

**U.S. Department of Labor**

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**Issue Date: 21 November 2016**

Case No.: 2015-AIR-00023

In the Matter of

**WILLIAM LEE**

Complainant

v.

**TACTAIR FLUID CONTROLS, INC.**

Respondent

Appearances: William T. Lee                      Jonathan B. Fellows, Esq.  
Pro se    For the Respondent

Before: SCOTT R. MORRIS  
Administrative Law Judge

**DECISION AND ORDER DENYING RELIEF**

This matter arises under the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century ("AIR 21" or "the Act") which was signed into law on April 5, 2000. The Act includes a whistleblower protection provision, with a U.S. Department of Labor ("DOL") complaint procedure. Implementing regulations are at 29 CFR Part 1979. The Decision and Order that follows is based on an analysis of the record, including items not specifically addressed, the arguments of the parties, and the applicable law.

I. **PROCEDURAL BACKGROUND**

Complainant filed an AIR 21 complaint with the Occupational Safety and Health Administration ("OSHA") on February 11, 2010. In its April 6, 2015 letter, OSHA made the following determinations: Complainant timely filed his complaint; Respondent is a designer and manufacturer of component parts for aircraft manufacturers, and is not an air carrier or subcontractor of an air carrier within the meaning of the Act; and Complainant is not a covered employee. Accordingly, OSHA dismissed the complaint. On May 1, 2015, Complainant objected to OSHA's findings and requested a formal hearing before the Office of Administrative Law Judges ("OALJ").

Originally, this matter was referred to Administrative Law Judge William Dorsey in San Francisco, California. On September 3, 2015, Judge Dorsey issued an Order to Show Cause

Why Hearing Should Not Be Held in New York, and directed Respondent to respond by October 16, 2015. By letter dated September 23, 2015, Complainant responded, explaining that he moved to California in February 2010, and requested that the hearing be held in California. By letter dated October 15, 2015, Respondent requested that the hearing be held in New York. By Order issued October 23, 2015, Administrative Law Judge Jennifer Gee determined that Respondent's response was untimely, scheduled the hearing to take place in Sacramento, California, and reassigned the case to Administrative Law Judge Richard Clark. By letter dated October 26, 2015, Respondent requested reconsideration that its response to the Order to Show Cause was untimely. By Order issued October 28, 2015, Judge Gee granted Respondent's Motion for Reconsideration and vacated the October 23, 2015 Order.

Subsequently, on October 29, 2015, this matter was reassigned to me. On November 2, 2015, I issued the Notice of Assignment and Conference Call. Complainant responded to the Notice of Assignment by letter dated November 10, 2015, and attached his August 7, 2010, statement, which was originally transmitted as part of his Complaint to OSHA; Complainant signed this Statement under penalty of Public Law 91-596, Paragraph 17(g), and it was also signed by a witness. Respondent responded by letter dated November 13, 2015. Respondent submitted Initial Disclosures pursuant to 29 C.F.R. § 18.50(c)(1)(i) by letter dated November 20, 2015. I issued the Notice of Hearing and Pre-Hearing Order on December 31, 2015, and set the hearing for April 4, 2016 through April 7, 2016 in Syracuse, New York.

On January 7, 2016, Respondent submitted a Notice of Motion to Dismiss, and in the alternative, for Summary Decision. In support of its Motion, Respondent attached the sworn affidavits, with accompanying exhibits, of Michael Yates, Daniel Corwin, Steven Moreno, and John Callahan, in addition to a Memorandum of Points and Authority. By letter dated January 19, 2016, Complainant submitted his Response to Respondent's Motion.

In light of the inaccurate legal standard Respondent cited in its Motion to Dismiss and Complainant's *pro se* status, I issued an Order Clarifying the Standard for Motions to Dismiss, Notifying Complainant of the Requirements for Opposing Motions to Dismiss and for Summary Decision, and of the Consequences for Failing to Respond on February 4, 2016. Pursuant to this Order, Respondent submitted a Supplemental Memorandum of Points and Authority in Support of Respondent's Motion to Dismiss on February 11, 2016. Complainant submitted his response in opposition to Respondent's Supplemental Memorandum on February 16, 2016. I denied Respondent's Motion to Dismiss by Order issued March 8, 2016.

Respondent submitted its prehearing statement and proposed exhibit list on March 17, 2016. Complainant submitted prehearing materials on March 29, 2016.

I held a hearing in this matter in Syracuse, New York from April 4 to 7, 2016.<sup>1</sup> Complainant, who appeared *pro se*, and Respondent's representative were present during all of these proceedings. At the hearing, this Tribunal admitted Respondent's Exhibits ("RX") 1 – 151<sup>2</sup> and Complainant's Exhibits ("CX") 1 – 4<sup>3</sup>. This decision is based on the evidence of

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<sup>1</sup> The Transcript of the April 4-7, 2016 proceedings will hereafter be identified as "Tr." Both parties provided brief opening statements. Tr. at 7-23.

<sup>2</sup> Tr. at 26, 102.

record, the testimony of the witnesses at this hearing, and the arguments by the parties. In its opening statement, Respondent conceded that it hired Complainant in 1999 and that it is a manufacturer of precision-made metal parts, including parts that end up in airplanes. Tr. at 12-13. For example, Respondent manufactures the York accumulator, a part that Respondent provided to Bombardier. This accumulator is used on certain aircraft landing gear.<sup>4</sup> Tr. at 23. At the end of Complainant's case, I denied Respondent's Motion to dismiss the complaint. However, I notified the parties that after I reviewed the transcript and evidence of record, I might reconsider Respondent's motion. *Id.* at 223-24. At the end of the hearing, Respondent again made a motion to dismiss the case. *Id.* at 768. After hearing arguments from both parties, the Tribunal again denied the motion. *Id.* at 770.

Complainant submitted its closing brief on June 30, 2016. Respondent submitted its closing brief on August 17, 2016. Complainant submitted his reply brief on September 9, 2016.

## II. FACTUAL BACKGROUND AND EVIDENCE<sup>5</sup>

### A. Testimonial Evidence

The sworn testimony of the witnesses who appeared at the hearing is summarized below.

#### William Lee (Tr. at 26 - 223)<sup>6</sup>

Complainant had been employed by Respondent since April 20, 1999. He is a professional engineer and has always worked on space components, defense missile components and aeronautic components. He holds a masters' of engineering from the University of Southern California in mechanical engineering. He earned his undergraduate degree from California State University, Long Beach. After earning his undergraduate degree, he went to work at ITT, and worked there for eight years. Complainant explained that he started his career with a company called J.C. Carter and left in 1985, with a one year absence with that company during this time period. From there, he worked for Fairchild Control from 1985 to 1987. He then worked for Eaton Consolidated Control from 1987 to 1988. He returned to Fairchild Control until the company moved in 1992. After this, he started a company called Space Component with a friend, and he worked there from 1992 to 1996. He worked for Whittaker Control from 1996 to

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<sup>3</sup> Tr. at 201.

<sup>4</sup> The accumulator is part of the aircraft's hydraulic braking system used when the pilot applies his foot controls. Tr. at 234; *see also* RX 16.

<sup>5</sup> In this Tribunal's Order Denying Respondent's Motion to Dismiss and Motion for Summary Decision, dated Mach 8, 2016, I informed the parties that "[i]n addition, the parties are hereby notified that, in all future proceedings in this case, this Tribunal intends to take official notice, pursuant to 29 C.F.R. § 18.84, of relevant information as contained in Airworthiness Directives, FAA Aircraft Registry database, FAA Service Difficulty Reports (*see* <http://av-info.faa.gov/sdrx/Query.aspx>), and the National Transportation Safety Board's ("NTSB") publicly accessible Aviation Accident Database & Synopses (*see* [http://www.nts.gov/\\_layouts/ntsb.aviation/index.aspx](http://www.nts.gov/_layouts/ntsb.aviation/index.aspx))." *See also* RX 148 at 18. Additionally, on November 2, 2016, this Tribunal issued an Order to Show Cause concerning certain matters that it intended to take official notice of. The parties did not object to the use of these facts and documents.

<sup>6</sup> Complainant appeared to have difficulty at times expressing himself. This Tribunal has done its best to capture the meaning of his testimony, which at times was disjunctive and difficult to follow.

1997, then returned to Eaton Consolidated and worked there from 1997 to 1999. From there, he joined Respondent and worked for Respondent from 1999 to 2010. *Id.* at 217-18.

Complainant worked for Respondent for ten years, and every year he received a salary increase, a bonus and company stock. *Id.* at 104-105. In 2006 or 2007, he was promoted to the Vice President of Engineering. Ten years was the longest that he had worked for any employer. Complainant worked for seven different employers between earning his Master's degree in 1981 and becoming employed by Respondent in 1999. *Id.* at 104. During his time with Respondent, Complainant constantly worked on Saturday and Sunday, sometimes until 10 p.m. Sunday evening, because he wanted to solve the problem. *Id.* at 55. The lab was open, no doors are locked and someone could come in any time, and he never discouraged any of his subordinates from reporting or identifying the testing that was occurring at the lab. *Id.* at 56. Thus, he disputed Respondent's assertion that these were "secret tests."

During Complainant's time as Vice President, Respondent's revenues went from \$16 to \$18 million to "40 some odd million." *Id.* at 30. In 2006, Respondent purchased two companies, Kaiser Fluid Control located in North Carolina and York accumulator. York accumulator was "unique compared to the rest of the component that [Respondent] ever acquired." *Id.* at 30-31.

Respondent is a commercial/aerospace company; a majority of the business is the commercial business, not aerospace. York accumulators are part of Respondent's aerospace business. *Id.* at 31. Further, none of the York employees transitioned from York to Respondent following Respondent's purchase of the company. *Id.* at 36. When Respondent purchased York accumulator, it was aware that York's products were substandard. *Id.* at 32. Respondent was aware that they needed to make a new accumulator. *Id.* at 37. Complainant stated that "[i]t is our responsibility to raise the bar, to inform the authority instead of just continued business as usual even though it may exceed the original spec." *Id.* at 33.

Respondent provided accumulators directly to air carriers as well as to Bombardier. *Id.* at 34-35. Respondent is a parts manufacturer, holds parts manufacturing authorizations ("PMA"), and is a repair station.<sup>7</sup> *Id.* at 46. The parts being manufactured for the CRJ<sup>8</sup> are subject to the requirements of Part 21 [of 14 C.F.R.]. *Id.* at 47. Complainant explained that every part that is used on an aircraft needs to be clearly documented. If any of the information for the part is missed, it is not used. "[W]hen you make an [aircraft] part, you need a routing sheet, how you cut the raw material, where the material come from, material certs."<sup>9</sup> *Id.* at 81. The Federal Aviation Administration ("FAA") requires the traceability of the manufactured part. *Id.* at 81 – 83. During Complainant's first years with Respondent, the majority of parts manufactured by the company were machined at its facility. Respondent acquired plans and drawings for parts from other companies and then produced parts to the specifications in those plans and drawings.

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<sup>7</sup> The authority to produce parts for installation on aircraft is contained in 14 C.F.R. Part 21. A repair station is a facility certificated to conduct repairs on certain aircraft and/or their components. *See* 14 C.F.R. Part 145.

<sup>8</sup> The Commercial Regional Jet (CRJ) is a transport category aircraft manufactured by Bombardier. *See generally*, <http://commercialaircraft.bombardier.com/en/crj.html>.

<sup>9</sup> This Tribunal infers that the "certs" means certification.

*Id.* at 106. Bombardier was one of the companies to which Respondent sold accumulators. *Id.* at 107. The CRJ-200 is a Bombardier aircraft.<sup>10</sup>

Respondent sells two different accumulators to Bombardier that are used on the CRJ 200. One accumulator is a component of the aircraft's brake system. This hydraulic accumulator provides emergency power to the aircraft braking system if the system loses power. "That is the system that it failed most often because you simply use the brake more often than other system." The other accumulator is called a utility accumulator. *Id.* at 33-34. Complainant explained that document AMM ("Aircraft Maintenance Manual") 32-43-00 (CX 1) is a schematic of the brake accumulator system. *Id.* at 86-90. Complainant offered Service Bulletin A-601R-29-029 (CX 2), showing the accumulator on the left side of the aircraft and the accumulators at this location on the aircraft are not used as frequently as those located in the brake system. *Id.* at 90. Complainant also offered an extract from the air frame engine maintenance training manual. CX 3.

Complainant noted that the accumulators manufactured by York, prior to Respondent purchasing York, were manufactured using 7075T73 aluminum, rather the 2024 aluminum called for by the approved specifications, and without requalifying the part. Tr. at 58. One difference between these types of aluminum is "7075 has a faster crack growth than a 2024 material. What means [sic] is once the crack initiated, they will penetrated [sic] through faster than the 2024." *Id.*

Complainant referenced an incident where an accumulator on an aircraft being used by an air carrier failed while the aircraft was on the ground and put a hole underneath the pilot's foot. An accumulator "is basically an energy and storage device." *Id.* at 31. The device has a piston in the middle. One side contains hydraulic fluid and the other side contains nitrogen gas. *Id.* at 32-34. When hydraulic fluid leaks, there is no pressure behind it. However, nitrogen gas is a compressible fluid. It stores energy and it expands when its pressure is reduced. *Id.* at 50. When a failure occurs on the hydraulic side "the energy of the nitrogen gas has to go somewhere, so they released the energy, pushed the piston out like a bullet or like a bomb, a kinetical vehicle." *Id.* at 34.

Complainant admitted that a hydraulic accumulator was not a component he regularly worked on. He has a strong background with solenoid valves, spool and sleeve valves, ball valves, control valves and actuators, but not accumulators. *Id.* at 36. During the transition from York to Respondent, he was not responsible for the transfer of documentation and inventory of this new product line. *Id.* at 37.

In 2006 or 2007, Respondent first learned of an accumulator failure on an aircraft. Respondent placed a 28,000 flight cycle limit on its accumulators. However, it is very difficult

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<sup>10</sup> According to the World Airlines Census (2015), in 2015 there were 564 CRJ 100/200 aircraft operating worldwide. The CRJ 100 is similar to the CRJ 200, except it has different engines. U.S. air carriers operating the CRJ-200 included for example Air Wisconsin, Mesa Airlines, PSA Airlines, ExpressJet Airlines and SkyWest Airlines. SkyWest Airlines is by far the largest operator of this type aircraft with 167 in service. *Id.* at 17. Each of these airlines is a Part 121 air carrier. See <https://www.transportation.gov/policy/aviation-policy/certificated-air-carriers-list>.

for an engineer to establish use by flight cycles because the number of times that the accumulator is used during a given flight varies greatly. *Id.* at 37-39. The accumulators would leak and need to be serviced. Respondent offered to simply replace them. However, the aircraft operators<sup>11</sup> wanted reimbursement for the installation time because making the repair resulted in lost revenue. *Id.* at 40. Respondent briefed the aircraft operators about the issue and they were angry at Respondent for the costs associated with failing accumulators. *Id.* at 40-41. *See also* RX 61 and 63. The only options available to the air carriers, if they were to continue to use the aircraft, were to get a new, rebuilt or repaired York accumulator. *Id.* at 48. Present at the briefing were air carrier representatives. Complainant believed more than a half dozen air carriers attended this briefing and he specifically recalled representatives from United Express and Pinnacle.<sup>12</sup> *Id.* at 44.

