SPC data on key characteristics of the ATA parts - the hand-directed tools being used did not collect such data - although its contracts with Boeing required it to do so. Boeing managers knew that Ducommun was not using computerized machines to fabricate ATA parts.

Ducommun tooling audit.

In 1999, Boeing detected non-conformities in parts known as "bear straps." Ducommun was one of the suppliers of these parts.

¹⁴ The tools were given this name by Ducommun employees because they resembled half of a wagon wheel.

Boeing wrote up an NCR (non-conforming part report) and Boeing's MRB determined that a shipment of 24 of these parts should be scrapped. The parts had unacceptable "shy" edge margins. Boeing suspended Ducommun's work on the parts and its delegation of source authority for the parts. Relators Prewitt and Ailes were members of a Boeing "bear strap team" that investigated the problem.

In 1999, Boeing appointed a "tooling audit team" to audit numerous tools at Ducommun that were being charged to and paid for by Boeing. Relators were members of the team. The scope of the audit included inventory accountability, evaluation of tool usage, storage and quality, manufacturing planning and processes, and tooling costs. The resulting August 24, 2000 audit report contained the following executive summary:

The severity of anomalies discovered at AHF-Ducommun is such that [Boeing] is pursuing restitution for a potential amount of \$5.3 million. Although disputed by AHF-Ducommun management, evidence of mischaracterization of AHF-Ducommun's current manufacturing process was discovered. Tools contractually represented to be required for a numerical control (NC) machine process were found being used as router fixtures. Planning documents that were provided to the audit team indicated NC machine processing, NC machine-type tools, and NC programming tapes. However, planning documents on the shop floor at AHF-Ducommun indicated otherwise. Observations at AHF-Ducommun revealed a labor-intensive hand-route[//]form process where machining-tools are used as shop-aids and contour templates. Misrepresented processes, along with inadequate inspections were found to exist at AHF-Ducommun.

The body of the report included the following finding, among others:

Two sets of planning documents were found to exist. Planning provided to BCA-WD indicated numerical control (NC) manufacturing process. Planning used by AHF-Ducommun production

personnel indicated a hand-route/form manufacturing process. Observations, interviews, and process evaluation revealed a manufacturing process that includes hand-route, hand-form using ball-peen steel hammers, scribing of the profile, and hand-sanding with a belt sander.

ATA holes are hand-drilled on a router fixture identified and sold to BCA-WD as a mill fixture. This manufacturing process was substantiated by AHF-Ducommun production personnel as being the "standard practice" for production of BCA-WD parts. AHF-Ducommun management contends that Boeing parts are NC machined. Contractual and financial agreements are based on NC machined production, in full, and not on manufacturing techniques AHF-Ducommun currently deploys in subsequent production.

The report proposed the following management actions by Boeing in response to these conditions: "Correct the manufacturing planning documentation to reflect the current and actual manufacturing process" and "Ensure that hand-form operations are performed in accordance with BAC 5300 and all other applicable specifications."

The audit report further found:

In 1996, AHF-Ducommun was given full delegation of product acceptance. First Article Inspection was performed on initial production, which used the NC process. Once the First Article Inspection was obtained, it is believed AHF-Ducommun reverted to the current manufacturing process stated above. The current manufacturing process has not been validated with First Article Inspection, as required by D1-9000, Section 1.10.

Currently, AHF-Ducommun uses tools for the acceptance of parts. These tools were found to be out of calibration and inadequate to assure dimensional accuracy of production parts. ATA holes are checked back to production tooling, which is not in compliance with 800-10438, "Requirements For Product Acceptance To Statistical Tolerance," a supplement that provides interpretation of statistical tolerances per RDS-1065 and defines the approved methods for

determining if product meets the statistical drawing requirements.

The management action proposed by Boeing in response was to "[i]mplement additional controls to ensure there is adequate supplier oversight. Direct the supplier to conduct a First Article Inspection to validate the current manufacturing process (see Management Action 00-8-039-07). Instruct AHF-Ducommun to cease acceptance of parts using tools." Other management actions listed in the report included suspension of all new business with Ducommun and "consider disengagement." All Boeing divisions were to be notified of the report to assess total impact to Boeing.

Boeing managers were aware during this time frame that some suppliers were not collecting SPC data on 737NG detail parts. These suppliers felt the data was not helpful for making better parts. They were not using the data so they stopped collecting it. Boeing's Quality Assurance initially viewed NC machine processes as essential for ATA production, but they eventually "backed off" and did not require proof that NC processes were used if the parts otherwise met engineering requirements.

Boeing entered into a confidential "Settlement and Release Agreement" with Ducommun on January 31, 2001. Under the agreement Ducommun admitted no wrongdoing, but it reduced the prices it charged Boeing for 737NG parts by three percent. Among the terms of the agreement were that Ducommun agreed to provide tool designs for certain identified tools; it was to submit and adhere to a Boeing approved periodic tooling calibration plan in accordance with D1-9000; and it was to submit valid first article inspection reports for the

current method of manufacture for any parts as to which the parties agreed that the original method of manufacture had changed. Boeing agreed, among other things, to waive tool design requirements for tools not used for final acceptance; to not require any revisions to listed tools; and to not require Ducommun to create missing NC tapes. Boeing thereby essentially approved Ducommun's current tooling and method of manufacture. Ducommun continued to use the wagon wheel tools to make ATA parts without NC machines or SPC data collection.

Ducommun performed physical inspections on 100% of the parts it made for Boeing. When it found parts that did not conform to the drawings and engineering requirements, it would either scrap the parts, rework them within engineering specifications, or issue a Nonconformance Report (NCR). Boeing's Material Review Board (MRB) would then review the NCR and determine disposition of the part. The MRB would determine whether the part should be scrapped, reworked, or used "as is."

At the time the 737NG aircraft at issue were delivered to the government, Boeing was aware of Ducommun's method of manufacture and quality control system relating to 737NG parts. The government paid Boeing a total of approximately \$984,843,057 for such aircraft. At no time did Boeing disclose Ducommun's methods to the government or obtain a waiver for any nonconforming parts. (Boeing maintains that the parts were conforming and required no special disclosure).

For nine of the 737NG aircraft, Boeing obtained and submitted a Conformity Certificate for military aircraft signed by both a Boeing representative and a Boeing-employed FAA designee. In the certificates, Boeing expressly certified that each aircraft had been

manufactured in conformity with data forming the basis for type certificate approval of 737NG aircraft. The remaining 737NG aircraft carried FAA airworthiness certificates.

FAA Review of Relators' Allegations

In 2002, as a result of the allegations in relators' initial lawsuit, the FAA opened a Suspect Unapproved Parts [SUP] investigation in accordance with its regulations. The FAA's Transport Airplane Directorate led the investigation. It coordinated with the Defense Criminal Investigative Service (DCIS) and the FAA's Manufacturing Inspection District Office (MIDO) in Wichita. Among other things, the investigators reviewed relators' complaint, met with the relators, made an unannounced visit to Ducommun where investigators sampled and inspected parts and evaluated the manufacturing process, and reviewed records. The FAA concluded that the "current manufacturing process appeared to have necessary controls in place that would result in a product conforming to type design." The report stated that "no nonconforming parts were found during the investigation at Ducommun," that "all deviations to type design were recorded and approved through MRB [Material Review Board] and records were complete." It said a review of databases showed no corrective actions or deficiency reports on the parts initially singled out by relators (bear straps and fail-safe chords). The FAA closed the investigation in 2004, stating it was "unable to discover any evidence to support the allegations and no criminal, civil, or administrative action is anticipated." (Docs. 712-3).

In 2005, relators submitted a second SUP report to the FAA after retaining engineering experts. The FAA met with relators' counsel and

with at least one of relators' experts. Relators gave the FAA a list of 737NG part numbers supplied by Ducommun and several Boeing SERs citing deficiencies in Ducommun's manufacturing processes. Following an investigation, the FAA issued another report. It noted that the Wichita MIDO office had witnessed the installation of the major section fuselage joins (including skins, doubles, bear straps, shear ties, frames, stringers and fail-safe chords) and found no evidence of nonconforming ATA holes. The installation was witnessed "without any signs of contour mismatch, binding and/or galling or enlargement of ATA holes. The ATA holes were used to locate and install the assemblies during the major join operation." It said that following its investigation and findings relating to SPC processes in 2002 and 2003, "Boeing provided this office with acceptable corrective action regarding their SPC process," and that the current manufacturing process had the necessary controls in place. As for the Boeing SERs, the FAA report noted that Boeing had requested corrective actions from Ducommun, that Boeing had not delegated MRB authority to Ducommun, and that nonconformance reports (NCRs) were generated by Boeing on some of the Ducommun supplied parts.

FAA investigators specifically considered relators' contention concerning flag note S3. The FAA interpreted the language requiring a tighter tolerance "when these [SPC] requirements are not met" as allowing a deviation from the SPC requirements and allowing for acceptance of ATA parts if they met the tighter tolerances on the drawing. The FAA said the investigation "determined that the parts were manufactured and approved in accordance with the approved data, processes, and procedures as set forth by Boeing" and that "the parts

are considered approved." (Doc. 645-3).

In addition, at the request of the Defense Criminal Investigative Service (DCIS), the FAA's Chief Scientific and Technical Advisor for Fatigue and Damage Tolerance, Robert Eastin, reviewed relators' interpretation of Boeing's drawings. He made a report to DCIS setting forth his findings. Eastin subsequently submitted a declaration in this matter and was deposed. Eastin's declaration states that Ducommun's use of drill jigs was conforming:

It appears that [Boeing] designers had envisioned that the locating holes would primarily be created using an automated process and control of automated processes typically requires the collection and analysis of statistical process control ("SPC") data. The designers, however, also permitted an alternative process of creating the holes using drill fixtures and hand drilling and, in practice, it was found to be a more cost effective part fabrication process. Although the engineering drawings identify the locator hole dimensional requirements, they do not dictate the method of creation. Even if the engineering drawings required an automated process for hole creation, the use[] of hand drilling using drill fixtures would not, in itself, be a safety concern and could easily have been dispositioned by a Material Review Board ("MRB").

(Doc. 647-9 at 4). The declaration states that Eastin looked for documented discrepancies with parts that were either improperly dispositioned by Boeing's MRB or not dispositioned at all and still assembled into airplanes, but he found no such evidence. He said none of the quality system issues pointed to by relators constituted part discrepancies requiring MRB action. He states that he also looked for evidence of in-service problems, such as reports of cracked, failed or distressed parts, but saw none.

Eastin's declaration says there is an absence of evidence to

support relators' allegation that the airplanes in question are not safe and should be grounded. "On the contrary, evidence indicates that the form, fit and function of the subject parts are as required due to conformance with the engineering drawings or as determined by MRB action for documented nonconformities. I see no need for the FAA to take any actions related to the safety of the affected airplanes, including issuance of any Airworthiness Directives."

In response to an inquiry from the media network Al Jazeera, an FAA representative stated that the FAA "found the parts were produced in accordance with type design." Additionally, a DOJ representative told Al Jazeera the government had "thoroughly investigated" relators' allegations, including the claim that the Ducommun parts were nonconforming because they were not manufactured using a computerized method." Doc. 645.

The FAA continued to certify 737NG aircraft with Ducommun parts after becoming aware of relators' allegations. The agency took no action to revoke any certificates or to require remedial action in light of the allegations.

Air Force and Navy Purchasers

Benjamin Butler, the Air Force program manager responsible for approximately twelve of the aircraft at issue, indicated that he relies on and trusts the FAA certification of the aircraft. Ronald Tucker, the Navy program manager responsible for four of the aircraft, testified that airworthy means to him that the FAA has approved it, and "as far as this program [is] concerned, the FAA is my engineering department. They signed off on it, it is done.... You know, the FAA has certified the aircraft and these modifications ... I don't rely

on Boeing for anything." These witnesses testified that the aircraft have met or exceeded contractual performance expectations.

The Air Force initially leased several of the aircraft at issue rather than purchasing them outright. The Air Force had the right to cancel the leases at the beginning of each year and the option to purchase the aircraft when the leases ended. Between 2008 and 2010, the Air Force opted to purchase the leased aircraft despite being fully aware of relators' claims.

747 and 757 Aircraft.

Aside from a speculative assumption by one or more of relators' experts, relators cite no evidence of any nonconformities in Ducommun parts installed on 747 or 757 aircraft.¹⁵

Twenty-five of the relevant invoices for 747 and 757 aircraft were issued six or more years before March 11, 2005.

B. Relators' Motions to Strike the FAA SUP Reports and Eastin Testimony (Docs. 682, 687)

Relators move to strike the foregoing 2004 and 2005 SUP reports and the declaration and deposition testimony of Robert Eastin.

Relators contend the FAA SUP reports do not qualify for the public records hearsay exception in Federal Rule of Evidence 803(8) because they are untrustworthy. They say the reports are untrustworthy because: they were untimely; the FAA investigators lacked skill and experience; the investigation was conducted without a hearing; the reports were prepared for litigation; the reports contain redactions and multiple hearsay; and no basis is set forth for the reports'

¹⁵ See Hammerquist Depo., Doc. 702-22 at 127-29.

conclusions. Relators argue the reports are not even relevant "because they do not help the finder of fact determine the truth as to the existence or absence of non-conforming parts installed on Boeing aircraft." Relators also complain the reports are prejudicial and unfair "in light of the influence Boeing not only has with the FAA but has actually exercised in this case, as when Boeing's counsel drafted declarations for an FAA representative." This is a reference to the Eastin declaration, which relators contend was "effectively created by Boeing for the purpose of litigation." Relators further argue Eastin's testimony should be excluded as an improper and unsupported expert opinion.

SUP Reports. The court concludes that the SUP reports fall under the public records exception of Rule 803(8)(A)(iii). They contain the FAA's findings from a legally authorized investigation and relators have not shown that the reports should be excluded as untrustworthy. See Perrin v. Anderson, 784 F.2d 1040, 1047 (10th Cir. 1986) (listing factors to be considered). The reports were not untimely considering the scope, extent and timing of relators' FCA allegations; relators make no showing that the FAA investigators lacked the requisite qualifications (relators apparently did not attempt to depose the investigators or otherwise discover their qualifications); the claims and statements of relators and their experts were considered by the FAA in its investigation; and the reports were not prepared for purposes of litigation but resulted from the FAA's legal obligation to investigate upon receiving notice of suspected unapproved parts. The FAA's investigation included both physical inspection and document review at Ducommun and at Boeing. The SUP reports cite a factual and

regulatory basis for the conclusions stated therein. And as defendants point out, in reviewing this matter the FAA had a strong incentive to identify and remedy any verifiable safety problems. Relators' disagreement with the findings in the SUP reports and their experts' wide-ranging criticisms of the FAA's motives and competence are not enough to warrant exclusion of the FAA's technical assessment of relators' allegations. Cf. U.S. ex rel. Milan v. Regents of Univ. of Cal., 912 F.Supp. 868, 880 (D. Md. 1995) (investigative report of oversight agency was admissible); Beech Aircraft Corp. v. Rainey, 488 U.S. 153, 170 (1988) ("As long as the conclusion is based on a factual investigation and satisfies the Rule's trustworthiness requirement, it should be admissible along with other portions of the report."). Relators have shown no unfair prejudice or other grounds for excluding these reports.

Eastin declaration and testimony. Relators also move to strike the declaration and deposition testimony of Robert Eastin. Eastin is an employee of the FAA. His title is Chief Scientific and Technical Advisor for Fatigue and Damage Tolerance. When relators made their initial claim, the Defense Criminal Investigative Service (DCIS) and the FAA asked Eastin to evaluate relators' claims -- specifically, whether the 737 aircraft were unsafe and should be grounded. Eastin did so and prepared a report. The report itself has never been disclosed by the government, which claims it is privileged. Nevertheless, the government made Boeing aware of Eastin and agreed that Eastin (with Boeing's assistance) could prepare a declaration, which was disclosed to relators (Docs. 683-8). Thereafter, Eastin was

deposed at length by relators' counsel (Docs. 686; 711-1).¹⁶ Eastin's declaration and testimony are distinctly unfavorable to relators.

Relators' initial objection is that Boeing did not timely identify Eastin as an expert witness. The claim is factually correct but specious. Boeing identified Eastin as a person having knowledge of facts, which clearly he does (Doc. 683-2). Boeing did not identify Eastin as an expert because he is prohibited by regulation from giving expert opinion or testimony.¹⁷ (Relators' counsel are presumed to have been aware of the regulation when they prepared their clients' motion to strike). Therefore, relators' objection on this ground is overruled.

Relators' next objection is that Eastin's declaration and testimony cannot be admitted under Fed. R. Evid. 701 or 702. Notwithstanding the fact that Boeing has not offered Eastin as an

¹⁶ The procedures for obtaining testimony of an employee of the Department of Transportation in litigation between private parties are set forth in 49 C.F.R. Part 9. A request for such testimony must include a certification that the party will not seek expert or opinion testimony from the witness and will not seek the testimony of the witness at a hearing or trial. 49 C.F.R. §9.15. No employee may provide testimony or disclose information acquired in the performance of their official duties except as authorized by the regulations or other law. §9.5. If authorized to testify, the employee may testify only as to facts within his personal knowledge and arising out of his official duties. The employee is not to testify as to facts contained in a report without permission from agency counsel to disclose the information, and shall not testify as to facts when agency counsel determines the testimony would not be in the best interests of the United States if disclosed. An employee shall not testify as an expert with regard to any matter arising out of his official duties. §9.9.

¹⁷ See 49 C.F.R. §9.9.

expert witness (and no Daubert hearing has been held¹⁸), relators mount a full Daubert-style attack on Eastin's supposed lack of qualifications, bias (based on Boeing's involvement in the preparation of his declaration), his "incomplete" knowledge of the facts and lack of "independent testing," (whatever that is supposed to mean in the context of this case).

Boeing, as expected, disputes each of relators' objections. Boeing points out, correctly, that it didn't ask Eastin to review relators' claims; the government made the request. The materials which Eastin reviewed came, in whole or in part, from relators' counsel and expert witnesses. Eastin counseled with other FAA employees and then issued a report. Boeing was not involved in any of this, which relators do not dispute but rather have chosen to pretend did not happen.

Boeing claims that Eastin's declaration and his deposition testimony are admissible as statements by a party opponent, i.e., by the government. Fed. R. Evid. 801(d)(2). Boeing argues that the government is a real party in interest because it stands to recover a great deal of money should relators prevail. From a legal standpoint, the government has an interest in the case, at least in the abstract. But from a practical, case-specific standpoint, the government's position and Boeing's are non-adverse and aligned. Why else would Boeing want to use Eastin's declaration and testimony? Why else would relators so strongly object to their use?

¹⁸ In a footnote of their reply brief (Doc. 715 at 5), relators now say that "[i]f this Court is inclined to consider the opinions contained in Eastin's declaration and deposition testimony ... Plaintiffs respectfully request a Daubert hearing."

Fed. R. Evid. 801(d)(2) provides:

An Opposing Party's Statement. The statement is offered against an opposing party and:

(A) was made by the party in an individual or representative capacity;

(B) is one the party manifested that it adopted or believed to be true;

(C) was made by a person whom the party authorized to make a statement on the subject;

(D) was made by the party's agent or employee on a matter within the scope of that relationship and while it existed; or

(E) was made by the party's coconspirator during and in furtherance of the conspiracy.

The statement must be considered but does not by itself establish the declarant's authority under (C); the existence or scope of the relationship under (D); or the existence of the conspiracy or participation in it under (E).