Complainant reviewed certain Respondent's Exhibits. RX 6 shows string gauge testing, and that testing was unsuccessful. RX 7 shows that pressure cycle testing was done from 2000 psi to 3000 to 2000, and that is not accurate. Complainant noted that Mr. Dudley Johnson sent this email to Complainant's EA [engineering assistant]. Bombardier was fully aware of these test parameters and had no objection to it. *Id.* at 69-70. RX 10 is a Service Letter from November 2007 requesting return of certain accumulators. RX 16 is the Service Bulletin to aircraft operators about the accumulator. RX 31 concerns an accumulator failure in 2000. RX 33, page 281 informed the FAA that there was a material change on the screw cap and end cap of the accumulator; this notice occurred April 1, 2009. *Id.* at 71-73. RX 35 is Mary Tucker's<sup>13</sup> personal meeting notes. RX 48 pertains to an incident where one of the employees that he supervised went to the Human Resources manager's office searching for things without permission. RX 64 pertains to testing of the accumulator at Young & Franklin. Young & Franklin employees were testing "five flight cycles in four seconds and these are one of the parameters that I cannot satisfy myself when compared to the actual usage of the airplane." *Id.* at 74-76. To accelerate the testing, they put a solarplex (ph) inside the accumulator to fill up the cavity so they could be tested faster. Young & Franklin tested twenty-four accumulators; sixteen failed, "eight to suspicion, and I don't know what 'suspicion' means." *Id.* at 76.

As the Vice President of Engineering, Complainant wanted to conduct tests on the accumulators. He wanted to test the accumulators using parameters similar to their actual use. *Id.* at 50-51. He did not need to consult with Mr. Johnson (Respondent's CEO) about all the various testing his department conducted. As part of the evaluation of the failing accumulators, Respondent hired a company called Retlif to do testing. All of the units Retlif tested failed. However, Complainant wanted to know why they failed, not just that they failed. Respondent's management was not satisfied with the way that he was communicating with Retlif. *Id.* at 51-52. Instead of Respondent seeking another outside test lab, so there would be independent testing activity, it moved all the testing from its facility in Liverpool, New York to Young & Franklin, which is a subsidiary of Respondent located approximately one and one-half miles from Respondent's facilities. Mr. Kaido was responsible for the testing at that location. *Id.* at 52.

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<sup>11</sup> As Complainant explained, air carrier and aircraft operator usually have the same meaning for purposes of aviation transportation operations. *See* Tr. at 49.

<sup>12</sup> This Tribunal takes official notice that United Express and Pinnacle are air carriers authorized to conduct passenger carrying operations under 14 C.F.R. Parts 119 and 121.

<sup>13</sup> Ms. Tucker works in Respondent's Human Resource Department. Tr. at 74.

Complainant asserted that Mr. Johnson wanted to have full control over the testing and that “he is management by fear and management by tactic.” Mr. Johnson took all the testing for the accumulator away from Complainant’s lab, but the lab that he ran conducted tests for products other than the accumulator. *Id.* at 52. In addition, Complainant was working on developing a stainless steel accumulator with higher pressures and fewer parts, and one that would reduce the possibility of fracturing by fifty percent. *Id.* at 53. Outside testing of this new product was conducted and the report allegedly said the part was marginal. He was not provided a copy of this report. Another senior executive recommended that a professor from Cornell be retained to conduct a similar stress analysis, and he too came to the conclusion that these parts were marginal. These failures put a lot of stress on Complainant. *Id.* at 54-55. It was his responsibility to prove that Respondent’s products were safe. *Id.* at 57.

RX 86 is an email exchange between Mr. Kaido and Mr. Krenzer. Mr. Kaido is the director of engineering at Young & Franklin. *Id.* at 61, 77. Mr. Krenzer is one of the senior engineers that reported to Complainant. *Id.* at 77. Mr. Krenzer reported to Mr. Kaido that in the tests conducted in the lab being run by Complainant, the York accumulator similarly failed. Complainant therefore queried, how can the test be “secret”? *Id.* On cross-examination, Respondent’s counsel directed Complainant to paragraphs 23 and 27 of his verified complaint, RX 141. *Id.* at 93-94. Complainant said, “It seems reasonable” that these reference the fact that three accumulators failed testing at Retlif Laboratories. Regarding paragraph 37<sup>14</sup> of his complaint, Complainant responded, “I would suppose so” when asked if the Young & Franklin engineer he was referencing was Mr. Kaido. *Id.* at 94. He agreed that he worked for Respondent for ten years and that Mr. Johnson was a very engaged executive. *Id.* at 102.

In October 2007, he concluded that the accumulators that Respondent sold to Bombardier needed to comply with military specification (“MIL SPEC”) MIL-A-8897A.<sup>15</sup> *Id.* at 108-111. *See also* RX 7. Complainant’s attention was directed to the table in RX 2 at 6, and he agreed that the table contains the seven steps that are required under MIL SPEC MIL-A-8897A to qualify the accumulator. Step 7 refers to impulse testing which requires one million total cycles. Column five of this table, entitled “cycling rate,” provides that the cycling rate is to be determined by the user. *Id.* at 112-13. When asked, “Do you know that you’re alleging that somehow the MIL SPEC is outdated because it specifies a fast cycling rate,” he responded, “No comment.” *Id.* at 114.

During Complainant’s time with Respondent, he came to learn that York accumulators had failed in the field. He was aware that the end user, airlines, had been given a recall notice for the York accumulator. *Id.* at 114-115. Complainant was of the opinion that customer relations was the job of the entire company. In November 2007, Respondent issued a Service Letter notifying customers that there had been failures of the York accumulator in the field. *Id.* at 116. *See also* RX 10. RX 87 shows that the reason the accumulator failed “is they put too many proof cycle in it.” *Id.* at 77. RX 129, page 817 states that the premature failures of the

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<sup>14</sup> Paragraph 37 reads: “In September 2009, a Y&F engineer reported that the York Accumulator was successfully tested under the Old Specifications.”

<sup>15</sup> Counsel’s question referenced MIL-A-8897, but upon my questioning, it was clarified that the discussion involved MIL-A-8897A. *See* Tr. at 109.

accumulator are the result of omitting the proof pressure test.<sup>16</sup> Yet in RX 87, Mr. Kaido says he tested the accumulator with too many cycles; in either case, that is bad for the accumulator. *Id.* at 78.

RX 31 at 277, table 1, lists the customers of the York accumulator. Tr. at 139-40. For example, Saab manufactures airplanes that use the York accumulator. Tr. at 172; RX 83. In addition, this table references York accumulator failures in the CRJ aircraft. Complainant agreed that the FAA was notified of these failures in March 2009. *Id.* at 140-41. He also acknowledged that Respondent told the FAA that it was conducting additional testing. *Id.* at 145. Complainant maintained that he was never given the opportunity to contact the FAA about these accumulators. *Id.* at 147-48. However, based on an email, he was made aware that Respondent's representative met with the FAA in April 2009 and made a presentation regarding the status of the York accumulator testing. *Id.* at 149.

Complainant agreed that part of the York accumulator is basically a barrel with a piston inside, and there are end caps on each end. One side of this piston is nitrogen gas; on the other side there is hydraulic oil or helium. *Id.* at 117-118. The screw caps and end caps had failed in the field, but there were more screw cap failures than end cap failures. Someone determined that there was an improper "undercut" in accumulators that had been machined. Complainant initially said that Respondent had a hard time determining if this occurred prior its acquisition of the York accumulator business. However, Respondent's counsel directed him to RX 18, page 101 where Complainant wrote the following: "There were seven confirmed accumulator part number 0860163002 failure at the screw cap, occurred between 2000 and 2008. All of these failed accumulators were manufactured York Industries." *Id.* at 118-120. Complainant asserted that this statement means to say that York Industry drawings were used to make those accumulators. *Id.* at 120. The next paragraph of this document reads, "During the failure investigation of these accumulators at Bombardier, an undercut at the screw cap was discovered." *Id.* at 121. Complainant acknowledged that this document was intended to report testing conducted at Respondent's facilities under his supervision; this testing was conducted in attempts to replicate the field failures. *Id.* at 122.

In July through September 2009, Complainant was engaged in testing of the new stainless steel accumulator to replace the York accumulator. *Id.* at 150. This new design would only require one cap, as it was a barrel with one opening. *Id.* at 123. This was one of the reasons his laboratory at Respondent's facility did not have the capacity to conduct additional testing. *Id.* at 150. Moreover, because designing the new accumulator was time-consuming and burdensome, Complainant recommended that further testing of the York accumulator be outsourced to Retlif. *Id.* at 123. RX 19 at 194 contains the Retlif Testing Laboratory results. As part of the testing, Retlif did impulse testing, the testing as set forth in step 7 of MIL-A-8997A. *Id.* at 124. Complainant acknowledged that when he requested the testing, he told Retlif to use a rate of ten

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<sup>16</sup> Complainant later explained:

The proof pressure test is a single occurrence test item. We engineer introduce a safety factor, sometimes 1.5, sometimes 2.5. In the old days we used 1.5 factor. For example, if the, if the maximum expected operatings [sic] pressure is 300, the proof pressure factor is 1.1, we will prove it to 4500. If this factor is two, we will pressurize it to six.

*Id.* at 84.

cycles per minute. *Id.* at 129. Respondent's counsel pointed out that Complainant alleged in his complaint that "a Y&F engineer reported that the York accumulator was successfully tested under the old specifications," referring to MIL-A-8997A, and asked Complainant if the three York accumulators Retlif tested met the MIL SPEC standards. *Id.* at 126. Complainant explained that his complaint does not "say successfully tested to what condition." *Id.* On further cross-examination, Complainant admitted that these accumulators failed to meet the criteria set forth in MIL-A-8997A; specifically, all three accumulators failed prior to reaching one million cycles. *Id.* at 127-28. Complainant did not know if the results of the Retlif tests were reported to the FAA. *Id.* at 135. Complainant did report the failures to Theunus Botha, Respondent's president at that time, and Mr. Johnson. *Id.* at 136; RX 22. Complainant acknowledged that Mr. Johnson had a "big concern" about these failures. *Id.* at 137; RX 23. On September 24, 2009, because the accumulators failed during the Young & Franklin testing, Respondent gave a presentation, in which Complainant participated, to its customers. *Id.* at 168; RX 63. The customers were informed that all screw caps failed in step 7 between 286,000 and 663,000 cycles. Tr. at 168.

Also during this time, Mr. Kaido sent an email about accumulator qualification testing with an attachment setting forth the proposed qualification test procedures for the accumulator. *Id.* at 151; RX 41 at 304-17. The cycles proposed for step 7 were 120 cycles per minute. Tr. at 152; RX 41 at 317. RX 42 is an email Complainant sent to Mr. Kaido in response to the proposed testing; this email contained his handwritten, proposed changes to the testing procedures. Tr. at 152-53. He did not comment on the proposed step 7 testing at 120 cycles per minute for one million cycles. *Id.* at 153-54. RX 44 contains additional comments Complainant made concerning the testing to be performed at Young & Franklin. *Id.* at 154. Again, he did not recommend any changes to the frequency or number of cycles concerning step 7 of the testing. *Id.* at 155-56. Following this testing, Mr. Kaido reported that every accumulator tested failed at step 7. *Id.* at 161, 163; RX 75 at 498. On October 14, 2009, Mr. Kaido invited Complainant to a meeting to discuss the Young & Franklin test results. *Id.* at 171; RX 64. On redirect, Complainant addressed RX 41 at 304; he maintained that it was not correct that he had four chances to reply to comments about the speed of the Young & Franklin cycles at step 7. He noted that his responses occurred during the July 4 weekend. He provided additional comments to the testing, as evidenced by RX 44 at 333. *Id.* at 207-08.

Complainant did not tell Mr. Kaido about the testing he was conducting on the York accumulator in October 2009, nor did he seek input on the testing parameters as Mr. Kaido had done for the Young & Franklin tests. *Id.* at 174-75. He did not generate a written quality test procedure for these tests. *Id.* at 178. However, Complainant said that he told Mr. Johnson, Mr. Kaido and others about the testing he was conducting in a company meeting. *Id.* at 177. He denied that he told technicians in his lab not to tell management about his testing of the accumulators. *Id.* RX 85 at 693 is an October 26, 2009 email from Jeff Rhebein, one of his engineering test lab technicians, notifying him that there was a failure of an accumulator at step 7 at 164,900 cycles. *Id.* at 179. Complainant said that Mr. Johnson asked him "furiously" why he had undertaken additional testing. *Id.* at 179-80. See RX 91, note 4. Complainant asserted that RX 99 through RX 101 contain emails that were exchanged during the period of November 2 to 10, 2009, and that these emails were driven by Mr. Johnson; Complainant claimed that he had

never seen these emails previously. RX 111 is a report, dated December 11, 2009, where the conclusion was more tests needed to be done. *Id.* at 80-83.

Following discovery of Complainant's testing of accumulators and after the Young & Franklin testing, Complainant had a meeting with Mr. Corwin and Mr. Johnson. *Id.* at 183. He did not recall the exact date of the meeting; however, during the meeting, he was informed that they were taking away his management responsibilities over Respondent's engineering laboratory. *Id.* at 183-84. During this meeting, Mr. Johnson expressed disappointment that Complainant was running "the secret test." *Id.* at 185. When they relieved him of his supervisory role over the engineering lab, Respondent did not change his compensation and he remained vice president of engineering for a short time. *Id.* at 186. Respondent retaliated against him by "announc[ing] it to the company that I am no longer responsible for [Respondent's] engineering department. I will be working in my own office on one project." *Id.* at 60. He did not understand how everything could deteriorate in 90 days after he spent 10 years with the company and helped it to grow. He believed that ten to fifteen percent of the company's business involved the York accumulators. When the Tribunal asked him to identify what he believed to be the retaliation that occurred between September and December 2009, Complainant also referenced the transfer of all the testing to the Young & Franklin testing lab, a subsidiary controlled by Mr. Johnson and managed by Mr. Kaido. *Id.* at 60-62.

Complainant maintained that Mr. Johnson retaliated against him by humiliating him during the last three months of his employment in 2009, because "the task is performed but the result was not desirable." *Id.* at 143. In September 2009, Respondent removed Complainant from his responsibilities at Respondent's laboratory. *Id.* at 146. Those responsibilities were transferred to Mr. Kaido's laboratory at Young & Franklin. *Id.* He acknowledged that Bombardier was a key customer for Respondent. *Id.* at 185-86. Bombardier came to Respondent to conduct an audit. *Id.* at 186; RX 100; RX 102. Bombardier's audit report found five major red flags, which Complainant called "recommendations." Complainant was removed as vice president of engineering and told to report to Mr. Kaido going forward on the day that Bombardier provided these results at a meeting. However, his compensation was not changed. *Tr.* at 188. Mr. Johnson told Complainant that he wanted him to stay on at the company and focus on finishing the work on the new stainless steel accumulator. *Id.* at 189.

In December 2009, Complainant took vacation and traveled to California to interview for a new job. *Id.* He interviewed at Aerojet and was offered employment. On January 4, 2010, he sent an email to Mr. Johnson. *Id.* at 190; RX 117. In this email, he stated that the York accumulators failed during his testing on October 25, 2009 during step 7. *Tr.* at 190. On January 8, 2010, Complainant met with Mr. Johnson. *Id.* at 192. Mr. Johnson did not give him the opportunity to talk and told him that he was terminated on January 8, 2010. *Id.* at 193. Respondent offered the "separation" agreement between Complainant and Respondent. CX 4. Mr. Johnson offered him 43 weeks of severance pay if he would sign a document releasing the company of all claims, and he was given three weeks to decide if he would accept the agreement. He declined to sign the agreement with Respondent. *Tr.* at 198-99. As a result of this discharge, he did not get a bonus, expected salary increase or stock options. *Id.* at 62-63. His base salary in 2009 was \$145,000. The year prior his bonus was \$25,000 plus stock options. When he was terminated, he was forced to sell his stock and stock options that were worth more than half a

million dollars. *Id.* at 63-65. He obtained employment with a new company on February 8, 2010, so he went one month without pay; in his new job, he earned \$20,000 less per year, and received no bonus or stock options. *Id.* at 66. Complainant questioned whether Respondent's allegation of his performing "secret test[ing]" was sufficient to terminate him. *Id.* at 77.

Complainant acknowledged that between October 25, 2009 and January 4, 2010, he did not report the problems with the accumulators to the FAA. *Id.* at 194.