Whether the Eastin materials qualify as statements of a party opponent under Rule 801(d)(2) is problematic. The United States clearly has some interest here, although it is not a party to the action. U.S. ex rel. Mergent Svcs. v. Flaherty, 540 F.3d 89, 93 (2nd Cir. 2008) (while relators have a stake in the outcome, the government remains the real party in interest in an FCA qui tam case). Boeing cites two cases in support of its Rule 801(d) argument: U.S. ex rel. Milam v. Regents of Univ. of Cal., 912 F.Supp. 868, 880 (D. Md. 1995) and United States ex rel. Hill v. Univ. of Medicine, 2010 WL 4116966 (D. N.J., Oct. 18, 2010), aff'd, 448 Fed.Appx. 314, 2011 WL 5008427 (3rd Cir. 2011). But neither of these cases bears much similarity to this case. In Milam, for example, no claim of privilege was made with respect to the underlying government report. The Milam court was

persuaded in part by the fact that the report was "relevant and highly probative in that it is a detailed report, written by a scientific oversight agency, on the precise issue before this Court." By contrast, the contents of the FAA report have been shielded from disclosure by the United States' claim of privilege. As for Hill, which relied on Milam, neither the district nor the appellate opinion even mentions Rule 801. Hill's relevance is tenuous, at best.

The issue which most concerns this court, however, is Boeing's position that Eastin can state his "conclusions . . . regardless of the accuracy of his conclusions." (Doc. 711 at 22). Eastin's bottom-line "conclusions," as described by Boeing are: "He is part of the factual story at the FAA. Relators' complaints were received and processed; no action was taken because the FAA concluded the aircraft were safe. Those facts speak directly to falsity, materially, and scienter. Mr. Eastin can testify to those facts based on his personal knowledge and participation." (id. at 3). Boeing also says Easton is a fact witness because "[h]e has personal knowledge of the FAA process for reviewing relators' contentions to determine whether they warrant FAA action, including issuance of an Airworthiness Directive, and rejecting those contentions." (Doc. 711 at 17).

Does it make sense to allow Eastin to testify about these things "regardless of their accuracy"? Not to this court. Moreover, Eastin's testimony that the FAA (in reality, Eastin) concluded that the 737 aircraft were "safe" is far more than just a fact; it is the FAA's conclusion based upon Eastin's (and other FAA employees') opinions. Since Eastin can't be a Rule 702 expert because of the regulation, the only other way he can give opinion testimony is by

qualifying under Rule 701. But Rule 701(c) precludes lay opinion testimony if it is ". . . based on scientific, technical or otherwise specialized knowledge within the scope of Rule 702." How can Eastin's testimony be anything else?

Even though Boeing is correct that Rule 801(d)(2) does not require a showing of trustworthiness¹⁹, the court concludes that Eastin's declaration and deposition testimony should be excluded under Rule 403. The simple fact is that the contents of Eastin's report to the FAA are unknown. The government has shielded the report through an assertion of privilege -- though the court has no idea why -- and Boeing has not challenged that assertion. Instead, Boeing has attempted to recreate the contents of the report through other means. But the means of doing so -- a restricted declaration, a deposition hampered by claims of privilege, a limited opportunity to discern the contents of the underlying report, and a legal restriction on the witness's testimony at trial -- presents an unacceptable substitute. It unduly restricts what should be a free and open inquiry into Eastin's report to the FAA, which is the whole point of his testimony. On the other hand, the probative value of Eastin's declaration and deposition testimony appear to be limited because they more or less

¹⁹ In Grace United Methodist Church v. City of Cheyenne, 451 F.3d 643, 667 (10th Cir. 2006), the court noted statements of a party opponent require no showing of trustworthiness and may be introduced even though the declarant lacks personal knowledge of the matter asserted. But Grace itself made clear that the rule does not obliterate all limitations on admission of such statements. Grace found that the opposing party could use a bishop's letter against his church insofar as it contained admissions about a church matter, but not insofar as it contained the bishop's legal opinions. This was so because he was "entirely unqualified to pontificate on legal questions" and his statements therefore amounted to "irrelevant hearsay." Grace, 451 F.3d at 669.

duplicate other evidence in the record. The FAA's actions with respect to these aircraft and with respect to relators' allegations are essentially set forth in the SUP reports and elsewhere.

Rule 403 provides that the court may exclude relevant evidence if its probative value is outweighed by a danger of unfair prejudice. Absent an adequate showing that Eastin's conclusions are trustworthy, the court concludes it would be inappropriate to admit his scientific opinions into evidence. See Aliotta v. Nat'l. R.R. Passenger Corp., 315 F.3d 756, 763 (7th Cir. 2003) ("we see no good reason why unqualified and unreliable scientific knowledge should be exempted from the expert evidence rules simply because the speaker is an employee of a party-opponent."); Wright & Miller, 30B Fed. Prac. & Proc. Evid. § 7015 (2014 ed.) (arguing Aliotta should have resorted to Rule 403 and excluded any evidence whose probative value was substantially outweighed by the danger of unfair prejudice).

Because the probative value of Eastin's evidence is substantially outweighed by the danger of unfair prejudice, relators' motion to strike Eastin's declaration and deposition testimony is granted. These materials will not be considered on summary judgment.

C. Summary Judgment Standards.

The rules pertaining to summary judgment are well-established. Federal Rule of Civil Procedure 56(c) directs the entry of summary judgment in favor of a party who "show[s] that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed.R.Civ.P. 56(c). An issue is "genuine" if sufficient evidence exists so that a rational trier of fact could resolve the issue either way, and an issue is "material"

if under the substantive law it is essential to the proper disposition of the claim. Adamson v. Multi Community Diversified Svcs., Inc., 514 F.3d 1136, 1145 (10th Cir. 2008). When confronted with a fully briefed motion for summary judgment, the court must ultimately determine "whether there is the need for a trial - whether, in other words, there are any genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). If so, the court cannot grant summary judgment. Celotex Corp. v. Catrett, 477 U.S. 317, 322-23, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986).

D. Elements of an FCA Claim.

Section 3729(a) of Title 31 prohibits making false or fraudulent claims for payment to the United States. It makes any person liable who "knowingly presents, or causes to be presented, a false or fraudulent claim for approval," §3729(a)(1)(A), or who "knowingly makes, uses, or causes to be made or used, a false record or statement material to a false or fraudulent claim," §3729(a)(1)(B). Such acts make the person liable to the U.S. Government for a civil penalty of \$5,000 to \$10,000 "plus 3 times the amount of damages which the Government sustains because of the act of that person."²⁰

The acts must have been knowingly done, but this standard does

²⁰ The FCA was amended on May 20, 2009. The court will refer to the amended version of the statute. Congress specifically provided that two amendments - including the addition of §3729(a)(1)(B) - would take effect as if enacted on June 7, 2008, and would apply to all FCA cases pending on that date.

not require proof of a specific intent to defraud. §3729(b)(1). It is satisfied if the person had actual knowledge of the falsity of the information or acted in deliberate ignorance or reckless disregard of the truth or falsity of it.

Relators and Boeing more or less agree on the essential elements of relators' claims. See Doc. 642 at 38-39. Relators can prevail under §3729(a)(1)(A) by showing: (1) Boeing presented a claim for payment or approval to the United States; (2) the claim was false or fraudulent; (3) the falsity was material to the government's decision to pay; and (4) Boeing acted with knowledge that the claim was false. Relators can prevail under §3729(a)(1)(B) by showing: (1) Boeing presented a claim for payment or approval to the United States; (2) the claim was false or fraudulent; (3) Boeing made or used, or caused someone else to make or use, a false record or statement to get a claim paid or approved; (4) Boeing did so knowingly; and (5) the falsity of the record or statement was material to the government's payment decision. These elements, which are tailored to the specific allegations of this case, are consistent with case law construing the statute. See e.g., U.S. ex rel. Spicer v. Westbrook, ___ F.3d ___, 2014 WL 1778030 (5th Cir., May 5, 2014).

E. Discussion.

1. False or fraudulent claims; scienter. The FCA "covers all fraudulent attempts to cause the government to pay out sums of money." U.S. ex rel. Conner v. Salina Reg. Health Center, Inc., 543 F.3d 1211, 1217 (10th Cir. 2008). It covers factually false claims, such as an incorrect description of goods provided, and legally false claims, such as falsely certifying compliance with a regulation as a condition

of payment. Conner, 543 F.3d at 1217.

A legally false certification can be either express or implied. U.S. ex rel. Lemmon v. Envirocare of Utah, Inc., 614 F.3d 1163, 1168 (10th Cir. 2010). An express claim arises when a payee "falsely certifies compliance with a particular statute, regulation or contractual term, where compliance is a prerequisite to payment." Ex rel. Lemmon, 614 F.3d at 1168. The "certification" need not be a literal certification, but can be "any false statement that relates to a claim." For an implied-certification claim, "the analysis focuses on the underlying contracts, statutes, or regulations themselves to ascertain whether they make compliance a prerequisite to the government's payment." "If a contractor knowingly violates such a condition while attempting to collect remuneration from the government, he may have submitted an impliedly false claim." ex rel. Lemmon, 614 F.3d at 1168-69.

The purchase contracts here required Boeing to obtain type certificates, production certificates, and airworthiness (or conformity) certificates, and relators argue that each of these certificates in turn required Boeing to follow the underlying FAA regulations on aircraft manufacture. Relators contend Boeing thus certified its compliance with the regulations by obtaining the certificates, and that "in the process of procuring the[se] pieces of paper, Boeing materially and expressly misrepresented compliance with its substantive contract obligations." Doc. 703 at 18. Relators argue that obtaining the certificates amounted to an incorrect description of the goods, as well as express and implied false representations of compliance within the meaning of the FCA. Doc. 667 at 37-38.

There is no question that FAA certification of the airplanes was a critical feature of the purchase contracts. It was an express requirement of the contracts that Boeing obtain the certificates. The Air Force and Navy contracted with Boeing to purchase "off the shelf" commercial aircraft. The contracts and the uncontroverted facts show that the FAA's assessment and certification was basically the material fact insofar as the government's purchase decision was concerned. The FAA certificates signified that the FAA had approved of Boeing's type design and quality control and production processes, and that the FAA considered these aircraft to be in accordance with type design and in a condition for safe operation.²¹ The uncontroverted facts show that the Air Force and Navy deferred to and relied upon the FAA's assessment of these matters.

Relators' claims combine elements of both express and implied false certification theories. Boeing represented and certified to the FAA that it complied with the FAA regulations governing aircraft manufacture. With the FAA certificates that Boeing obtained as a result of these representations, it obtained payment under its contracts with the military. The latter contracts expressly required Boeing to obtain the certificates "issued pursuant to" FAA regulations. Regardless of which label is applied here (express or implied certification), the FCA "covers all fraudulent attempts to cause the government to pay out sums of money." Ex rel. Lemmon, 614

²¹ Relators make much of the fact that a Boeing employee was the FAA designee who executed the airworthiness certificates. That fact is a product of the system designed by Congress. It does not undermine the validity of the certificates or call them into question. The FAA designee was acting on behalf of the FAA in executing the certificates.

F.3d at 1167. By obtaining the FAA certificates Boeing effectively represented to the Air Force and Navy that it had followed critical FAA regulations and that the planes were airworthy as defined by FAA regulations. Stated otherwise, if Boeing had somehow managed to hoodwink the FAA into certifying aircraft that Boeing knew were not airworthy, then presenting the FAA airworthiness certificates to the military to obtain payment on the purchase contracts would amount to a false certification or the use of a false record to obtain payment.²² Boeing may be correct that the FCA should not serve as a substitute for regulatory compliance and that Boeing's compliance with each and every one of the thousands of FAA underlying regulations covering all conceivable aspects of manufacture could not all reasonably be considered as conditions of payment on these contracts. But a representation that the aircraft were airworthy - i.e., that they were manufactured in accordance with type design and were in a condition for safe operation - went to the heart of the purchase contracts. Cf. ex rel. Conner, 543 F.3d at 1222 ("some regulations or statutes may be so integral to the government's payment decision as to make any divide between conditions of participation [in a federal program] and conditions of payment a 'distinction without a difference.'"). And the court agrees with relators that Boeing expressly or impliedly represented in connection with the purchase contracts that the

²² As Boeing notes, there are thousands of underlying regulatory requirements relating to aircraft manufacture. The fact that only material representations are actionable under the FCA would likely bar claims based on alleged violation of regulations that would not affect the safety or performance of the aircraft.

airplanes were airworthy.²³

Even so, relators must cite evidence from which a reasonable jury could conclude that Boeing knowingly and falsely certified its compliance. In this context the falsity and scienter requirements of the FCA are inseparable. See U.S. ex rel. Lamers v. City of Green Bay, 168 F.3d 1013, 1018 (6th Cir. 1999). And "[e]xpressions of opinion, scientific judgments, or statements as to conclusions about which reasonable minds may differ cannot be false." See U.S. ex rel. Morton v. A Plus Benefits, Inc., 139 Fed.Appx. 980, 982-83, 2005 WL 1672221, 3 (10th Cir. 2005) (citing U.S. ex rel. Roby v. The Boeing Co., 100 F.Supp.2d 619, 625 (S.D. Ohio 2000)). "Falsity under the FCA does not mean scientifically untrue; it means a lie." At a minimum it "requires proof of an objective falsehood." Ex rel. Morton, 139 Fed.Appx. at 982-83 (citations and punctuation marks omitted); Wang v. FMC Corp., 975 F.2d 1412, 1420-21 (9th Cir. 1992) ("Without more, the common failings of engineers and other scientists are not culpable under the Act.").

As applied to the case at hand, this means relators must cite evidence that Boeing's certifications - which were based on Boeing's understanding of its 737NG engineering drawings, quality control requirements, and the applicable FAA regulations - amounted to a

²³ By contrast, the contractual provisions relating to Boeing's production facilities and quality control systems listed several FAA regulatory requirements and then stated: "Compliance is evidenced by the [FAA] Production Certificate." The court agrees with Boeing that this language specifically limited Boeing's contractual obligation to obtaining and maintaining an FAA Production Certificate, something Boeing unquestionably did. Thus, no FCA claim lies for any alleged violation by Boeing of the quality control regulatory provisions listed in these portions of the purchase contracts.

reckless or knowing falsehood. Evidence of good-faith differences of opinion between Boeing and relators' experts about what FAA regulations require will not suffice. This is a significant hurdle given that the FAA - the federal agency charged by Congress for determining whether type design and other regulatory requirements are met - specifically examined relators' allegations and essentially concluded that Boeing's interpretation was correct.

Notwithstanding the FAA's findings, relators believe Boeing failed to conform to and comply with the requirements of the 737NG type design and Boeing's production certificate. Doc. 703 at 13. Boeing's false claims allegedly "consisted of, among others, its abandonment, without contemporaneous disclosure to or consent by the Government, of the advanced technology process requirements specified for the design, fabrication, assembly and quality control of the aircraft...."

Relators' allegations are based in significant part on Ducommun's use of hand-directed tools to fabricate ATA parts and the fact that ATA holes were drilled without collection or use of SPC data. Relators cite their experts' view that these practices violated the 737NG type design, Boeing's quality control policies, and various FAA regulations. Most prominently, they point to the provision in flag note S3 stating that parts identified as statistically toleranced "shall be produced with statistical process controls." When this flag note was used in engineering drawings, a statistical tolerance for each ATA hole was provided in the drawing. According to the evidence, the use of statistical tolerances and SPC necessarily mandated the use of a CNC machine to capture SPC data.

Although the foregoing facts, standing alone, would indicate that SPC was mandatory, the rest of flag note S3 makes it possible to conclude otherwise. In each instance where the flag note appeared, a narrower specified tolerance was listed along with the statistical tolerance. The note explained that the statistical tolerance applies only if certain conditions were met. "When these requirements are not met," the note provided, individual measurements had to fall within plus or minus thirty percent of the statistical tolerance. The latter provision can reasonably be construed to mean that statistical tolerancing and SPC were not always required. And if SPC was not required, drilling ATA holes with a non-CNC tool (such as a drill jig) would not violate the requirements of flag note S3 so long as the narrower tolerance was satisfied. This is certainly not the only possible understanding of the flag note, and perhaps not even the best one, but it is a plausible one.

Boeing's ATA design guide, which was in effect at the relevant time, similarly indicated that statistical tolerancing was not mandated. An introductory note on the use of flag notes stated in part:

When statistical tolerancing is used on an engineering drawing, the corresponding arithmetic tolerances may also be shown. The statistical tolerances will be identified with an "S" series Flag Note. If Manufacturing elects to build to statistical tolerances rather than arithmetic tolerances, the part features must be fabricated using statistical process controls;...

(Doc. 669-5 at 8-9) (emphasis added). This indicates it was up to manufacturing to choose the method of production and that use of SPC was not required if part features were fabricated to satisfy the

drawing's narrower specified tolerances.

This optional aspect of SPC is consistent with the testimony of the two authors of flag note S3, Kuss and Atkinson. Kuss testified they included the phrase "when these requirements are not met" to explain that "the different methods of manufacture, depending on whether SPC data was generated, would result in different tolerances. Flag note S3 was not meant to require SPC in every instance...." He said use of drill jigs by Ducommun was acceptable so long as ATA hole location tolerances stated in the engineering drawings were satisfied. Atkinson echoed that view, saying they knew "part suppliers would have options for the method of drilling," so they provided for different tolerances depending on whether the supplier conducted a statistical analysis. This uncontradicted testimony is consistent with other evidence indicating that engineering drawings ordinarily set the physical parameters for parts but did not dictate a specific method of manufacture. Additionally, Boeing cites the declaration of a former Boeing lead engineer who says he interpreted the flag note in the same manner as the authors did, and that he knows of no Boeing engineer who interpreted it differently.

Other Boeing policy documents support the same view. Boeing publication "Requirements for Product Acceptance to Statistical Tolerance" provided interpretation of statistical tolerances and defined the approved methods for determining if a product met statistical drawing requirements. (Doc. 669-8 at 7). It too indicated that use of SPC and CNC machines for drilling ATA holes was not an absolute requirement and that ATA parts produced without SPC were acceptable as long as they met the required tolerance. A provision

entitled "Summary of Flag Note S3 Requirements for Product Acceptance" lists four options for accepting statistically toleranced features. The first two involve using SPC and 100% lot inspection. The third states in part that "[w]hen ... statistical process controls are not utilized in the manufacturing process, every S3 identified feature must fall within [plus or minus] 30% (goal post tolerance) of the specified engineering tolerances, centered on the target value of the feature as verified using standard inspection and measurement techniques." The fourth option, which was characterized as "not preferred," provides in part: "A drill jig or check fixture may be used, although this method does not provide quantifiable variation data. The tool can consume a maximum of 2/3 of the 60% goal post tolerance (which translates to 40% of the specified statistical tolerance) for the feature. Variation data collection and characterization is not required in this case." These provisions taken together indicate that use of SPC was not mandated either in production or acceptance of ATA parts.

Yet another Boeing document in effect at the time, the Supplier ATA Capability Assessment (Doc. 669-13), also stated that CNC machining of ATA parts was not required. Although use of CNC machines was preferred, "[p]recision drill jigs may, and in some instances should, replace the CNC mill." The use of drill jigs to install and inspect ATA holes was "a viable alternative and in some instances provides the best value approach."

The upshot of all this is that there were, at a minimum, conflicting indications of whether use of CNC machines and SPC were required for production of ATA parts. That fact alone undermines

relators' claim that Boeing knowingly and falsely certified compliance with FAA regulations in this regard. But above and beyond that, relators' allegations were specifically investigated, reviewed and rejected by the FAA. The uncontroverted facts show the FAA concluded the aircraft parts conformed to type design. It rejected relators' allegations about CNC machines and the use of SPC.