I also questioned the Complainant. Complainant maintained that Mr. Johnson was very aware that the Respondent's engineering lab was doing a significant amount of the York accumulator testing. The testing is a learning curve, not for himself, but for the entire company, "including Bombardier—the people that make the aircraft." Complainant acknowledged that the issue of the accumulators was an important issue to Respondent, and Mr. Johnson expressed interest in being informed about any developments. As the vice president of engineering, Complainant did not go through Mr. Johnson for approval of many tasks. *Id.* at 219-21.

Peter Kaido (Tr. at 224-382)

Mr. Kaido has been employed at Young & Franklin, incorporated since 2004. His duties include performing work for Respondent, a wholly owned subsidiary of Young & Franklin.<sup>17</sup> His education includes earning a Bachelor of Science degree from Clarkson University, an engineering school, and he majored in mechanical engineering. His education included the study of metal fatigue, the localized and progressive degradation of material due to cyclic stress. He earned a Master of Science in 1997 from Syracuse University. After earning his bachelor's degree, he worked for Cooper Industries for four years, a company that manufactured gas compressors, natural gas and oil field equipment. From there, he went to work for Carrier, where he was a development engineer for commercial refrigeration compressors. During his time there, he was ultimately promoted to engineering manager. At Carrier, he addressed issues regarding metal fatigue. Tr. at 224-28.

From Carrier, he joined Young & Franklin where he has held positions including engineering manager, director of engineering and vice president of engineering. At Young & Franklin, he has worked with various types of products, including fuel control valves, hydraulic valves and actuators (both hydraulic and electric), and has had the opportunity to address issues concerning metal fatigue. Prior to joining Young & Franklin in 2004, Mr. Kaido met Complainant during the interview process. At that time, and in 2009, Complainant was the director of engineering, but was later promoted to the vice president of engineering.<sup>18</sup> Aside from the issue of the hearing, he would occasionally interact with Complainant in board meetings or meetings to discuss engineering matters. Respondent and Young & Franklin's engineering teams worked somewhat collaboratively. *Id.* at 228-31.

In 2005, Respondent acquired product lines from a company called York. Four to five percent of the Respondent's sales were related to this product. *Id.* at 229, 232. The York accumulator was to be manufactured per MIL SPEC MIL-A-8897 and Bombardier used them on

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<sup>17</sup> Young & Franklin has 100 employees and Respondent has approximately 230. Tr. at 361.

<sup>18</sup> *See also* Tr. at 361-62.

its aircraft. It was his understanding that Bombardier required that the accumulators provided to them meet the qualification standards referenced in MIL-A-8897. *Id.* at 239. He became aware of field failures with the York accumulator because Young & Franklin and Respondent, although separate entities, are small, tightknit companies, and “a lot of the management resources are shared amongst the companies.” The companies’ management had regular quarterly meetings and the York accumulator was a topic of discussion. The attendees at these meetings consisted of Mr. Johnson, the senior management and his board of directors. Both he and Complainant attended these meetings. *Id.* at 229-32. These failures were considered an important issue for the company, and the company was investigating them. *Id.* at 232.

Respondent issued a service bulletin regarding the York accumulators. He explained; “A service bulletin is a manufacturer’s method of informing users, customers, of an issue relating to either a problem or a specific service requirement of the product.” *Id.* RX 15 is a service information letter regarding reports of failures with screw caps. RX 16 is a service bulletin, similar to RX 15, which spells out the issues with field failures of the screw caps, although this bulletin gives the serial number range. Both of these were provided to the customers. RX 16 refers to the York accumulators used on landing gear for the Bombardier aircraft braking system. *Id.* at 233-34.

At the time he became involved in the York accumulator issue, Respondent had instituted a recall of the accumulator, as reflected in the service letter contained in RX 10. This service letter informs the customer about the inspection and replacement of the parts of accumulators at issue. The failures occurred at the screw caps. The FAA was aware of both the recall and service bulletin concerning the York accumulators. RX 31 is a letter Respondent sent to the FAA about the York accumulator failures; this letter mentions that several of the failures were due to an undercut. An undercut is a manufacturing defect where more material is removed at the end of the machine threads than called for in the prints. After this letter was issued, a Respondent representative met with FAA representatives to discuss the field failures and Respondent’s testing. To his knowledge, York manufactured the parts that had the undercut defect. *Id.* at 234-38.

The letter to the FAA in March 2009 (RX 31) references testing that was performed on York accumulators, and refers to a report from Retlif Testing Laboratories (RX 19). Using an outside laboratory for this testing was discussed at company meetings, as it was an issue of importance to Respondent. This testing included impulse testing, where the component parts are subjected to hydraulic impulses or pressure cycles for inducing stress in the part to simulate a life for fatigue evaluation. This is part of the criteria set forth in MIL-A-8897 (RX 2 at 6) in the table at step 7. Step 7 requires one million impulses, but does not state how fast one can conduct the cycles, as the speed is optional. Retlif tested three accumulators, and all three failed at Step 7. *Id.* at 239-42.

The fact that all three accumulators failed concerned Respondent, in particular Mr. Johnson, so he and Mr. Moeller<sup>19</sup> visited Retlif’s lab to discuss the test setup, the conditions of the test, and to study the failed parts themselves. During the visit, he became concerned because Retlif had not performed an acceptance test procedure. This step required a proof pressure test.

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<sup>19</sup> Mr. Moeller was Respondent’s Vice President of Technology in 2009. Tr. at 366.

For the York accumulators, this proof pressure test induces residual compressive stress in the critical stress areas of the part. This effectively extends the fatigue life of the part. Further, the test had not been controlled adequately, for Retlif did not have the test equipment to properly control minimum and maximum pressures during the test. *Id.* at 242-45.

Within a week of his visit to Retlif, he communicated his thoughts and concerns about the testing via email dated April 9, 2009 to Mr. Johnson, Mr. Moeller, Complainant, and several others. These emails are located at RX 34. *Id.* at 247. It was his and Mr. Moeller's view that, because of the discrepancies in Retlif's testing, "it was in our best interest to run more tests and get a good handle on what was going on with [these accumulator failures.]" *Id.* at 244-5. RX 129 is the formal memo he prepared expressing his views on the validity of the Retlif testing.<sup>20</sup> *Id.* at 248. Mr. Johnson never instructed him to cover up the fact that the accumulators failed the Retlif testing. *Id.* at 243. Following his investigation of the Retlif test, he communicated his concerns to Complainant. *Id.* at 245. Young & Franklin possess proper facilities and test equipment to conduct the appropriate testing of York accumulators. *Id.* at 246. In March 2009, it was his understanding that Respondent's engineering lab did not have the resources to run additional testing. RX 27 is an email exchange between Mr. Kaido and Theunis Botha, Young & Franklin's president in March 2009, regarding accumulator impulse test procedures. Complainant was included in those email exchanges. During this time period, Complainant represented to management that the Respondent's engineer lab lacked the resources to conduct proper testing of York accumulators. Sometime later in March 2009, Young & Franklin's lab took over responsibility for testing the York accumulators. Thereafter, he would periodically confer with Complainant about this testing; they had weekly meetings, which centered around the York accumulator testing. *Id.* at 264-65.

Mr. Kaido explained that Society of Automotive Engineers ("SAE") is a recognized body within the field of engineering. SAE has taken over all the MILSPECs. "It's common knowledge in that MIL SPECs are not updated anymore." "Anything that's issued new for aerospace standards are covered by the SAE." *Id.* at 252-53. SAE ARP1383 (RX 138) is a specification for impulse testing of hydraulic components. ARP4379 (RX 8) is a specification for testing hydraulic accumulators. This specification was issued in 1991 and essentially supersedes military specifications. *Id.* at 251-52. If an aircraft manufacturer were to request to design a new hydraulic accumulator for an airplane, they would reference a qualification specification, SAE ARP4379. *Id.* at 253-54. Step 7 referenced in MIL-A-8897 is still referenced in ARP4379, but at Step 7C. RX 8 at 41. The cycle rate for this Step 7 impulse testing is governed by SAE ARP1383. *Tr.* at 254-55; *see also* RX 138. RX 138 is SAE ARP1383.<sup>21</sup> RX 138 at 927, section 4.2 provides a cycling rate of up to 3 Hz may be allowed for small components; two Hz is the equivalent of 120 cycles per minute. *Tr.* at 256-57. Mr. Kaido explained that the speed at which cycles are used is not relevant to metal fatigue, which is a function of the cyclic stress that is on the part. "It is solely a function of that alternative stress and the number of cycles. The rate at which the cycles apply is not a factor." *Id.* at 259. For

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<sup>20</sup> Mr. Kaido identified the individual who created the table on page 818 of RX 129 as Complainant. However, he could not identify whose handwriting was on this document *Tr.* at 249.

<sup>21</sup> RX 138 is actually SAE ARP1383C, a version of the specification that came into effect after 2009. However, Mr. Kaido testified that any revisions to this document had no impact on the cycle rate in the specification that was in effect during the times relevant to Complainant's complaint. *See Tr.* at 257-58.

impulse testing, one puts a structural load on the component, here the accumulator. “That pressure load puts stress on the part. And when you alternate that load, bringing it from a high to a low that is a stress cycle. And the number of those cycles is – correlates to the failure.” *Id.* at 260. Under the MILSPEC involved here, one was required to pressurize the part one million times; for this accumulator, it is stopped from 2,000 pounds per square inch to 3,000 pounds per square inch, back to 2,000 pounds per square inch, which constitutes one cycle. *Id.* at 260-61.

Mr. Johnson was aware that three York accumulators failed to meet the MILSPEC testing at Retlif. He was also aware that additional testing was going to be conducted at Young & Franklin. Mr. Johnson participated in several meetings, in which the procedure for conducting the York accumulator testing was addressed. Complainant participated in these meetings as well. From March to September 2009, “[t]here was no bigger issue facing the company.” *Id.* at 266-67. To allow all parties to review and understand what they were testing, he prepared a written procedure for all parties to review. RX 41 is an email to members of management, including Complainant, regarding updates of the qualification test. As of July 1, 2009, problems remained with the test; some gas leaks were occurring, which prevented continuing the test. During this time, Mr. Kaido recalled that they were testing four accumulators. These accumulators did not pass the testing. Two hertz, 120 cycles per minute, were used for this testing. *Id.* at 267-69.

Following the July test failures, Mr. Kaido explained that they were determined to test twelve additional accumulators at Young & Franklin in order to gather a greater statistical distribution of the fatigue life. As there is a screw cap at each end, there were a total of 24 parts that they could take to failure to get a statistical distribution. Complainant was aware of this testing and Mr. Kaido sought his input on the qualification test procedure before going forward with that test. RX 42 is a July 2009 mark up of the test procedure provided by Complainant. Complainant did not provide any comments on the cycle rate. RX 43 is an invitation to a meeting that took place to address the qualification test procedure for the twelve accumulators. Complainant attended that meeting and others, and was a full participant. RX 44 and RX 45 are other mark-ups of the qualification test procedure. Following input from the engineers, the testing went forward. None of the twelve York accumulators that were tested met the one million cycle requirement for impulse testing; the screw caps failed in high stress locations. These tests were in no way a success. He reported the results to Respondent and Complainant was aware of the failures of the twelve York accumulators. All the screw caps failed prior to one million cycles. *Id.* at 269-74.

Customers were notified that the York accumulators had failed the qualification testing. On September 24, 2009, Respondent conducted a webinar for users of the York accumulator; Mr. Kaido attended and he believed Complainant also attended. RX 63 contains the presentation slides provided at that webinar. As of the date of that presentation, Respondent had stopped shipping the York accumulators. Respondent informed its customers that it would not issue certificates of conformity saying that the accumulators met the requirements of MIL-A-8897A, and that it would only start shipping once customers acknowledged that, and further acknowledged Respondent’s proposed life limit of 28,000 flight cycles on the accumulator. The 28,000 life cycles was a conservative estimate given the mean time to failure was much higher. The customers later came to Respondent to tailor a life test for their applications. Respondent

still adheres to the 28,000 flight cycles limit, and advised the FAA that this limit was being imposed on the accumulators, as provided in RX 51. *Id.* at 278-83. RX 64 is an email that discusses a life cycle test for a particular customer, including Saab. Complainant was included as a recipient. *Id.* at 287-88. RX 79 is an email Mr. Kaido sent to Respondent, including Complainant, informing them about the parameters of testing requested by Saab. *Id.* at 289. RX 83 is an update on the Saab life and General Dynamic tests.<sup>22</sup> RX 90 was a report on the Saab life cycle test. *Id.* at 290. He shared this data with the entire team, including Complainant. *Id.* at 291.

In October 2009, Mr. Kaido learned that Complainant had been investigating whether or not cycle rate of impulse testing had any relevance to analyzing metal fatigue. He learned that Complainant had consulted an expert in metal fatigue, Jesse Comer, a professor of engineering. Professor Comer authored the authoritative text on engineering analysis of metal fatigue. RX 71 is an email exchange between Complainant and Jesse Comer. Professor Comer's opinion was that impulse testing could be run at any speed if the stress strain amplitude is reached. *Id.* at 261-63. RX 75 is an email, to several individuals, addressing the results of the twelve accumulators tested, and notes the mean time to failure was 375,000 cycles at Step 7. This email was dated October 13, 2009 but the actual testing concluded approximately one month prior. These test results were reported to Mr. Moeller in mid-September 2009; Mr. Moeller, in turn, communicated the results to the FAA. *Id.* at 277. He never announced that these tests were successful. Neither Mr. Johnson nor Mr. Corwin ever told him not to report those failures. *Id.* at 300. Once Mr. Kaido learned that this testing was occurring, he requested information about it be brought up and discussed so his staff could pull all pertinent information together since the Young & Franklin lab was "fully engaged in trying to correlate the test data and understand the York accumulator failures." *Id.* at 293. RX 89 is an email from Mr. Kaido to Dan Corwin, who was the president of Young & Franklin; this email mentions Mr. Johnson's request that Mr. Kaido devise a way to validate Complainant's test and its results, which they had recently discovered. Mr. Johnson did not tell him to "cover up" Complainant's test results. *Id.* at 294-95.

Following the September 2009 webinar, the company continued to address issues concerning the York accumulator. Complainant continued to be invited to participate at those meetings. RX 81 is an invitation to attend a meeting in October 2009. *Id.* at 287-88. The purpose of this meeting was to discuss the results of testing, ongoing testing and future testing. Complainant was invited to this meeting. At the time of this meeting, Mr. Kaido was not aware that Complainant had directed testing on the accumulator in Respondent's engineering lab. *Id.* at 288. It was not until October 26, 2009 that he learned Complainant was conducting testing on York accumulators. *Id.* at 291-92. RX 85 is an email from Jeff Rhebein, who was a technician in Respondent's engineering lab, to Complainant with a courtesy copy to Jeff Murray, another engineering lab technician, regarding a screw cap failure. This email was not addressed to anyone outside of Respondent's engineering lab. *Id.* at 292. RX 95 is an email from Mr. Kaido to Mary Tucker, the director of human resources, and Dan Corwin regarding interviews of Respondent's engineering lab technicians that conducted the tests under Complainant's supervision. As a result of these interviews, Mr. Kaido concluded that the accumulator tests that Complainant performed did not follow a written test procedure, but that the technicians used

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<sup>22</sup> Mr. Kaido explained that the General Dynamics test was for a tank application, not an aircraft application. Tr. at 290.

page 5 of MILSPEC MIL-A-8897A (RX 2). RX 73 reflects a summary of his findings of that test, and his conclusion that Complainant's test provided no useful information as it was not controlled properly for a variety of reasons. *Id.* at 296-99.

Mr. Kaido was aware that Respondent terminated Complainant in January 2010, but he played no role in that decision. *Id.* at 303-04. Also during that month, representatives of Bombardier came to Respondent's facilities. On January 7, 2010, Respondent showed Bombardier the York accumulator test setup, data collection and results. RX 119 is a summary of that first day of the meeting. *Id.* at 309-310. In April 2010, he participated in meetings with the FAA. The FAA was conducting an investigation into the Respondent's York accumulator line. *Id.* at 304. Since the field failures that were reported back in September 2009, there had been no additional field failures that he was aware of. *Id.* at 307.