Congress has given the FAA primary responsibility for regulating aircraft manufacture as a means of furthering public safety. The FAA has the far-reaching technical expertise needed to judge compliance with its regulations and to assess the impact of manufacturing practices on public safety. The FAA has promulgated extensive, wide-ranging, complex regulations, and it is responsible for construing and applying them on an industry-wide basis. It has exceptionally broad remedial powers to enforce the regulations if it believes a violation has occurred. Its agents and officers are accountable for their actions (as members of the Executive Branch) and the agency is subject to oversight by Congress.

Federal judges and juries, by contrast, have no such expertise or restraints, and allowing them to decide whether aircraft are airworthy has the potential to derail the oversight system devised by Congress and implemented by the President. Cf. ex rel. Conner, 543 F.3d at 1221 (allowing FCA claim based on hospital's Medicare certification "would undermine the government's own scheme for ensuring that hospitals remain in compliance and for bringing them back into compliance when they fall short of what the Medicare regulations and statutes require."); U.S. ex rel. Rostholder v. Omnicare, Inc., 745 F.3d 694, 702 (4th Cir. 2014) ("When an agency

has broad powers to enforce its own regulations, as the FDA does in this case, allowing FCA liability based on regulatory non-compliance could 'short-circuit the very remedial process the Government has established to address non-compliance with those regulations.'").

If relators' claims of regulatory non-compliance had not been already been reviewed by the FAA, the court would likely stay this case and submit these issues to the agency under the doctrine of primary jurisdiction. See e.g., U.S. ex rel. Wall v. Circle C Constr., L.L.C., 697 F.3d 345, 352 (6th Cir. 2012) ("The primary jurisdiction doctrine is a rule of judicial construction which 'allows courts to refer a matter to the relevant agency whenever enforcement of the claim requires the resolution of issues which, under a regulatory scheme, have been placed within the special competence of an administrative body.'"); In re Universal Serv. Fund Tel. Billing Practices Litigation, 300 F.Supp.2d 1107, 1152 (D. Kan. 2003) ("courts should generally refer matters to administrative agencies where issues of fact are not within the conventional experience of judges, require the exercise of administrative discretion, or require uniformity and consistency in regulating the business entrusted to a particular agency."). But doing so now would be redundant. The FAA has already investigated, reviewed and rejected relators' allegations. Relators and their experts were given an opportunity to submit any evidence for the agency's consideration, including after the FAA rejected their initial submissions as unsubstantiated. Relators have not shown that the FAA failed to consider some critical matter or that the FAA findings should be disregarded. In 2011, in response to a letter to the FAA from relators' counsel urging the FAA to take action against

Boeing, the acting chief counsel of the FAA stated:

Although you may disagree with the FAA's position, the agency has thoroughly reviewed the evidence you have provided, either in writing or in your discussions with FAA officials, arising out of your *qui tam* litigation. Based on the information you provided, the FAA determined there were no critical safety issues regarding the Boeing 737, and the agency has no reason to reconsider that conclusion. In the absence of new evidence regarding the 737, I believe our past evaluations have been sufficient to confirm adherence to FAA requirements. If other information becomes available, we will reassess what FAA actions, if any, are necessary to assure compliance with regulatory requirements.

Doc. 647, Ex. A-15.

Relators clearly disagree with the FAA, but the agency considered their arguments and evidence and reached a conclusion with a rational basis. Relators' arguments that FAA investigators lacked the proper expertise or that the investigation was otherwise flawed provide no basis for this court to disregard the FAA's considered conclusion that the parts were acceptable. See Auer v. Robbins, 519 U.S. 452, 462 (1997) ("There is simply no reason to suspect that the interpretation does not reflect the agency's fair and considered judgment on the matter in question."); U.S. ex rel. Purcell v. MWI Corp., 520 F.Supp.2d 158, 176 (D. D.C. 2007) ("Federal courts hesitate to second-guess an agency's interpretation of its own regulation and in fact will sustain it unless 'plainly erroneous or inconsistent' with the regulation.). An FCA action is not the appropriate vehicle for challenging a federal agency's construction and application of its regulations.

Similarly unpersuasive is relators' suggestion that the FAA did not really reject their claims, which flies in the face of both common

sense and the FAA's findings and course of conduct. FAA investigators concluded that "the parts were manufactured and approved in accordance with the approved data, processes, and procedures as set forth by Boeing" and that "the parts are considered approved." As noted above by the FAA's acting counsel, the agency reviewed relators' allegations and concluded there were no flight safety critical issues concerning the 737. Had the FAA found otherwise, it would have been obligated to act. Considering all of the circumstances, including the fact that the responsible government agency believes these parts conform to regulatory requirements, relators have failed to show a genuine issue of material fact on their claim that Boeing knowingly and falsely certified compliance with the FAA regulations.

In so finding, the court need not go so far as to hold that the FAA's findings necessarily preclude relators as a matter of law from claiming that Boeing violated FAA regulations. Cf. Restatement (Second) of Judgments §83, comment b ("Decisional processes using procedures whose formality approximates those of courts may properly be accorded the conclusiveness that attaches to judicial judgments."). It is enough to say that relators have made no showing of a genuine issue of material fact in light of the FAA's findings and the other uncontroverted facts. See U.S. ex rel. Williams v. Renal Care Group, Inc., 696 F.3d 518, 531 (6th Cir. 2012) ("The False Claims Act is not a vehicle to police technical compliance with complex federal regulations.").

2. Materiality. All of relators' "false claim" allegations also require a showing of materiality. In view of the above finding that relators have failed to support the first element of their FCA claims,

questions about materiality are arguably moot. But because relators have made a such multitude of allegations, some of which are difficult to categorize or even comprehend, the court deems it advisable to address materiality as well. For example, in addition to claims about Boeing's failure to use SPC, relators claim that Boeing made numerous false representations to the government including that its manufacturing processes would be "state of the art" and the aircraft would be "free from defects," that it would incorporate ATA, HVC, SPC, and the D1-9000 AQS quality system in manufacturing the 737NG, that it performed appropriate first article inspections, and that "key characteristics" would be measured to ensure that they met engineering tolerances. Relators' experts, in combined reports spanning hundreds of pages, assert innumerable regulatory violations relating to these and other matters. But even if relators could manage to show that Boeing knowingly made false representations about these matters, the uncontroverted facts fail to demonstrate a genuine issue of whether they were material to the government's payment decision.

A false or fraudulent statement is material for purposes of the FCA if it has "a natural tendency to influence, or [is] capable of influencing, the payment or receipt of money or property." §3729(b)(4). See also U.S. ex rel. Lemmon v. Envirocare of Utah, Inc., 614 F.3d 1163, 1169 (10th Cir. 2010) ("a false certification ... is actionable under the FCA only if it leads the government to make a payment which, absent the falsity, it may not have made."); U.S. ex rel. Conner v. Salina Regional Health Center, Inc., 543 F.3d 1211 (10th Cir. 2008) ("the false statement must be material to the government's decision to pay out moneys to the claimant"). Cf. U.S.

ex rel. Bahrani v. ConAgra, Inc., 624 F.3d 1275, 1295 (10th Cir. 2010) (“To date, we have never directly addressed whether civil claims under the FCA incorporate a materiality element and, if so, what the proper test is for materiality.”).²⁴

Materiality is an objective rather than a subjective standard. See U.S. ex rel. Feldman v. Van Gorp, 697 F.3d 78, 95 (2nd Cir. 2012). It turns on whether a statement would have a natural tendency to influence or is capable of influencing the agency’s payment decision. It does not require a showing that the particular government employee making the payment decision in fact considered the statement to be important.

The evidence here cannot reasonably support a finding that Boeing’s allegedly false representations about its regulatory compliance or manufacturing processes were material. To begin with, relators cite no evidence that any physically non-conforming parts were installed on any aircraft delivered to the government. It might be reasonable to infer that a false representation that an aircraft’s parts conformed to engineering requirements could influence the government’s decision. But relators cite no evidence of such non-conformance. Boeing has cited evidence to the contrary and the FAA has determined that the challenged Ducommun parts in fact conformed to type design. It is true that relators have cited evidence of some

²⁴ As noted in Bahrani, courts adopted a materiality element on FCA claims before the statute expressly required it. Most courts held that materiality focused on whether the false statement was capable of influencing the agency’s decision. Bahrani, 624 F.3d at 1295, n.9. As a result of amendments to the FCA in 2010, that standard was expressly adopted as part of §3729. Boeing concedes that the statutory standard applies in the instant case.

deficient tools, processes and record-keeping at Ducommun, as well as a failure by Ducommun to properly measure "key characteristics" as required by its contract with Boeing. But according to FAA investigative records, Boeing instituted corrective actions and the FAA was satisfied that the problems were sufficiently addressed. It is not reasonable to infer that these production and record-keeping failures alone could have influenced the government's purchase decision when the uncontroverted evidence is that the parts conformed to engineering specifications and were approved by the FAA. In arguing that the deficient processes raise the specter that physically non-conforming parts were installed, relators discount or disregard Ducommun's 100% inspection and measurement of ATA parts after fabrication and its validation that the parts met engineering tolerances. They also dismiss evidence that Boeing's MRB properly dispositioned identified non-conforming parts and that Boeing was able to reject parts during assembly if ATA holes did not line up or parts were otherwise non-conforming.²⁵ Against this evidence that several quality control checks were in place, relators offer only speculation that some non-conforming parts might have slipped through. But speculation fails to meet relators' burden of showing a genuine issue of fact.

In response to relators' allegations and input, the FAA

²⁵ Relators cite an incident where out-of-contour Ducommun chords were detected by Boeing at final assembly in Renton, Washington. Relators do not dispute that Boeing's MRB properly dispositioned these non-conforming parts. Rather, they argue it is evidence that non-conforming parts could avoid detection at Ducommun and Wichita. (See Doc. 702-15 at 10). That fact is not proof that there were non-conforming parts on the aircraft delivered to the government, however, nor is it proof of a materially false representation by Boeing.

investigated and found no evidence of non-conforming parts. The FAA also found no service difficulty reports (i.e., reported problems) on the Ducommun parts. (Doc. 647-4 at p. 33). Relators cite no competent evidence that any of the challenged parts have failed in service or have otherwise caused problems.²⁶ Relators' experts hypothesize that defects in the Ducommun parts are latent and may only become apparent after years of accumulated fatigue damage cause the parts to fail. Anything is possible, of course, but a possibility alone cannot satisfy a preponderance of the evidence standard. Some of the aircraft at issue in this case have been in service now for over 15 years. No evidence is cited of any damage or cracks relating to non-conforming Ducommun parts. Declarations and testimony from Navy and Air Force officers state that the aircraft have met or exceeded expectations, with no evidence of unexpected corrosion or damage. All of these facts tend to refute rather than support a claim of materiality.

In an attempt to overcome this lack of evidence, Relators point to an Airworthiness Directive (AD 2013-19-23) issued by the FAA in 2013 which changes maintenance requirements for 737NG aircraft. (Doc. 737). In a supplemental expert report - submitted without leave of court - relators' experts assert that this AD "demonstrates the fallacy of Boeing's reliance on its fuselage fatigue test" and "provides new evidence ... that Boeing falsely certified conformance" of Ducommun parts to type design. They contend it "shows that issues

²⁶ Relators' expert reports mention several past 737NG accidents where a crash or hard landing resulted in a catastrophic structural failure. The reports contain some clearly speculative assertions that the structural failures might have been related to non-conforming Ducommun parts. See e.g., Docs. 702-20, 702-21.

with cracking exist in the areas of the fuselage where Ducommun PSE [principal structural elements] parts are located." On its face the AD states that it was issued as a result of additional analysis of fatigue cracking by Boeing, not because of detection of existing problems on in-service planes. Moreover, relators fail to show the relevance of the AD. They attempt to tie it to Ducommun parts by saying it concerns PSEs where Ducommun parts are located. But as Boeing points out, Ducommun parts are located throughout the fuselage, so any maintenance directive concerning the fuselage would be "in an area" where Ducommun parts are located. The fact that an AD was issued calling for greater inspection of PSEs in the fuselage, without more, says nothing about Ducommun parts, and even less does it show that problems were created by allegedly nonconforming Ducommun parts.

The uncontroverted facts are that the government's purchase decision here was based primarily - if not entirely - on the FAA's certification of Boeing's production process and its assessment of the airworthiness of the aircraft. As an Air Force representative testified, "the FAA is my engineering department." Under the purchase contracts the Navy and Air Force relied completely on the FAA's assessment. Any questions the Air Force or Navy might have had about the propriety of Boeing's manufacturing processes undoubtedly would have been referred to the FAA. Cf. Kungys v. United States, 485 U. S. 759, 775 (1988) (plurality opinion) (materiality is determined by asking what would have ensued from official knowledge of the misrepresented fact). Given that the FAA initially certified the planes and has twice now rejected relators' claims of safety problems and regulatory non-compliance, the uncontroverted facts tend to show

only that Boeing's representations or non-disclosures would not have influenced, and therefore were not material to, the government's purchase decision. Any lingering doubt on that question is dispelled by the actions of the government purchasers after learning of relators' claims. A number of the aircraft at issue were delivered to the military after relators filed their first FCA action in 2002. (Their first action was voluntarily dismissed and then refiled in 2005). The government did not terminate the leases or contracts after learning of relators' allegations, nor did it seek any contractual remedies. On the contrary, the Air Force decided to go ahead and purchase the leased aircraft on which it had an option to buy. The most recent such purchase occurred in 2010. See ex rel. Conner, 543 F.3d 1211, 1219-20 ("If the government would have paid the claims despite knowing that the contractor has failed to comply with certain regulations, then there is no false claim for purposes of the FCA."); U.S. ex rel. Yannacopoulos v. General Dynamics, 652 F.3d 818, 831 (7th Cir. 2011) ("the agency failed to take action when it actually learned of the supposed misrepresentation. In that case, speculative testimony about how that party might have acted if it had discovered that misrepresentation earlier cannot raise a genuine issue of fact as to materiality."); U.S. ex rel. Owens v. First Kuwaiti Gen. Trading & Contracting Co., 612 F.3d 724, 729 (4th Cir. 2010) (evidence that government officials were aware of any alleged defects and accepted the work anyway "effectively negates the fraud or falsity required by the FCA"). All of the actions of the FAA and the military purchasers show that the purported false statements or failures to disclose by Boeing would not have affected the government's purchase decision.

Because Boeing's asserted failures were not material to the government's purchase decision, Boeing is entitled to judgment as a matter of law on relators' FCA claims.

2. Ducommun's Motion for Summary Judgment on Liability (Doc. 657).

Ducommun adopts Boeing's arguments for summary judgment and makes a number of additional arguments. The essential elements of relators' claims against Ducommun, like the claims against Boeing, require evidence that false or fraudulent claims were made and that the falsity was material to the government's payment decision. For the reasons discussed above with respect to Boeing, evidence of these essential elements is likewise lacking in the claims against Ducommun. The court grants Ducommun's motion for summary judgment for the same reasons previously discussed.

3. Boeing's Motion for Summary Judgment on Retaliation Claim (Doc. 648).

A. Uncontroverted Facts.

Jeannine "Gigi" Prewitt began employment with Boeing in 1996. Between 1996 and 2000, she held the positions of Buyer Level I, Material Planner Level 2, Materials Management Analyst Level 2, and Materials Management Analyst Level 3.

From 1998 to 2000, Prewitt did support work for the manufacture of body panels for the 757 aircraft program. She also purchased metallic fuselage parts for all Boeing models, including 737NG, 747,

757, 767 and 777 aircraft.

In 2000, she and several others at Boeing were placed on a team that audited tooling at Ducommun. The tooling audit team discovered evidence that Ducommun "had misrepresented manufacturing processes and had falsified quality inspections, and that Ducommun's conduct violated the basis for Boeing's delegation to Ducommun of quality assurance inspection authority." Prewitt received favorable reviews for her job performance and received a commendation and award of stock for her work on the Ducommun audit team.

The tooling audit team reported its findings to directors, executive management, and managers at Boeing in 2000. Unsatisfied with Boeing's response, Prewitt continued to raise the audit's findings with others at Boeing. She claims she was "cautioned to drop any further efforts to report violations found in Ducommun's production process." In early 2001, Prewitt and Taylor Smith met with Boeing's Director of Security Investigations, Gary Shaw. They expressed concern as to whether Boeing was disclosing the circumstances at Ducommun to the FAA, indicating they thought Boeing had an obligation to do so. Shaw allegedly told them that Boeing could sue them for telling the FAA.

The audit team raised concerns about non-conforming Ducommun parts. They did not specifically raise issues about airplanes being sold to the U.S. Government. On February 13, 2001, Prewitt sent a two-page document to Carolyn Harms, a Boeing manager, summarizing the team's remaining concerns. The document listed 12 issues, including tooling, manufacturing and quality standards. None of the issues dealt specifically with aircraft being sold to the government or with fraud

on the government.

Prewitt wrote an email summarizing her retaliation claims in November 2003. It contains nothing about fraud or government airplanes. At the time of this email, relators' FCA complaint was still under seal, meaning Prewitt was precluded from making any allegation of FCA retaliation in the email.

Prewitt's medical leave.

Prewitt went on long-term medical leave in March 2001. She returned more than two years later, in April 2003.

While Prewitt was on leave, the aviation industry suffered a significant downturn following the attacks of September 11, 2001. Boeing saw a marked decrease for its commercial aircraft. It subsequently engaged in several rounds of layoffs of employees.

As of July 2001, there were 126 Materials Management Analysts performing Prewitt's type of work in Boeing's Wichita commercial division. By the time Prewitt returned from leave, there were only 100 - a drop of 21 percent. Structural Bond, the unit to which Prewitt was assigned, was reduced even more. The group lost approximately 40 percent of its employees in the first 6 months following 9/11, and nearly 50 percent within two years of 9/11. When Prewitt went on leave, the group had 12 employees with Prewitt's particular job classification and skill background. By early 2003, that number had dropped to 3.

The Material Management Analyst job title can involve different job skills, including planning and procurement. In 2001, the total number of procurement buyers laid off with Prewitt's job title and skill code was 9. In 2002 it was 3. In 2003, Prewitt was the only

person with that title and skill code to be laid off.

Because Prewitt was on long-term leave, she was not subject to the layoffs of 2001 and 2002. But just prior to and during her leave, all of the body work for the 757 program - including work Prewitt did before the tooling audit - was transferred to an Italian supplier. As such, Prewitt's previous job was no longer available when she returned.

On March 8, 2002, while Prewitt was on leave, she and other relators filed their lawsuit under seal. It was still under seal when relators voluntarily dismissed that case in June 2003.

Relators filed the present lawsuit under seal on March 11, 2005. After the government declined to intervene, the court ordered in August 2005 that the complaint be unsealed and served on Boeing.

In June 2002, Boeing FAA representative Randy Milne was informed that an FAA investigation of suspected unapproved parts (SUP) had been initiated based on information from the DCIS. He was informed that the investigation related to Ducommun and allegedly involved "bad parts" and possibly "fraudulently represented" parts. In June 2002, an FAA request for information regarding Ducommun was transmitted to Rusty Ulmer, Boeing Wichita Procurement Quality Manager. Ulmer testified he may have asked Boeing's Internal Audit department if it was okay to send the FAA a copy of the 2000 tooling audit report. He also said he may have told Carolyn Harms of his contact with the FAA because she was Director of Materiel at the time.

Prewitt's return from leave.

In February 2003, Prewitt sent an email to Carolyn Harms telling her that she planned to return in April and asking for suggestions as

to what positions might be available. The following handwritten notes appear on a printed copy of the email from Boeing's files:

- Has been gone for almost 2 years - since 4/5/01.
- Not on authorized leave now - medical condition not validated. Aetna has cut off insurance. She has filed a lawsuit.
- Her group is much smaller now - her former boss has been reduced and is now an MMA
- Headcount in group is at target - they probably will absorb her when she returns to work.