Mr. Kaido was familiar with airworthiness directives. RX 135 is an airworthiness directive from Transport Canada pertaining to accumulator screw cap failures on Bombardier CL600 aircraft. This airworthiness directive specifically addressed the field failures and had nothing to do with his testing results from September 2009 at Young & Franklin. *Id.* at 311-12. On cross-examination, Mr. Kaido admitted that, prior to joining Young & Franklin, he had not worked on parts to be installed on aircraft. However, as a pilot,<sup>23</sup> he was aware of airworthiness directives, service bulletins and service information letters. He explained that a service bulletin was issued by a manufacturer while an airworthiness directive was issued by a governing agency such as the FAA or Transport Canada. Both Respondent and Bombardier had issued service bulletins. *Id.* at 313-14.

Mr. Kaido agreed that there were two engineering teams involved here, the Young & Franklin group and Respondent's group. Mr. Kaido managed the Young & Franklin engineering lab and Complainant managed Respondent's engineering lab. The field failures of the York accumulator were discussed at board meetings. Mr. John Moeller conducted most of the communications between Respondent and the FAA. *Id.* at 315, 317-18. The biggest challenge when setting up the Young & Franklin testing was with the cold temperatures, in addition to getting the leaks fixed and corrected before he started testing; as of July 1, 2009, he did not believe that testing had started. *Id.* at 319-322. *See* RX 41. Mr. Kaido did not incorporate Complainant's comments to the qualification test procedures that he emailed for comment. Tr. at 329-38. *Compare* RX 77 (page 552) with RX 42 (pages 323 and 324). RX 77 addresses two accumulators that Mr. Kaido's lab tested. Table 6 to RX 77 at 559 shows that the screw caps failed on those accumulators at 3,830,000 cycles; 1,000,000 cycles is what was required to pass the test. Mr. Kaido acknowledged that the report contained in RX 77 at 558 indicates that those two accumulators, identified as A and B, met the requirements of MIL-A-8897, while the accumulators identified as C and D failed at 351,760 cycles. These accumulators were not part of the twelve used in the Young & Franklin test when calculating the mean time between failure. Tr. at 340-43.

When questioned, Mr. Kaido acknowledged that ARP1383C states, "A cycle rate of one hertz is recommended" for the test, not the two hertz used by Mr. Kaido in his testing, although it indicated that the use of up to three hertz may be allowed. *Id.* at 344. RX 139 at 927, paragraph

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<sup>23</sup> Mr. Kaido is a single engine land private pilot. Tr. at 361.

4.2. Mr. Kaido said he used a two hertz cycle rate because it was “[c]onvenient with the test equipment that I had.” Tr. at 345. The ARP1383C provides that if more than one hertz the stress level is used, at least one test sample shall be verified by analysis or by viewing the output from strained gauges. *Id.* at 34. Although Mr. Kaido said this was performed, he acknowledged that the qualification of the test sample was not documented in his qualification test report. *Id.* at 346.

On redirect, Mr. Kaido explained that the RX 75 and RX 77 are different tests. RX 77 shows that two accumulators failed at Step 7 and two passed at Step 7. This testing occurred in July and August 2009. Based upon this information, Respondent determined that Young & Franklin would conduct a larger test, which involved twelve accumulators. None of those twelve accumulators passed the test at Step 7. RX 77. This testing, as reflected in RX 75, took place in September 2009 and occurred after the testing contained in RX 77. Tr. at 358-60.

Upon my questioning, Mr. Kaido said he had no oversight responsibilities in 2009, other than the accumulator testing his lab was doing for Respondent. Complainant had no obligation, outside of accumulator “activities” to report to him any of his activities as the Vice President of Respondent because Mr. Kaido was the Director at Young & Franklin. He explained that when he refers to “the company,” he means both companies; in essence Young & Franklin and Respondent are one company, but separate for accounting purposes. They share the same accounting, quality department, manufacturing engineering, and product or development engineering. In 2009, the engineering was separate for the two companies. In 2009, Mr. Johnson was the chief executive officer and Mr. Botha was president. The accumulator that the company produces or repairs are used predominantly on aircraft. RX 16 at 75 lists accumulators that were returned by customers. Respondent is an FAA certificate Part 145 repair station. The company was aware that there were issues with these accumulators as far back as 2008. These failures occurred on air carrier aircraft identified in RX 31. RX 75 at 506 indicates that 300 cycles per minute should be used. Mr. Kaido said this represented a typographical error because he knows that those tests were run in at least two hertz. However, assuming that it was not a typographical error, 300 cycles equates to five hertz, according to Mr. Kaido. And, if the test occurred using five hertz, it would exceed the MILSPEC. Mr. Kaido was confident that five hertz was a typographical error because they wouldn’t have been able to generate the volume flow fast enough. RX 63 reflects that the webinar meeting involved both manufacturer and air carrier participants. Tr. at 362-66, 373-74.

Jeff Murray (Tr. at 382-91)

Mr. Murray has worked for Respondent since 1993. He has worked in the production manufacturing facility, the repair station, and the quality department, and also spent twelve years as a technician in the research and development lab. At some point in his career, he took direction from Complainant. He first met Complainant in 1998 when Complainant was hired. In 2009, there was test equipment in Respondent’s engineering lab, and in the summer, Complainant directed him to conduct testing of a York accumulator. RX 125 is a statement he prepared at Respondent’s request. He never talked to Mr. Kaido about the testing Complainant directed him to do on this York accumulator in 2009. Complainant instructed him that the test

was being done for his information only and that the test and its results were not to be discussed with anyone other than Complainant. *Id.* at 382-84.

On cross-examination, Mr. Murray recalled that Complainant had been removed from his position of director of the engineering lab somewhere near 2009. He recalled that Ms. Tucker and Mr. Kaido told him that Mr. Kaido would be in charge of the lab after a certain period of time. Testing the York accumulator was not his only job; in fact, he recalls the lab being very busy because the company was starting several new product lines. He agreed that he was fairly familiar with any test setup that involved pressure testing. In 2009, he was aware that accumulators were being tested at Young & Franklin. *Id.* at 385-89.

Upon my questioning, Mr. Murray said that it was commonplace that testing would be done for Complainant's information only. At that time, Mr. Johnson would visit the lab about every three weeks. In 2009, the issue about the quality of the York accumulators was of significance to the company. *Id.* at 390-91.

Brian Vu (Tr. at 392-405)

Mr. Vu has worked for Respondent since June 2008, starting out as a repair technician, mostly working on York accumulators. The York accumulator is installed in an airplane. After that, he became an assembly and test ("A&T") engineer. He holds a bachelor's degree in technology engineering. *Id.* at 393-94, 398.

In 2009, he was an A&T engineer and reported to Mr. John Bowers, the head of manufacturing engineering. He was not part of the engineering department. He knows Complainant, though Complainant worked in a different department. In 2009, Respondent was in the process of beginning to manufacture a stainless steel accumulator. The major difference between the York accumulator and the stainless steel accumulator is the stainless steel accumulator has only one end cap, whereas the York accumulator has two end caps. Complainant had been tasked to develop this stainless steel accumulator. One day, Complainant approached him and asked him about some of the data on the test data sheet that had been recorded. The stainless steel accumulator was the product being tested, but Mr. Vu was not the technician conducting the test. Complainant told him that a value should be zero. Mr. Vu told him what was recorded is what he observed and that "we cannot change it." Complainant asked him to change the test results. He did not change the results, and since he was upset to receive such a request, he discussed the matter with Mr. Bowers. *Id.* at 394-397, 401.

John Bowers (Tr. at 406-420)

Mr. Bowers has worked for Respondent since 1983. After leaving the Navy in 1974, he went to work at a manufacturing plant in Pennsylvania where he was a tool and die maker. In 1980, he moved to Syracuse where he worked for Babbitt bearings for about one year; he then worked at Carroll Steins for a couple of years. He subsequently joined Respondent, and he was working for Respondent in 2009. *Id.* at 406-08.

Mr. Bowers knows Complainant. In 2009 Mr. Bowers was in the manufacturing engineering department, and Mr. Vu worked for, and reported to, him. As an A&T engineer, Mr. Vu would test the assemblies for the product that Respondent makes. In October 2009, Complainant travelled to Brazil to visit an aircraft manufacturer named Embraer, a potential customer, concerning the testing of Respondent's new stainless steel closed end accumulators. He recalled a November 2009 conversation that he had with Complainant in which Complainant indicated that Embraer was very pleased with Respondent and with the new closed end accumulator design; RX 124 is a summary of that conversation. During this conversation, Complainant relayed several times that he had told Embraer that there was zero leakage with his new accumulator. Later, he overheard a conversation between Complainant and Mr. Vu. While Mr. Bowers could not hear the words spoken, he noticed that Complainant was upset and angry with Mr. Vu, which concerned him. Following that exchange that he observed, he asked to speak to Mr. Vu in his office. Mr. Vu told him that Complainant was discussing the data sheet for the testing performed on the stainless steel accumulator, and that Complainant was upset that zero leakage was not documented; Complainant discussed with Mr. Vu that there was a break-in period. Mr. Vu responded that the data was collected per the ATP<sup>24</sup> and Mr. Vu was not aware of a break-in period. Mr. Vu told him that Complainant had requested that he change the data sheet for this testing. Mr. Vu appeared to be upset by the exchange with Complainant, so Mr. Bowers reported the incident to human resources. RX 105 is a summary of his report to human resources.<sup>25</sup> *Id.* at 408-414. Mr. Bowers has provided human resources with a statement reporting unusual activity by an employee a few other times. *Id.* at 420. On cross-examination, Mr. Bowers acknowledged that the leakage reported on the data sheet was within the allowable limit of the ATP. *Id.* at 417.

Mike Yates (Tr. at 420-442, 446-505)

Mr. Yates has worked for Respondent since 1997. He previously worked for Young & Franklin from 1980 to 1981, and again from 1989 to 1992. He holds a Bachelor of Science degree in industrial engineering and a Masters' in Business Administration, both from Syracuse. Other than Respondent and Young & Franklin, he has worked for NYNEX Corporation (which later became Verizon), and has run his own business. He has been President for Respondent since 2011. In 2009 and 2010, he was the Vice President of Sales and Marketing. He knows Complainant, in part, because they were both promoted to vice president positions within the company in 2007. *Id.* at 421-22.

Complainant ran the design engineering department. That department was responsible for supporting the manufacturing floor and answering technical questions about legacy products. His department would facilitate making improvements to those products, and Complainant's team was responsible for designing new products "as we won new products." *Id.* at 422-23.

The company has grown significantly since he joined the company in 1989. Between 1986 and 2005, the company made four additional acquisitions of aerospace product lines and

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<sup>24</sup> The record does not indicate what Mr. Vu meant when referring to the "ATP". One possible term would be accumulator test protocol.

<sup>25</sup> Upon my questioning, Mr. Bowers stated that he believed he prepared RX 105 in October 2009. Tr. at 419.

consolidated all of them into Respondent as it exists today. Mr. Yates had a role in the acquisition of the York accumulator product line. For that purchase, the company acquired drawings and the intellectual property rights associated with those drawings and a couple of machine tools, as well as inventory. As part of that acquisition, the product line was moved from York, Pennsylvania to Respondent's facility in Syracuse, New York. *Id.* 423-25.

In 2008 and 2009 Respondent explored changing its business model after realizing that there were fewer acquisition opportunities in the marketplace. If the company wanted to continue to grow, it needed to find ways other than through acquisitions. Therefore, they decided to enter the "design to build" marketplace, where Respondent would design the product itself and qualify it for use on aircraft. *Id.* at 426.

At that time, Complainant became the vice president of engineering. He was tasked with building a bigger and better engineering department after the Respondent was awarded several big contracts, which necessitated more resources. By the end of 2009 and toward the beginning of 2010, it was apparent that Complainant was getting farther behind in this goal. He attended leadership meetings and quarterly board meetings that Complainant also attended. *Id.* at 426-27.

In 2007 and 2008, there were dozens of customers for the York accumulator, including Bombardier, Embraer, Gulfstream, General Dynamics, and Saab. After the acquisition of the product line, Respondent became aware of failures beginning in 2006. Eventually, Respondent initiated a recall of the accumulators. RX 10 is the Service Letter from November 2007 for accumulators used on Embraer aircraft. RX 15 is a Service Information Letter and RX 16 is a Service Bulletin for two accumulators. These documents are specific to particular aircraft, the Bombardier CRJ. *Id.* at 429-30.

Respondent conducted briefings to customers about the accumulator. RX 14 is where Respondent insisted that it participate in CRJ operators' conferences so it had an opportunity to brief the aircraft operators on the status of the failures and the investigation that Respondent was conducting. Mr. Yates attended several of those briefings. RX 9 are minutes of an October 31, 2007 meeting in Montreal that he attended, a meeting that involved Respondent's representatives and representatives from Bombardier. *Id.* at 431-32.

RX 13 is a Service Bulletin to the Saab 340 aircraft operators about the recommended action to be taken on accumulators on those aircraft. Respondent had to perform the failure investigation on the two field failures of the accumulator. Respondent also played a role in supporting the field with spare parts and facilitating requested action. RX 31 is a letter Respondent wrote to the FAA in March 2009 about the field failures on both the Bombardier CRJ and the Saab aircraft. In the accumulators that failed and were returned to its facility, Respondent discovered the defect was due to an undercut in the screw cap. York Industries, and not Respondent, manufactured these returned parts, but were acquired by Respondent as inventory during the York Industries' acquisition. Respondent notified the FAA that it would continue to investigate. *Id.* at 432-37.

Prior to March 2009, the testing of the accumulators and proper investigation into the failures was Complainant's responsibility. *Id.* at 437. As of March 2009, there had been

discussions within management of the company and questions about the Retlif tests; the test was “nonsensical” because in the field, screw caps on small accumulators were failing, but during the Retlif test it was the end cap, not the screw cap that was failing. *Id.* at 439. Mr. Johnson was aware that those accumulators tested by Retlif failed to meet the tests. Mr. Johnson never directed the results of that be covered up. Because of this “inconsistency,” Respondent needed to do more testing. *Id.* at 440.

During this time, Mr. Yates and Complainant both reported to the president, Joe Klocko. Mr. Klocko was frustrated because he wanted this additional testing done, but Complainant could not finish it in a timely manner at Respondent’s lab. Thus, Respondent delegated subsequent testing to Young & Franklin, and Mr. Kaido oversaw that testing. *Id.*

In 2009, a cross-functional team of individuals addressed the York accumulator issue. Those individuals included Mr. Yates, Complainant, Mr. Kaido, Mr. Krenzer (a design engineer who worked for Complainant), Mr. Petruska (a program manager), and Mr. Corwin. When determining where to do testing after the Retlif test, Complainant was asked if there was capacity at Respondent’s facilities to conduct the additional testing. He believed that Complainant said that Respondent did not have the capacity to do the testing there. Consequently, a decision was made to have the testing done at Young & Franklin. Thereafter, the team discussed procedures that would test the accumulators at Young & Franklin. RX 41 is an email that reflects some of the difficulties confronted during the test set up because of cold temperature leakage. Complainant provided input for the testing as reflected in RX 42. RX 43 is a meeting notice with key members, including Complainant, to discuss the test procedure. A written test procedure for the accumulators was ultimately completed. *Id.* at 447-51.

Mr. Yates became aware that the medium accumulators had failed the test. The small accumulators passed the test.<sup>26</sup> *See* RX 77 at 558; *see also* Tr. at 452. The FAA was advised of these results, as reflected in RX 51 and RX 52. Once Respondent became aware that the accumulator was not able to meet its requirements, Respondent stopped shipping them, and put a 28,000 flight cycle life limit on the parts. Tr. at 454; *see also* RX 60. RX 63 is the webinar presentation presented by Respondent. During this webinar, customers were advised that the accumulator had not met the original qualification specification and a 28,000 flight cycle limitation was imposed. RX 78 is a letter from Respondent to the FAA laying out the steps it had taken as of October 13, 2009 to address the accumulator failures. *Id.* at 455-57.

RX 81 is a meeting notice to review the results of the status of ongoing testing and testing going forward. Following the accumulator failures at Young & Franklin, Respondent decided to conduct additional tests in cooperation with customers, beginning on October 14, 2009. Mr. Yates learned on or about October 27, 2009 that Respondent’s lab was conducting testing of the medium accumulator. He has not seen a written test procedure that was used for these tests, nor has he seen a written report from Complainant of the results of the testing at Respondent’s engineering lab. *Id.* at 457-60.

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<sup>26</sup> Respondent manufactures two sizes of accumulator per MIL SPEC MIL-A-8897A, which are referred to as small and medium size. *See* Tr. at 72, 428-29, 451-54 and 634. Apparently the small size accumulator is 50 cubic inches while the medium size accumulator is 100 cubic inches. *See* Compl. Br. at 10. It is the medium size accumulator that is at the center of this case.

In 2009, Bombardier was, and currently is, an important customer of Respondent. Bombardier sent a team to conduct an audit of Respondent in 2009. RX 100 is a copy of the audit report Bombardier generated. In November 2009, Complainant was responsible for Respondent's engineering department. RX 101 is the presentation Bombardier provided Respondent where they identified five red flags within the engineering department. Respondent's management, including Mr. Johnson, was concerned about these red flags. Management discussed whether it was better for the company for Complainant to continue managing the engineering department. Mr. Yates decided that it would be better for Respondent if it made a change, and removed the Complainant from managing the engineering department. Mr. Kaido took over those duties. Since then, Respondent has built a bigger and better engineering department. *Id.* at 461-68.

On cross-examination and upon my questioning, Mr. Yates said that Respondent acquired the York accumulator in 2005. *Id.* at 472. The entire product line purchased from York constitutes less than ten percent of Respondent's total sales. Respondent's annual sales currently are in the \$55 million range. *Id.* at 475. Between 2005 and 2009, Complainant reported directly to Respondent's president. Mr. Johnson became Respondent's president in 2009. *Id.* at 478-79. Prior to 2009, Young & Franklin had not been involved in any of the York accumulator testing. *Id.* at 497. When Respondent presented its results of the Young & Franklin testing, representatives from both air carriers and aircraft manufacturers were present. Approximately fifty air carriers operated the CRJ 200. *Id.* at 498. Bombardier's business constitutes about ten percent of Respondent's sales. *Id.* at 498-99. There were problems with the Retlif testing procedures. RX 19 at 246 shows that the clamp was placed over the end cap, but when installed on an aircraft, it sits in a cradle and the clamp is attached to the barrel. *Id.* at 502-507. *See also* CX 2.

Steven Moreno (Tr. at 507-43)

Mr. Moreno has worked for Respondent for eight years, starting January 2008. Prior to joining Respondent, he worked for 22 years for Parker Hydraulics Division in Kalamazoo, Michigan. Parker makes flight controls and other aircraft equipment. Respondent hired him as a manager of repairs, and a year later, he became the director of customer support overseeing all aftermarket functions, including spares and repairs. He supports the airline customers or government customers directly, and the original equipment manufacturer (OEM) customers after Respondent makes the production deliveries. One of the parts he works on is the York accumulator. He worked with the York accumulator when he worked at Parker, so he has been familiar with the York accumulator for a long time. *Id.* at 508-09.

He learned about failures of York accumulators in the field while working for Respondent. RX 31, table 1 is a description of all the accumulator failures that had happened up to that time. The two aircraft where these accumulators failed on were the Saab 340 and Bombardier CRJ. RX 13 is a Saab service bulletin issued in June 2008 pertaining to the York accumulators that he worked with Saab representatives to develop. This service bulletin told the aircraft operators to remove the accumulator. RX 47 is an airworthiness directive issued by the European Airworthiness Safety Administration ("EASA"), Europe's equivalent of the FAA. The airworthiness directive is based on Saab's service bulletin. In response to a Notice of Proposed

Rulemaking (“NPRM”) concerning the EASA airworthiness directive, Respondent wrote to the FAA requesting a shorter compliance time than that proposed in the NPRM. *Id.* at 510-17.

Mr. Moreno has communicated with customers and operators about York accumulators on Bombardier aircraft. In October 2008, he gave a presentation before the Bombardier Operators Technical Steering Committee, and he discussed field failures of York accumulators. *Id.* at 518-19; *see also* RX 14. At that time, Respondent recommended inspection and replacement of York accumulators on the CRJ. Tr. at 519. Respondent worked with Bombardier on a service information letter and a service bulletin. *Id.* at 520; *see also* RX 15, RX 16. All CRJ operators received both documents in October 2008. In June 2009, he gave a presentation at the CRJ Operator’s Conference where he described replacing screw caps to the York accumulators as an interim fix and referenced the stainless steel accumulator as the long-term solution to the York accumulator problem. Tr. at 520-21, 524; *see also* RX 40. In August 2010, Transport Canada issued an airworthiness directive pertaining to the York accumulators on the CRJ 100/200 series aircraft. This airworthiness directive mandates compliance with a Bombardier service bulletin, one that Respondent worked with Bombardier to develop. Tr. at 526-27; *see also* RX 135. The FAA similarly issued an airworthiness directive concerning these accumulators. Tr. at 529; *see also* RX 136. Both airworthiness directives occurred because of reported field failures, not the testing performed by Respondent. Tr. at 529-30.

Upon my questioning, Mr. Moreno stated that Respondent is an FAA Part 145 repair station. *Id.* at 536. Mr. Moreno’s primary contact in the engineering department was a Mr. Laybourne, who worked for Complainant, not Complainant himself. *Id.* at 540.

Dudley Johnson (Tr. at 543-642)

Mr. Johnson earned his Ph.D. in economics from the University of Virginia. He taught at Dartmouth College for three years. He was the chief research economist in financial research in econometrics at Citibank for ten years, and then he purchased Young & Franklin in December 1980. Young & Franklin purchased Respondent in 1986. At the time of purchase, Respondent made aircraft components, brake valves and other types of small valves. *Id.* at 544-45.

Complainant was hired by Mr. Caponecchi, then president of Respondent, in the late 1990s. In 2005, Respondent purchased York, which had a small product line; they bought blueprints, writing sheets, some machinery, and the customer list of York. At the time of purchase, Respondent asked York if they had experienced product failures. Respondent was told there might have been one. Given that York had 98,000 accumulators in the field, Respondent thought it was a low risk situation. However, the failures began to be reported in 2006. *Id.* at 547-48.

Mr. Johnson did not begin to actively manage what Complainant did at the company until early 2009 when “we found out we had this conductivity issue, which put at risk virtually the whole product line.” *Id.* at 549. In the 1970s, at the request of Boeing, York changed the material used to make the accumulator to a less corrosive material. In order to do this, they were supposed to do a conductivity test, which was not performed.<sup>27</sup> *Id.* As this was a new product

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<sup>27</sup> *See generally*, 14 C.F.R. §§ 21.9 and 21.319.

line for Respondent, “we basically accepted what the people had been doing as the way it should be done.” *Id.* at 550. Some time passed before Respondent realized the problem. Once Respondent realized it had a problem, it wanted to find out how to make it correct “because if we can’t make it correct, you close it down because you can’t ship it otherwise.” *Id.* In 2009, York accumulator accounted for three and one-half percent of Respondent’s overall sales. Also in 2009, Respondent was in the position to develop new products instead of just making existing products. This required an increased design engineering capacity. *Id.* at 550-51.

In February 2009, Complainant wrote an email to Mr. Johnson regarding outside testing at Retlif of the York accumulator. RX 22. Complainant recommended additional testing because the current test was not appropriate; the failure mode of the test was not consistent with the field failure modes. For years, Young & Franklin had been the biggest research and development spender between the two companies. In the spring of 2009, Respondent attempted to develop a new accumulator to replace the York accumulator. Complainant had told him that he was too busy developing the stainless steel accumulator to be responsible for testing the old York accumulator. Therefore, Respondent gave Young & Franklin the task of conducting the York accumulator testing. *Id.* at 553-558.

In September 2009, Mr. Johnson received reports that the York accumulators made by Respondent did not meet Step 7 of the MIL SPEC. Notwithstanding, Complainant’s allegation in RX 141, paragraph 37 indicating that testing was successful, Mr. Kaido never told him that the twelve medium size accumulators he tested at Young & Franklin passed the military specifications. *Id.* at 560-61. Also in September 2009, Respondent notified the FAA that the accumulator failed the MIL SPEC. RX 72 at 484; RX 78. RX 56 is a document in which Respondent notified Bombardier that Respondent was establishing a stop shipment until they acknowledged that the accumulators had a life limit of 28,000 cycles.

Following the twelve accumulator failures during the Young & Franklin testing, Mr. Johnson understood that Young & Franklin, and Mr. Kaido, were going to conduct additional testing in consultation with customers. Mr. Corwin asked Complainant to provide input into this additional testing schedule. *Id.* at 569-571. On October 27, 2009, Mr. Johnson sent an email (RX 88) to Complainant to see him upon his return from a business trip. He sent the email after he found out that Complainant was running a test “that we called the secret test, that it was out of conformance with both pressure and temperature.” Tr. at 571. On November 2, 2009, he sent another email to Complainant asking him what he was trying to achieve by this test. Complainant provided a “dissembling response.” *Id.* at 572-73. He asked Complainant to prepare a memo to explain his testing. RX 91. But his memo (RX 92) did not address the issues. Tr. at 573. Complainant presented RX 92 on November 3, 2009, when he had the meeting with Complainant to discuss the testing. RX 92 did not directly address the testing and he has never seen the written protocol that Complainant prepared for the test he directed Respondent’s engineering lab technicians to undertake. *Id.* at 573-75. At this meeting, it became quite clear to Mr. Johnson that “[w]e needed to get control over the [Respondent’s] lab. We’d never get control over the [Respondent’s] lab as long as [Complainant] was in control, and so I removed him from control of the lab.” *Id.* at 576. He ultimately advised Complainant during this meeting that he was removing responsibility over the engineer lab from him, and “I told him the tests we were running were unprofessional. He was not doing things within the context of what we

needed. We were short of resources, and in effect he was not utilizing the resources properly.” *Id.* at 578-79. Mr. Johnson characterized the tests he performed as badly conceived and managed, especially since Complainant was already “up to his eyeballs with work.” *Id.* at 579. Even though he took the lab away from Complainant, Complainant continued as vice president of engineering. Mr. Kaido’s report (RX 98) confirmed that Respondent’s engineering lab had not been properly managed. *Id.* at 579-81.

Bombardier is an important customer and it audited Respondent; RX 100 is the report of that audit. RX 101 is the PowerPoint presentation Bombardier provided Respondent on November 13, 2009, in which Mr. Johnson participated. The five major red deficiencies concerned him and he had absolutely no confidence that Complainant could address those deficiencies. Complainant had been tasked to build up the engineering staff and he had not accomplished that. Complainant did not delegate. *Id.* at 581-83. Mr. Johnson and the rest of management were “very much afraid if we don’t get control of the process and be able to hire new engineers when none were being hired, we did not think the company could survive.” Tr. at 582. The audit was “the straw that breaks the camel’s back.” *Id.* at 585. RX 102 is the memo reflecting Complainant’s removal as vice president of engineering. Complainant was told prior to the memo’s release; RX 102 notified Respondent’s employees of the change. Mr. Johnson asked Complainant to continue with Respondent and neither his compensation nor his benefits were changed. Going forward, Complainant was to focus on the stainless steel accumulator. *Id.* at 584-86.

Sometime in the first half of December 2009, Mr. Johnson told Complainant that he would not receive an increase in salary, nor would he receive a bonus because of his substandard performance. Complainant was not pleased. When he returned to his office after the first of the year, he received an email from Complainant dated January 4, 2010 (RX 117), in which Complainant alleged retaliation. *Id.* at 586-87. Mr. Johnson testified that, “Only an employee that had no interest in staying in the company would ever write such an angry email. As soon as I saw that, I realized there was no way that [Complainant] would be a happy employee, and I assumed all of this was meant to get fired.... I looked at that and I said that he doesn’t write like that so he’s probably had help. Everything he’s got in there is inflammatory and obviously the man wants to be fired to get severance.” *Id.* at 593.

On January 8, 2010, he met with Complainant with Mr. Corwin present at the meeting. Unbeknownst to Mr. Johnson, Complainant recorded this meeting. He only learned about that the week prior to the hearing. During this meeting, Mr. Johnson notified Complainant that his employment was terminated. Respondent’s counsel played the tape recorded conversation of January 8, 2010 and Mr. Johnson informed Complainant of the following: Complainant could resign and receive a severance package equal to one month salary for every year that Complainant worked for the company; he would receive medical benefits; and the company would accelerate his stock option that he would get in January. In exchange, Complainant would have to sign a release not to compete nor poach employees. The other option was to be terminated effective January 8, 2010 with no severance. Mr. Johnson told Complainant the only reason not accept the severance was if Complainant was going to fight the termination, and Mr. Johnson told Complainant that he had never lost a labor dispute. *Id.* at 593-99.

Since Complainant's discharge, he is not aware of any field failures of York accumulators that were manufactured by Respondent. There remains a 28,000 flight cycle limit on those accumulators. Upon my questioning, Mr. Johnson said that he is the primary owner of Young & Franklin, which owns Respondent. He characterized the January 2010 email (RX 117) as outrageous. He learned later that at the time Complainant wrote that email, he had already obtained another job. *Id.* at 602, 637-38.

Dan Corwin (Tr. at 642-686)

Mr. Corwin is currently a director of Young & Franklin, the parent company of Respondent. He was employed at Young & Franklin from late 2003 until January 1, 2013. He earned his degree at Gannon College, and then served almost two years in the Army, one year being in Vietnam. After being discharged from the military, he worked for Acme Electric Corporation for 32 years. At the end of his time there, he was the senior vice president, chief financial officer. Acme made electronic power supplies for high-tech companies. Mr. Johnson was a board member of Acme Electric and he asked Mr. Corwin to join Young & Franklin shortly after he left Acme. His first position at Young & Franklin was vice president of business development. Eventually, he became responsible for sales and engineering. *Id.* at 643-45.

In November 2008, Mr. Corwin became involved in Respondent's strategic meetings, and in April or May 2009, he became "heavily involved" with the accumulators the company had purchased from York. *Id.* at 646. Additionally, the company was trying to develop a new product, and it takes quite a change to go from build-to-print to development. At the time he became involved, Complainant was the vice president of engineering. From an engineering standpoint, Complainant was responsible for resolving the issues with the York accumulator. At that time, the company was trying to determine why the eight or nine end caps had failed on accumulators in the field on commuter regional jets. Some of these failures were returned to Respondent and it determined that the cause was an undercut during manufacturing at York. He became aware that Retlif had conducted tests at Respondent's behest, and the accumulators they tested failed. *Id.* at 646-50.

When Mr. Corwin became involved, he came to the conclusion that Complainant was not adequately prepared to address the problem because he lacked the principles of engineering on cycling. *Id.* at 650. Complainant was taciturn when Mr. Corwin questioned him about the issues with the accumulators. To his knowledge, Complainant agreed that additional testing was needed following the Retlif test. Between April and September 2009, a team formed to address the accumulator issue, and the team included personnel from both Young & Franklin and Respondent; Complainant was part of that team. At these meetings, Complainant stated that Respondent did not have the capacity to do the accumulator testing. He also said to run the cycles more slowly. *Id.* at 651-54. However, Mr. Corwin did not understand what Complainant meant by slow; Complainant did not quantify this term. "I know Pete [Kaido] knew how to test these things and I accelerated the test so we can get to the customers and find out what where we were." *Id.* at 654. Mr. Kaido reported that the accumulators during the Young & Franklin testing had failed. This information was relayed to the FAA. RX 65 and RX 66 contain Mr. Corwin's requests to Complainant to provide him with information and data that he had on the accumulators, but Complainant did not respond. *Id.* at 655-57.