Harms testified she did not write these notes. There is no evidence showing who wrote them. The "lawsuit" comment ostensibly refers to Prewitt's challenge to Aetna's insurance determination, although at the time of her return from leave Prewitt had not filed any "lawsuit" other than the FCA claim.²⁷

When Prewitt returned from leave in April 2003, there were only 3 others in Structural Bond with the same job classification and skill background as her. Boeing contends the group was fully staffed based on business requirements and did not need a fourth person.

Neither Boeing policy nor the SPEEA-WTPU collective bargaining agreement required Boeing to create a position for an employee returning from a leave of absence. Nevertheless, the Structural Bond manager, Steve Sharp, created a temporary position for Prewitt within his group, telling her that her chances of securing a more permanent position at Boeing would improve if she were back at work and not on leave. Prewitt contends that she sat at a desk with little work to do

²⁷ Prewitt acknowledged in her deposition that she filed a complaint with the Kansas Department of Insurance concerning Aetna's denial of disability coverage.

and was not given an opportunity to use her skills as a buyer.

Prewitt presents evidence that she applied for a number of "buyer position" openings at Boeing in 2003 but was not interviewed or hired for any of them. She cites no evidence, however, that these jobs were in her job classification.

Prewitt requested a transfer to SM&P [Supplier Management and Procurement], the procurement group with buyers of her skill code, but her request was denied. No evidence is cited of the circumstances of this denial. Sharp and another manager tried to convince Prewitt to change her skill code to a manufacturing planner rather than a buyer. Prewitt declined, noting that her background was in procurement. Prewitt says she was told in May 2003 that she and another buyer in Structural Bond would soon be transferred to SM&P but the transfer never occurred.

Prewitt was represented by the SPEEA union at Boeing. SPEEA and Boeing have collective bargaining agreements governing the terms of employment for salaried employees like Prewitt. The agreement in effect in 2003 set forth a standard retention process. The process was designed to let employees know where they stood compared to their peers with respect to the risk of being laid off. Employees with similar skills were grouped together and assigned one of three retention ratings: R1, R2, or R3. The highest retention rating (i.e. lowest risk of layoff) was R1; the lowest retention rating was R3. The ratings were assigned under a forced distribution system in which approximately 40% of employees had to be rated R1, 40% rated R2, and 20% rated R3.

Given the number of layoffs between 2001 and 2003, nearly all

of those rated R3 when Prewitt went on leave were no longer employed at Boeing when Prewitt returned. The layoffs included R2 employees and some R1 employees. Because of the forced distribution system, some employees who were rated R2 or R1 when Prewitt left were rated R3 when she came back.

When Prewitt returned, she was rated against the three other Materials Management Analysts in Structural Bond. Todd Herrington, the manager who reviewed the group and assigned retention rankings, stated that two of the four employees had over twenty years service in the group and the third had over 7 years. Prewitt had only about five years service plus two years on leave. Herrington testified that he believed Prewitt's skills were not as developed as the other three employees and he therefore assigned her a retention rating of R3. Each of the other three employees had been rated an R1 in the past; Prewitt had never been rated R1. Two of the three others had been moved down to an R2 rating under the forced distribution system.

Prewitt contends she should have been rated with the pool of buyers in procurement rather than with the other employees in Structural Bond who were internal planners.

Under the collective bargaining agreement, Prewitt had the right to appeal her retention rating before an independent panel. Prewitt availed herself of that right. The panel reviewed her rating but declined to modify it by a 2-1 vote.

Prewitt testified during her deposition that she believes someone at Boeing knew about her then-sealed 2002 lawsuit. When asked the basis for that belief, she declined to answer, citing attorney-client privilege.

Prewitt's layoff.

In the summer of 2003, Boeing implemented additional layoffs to meet revised business plans. Steven Sharp, business manager for Structural Bond, testified that his department had to reduce overall employment by five to ten persons. According to Sharp, he instructed each of his managers in Structural Bond to determine which positions in their group could be eliminated. Sharp maintains that Prewitt was designated for layoff because she was rated R3 and was working in an ad hoc position.

Prewitt received a lay off notice in August 2003 with an impending effective date in November 2003. On the same day Prewitt received her layoff notification, 22 other salaried SPEEA employees also received layoff notices. One of the other salaried employees in Prewitt's group was designated for layoff in late 2003.

Prewitt cites no competent evidence that Sharp or Herrington was aware before her layoff that she had raised complaints about fraud against the government or flight safety issues. Sharp stated in his declaration that he was aware that Prewitt had raised complaints about a Boeing supplier and was unhappy with how Boeing had handled the situation. He said Prewitt never expressed any concerns to him about airplane safety or fraud against the government. Sharp said he did not learn about Prewitt's FCA lawsuit until several years after Prewitt left Boeing.

After Prewitt received her layoff notice, Sharp stopped by her desk. According to Prewitt and another witness, Sharp reported that Ron Brunton, Director of Quality, wanted Prewitt gone and had said there "wasn't a hole deep enough to hide her" at Boeing. Sharp asked

what she had done to merit such a remark and whether she had an attorney.

After Prewitt was laid off, she applied for other jobs at Boeing. Prewitt believes the hiring managers for these positions knew of her FCA claims and refused to hire her as a result.

Prewitt filed a separate lawsuit against Boeing in 2004 and dismissed it in 2009. That suit alleged that she was treated differently and laid off due to her disability status and gender.

Prewitt claims she was retaliated against for her FCA activities in the following ways: (1) she was given a new assignment upon returning from leave; (2) she was given an R3 retention rating; (3) she was laid off; and (4) she was not rehired after her layoff.

B. FCA retaliation.

The FCA provides in part that an employee shall be entitled to relief if the employee was in any manner discriminated against in the terms and conditions of employment because of lawful acts done by the employee in furtherance of an FCA action or because of other efforts to stop violations of the FCA. 31 U.S.C. § 3730(h)(1).

The FCA "whistle blower" provision:

provides relief only if the whistleblower can show by a preponderance of the evidence that the employer's retaliatory actions resulted "because" of the whistleblower's participation in a protected activity. Under other Federal whistleblower statutes, the "because" standard has developed into a two-pronged approach. One, the whistleblower must show the employer had knowledge the employee engaged in "protected activity" and, two, the retaliation was motivated, at least in part, by the employee's engaging in protected activity. Once these elements have been satisfied, the burden of proof shifts to the employer to prove affirmatively that the same decision would have been made even

if the employee had not engaged in protected activity.

U.S. ex rel. Erickson v. Uintah Special Svcs. Dist., 268 Fed.Appx. 714, 716 (10th Cir. 2008) (quoting S.Rep. No. 345 at 35, 99th Cong., 2d Sess. 35 (1986), reprinted in 1986 U.S.C.C.A.N. 5266, 5300). See also U.S. ex rel. Sikkenka v. Regence Blue Cross and Blue Shield of Utah, 472 F.3d 702, 729 (10th Cir. 2006) (relief is available if the employee can show that the employer had knowledge that the employee was engaged in protected activity, and that the retaliation was motivated, at least in part, by the employee's protected activity).

Boeing claims it is entitled to summary judgment on this claim for three reasons: (1) because Prewitt's tooling audit activities were not protected activity under the FCA; (2) there is no evidence that Boeing knew of Prewitt's FCA lawsuit; and (3) Prewitt cannot show that Boeing retaliated against her because any adverse employment actions were based on legitimate business decisions. (Doc. 649).

The court need not address Boeing's first and second arguments, because its third argument is dispositive. Even assuming some managers within Boeing were aware that Prewitt had engaged in efforts to stop what she believed were violations of the FCA, Prewitt has failed to cite evidence showing a genuine issue of fact as to whether Boeing retaliated against her because of her efforts. Specifically, she fails to cite evidence that any of the decision makers on the employment actions affecting her were aware of her FCA activity or that they took adverse action against her because of it. Moreover, she fails to cite evidence that Boeing's proffered reasons for these employment

decisions are a pretext for retaliation.²⁸

Prewitt's first complaint is that she was not given her former position when she returned from leave. Boeing argues that the position no longer existed in April of 2003. It cites evidence that work Prewitt formerly did relating to the 757 was transferred to a contractor in Italy. In response, Prewitt calls this an "excuse" because "in truth 757 work was already winding down in late 1999/early 2000 when Prewitt was purchasing parts for other model aircraft." But the fact the position existed in 2000 when 757 work was "winding down" says nothing about whether it still existed two years later when Prewitt returned. Without more, the prior availability of the position and the fact that some portion of the prior work involved other aircraft does not show a genuine issue for trial. Prewitt cites no evidence from which a jury could reasonably conclude that her former position was still available when she returned to work in 2003.

As for Boeing's failure to assign Prewitt to another procurement position upon her return, Prewitt claims she should have been transferred to another department (SM&P) where there were open procurement positions. Sharp instead assigned Prewitt to an

²⁸ The First Circuit and other courts have applied the McDonnell Douglas burden-shifting framework to FCA retaliation claims that are based on circumstantial evidence. See Harrington v. Aggregate Indus. Northeast Region, Inc., 668 F.3d 25, 31 (1st Cir. 2012). See also McCollum v. Jacobs Engineering Group, Inc., ___F.Supp.2d ___, 2014 WL 218441 (S.D. Miss. 2014). Under that framework, an employee seeking to avoid summary judgment must first cite evidence of a prima facie case. That burden is not great; it merely requires the employee to establish facts adequate to permit an inference of retaliatory motive. The burden then shifts to the employer to articulate a legitimate non-retaliatory reason for the adverse employment action. If the employer does so, the employee has the burden of showing a genuine issue as to whether the employer's proffered reason for the act is pretextual.

essentially non-procurement job within Structural Bond, the department where she had been employed when she went on leave. Even assuming a jury could reasonably find that a transfer to SM&P would have been objectively more desirable than the assignment to Structural Bond, the evidence is lacking that Sharp (or anyone else) made this assignment with knowledge of and as a result of Prewitt's FCA activities. Similarly, Prewitt contends she was "kept out of procurement" because she applied for but was not hired for other procurement positions. But the evidence shows nothing beyond the fact that Prewitt applied for and was not hired for these jobs. It does not show what positions with her particular job code were available. It does not show the qualifications or selection criterion for these positions. It does not show the relative qualifications of the candidates or of the persons selected. Nor does it show anything about who made the decisions affecting Prewitt or the reasons for those decisions. Such facts cannot reasonably support a finding of retaliation.