There came a point where Mr. Corwin discovered that Complainant was running tests on the accumulator, which astounded him, as he was told that it did not have the capacity to perform that testing. He attended a meeting with Mr. Johnson and Complainant in early November 2009. At that time, Complainant provided written responses (RX 92) to a series of questions Mr. Johnson posed in an email (RX 91) to Complainant; Mr. Corwin had been courtesy copied on that email. *Id.* at 559-60. RX 93 contains notes that Mr. Corwin made immediately after that meeting. In addition, Respondent had interviews conducted to determine the details of the Respondent engineering lab tests that Complainant had conducted. He did not believe that Complainant had conducted proper testing. *Id.* at 664.

In November 2009, he participated in a meeting where Bombardier presented the results of its audit of Respondent. RX 101 contains the results of that audit. He felt the report was indicative of the situation at Respondent's facility. He realized that the engineering staff would have to double or triple in size. Complainant was responsible for hiring new engineers, and he did not see much effort on Complainant's part in completing that task. *Tr.* at 666-67.

Prior to the Bombardier audit, he recommended a change in the management of the engineering department to Mr. Johnson. *Id.* at 667. He recommended consolidating the engineering departments of Respondent and Young & Franklin under Mr. Kaido "until we got a hold of the new method of doing business and a hold of the problems that we accumulated." *Id.* at 668. RX 102 reflects the announcement of the consolidation of the departments and the change of Complainant's role in the company.

Mr. Corwin attended a meeting with Mr. Johnson and Complainant shortly after Complainant sent an email to Mr. Johnson (RX 117). He had no idea that Complainant had secretly recorded that meeting. During this meeting, Complainant was offered a severance package. In no way did Mr. Johnson suggest that if Complainant accepted the severance package, he could not report safety issues. *Tr.* at 672-73. On cross-examination, Mr. Corwin said that the cycle rate should be as fast as the equipment will allow. *Id.* at 679. Had Complainant asked, Mr. Corwin could have approved the purchase of additional testing equipment for Respondent's engineering lab. *Id.* at 681-82.

#### Mary Tucker (Tr. at 690-768)

Ms. Tucker is the vice president of human resources for Young & Franklin. She is also responsible for Respondent's human resources department. She holds a Bachelor of Science degree in industrial and labor relations from Cornell University. After graduation, she worked for Gillette, which was later purchased by Pirelli Cable Corporation. At this company, she started as a personnel manager and worked her way up to corporate manager of human resources. Following that position, she was self-employed providing consulting services to nonprofits. In May 2006, she went to work at Young & Franklin. *Id.* at 690-92.

She first interacted with Complainant in May 2006, at which time she discussed organizational development topics with him. In 2006, Respondent's primary business was to

“tweak” existing component aircraft designs. Just before she joined Young & Franklin, the company has completed the acquisition of York Industries. *Id.* at 692.

There came a time when management began to consider changing Respondent’s business strategy. She and Complainant attended meetings to discuss this change in business strategy. These meetings concerned changing the business model from supporting or sustaining legacy design to creating the company’s own designs. She did not think that Complainant was very engaged in those meetings. *Id.* at 692-94.

In early 2009, the company obtained contracts from Heroux and Sumitomo that entailed a lot of work for Respondent in terms of parts. These contracts required Respondent to increase its engineering staff. She was involved in recruiting new engineering staff to Respondent which required interacting with Complainant. *Id.* at 694. Complainant had very limited success in hiring engineers because “he was very hung up on hiring strictly aerospace engineers.” *Id.* at 695. By early 2009, Complainant had not recruited the necessary engineering staff to meet the company’s contractual obligations. *Id.*

RX 35 contains notes that she took on April 22, 2009 during a luncheon that Complainant also attended. During this meeting, attendees expressed concerns that the company was not going to be able to meet its production demands with the new Sumitomo contract. The operations personnel expressed concern about interacting with Complainant and Mr. Tran, another member of Respondent’s engineering department. *Id.* at 697-99. The meeting participants found that Complainant and Mr. Tran “were very arrogant and it was their way or the highway. It was very difficult to communicate with them.” *Id.* at 699. Prior to this luncheon meeting, she discussed the issue with Mr. Johnson. *Id.* at 697. In that meeting, she told Mr. Johnson that “it had been expressed to me from a number of Mr. Johnson’s direct reports that they were having difficulty working with the design engineering department in terms of design standards, in terms of priorities, in terms of scheduling, and also concerned that the design engineering staff was not quite up to snuff with their knowledge and their application of GD&T.”<sup>28</sup> *Id.* at 698. At the end of the April 22, 2009 meeting, she was concerned about whether Complainant’s department was going to succeed in bringing these new products to market. *Id.* at 701-02.

RX 38 is an email exchange that took place on May 19, 2009 relating to the need to build the proper engineering staff to meet the Respondent’s new design requirements.

In June 2009, she met with Complainant to discuss personnel issues in his department. He had hired a couple of entry level engineers and she was concerned that one of those engineers, a female, was developing an inappropriate relationship with a senior level engineer. Contrary to her instructions, Complainant attempted to move the female engineer’s workstation next to this senior engineer with whom she had concerns. Also in May and June 2009 they discussed the fact that one of his engineers was actively looking for a position outside the company, yet Complainant had assigned him as a project lead for an important project for the company. Additionally Ms. Tucker was concerned that the lab group leader who reported to

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<sup>28</sup> GD&T stands for geometric dimensioning and tolerance. “GD&T is basically a language that translates drawings onto the manufacturing floor, onto our machines.” *Id.* at 699.

Complainant was acting inappropriately with one of her staff members and wandered around the building. After this discussion, she was not confident that Complainant could take the necessary steps to address the human resources issues. *Id.* at 703-05.

In October 2009, Mr. Johnson sent her to attend the National Business Aviation Association conference in Florida. Mr. Johnson attended, and Complainant was also scheduled to attend the conference with the goal of attracting senior level engineers to join the company, specifically Complainant's department. She was shocked when she arrived at the airport and Complainant did not plan to attend the conference; instead, he sent the female engineer that she was concerned was having an inappropriate relationship with another employee supervised by Complainant. Complainant's absence from this conference hindered efforts to recruit new engineers to his department. Sending such a junior engineer to a high profile trade show was very unusual, and this had never happened before. During the conference in Florida, she met with Mr. Johnson to discuss Complainant's management of his department. *Id.* at 705-07.

RX 124 is a document prepared on February 9, 2010 that she asked John Bowers to prepare after Complainant went to Mr. Bower's office on November 2, 2009. Mr. Bowers had reported to her that on November 2, 2009, he ran into Complainant in the hallway after Complainant had returned from a trip with Embraer, one of Respondent's customers. Mr. Bowers was concerned that Complainant overpromised Embraer what Respondent would be able to produce and sell to them, in terms of the stainless steel accumulator's performance. Following this encounter, Mr. Bowers reported an incident concerning a lab technician who worked for him, Mr. Vu, and Complainant. RX 105 is a note concerning the exchange between Complainant and Mr. Vu. Ms. Tucker met with Mr. Vu and assured him that he had done nothing wrong. In essence, Complainant had asked Mr. Vu to change the test results on a data sheet for a test of a new stainless steel high-pressure accumulator. *Id.* at 707-11.

During the middle of 2009, Respondent addressed the issue with the York accumulator. The York accumulator issue was common knowledge within the company. She was aware of this because it was an "all hands on deck issue." *Id.* at 712. Ms. Tucker knew that Mr. Kaido was overseeing additional testing of the York accumulator. Mr. Kaido was part of the Young & Franklin side of the company and he reported directly to Mr. Corwin, who, in turn, reported to Mr. Johnson. She understood that testing on the York accumulator was being done at Young & Franklin because Respondent's engineering department did not have the capacity to run any additional testing. *Id.* at 712-13.

At some point, she learned that Complainant had been testing an accumulator in Respondent's engineering lab. RX 95 is a November 3, 2009 email from Mr. Kaido to her and Mr. Corwin, concerning interviews of Respondent's lab technicians. She actually attended those interviews because they were given directions that things were to remain secret; "that is not appropriate nor is it accepted at our company." *Tr.* at 714. Three individuals were interviewed and they all reported to Complainant. Two of these employees said that Complainant had instructed them not to disclose this testing. Also, the engineer that Complainant had designated as the engineer in charge of the York accumulator was not aware of this testing. This "ticked off" the engineer in charge. Following these interviews, she participated in a meeting with Complainant and Mr. Johnson where Mr. Johnson summarized the interviews with the lab

technicians. RX 96 contains notes that she took during this meeting. Mr. Johnson expressed concern about Complainant's management of the engineering lab. Based on her interviews and knowledge of the situation as of November 4, 2009, she did not think that Respondent's lab, under Complainant's direction, was meeting the Respondent's goals. *Id.* at 714-17.

Between April 2009 and November 2009, she could not see how Complainant had done anything to correct the deficiencies in the engineering lab for Respondent. At that point, she believed that Complainant did not have the ability to successfully manage current staff, let alone the staff required to support Respondent. On November 4, 2009, she recommended to Mr. Johnson that he terminate Complainant's employment; however, Mr. Johnson did not terminate Complainant's employment at that time. Mr. Johnson told her that Young & Franklin was there to support Complainant and his organization. *Id.* at 717-722. "He felt that although [Complainant] may not have worked very smart, he thought that [Complainant] was a hard worker." *Id.* at 722. She has learned in working with Mr. Johnson "that he is very slow to hire and very slow to terminate what you would consider a higher-level employee." *Id.* at 723.

On November 13, 2009, she attended a PowerPoint presentation provided by Bombardier (RX 101). Complainant arrived late for this meeting, which she considered important to the company. Mr. Johnson, Mr. Yates and Mr. Corwin attended this meeting. The slide with the major discrepancies (RX 101, page 738) concerned her because she attends a number of audit proceedings and she had never seen so many major non-conformances in an audit report before, and has not since. *Tr.* at 724-25. The concerns Bombardier expressed in this report were consistent with those she had previously expressed to Mr. Johnson. Following this meeting, she discussed the results with Mr. Johnson, and again recommended that he terminate Complainant's employment. *Id.* at 726. Mr. Johnson did not accept that recommendation. However, Mr. Johnson removed Complainant's responsibility for the engineering lab. RX 102 is an organizational announcement of this change. *Tr.* at 727. Complainant was to focus on the stainless steel accumulator, a project that was important to the company, and he was to report to Mr. Kaido. *Id.* at 727-28. As a result of this action, neither Complainant's title nor his compensation was changed. *Id.* at 721, 723 and 728.

At some point, Ms. Tucker learned that Complainant had obtained new employment. RX 122 is a verification of employment for the human resources office received, apparently signed by Complainant on January 7, 2010. This is the type of form human resources receives when someone obtains, or is close to obtaining, employment elsewhere. *Tr.* at 728-29.

In the first week of January 2010, Ms. Tucker learned that Mr. Johnson had decided to accept her recommendation to terminate Complainant's employment. She had a 25 minute exit interview with Complainant on January 11, 2010. This exit interview is documented in RX 120. During this interview, Complainant did not tell her that he knew of any violation of an FAA order or regulation, or that he was concerned about information that had not been reported to the FAA. *Tr.* at 730-31. She tendered Complainant a proposed severance agreement. CX 4. Complainant had stock options and he was given the opportunity to exercise those options upon his termination, as part of the separation and release agreement. Complainant left their meeting with the agreement and was given time to consider whether or not to accept the offer. The offer included 43 weeks of severance pay, as well as the payout on the stock options and continued

medical coverage. He did not accept the offer. Before he left that day, he did make a counteroffer for more severance. Tr. 732-34.

On cross-examination, Ms. Tucker acknowledged that in 2009, she was the highest ranking human resources person at Respondent and Young & Franklin. She reported directly to Mr. Johnson. The termination of Complainant was unusual for her because it was the first termination of an executive's employment during her time with the company. She acknowledged that she had been promoted at some point after Complainant's termination. Ms. Tucker was certain that Complainant had been invited to the business model meetings. When she referenced that Complainant was not engaged in these meeting, she explained in the fall of 2008 through the winter of 2009 the participants were given task assignments to complete and to discuss at the next meeting. Complainant was not prepared with any of the work he was asked to do and he did not present. *Id.* at 738-744.

Respondent terminated its lead design project engineer for the Sumitomo project in May 2009. Mr. Johnson told Complainant that if Complainant was unwilling to terminate the employee two days before the employee took his new job in Alabama, then Mr. Johnson would. In addition, Ms. Tucker conducted the investigation of this employee because he used the company email system to communicate with his future employer. This employee was appointed by Complainant to be the senior project engineer for the biggest project that Respondent had undertaken. Respondent did not want this employee to oversee the Sumitomo project, only to disappoint all of his co-workers by leaving. *Id.* at 746-49. When asked about the flight to Florida to attend the NBAA meeting, Ms. Tucker said that she traveled by company plane and she did not recall whether there was an empty seat available for the Complainant. *Id.* at 754-55. The disciplinary action here for the "secret test" was the removal of the lab from Complainant's oversight. *Id.* at 764. She knew Complainant wanted more severance after his attorney at that time called Respondent's attorney asking for more severance. *Id.* at 767.

## B. Stipulated Facts

The only stipulated facts are Respondent employed Complainant from April 10, 1999 until his termination of employment on January 8, 2010. At the time of his termination, Complainant was the Vice President of Engineering, having been promoted as such in December 2007. Respondent acquired York Industries aerospace product line around May 2005. This product line included the York accumulator.

## C. Facts in Dispute

### 1. Complainant's Statement of Facts

Complainant maintains that Respondent designs and manufactures the York accumulator, a part used on various aircraft. Further, Respondent sells and provides repair services directly and indirectly to the owners and operators of these aircraft and air carriers. Fifty or so air carriers operate the Bombardier CRJ aircraft, which uses the York accumulators. Compl. Br. at 3, 5.

Respondent had Retlif perform tests performed on small accumulators and all three accumulators failed; they failed at 220,772 cycles, 377,632 cycles, and 623,619 cycles respectively, all short of the required 1,000,000 cycles. However, impulse tests performed at Young & Franklin, under Mr. Kaido's supervision, showed that two small accumulators exceeded the impulse cycle requirements. The large disparity between results was never reported to authorities. All of the reporting and correspondence with customers only concerned the medium size accumulators. Compl. Br. at 4-5.

On April 8, 2009, Respondent transferred responsibility for the accumulator testing to Young & Franklin without any notification or explanation. *Id.* at 6.

Complainant refutes any assertion that he was consulted on every phase of the accumulator testing. He maintains that Mr. Kaido started the qualification test without formal release of the qualification procedure, procedure document number, or signatures. Mr. Kaido later asked for team comments in July 2009. Mr. Kaido did not reply to Complainant's emails and he was not given an option to approve the qualification test procedure. Complainant also asserts the test was defective because of the testing cycle rate, "Even 10 cycles per minutes is faster than any airline operator can operate the accumulator in their aeroplane [sic]." *Id.* at 8. He argues that Respondent simply wanted to run the test as fast as it could and that he complained to management about the test speed. *Id.* at 8, 11.

On November 3, 2009, Respondent denied Complainant further access to its labs and on November 13, 2009 it announced that Complainant was no longer responsible for Respondent's engineering lab. On January 8, 2010, Respondent terminated Complainant's employment. *Id.* at 6-7.