Prewitt's second allegation concerns her reduction from an R2 retention rating to an R3. On this point Prewitt cites nothing to undermine Boeing's asserted explanation that the reduction resulted from a combination of the effect of layoffs, the forced distribution of the retention rating system, and Herrington's conclusion that Prewitt's service and skills were slightly less extensive than the other three members of her group. Prewitt does not specifically challenge her ranking within the Structural Bond group, but argues she should have been rated against other buyers in SM&P rather than against the group where she worked. But the evidence cited cannot reasonably support a finding that Prewitt's assignment or the fact

that she was rated against the group where she actually worked was a product of unlawful retaliation. Prewitt was in an area with other employees who shared her same job title. Even if that assignment was less than ideal in light of Prewitt's experience as a buyer, the mere fact of the assignment hardly supports a finding of retaliation. The evidence before the court shows that the assignment was made by Sharp, and Prewitt cites nothing to suggest that it resulted from retaliation. Aside from the opinions of Prewitt and a union representative that she should have been rated against other buyers, Prewitt cites nothing to show that rating her within her assigned work group somehow suggests a pretext for retaliation. Nor are any circumstances cited to suggest that Herrington's determination was not a genuine assessment of the relative qualifications of the group by that group's manager. Prewitt's R3 rating itself was upheld upon review by a panel and the circumstances surrounding the reduction, including the significant number of contemporaneous lay offs, do not suggest a retaliatory motive. Prewitt claims Herrington "was a 'cat's paw' decision maker, and was effectively used as a tool," but no evidence whatsoever is cited to support that claim. Any argument that the retention rating was a product of FCA retaliation by Boeing is based solely on speculation and not on evidence.

Prewitt next argues that her lay off constituted retaliation for FCA activity. But given her retention rating of R3 and the undisputed fact that large numbers of Boeing employees were laid off in the same time frame - including another member of Prewitt's four-person group - the evidence does not support an inference that she was singled out for adverse treatment. In addition, nothing is cited to show that

Sharp or Herrington or any other decision maker involved in the lay off determination was aware of or was influenced by Prewitt's protected FCA activity.

Prewitt argues there is "substantial evidence that officials who knew about the False Claims Act lawsuit, including Carolyn Harms, Director of SM&P, created circumstances leading to Prewitt's drop in retention rating and her resulting layoff." (Doc. 701 at 17). The inference that Harms knew about the FCA lawsuit is apparently based on the hand-written comment, previously referred to, that appeared on a printed email from Prewitt to Harms. That inference is dubious at best. (See footnote 28, supra). But even if Harms' knowledge of the FCA suit is presumed, Prewitt fails to articulate or show how Harms "created circumstances" that led to Prewitt being laid off. The evidence shows no involvement by Harms in any employment decisions affecting Prewitt. Similarly unavailing is the evidence pertaining to Brunton's alleged comment that he wanted Prewitt "gone" and that there "wasn't a hole deep enough to hide" her at Boeing. These comments clearly evidence some animus against Prewitt stemming from her efforts to correct problems at Ducommun. But aside from pure speculation, there is nothing to suggest that Brunton played any role or had any influence on any adverse employment decision affecting Prewitt. His negative comments were apparently made after she had already received a layoff notice and evidently came as a surprise to Sharp, who asked Prewitt what she had done to merit such a comment. Standing alone the comments fail to show that Brunton played any role or had any influence on the decision to lay off Prewitt.

Finally, Prewitt contends she was retaliated against because she

was not interviewed or hired for positions after being laid off. Again, the record is entirely lacking as to the circumstances surrounding these employment decisions. Prewitt claims that Boeing learned by June of 2002 of her FCA suit, meaning these adverse employment decisions occurred more than a year later. That time frame alone does not suggest improper motive. While it is not beyond the realm of possibility that retaliation played a role in Prewitt not being hired, a mere possibility is not enough to withstand a properly supported summary judgment motion. Prewitt offers no evidentiary basis upon which a jury could rationally infer retaliation. Prewitt undoubtedly believes that she was qualified for these positions - and she may have been. She had a good employment record at Boeing. But there may have been other applicants who were even better qualified or who possessed skills that Prewitt did not possess. The positions may have called for emphasis in areas where Prewitt's skills were lacking. The record is entirely silent on these points. A jury evaluating this record could have no basis other than speculation for concluding that retaliation for Prewitt's FCA activity played a role in these employment decisions. See Davis v. Unified School Dist. 500, 750 F.3d 1168, 1172 (10th Cir. 2014) ("The sheer number of failed attempts might be significant in a different context or if more completely developed, but in this case it is little more than rank speculation."). Boeing's motion for summary judgment on the retaliation claim must be granted.

C. State wrongful discharge claim.

Prewitt also claims that Boeing unlawfully retaliated against her for whistle blowing in violation of the public policy of Kansas.

Boeing argues that any such claim is precluded.

Kansas may allow a common law claim for unlawful discharge or demotion where an employer retaliates against an employee for reporting the employer's violation of health, safety regulations or general welfare regulations. See Goodman v. Wesley Med. Center, L.L.C., 276 Kan. 586, 78 P.3d 817 (2003). But this "whistle-blower's exception" to the general rule of at-will employment is itself subject to an exception. Under the "alternative remedies doctrine," a federal (or state) statute authorizing a remedy for retaliation will be substituted for a state retaliation claim if the statute provides an adequate alternative remedy. Flenker v. Willamette Indus., Inc., 266 Kan. 198, 967 P.2d 295 (1998). In other words, if a statutory remedy is adequate, the common law remedy is precluded.

Prewitt contends the FCA retaliation provision is inadequate because it does not allow for punitive damages. Doc. 701 at 18. As Boeing points out, the Tenth Circuit previously found that the absence of punitive damages alone did not render a statutory remedy inadequate. See Masters v. Daniel Intern. Corp., 917 F.2d 455, 457 (10th Cir. 1990) ("We find that the remedies provided by the Act are sufficient to have satisfied Masters' claim despite the fact that exemplary damages would not have been recoverable."). More recently, the Kansas Supreme Court indicated that a lack of punitive or other damages is "not trivial" and is a factor to consider. Hysten v. Burlington N. Santa Fe Ry. Co., 277 Kan. 551, 108 P.3d 437, 445 (2004). But as Judge Robinson noted in Conus v. Watson's of Kansas City, Inc., 2011 WL 4348315 (D. Kan., Sept. 16, 2011), Hysten found that a statutory remedy requiring arbitration was inadequate because

of a number of differences with the common law remedy, including "differences in process, differences in claimant control, and differences in the damages available." Hysten, 277 Kan. at 445. Among other things, the statutory remedy in Hysten did not allow recovery of compensatory damages for pain and suffering or of punitive damages, and the arbitrator's initial ruling was subject to court review only under an extremely narrow standard of review.

By contrast, the FCA retaliation provision (31 U.S.C. § 3730(h)) allows an employee to bring an action in federal district court and to obtain all relief necessary to make the employee whole, including reinstatement, double back pay, interest, and compensation for special damages including litigation costs and attorney's fees. For the reasons articulated by Judge Lungstrum in Lipka v. Advantage Health Group, Inc., 2013 WL 5304013 (D. Kan., Sept. 20, 2013), the court believes the Kansas Supreme Court would find the FCA remedy to be adequate and would conclude that it precludes a separate common law retaliation claim under Kansas law. Lipka, 2013 WL 5304013, *8 ("the anti-retaliation provision of the FCA adequately protects the state's public policy and provides plaintiff with a sufficient remedy for the allegedly retaliatory discharge."). Boeing's motion for summary judgment is accordingly granted as to Prewitt's state law retaliation claim.

4. Conclusion.

Relators' motion to strike Eastin's declaration and testimony (Doc. 682) is granted;

Relators' motion to strike the 2004 and 2005 SUP reports (Docs.

687) is denied;

Boeing's motion for summary judgment on liability (Doc. 644) and Ducommun's motion for summary judgment (Doc. 657) are granted; Relators' motion for partial summary judgment on liability (Doc. 650) is denied;

Boeing's motion for partial summary judgment on damages (Doc. 646) and Ducommun's joinder in the motion (Doc. 659) are denied as moot; and

Boeing's motion for summary judgment on retaliation claim (Doc. 648) is granted.

Judgment will be entered accordingly and the action will be dismissed on the merits.

A motion for reconsideration of this order is not encouraged. The standards governing motions to reconsider are well established. A motion to reconsider is appropriate where the court has obviously misapprehended a party's position or the facts or applicable law, or where the party produces new evidence that could not have been obtained through the exercise of reasonable diligence. Revisiting the issues already addressed is not the purpose of a motion to reconsider and advancing new arguments or supporting facts which were otherwise available for presentation when the original motion was briefed or argued is inappropriate. Comeau v. Rupp, 810 F.Supp. 1172 (D.Kan. 1992). Any such motion shall not exceed five pages and shall strictly comply with the standards enunciated by this court in Comeau v. Rupp. The response to any motion for reconsideration shall not exceed five pages. These page limits will not be extended for any reason, including by agreement of counsel. No reply shall be filed.

IT IS SO ORDERED.

Dated this 8th day of October 2014, at Wichita, Kansas.

s/Monti Belot

Monti L. Belot

UNITED STATES DISTRICT JUDGE