## 2. Respondent's Statement of Facts

In its brief, Respondent asserts that sales of the York accumulator amounted to approximately 3.5% of the company's sales, and argues, "The issue before the Company in 2009 was not preserving future sales of a relatively important product line, but preserving the Company's integrity with customers and regulators." Resp't Br. at 5. Respondent began working with customers in early 2007 to undertake testing in light of manufacturing defects from accumulators produced prior to Respondent's acquisition of York Industries that were reported by operators in 2006; Respondent initiated a recall of the York accumulator in November 2007 and conducted briefings for operators regarding the recall. *Id.* at 7-8. For these reasons, "the proof at the hearing established that customers and regulators were well aware of the field failures of the York accumulator, and that a recall program had been instituted by [Respondent], well before any of the protected activity alleged in [Complainant's] Complaint." *Id.* at 8. Respondent advised the FAA and its customers in September 2009 that it was stopping shipments of the York accumulators until the customers confirmed that they would comply with a new life cycle limit. *Id.* at 16-17. Respondent again updated the FAA as to the status of the testing in October 2009. *Id.*

Though the defective accumulators were produced by York Industries, Respondent sought to test whether the accumulators that Respondent manufactured pursuant to York

specifications after the 2006 acquisition complied with the original specifications. *Id.* at 8. Thus, Complainant arranged for an outside laboratory, Retlif Testing, to conduct the testing. *Id.* Retlif reported results of the testing in January 2009, and these results “caused appropriate concern at [Respondent].” *Id.* Complainant consistently stated that Respondent did not have the capacity to conduct the necessary testing within Respondent’s own facility. *Id.* at 9-10. Therefore, additional testing took place at Young & Franklin’s facilities, and Mr. Kaido was put in charge of this testing. *Id.* at 10, 14.

Contrary to Complainant’s claims, he presented no evidence that any customer or regulator approved testing of the York accumulator pursuant to new specifications. *Id.* at 12. These claims are also contrary to the memorandum that he prepared for Respondent in October 2007. *Id.* at 13. Moreover, Mr. Kaido testified that Complainant never responded to his requests for input regarding the Young & Franklin testing, and that Complainant did not comment concerning the cycle rate of the testing. *Id.* at 15-16. Mr. Kaido also testified that Complainant was a full participant in the engineering department’s meetings to discuss the testing of the accumulators for the Young & Franklin testing, though he did not raise any concern regarding the cycle rate impulse testing over the course of April to September 2009. *Id.* at 16.

After the September 2009 testing failures, Respondent undertook additional testing in concert with Mr. Kaido and Complainant. *Id.* at 17. Complainant was a regular participant in meetings to discuss this testing, but he failed to respond to several emails soliciting his input for the testing schedule. *Id.* at 17-18. Instead, Complainant secretly ordered technicians to conduct testing of the medium-sized York accumulator in late September 2009, and advised the technicians to only discuss the results of the testing with him. *Id.* at 18. Complainant never told Respondent’s management that he was performing this additional testing. *Id.* at 20. “The testing was discovered after the York accumulator [Complainant] was testing failed on October 24, 2009. After the testing was discovered, Mr. Johnson asked Mr. Kaido to validate the test results.” *Id.* Instead of covering up the test results as Complainant alleges, Mr. Johnson spoke with the technicians conducting the test and interviewed them, as Complainant did not prepare a written memorandum regarding the testing that he performed. *Id.* at 20-21.

Mr. Kaido composed a memorandum after the interviews and identified several issues regarding how the test was conducted. *Id.* at 21. Moreover, the test did not provide any new information, because it showed that the York Accumulator failed to meet the Military Specifications, which the accumulators tested at Young & Franklin also failed to meet. *Id.* Respondent asserts, “Nothing in the written explanation provided by [Complainant] at that time called into question the results of the Y&F testing.” *Id.* Based on Complainant’s decision to conduct testing, for which he used improper procedures, and since the testing yielded no new information, Respondent concluded that Complainant “could not effectively manage the [Respondent’s] Engineering Lab.” *Id.* at 22. For this reason, Mr. Johnson met with Ms. Tucker, who recommended Complainant’s removal from the laboratory and termination of employment. *Id.* Mr. Johnson “testified that [Complainant] had been dishonest in running a test on a York accumulator after telling management that the [Respondent’s] Engineering Lab was too busy to conduct such testing.” *Id.* at 23. In addition, upon the removal of Complainant’s responsibility of managing the Engineering Department, Mr. Kaido reported to Mr. Johnson that Complainant

had not properly managed the laboratory because he did not define test objectives, convey the status of ongoing tests, or implement a test schedule. *Id.*

In November 2009, Bombardier performed an audit of Respondent’s facilities, which produced unfavorable findings. *Id.* Mr. Yates testified that “the five major findings of the Bombardier Audit were all within [Complainant’s] responsibilities.” *Id.* For this reason, Mr. Johnson placed Mr. Kaido in charge of Respondent’s Engineering Department. *Id.* at 24. Moreover, during this time, Respondent transitioned its business from “build to print” to both designing and manufacturing parts. *Id.* To accommodate the needs of Respondent’s new business model, Complainant was tasked with building a larger engineering staff, delegating more tasks, and overseeing design projects. However, though Respondent won new design/build contracts, Complainant failed to build the necessary engineering staff to support the new business. *Id.* at 24-25. Accordingly, Ms. Tucker again recommended to Mr. Johnson that he terminate Complainant’s employment. *Id.* at 25. Respondent argues, “The Bombardier Audit was the straw that broke the camel’s back with respect to [Complainant’s] ability to lead the [Respondent’s] Engineering Department.” *Id.* at 26.

Initially, Respondent retained Complainant as the Vice President, with no change in compensation. *Id.* However, Complainant “essentially ceased doing any work following the Bombardier Audit.” *Id.* He refused to acknowledge Mr. Kaido as his new supervisor, declined to attend meetings and searched for other employment. *Id.* Respondent terminated Complainant’s employment on January 7, 2010. *Id.* at 27. Subsequently, the FAA investigated Respondent and interviewed Mr. Kaido about the Young & Franklin testing. *Id.* at 28. During his exit interview, Complainant did not report any compliance issues and his response to Respondent’s severance proposal did not concern making any reports to regulators. *Id.* The FAA thereafter conducted an investigation prompted by Complainant’s assertions, which “resulted in no findings, and the FAA has neither suggested nor required additional testing.” *Id.*

D. Summary of the Key Documentary Evidence<sup>29</sup>

In support of his case, Complainant presented the following evidence, as summarized below:

<b>Exhibit</b>	<b>Description</b>
CX 1	CRJ AMM 32-43-00 Main Landing Gear Schematic, Figure 8.
CX 2	Alert Service Bulletin A601R-29-029, Figure 1.
CX 3	CRJ series 100/200, Airframe/Engine Maintenance Training Manual, Figure 42.
CX 4	Confidential Employment Separation Agreement offered to Complainant in January 2010.

CX 1 to CX 3 pertains to the use of the York accumulator as part of the CRJ braking system.

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<sup>29</sup> While this Tribunal has reviewed each exhibit offered carefully, it is not necessary that it recount the details of every exhibit admitted.

In support of its position, Respondent presents the following key documentary evidence,<sup>30</sup> as summarized below:

<b>Exhibit</b>	<b>Description</b>
RX 2	Military Specification (MILSPEC) MIL-A-8897A.
RX 4	Letter from Atlantic Southeast to the FAA concerning a brake hydraulic accumulator failure, dated May 18, 2006.
RX 5	Letter from Respondent to Bombardier notifying it that it may be under an obligation to report brake system failures on ASA and Mesa aircraft, dated Aug. 23, 2006.
RX 10	Respondent's Service Letter TFCTP1, York Brand Accumulator Recall, dated Nov. 12, 2007.
RX 13	Saab 340 Service Bulletin 340-29-023.
RX 16	Respondent's Service Bulletin, Landing Gear – Replacement of Hydraulic Accumulator Screw Caps, rev. 1, dated Nov. 7, 2008.
RX 18	Respondent's BA Accumulator Screw Cap Fatigue Test Report, dated Nov. 14, 2008
RX 19	Retlif Testing Lab results, dated Jan. 8, 2009: reflecting that all three accumulators tested failed the impulse test before reaching one million cycles.
RX 20	Notice of Proposed Rule Making (NPRM) for AD 2008-NM-162.
RX 22	Email, dated Feb. 27, 2009, from Complainant to Respondent's President Dudley Johnson concerning the Retlif test results.
RX 28	Email from Respondent to FAA recommending the FAA shorten compliance time from what was proposed in the NPRM (RX 20). <i>See also</i> RX 29 and RX 30.
RX31	Respondent's letter to FAA requesting a meeting to discuss the issues involving the York accumulator product line, dated Mar. 23, 2009. Table 1 identifies known York accumulator failures by air carrier.
RX 33	Respondent's letter to FAA representing no test failures per MIL-DTL-5498F test 7C with different material used for the screw cap, dated April 1, 2009.
RX 34	Email trail beginning Apr. 9, 2009, where Mr. Kaido identifies deficiencies in the Retlif testing following his visit.
RX 37	Email dated Apr. 24, 2009 concerning the follow-up presentation to the FAA ACO regarding the York accumulator problems.
RX 41	Email from Mr. Kaido to Complainant and others concerning the Accumulator Qualification Test procedure using MILSPEC MIL-A-8897A.
RX 42	Complainant's mark-up on July 1, 2009, concerning the Accumulator Qualification Test procedure using MILSPEC MIL-A-8897A.
RX 44	Complainant's second mark-up on July 5, 2009, concerning the Accumulator Qualification Test procedure using MILSPEC MIL-A-8897A.
RX 45	Complainant's revised version of the July 5, 2009 mark-up of the Qualification Test Procedures to be utilized for the Young & Franklin tests.
RX 47	EASA AD 2008-0146 dated Aug. 1, 2008 concerning the Saab aircraft.
RX 52	Email to FAA advising that the Saab failures were screw cap failures that had been previously reported.
RX 53	Respondent's letter to customers, dated Sept. 22, 2009, announcing that it would stop shipping accumulators and requirement of lift limit. Letter informs customers that the accumulators did not pass the MIL-A-8897A test and recommends a 28,000 cycle lift

<sup>30</sup> This Tribunal considered all 151 of Respondent's Exhibits, especially those mentioned during the hearing testimony. However, those referenced below are the most salient for rendering this Decision; it is not necessary that it summarize every exhibit offered.

Exhibit	Description
	limit.
RX 56	Respondent letter to Bombardier notifying it of Respondent's test results and Respondent's decision to stop shipment of the accumulators and recommending a 28,000 flight cycle life limit.
RX 58	Respondent letter to Crane Aerospace, dated Sept. 22, 2009 announcing that Respondent has stopped shipment of the accumulators and recommending a 28,000 flight cycle lift limit.
RX 59	Email from Respondent to FAA, dated Sept. 23, 2009, re: Webinar.
RX 60	Letter from Respondent to FAA, dated Sept. 23, 2009 notifying FAA per FAR 21.3 of life reduction of accumulators due to impulse testing.
RX 63	Respondent's Customer Briefing slides, dated Sept. 24, 2009.
RX 65	Email, dated Sept. 25, 2009, from Mr. Corwin to Complainant and Mr. Kaido, requesting meeting to determine the company's total capacity for accumulator testing and for Complainant to estimate demand still needed for the stainless steel accumulator testing.
RX 66	Email, dated Sept. 28, 2009, from Mr. Corwin to Complainant requesting data similar to what Mr. Kaido provided for the Young & Franklin lab.
RX 67	Young & Franklin Accumulator Life Assessment of the York accumulator screw caps, dated Sept. 29, 2009.
RX 68	Handwritten notes: shows testing began Sept. 29, 2009 and failed on Oct. 24, 2009.
RX 71	Email from Jess Comer to Complainant, dated Oct. 9, 2009, where Prof. Corner informs Complainant that the amplitude of the strain "allows for fatigue tests to be run at any speed, IF the stress/strain amplitude is reached during the loading event."
RX 72	FAA Letter of Investigation (LOI) notifying Respondent of a potential violation of Part 21, "regarding the recent discovery of the York [accumulator] not meeting the impulse requirements of the product specification and their resulting life-reduction."
RX 75	Young & Franklin Qualification Test report of a twelve accumulator test attached to an email dated Oct. 13, 2009.
RX 76	Respondent's Qualification Test Report: shows the twelve accumulators tested by Young & Franklin were medium accumulators.
RX 77	Young & Franklin Qualification Test report of 4 accumulators, Oct. 13, 2009.
RX 78	Letter to response to the FAA LOI (RX 72). Letter includes reference that 45 customer representatives attended a Sept. 22, 2009 briefing on the issue.
RX 85	Email dated Oct. 26, 2009, to Complainant from technician that medium accumulator failed on Oct. 24, 2009. <i>Compare with RX 68.</i>
RX 86	Email trail concerning accumulator testing at Respondent's lab, dated Oct. 26, 2009.
RX 91	Emails dated Nov. 2, 2009, between Complainant and Mr. Johnson concerning Complainant's testing of a York accumulator at Respondent's lab.
RX 92	Complainant's response to Mr. Johnson's Nov. 2, 2009 email request for information located at RX 91.
RX 95	Email from Mr. Kaido, dated Nov. 4, 2009 concerning interviews of technicians at Respondent's lab concerning the York accumulator test.
RX 100	Bombardier's Audit report, dated November 13, 2009.
RX 101	Bombardier's slide presentation of audit findings, dated Nov. 13, 2009; in particular page 6 of the report.
RX 102	Organization Announcement, dated Nov. 13, 2009 that Mr. Kaido will assume responsibility for managing Respondent's design engineering department.
RX 105	Memo concerning Complainant's alleged attempt to have another employee change the results of a nitrogen leakage test.

Exhibit	Description
RX 117	Complainant's email to Mr. Johnson, dated Jan. 4, 2010, where he alleges that his Oct. 25, 2009 tests showed the Young & Franklin tests were faulty and the he was "going to share this information with you, our customers and other authorities if needed." In this email he claims retaliation because of the removal of his responsibilities at the lab, the cancellation of his 2009 bonus, and the lack of salary increase in 2010. Complainant acknowledges that his test involved a medium accumulator.
RX 129	Respondent's Accumulator Impulse Testing, dated Feb. 24, 2010.
RX 133	Letter from Mr. Johnson to FAA, dated Apr. 23, 2010, concerning Complainant's OSHA allegations.
RX 135	Transport Canada AD CF-2010-24, dated Aug. 3, 2010, limiting accumulator to 4,500 flight cycles.
RX 136	AD 2010-22-02. This AD cites seven cases of on-ground hydraulic accumulator screw cap/end cap failures experienced on CL-600-2B19 aircraft.
RX 137	AD 2011-23-08. This AD indicates the corrections needed for these accumulators will impact 605 U.S. registered aircraft.

### III. ISSUES

#### A. Complainant's Position

In his initial brief, Complainant cites to numerous Respondent Exhibits to support his position that Respondent is a contractor/subcontractor of an air carrier. Thus, he maintains that Respondent is a contractor and sub-contractor of an air carrier. Compl. Br. at 4. He also maintains that the term "safety sensitive function" extends to "the direct or indirect supply of components/services to keep the aircraft running at its safest condition." *Id.* at 3. Complainant argues that the Transport Canada airworthiness directive supports his position that the accumulator is an important safety component to the CRJ aircraft and to the air carriers themselves and that the issue of the safe usage of these accumulators is "not just a matter of 'safety sensitive function'." *Id.*

Complainant next asserts that Respondent "is not reporting the failure and supporting data accurately to FAA, Airlines and Air Framer." He maintains that this information is crucial for the FAA "to accurately determine the new mandatory inspection schedule and mandatory replacement [to continue their use]." *Id.* at 4. He asserts that Respondent reported that two of the accumulators passed the requirements and reported such to its customers. *Id.* at 4-5 (citing to RX 58). Complainant asserts that he was retaliated against because of the cost to the company to replace these accumulators. Specifically, Respondent recommended replacement after 28,000 cycles but Transport Canada only authorized 4,000 cycles and mandatory stainless steel accumulator replacement in two years. Compl. Br. at 5.

Complainant argues there were several discrete acts of retaliation related to his protected activities. First, Complainant alleges that on the March 23, 2009 and April 8, 2009, Respondent's act of removing him from responsibility for the testing the small accumulators and giving it to Retlif constituted retaliation. *Id.* at 6. The third and fourth acts of retaliation occurred on November 3, 2009 and November 13, 2009 when Respondent denied Complainant access to its lab and announced that it had stripped Complainant of his responsibility of

Respondent's lab. The final act of retaliation was on January 8, 2010 when Respondent terminated his employment. *Id.* at 6-7 and 12.

On September 9, 2016, Complainant submitted his reply brief. He argues that 14 C.F.R. § 21.303 required Respondent to maintain a quality system in compliance with the data and procedures approved for the PMA and that Respondent had to ensure that each article produced conformed to its approved design and was in a condition for safe operation. Further, reporting field failures in a timely manner and submitting accurate data are some of Respondent's most important responsibilities. Compl. Reply Br. at 2. He again cites the Transport Canada airworthiness directive to support his position that reporting data to authorities using inaccurate results obtained by test that does not simulate the actual airline duty cycles will jeopardize aircraft safety. *Id.* Specifically, Complainant points to the difference between the 28,000 cycles recommended by Respondent versus the 4,000 cycles imposed by the airworthiness directive. *Id.* He also notes that, while Respondent argues that the testing cycle rate can be justified by SAE ARP1383C, it never contacted Professor Comer to discuss that point, and in fact ignored paragraph 4.2 of the SAE. Compl. Reply Br. at 3. As for the Bombardier audit, Complainant asserts those results were "based on incorrect answers provided by [Respondent] employees." *Id.* at 4, 6.

Complainant argues that Respondent's assertion that his absenteeism prompted his termination is meritless as he had never used all of his allotted vacation during his more than ten years of employment with Respondent. *Id.* at 4.

Complainant reiterated that placing Mr. Kaido in charge of the accumulator testing constituted retaliation. His removal of responsibility from Respondent's lab was also retaliation for his "so-called secret test of the medium size accumulator" for "[i]t prevented him from finishing any further testing to illustrate [that] 10 cycles per second impulse test speed is appropriate to simulate the York accumulator usage in today's aircraft actual usage." *Id.* at 5-6. He argues that had the "'secret test' passed the one million impulse cycle, this retaliation action will never happen." *Id.* at 7.

Complainant asserts there is no requirement for him to complete the filing with authorities of the Respondent's information relating to any violation to be covered under AIR 21. *Id.* at 8. He also asserts that Respondent violated several provisions of the federal aviation regulations.<sup>31</sup> *Id.* at 9-10.

As for damages, Complainant seeks reinstatement, reinstatement of his 2009 stock options, reinstatement of his company stock shares into the company with opportunities to earn/purchase more company stock, salary differential pay, and related time and expenses. *Id.* at 11.

#### B. Respondent's Position

Respondent characterized Complainant's direct testimony as incoherent, and his testimony on cross-examination as evasive. Resp't Br. at 30. Respondent also highlights that

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<sup>31</sup> 14 C.F.R. §§ 21.7 and 25.1435, as well as 14 C.F.R. §§ 3.5 and 23.303.

Complainant offered no exhibits during his case, and that ultimately, he failed to introduce testimony or documentary evidence to carry his burden of proof. *Id.* Complainant “failed to testify too many of the key allegations of protected activity contained in the Complaint. Most notably, he did not testify that he contemporaneously objected to the Y&F parameters or that he contemporaneously objected to the Y&F test results,” despite many opportunities to voice these concerns. *Id.* Complainant “failed to introduce into evidence any testimony or documentary evidence that showed that he voiced any objection to the fact that testing was being conducted at Y&F until his email of January 4, 2010.” *Id.* at 31. For example, Complainant made no mention of any deficiencies in the Y&F testing in his November 2009 memorandum regarding his own “secret” testing. *Id.* at 32.

Regarding adverse action, Respondent argues that the decision to move testing to Young & Franklin facilities was not retaliation, particularly since Complainant was part of the team that oversaw that testing. *Id.* at 31. Moreover, Respondent asserts that it removed Complainant’s responsibility over the Engineering Department due to his decision to conduct testing “in a vital area” without consulting management and engineering staff, and after informing management that its facilities were insufficient to perform the testing that he subsequently conducted in secret. *Id.* at 32. Removing Complainant’s responsibility over the Department was not related to any information that he provided to Respondent or to the FAA. *Id.* at 33.

Respondent further asserts that it has demonstrated, by clear and convincing evidence, that it removed Complainant’s responsibility over the Engineering Department and terminated Complainant’s employment for reasons unrelated to any alleged protected activity. *Id.* at 36-44. In support of its position, Respondent cites Mr. Kaido’s report identifying numerous deficiencies in the lab under Complainant’s management, in addition to the Bombardier Audit and Complainant’s failure to meet objectives necessary for Respondent to transition into the design/build market. *Id.* at 37-38. Furthermore, prior to the termination of his employment, Complainant “had only intermittent attendance at work. Apparently this was because he was seeking other employment,” which he acknowledged at the hearing. *Id.* at 40. In conclusion, Respondent asserts:

The notion that [Complainant] was terminated because on January 4, 2010, he stated that he was going to make a report to the FAA is contrary to all of the actions that the Company had taken in reporting field failures to customers and the FAA, advising the FAA of the testing of the York Accumulator, and imposing new life limits on the York Accumulator. The Company had shown no hesitancy to disclose concerns about the York Accumulator to customers or the FAA.

*Id.* at 44.

Finally, Respondent alleges that Complainant cannot recover any damages. *Id.* at 45. He failed to provide a pre-hearing statement and exhibits to support his claims for damages. *Id.* He also failed to “present any testimony or documentary evidence regarding how his compensation had progressed from 2010 through the time of the hearing.” *Id.* Complainant also did not introduce any testimony that would support his claim for non-economic compensatory relief. *Id.* Respondent argues that Complainant “should not be allowed to claim lost income when he

provided no initial disclosures, and offered no documentary evidence in support of any claim of lost income.” *Id.* In addition, “Respondent was denied any fair opportunity to contest any claim of economic loss by [Complainant’s] wholesale failure to follow the rules despite repeated opportunities from the Judge to come forward with competent proof.” *Id.* at 45-46. Respondent “submits that [Complainant] acknowledged that he sought and accepted alternative employment before January 7, 2010, and that any loss of income was caused by his own decision to seek other employment.” *Id.* at 46.

#### IV. CONCLUSIONS OF LAW

To prevail on his whistleblower complaint under AIR 21, Complainant bears the initial burden to demonstrate the following elements by a preponderance of the evidence: (1) he is a person protected by the Act; (2) he engaged in protected activity; (3) Respondent took unfavorable personnel action against him; and (4) the protected activity was a contributing factor in the unfavorable personnel action. *Occhione v. PSA Airlines, Inc.*, ARB No. 13-061, slip op. at 6 (Nov. 26, 2014) (citing 49 U.S.C.A. § 42121(b)(2)(B)(iii); 29 C.F.R. § 1979.109(a)).<sup>32</sup> If Complainant establishes this *prima facie* case, the burden shifts to Respondent to demonstrate, by clear and convincing evidence, that it would have taken the same unfavorable action in the absence of the protected activity. *Palmer v. Canadian National Railway/Illinois Central Railroad Company*, ARB No. 16-035, ALJ No. 2014-FRS-154, slip. op at 52 (Sept. 30, 2016)(en banc)<sup>33</sup>; *Mizusawa v. United States Dep’t of Labor*, 524 F. App’x 443, 446 (10th Cir. 2013) (citing 49 U.S.C. § 42121(b)(2)(B)(iv)).

An overview of the Federal Aviation Administration’s (FAA) regulatory scheme is necessary for an understanding of the issues in manufacturing raised in this Complaint.<sup>34</sup> The Federal Aviation Act of 1958,<sup>35</sup> directs the Secretary of Transportation to promote flight safety by establishing minimum standards for aircraft design, materials, workmanship, construction,

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<sup>32</sup> See also *Brune v. Horizon Air Industries, Inc.*, ARB No. 04-037, ALJ No. 2002-AIR-6 (Jan. 31, 2006), slip op. at 15 (once Complainant reaches the hearing, “he must prove protected activity, adverse action, and causation by a preponderance of evidence, not merely establish a rebuttable presumption that the employer discriminated.”); *Palmer v. Canadian National Railway/Illinois Central Railroad Company*, ARB No. 16-035, ALJ No. 2014-FRS-154, slip. op at 16 & n. 74 (Sept. 30, 2016); *Peck v. Safe Air Int’l, Inc.*, ARB No. 02-028 ALJ No. 2001-AIR-3, slip op. at 6 (ARB Jan. 30, 2004).

<sup>33</sup> See also *id.* at USDOL Reporter at 60. “We think it may thus help cement this crucial aspect of [the test] to refer to [it] as the ‘same-action defense,’ not as the ‘clear and convincing’ defense.” *Id.*, slip op. at 22; see also *id.* at USDOL Reporter at 23 - 24.

At the time this Tribunal was writing this decision there were two versions of *Palmer* on the OALJ DOL website; one is the slip opinion and the other is for the USDOL Reporter. Therefore this opinion attempts to cite to both versions. The published opinions are the same but there is a difference in pagination. *Compare*

[http://www.oalj.dol.gov/PUBLIC/ARB/DECISIONS/ARB\\_DECISIONS/FRS/16\\_035.FRSS.pdf#search=Palmer](http://www.oalj.dol.gov/PUBLIC/ARB/DECISIONS/ARB_DECISIONS/FRS/16_035.FRSS.pdf#search=Palmer) 2016 *with*  
[http://www.oalj.dol.gov/PUBLIC/ARB/DECISIONS/ARB\\_DECISIONS/FRS/16\\_035.FRSP.pdf#search=Palmer](http://www.oalj.dol.gov/PUBLIC/ARB/DECISIONS/ARB_DECISIONS/FRS/16_035.FRSP.pdf#search=Palmer) 2016.

<sup>34</sup> For a slightly different view of the FAA’s regulatory scheme, see *United States v. S.A. Empresa De Viacao Aerea Rio Grandese (Varig Airlines) et al.*, 467 U.S. 797 (1984) (hereafter *Varig Airlines*).

<sup>35</sup> P.L. 85-726, 72 Stat. 731 (enacted Aug. 23, 1958).

and performance. 49 U.S.C. § 44701. Congress established a multi-step certification process to monitor the aviation industry's compliance with these requirements. 49 U.S.C. § 44704. Authority over the process rests with the FAA. 49 U.S.C. § 44701.

In broad terms, the FAA regulatory scheme for transport category aircraft is located in 14 C.F.R. and is broken down into four major parts: Part 25 (design); Part 21 (production); Part 43 (maintenance)<sup>36</sup>; and Part 91 (operation).<sup>37</sup> As this case focuses on the production of an aircraft part, this decision will primarily focus on Part 21.

Before an aircraft may be considered airworthy, it (1) must conform to its type certificate, if that certificate has been modified by supplemental type certificates and by Airworthiness Directives<sup>38</sup>; and (2) must be in condition for safe operation. *See Administrator v. Nielsen*, NTSB Order No. EA-3755 at 4 (1992) (citing *Administrator v. Doppes*, 5 NTSB 50, 52 n. 6 (1985)).<sup>39</sup> In addition to the foregoing requirements, an aircraft must pass all required inspections before an aircraft is considered airworthy. *See In the Matter of USAir, Inc.*, FAA Order No. 1996-25, Docket No. CP94EA0045, 1996 WL 509937. *See also* 14 C.F.R. § 3.5(a). *See generally*, 14 C.F.R. § 21.183.

The FAA has promulgated comprehensive regulations setting out the minimum safety standards that aircraft designers and manufacturers must meet before marketing their aircraft.<sup>40</sup> *See, e.g.* 14 C.F.R. Parts 21, 23 and 25.<sup>41</sup> At each step of the certification process, an FAA employee or an FAA-designated representative<sup>42</sup> evaluates materials submitted by the aircraft

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<sup>36</sup> It is the owner/operator that holds primary responsibility for maintaining the aircraft in an airworthy condition. 14 C.F.R. § 91.403.

<sup>37</sup> In general, when transport category aircraft are operated by U.S. air carriers their maintenance and operations are further regulated by Parts 121 and 135. *See generally*, 14 C.F.R. Part 119.

<sup>38</sup> FAA's airworthiness directives are legally enforceable rules that apply to the following products: aircraft, aircraft engines, propellers, and appliances. 14 C.F.R. § 39.3. The FAA issues an airworthiness directive addressing a product when it finds that an unsafe condition exists in the product; and the condition is likely to exist or develop in other products of the same type design. 14 C.F.R. § 39.5. Anyone who operates an aircraft that does not meet the requirements of an applicable airworthiness directive is in violation of Part 39 and subject to adverse action by the FAA each time the aircraft is operated, be it certificate action or civil penalty. *See* 14 C.F.R. §§ 39.7 and 39.9.

<sup>39</sup> "It is well-established that an aircraft is deemed 'airworthy' only when it conforms to its type certificate (if and as that certificate has been modified by supplemental type certificates and by Airworthiness Directives), and is in condition for safe operation." *Administrator v. Bailey and Avila*, NTSB Order No. EA-4294 at 4 (1994), WL 702156 (N.T.S.B.).

<sup>40</sup> The baseline regulation for commercial aircraft is 14 C.F.R. Part 21, for it addresses the certification procedures for products and parts. Parts 23 and 25 set forth more stringent airworthiness standards an aircraft manufacturer must meet when developing or producing a commuter or transport category aircraft.

<sup>41</sup> Part 21 is the certification process while part 23 (generally aircraft under 12,500 lbs. gross takeoff weight) and part 25 (aircraft over 12,500 lbs. gross takeoff weight) delineate specific certification standards for the aircraft.

<sup>42</sup> Because the FAA does not have nearly 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 representatives assist in the FAA certification process. They are typically employees of

manufacturer to determine whether it has satisfied these regulatory requirements.<sup>43</sup> 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 at 804-06. The Federal Aviation Administration regulations for certifying aircraft for commercial use are identified at 14 CFR Part 21 "Certification Procedures for Products and Parts."<sup>44</sup> These regulations provide the procedural requirements for issuance of Type Certificates.

There are three main phases in the certification process: a type certificate,<sup>45</sup> a production certificate, and an airworthiness certificate. 49 U.S.C. §§ 44702 and 44704. 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.<sup>46</sup> 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. 49 U.S.C. § 44704(a)(1). 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. Then 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. If the FAA finds that the proposed aircraft design meets the minimum safety standards, it signifies its approval by issuing a type certificate. *Varig Airlines*, 467 U.S. at 805-06.

Production may not begin until a manufacturer obtains a production certificate from the FAA authorizing the manufacture of duplicates of the prototype. 14 C.F.R. Part 21, subpart G. 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.<sup>47</sup> 14 C.F.R. Part 21,

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the aircraft manufacturers or contractors themselves who possess detailed knowledge of an aircraft's design based on their day-to-day involvement in its development or production. *See* 14 C.F.R. Part 183.

<sup>43</sup> These processes and inspections must be documented during the certification process before the aircraft is approved for service or return to service. *See* 14 C.F.R. § 21.1(b)(1).

<sup>44</sup> The regulation defines a "product" as an aircraft, aircraft engine, or propeller. 14 C.F.R. § 21.1(b)(6).

<sup>45</sup> Some confuse the type certificate data sheet (TCDS) with the type certificate. 14 C.F.R. § 21.41 makes clear that the TCDS is evidence that the product has been type certificated, but the requirements of a type certificate involves much more than that contained in the TCDS.

<sup>46</sup> For an overview of the type certificate process, *see* FAA Order 8110.4C (change 5)(Dec. 20, 2011). 14 C.F.R. § 21.41 provides:

Each type certificate is considered to include the type design, the operating limitations, the certificate data sheet, the applicable regulations of this subchapter with which the Administrator records compliance, and any other conditions or limitations prescribed for the product in this subchapter.

<sup>47</sup> *See generally*, FAA Order 8120.22A, *Production Approval Procedures* (Jan. 11, 2016).

subpart G. 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.

Finally, before any aircraft may be placed into service, its owner must obtain an airworthiness certificate from the FAA. 14 C.F.R. § 21.183. Such a certificate signifies that the particular aircraft in question conforms to the type certificate and is in condition for safe operation.<sup>48</sup> Once issued, the airworthiness certificate remains effective as long as the maintenance, preventive maintenance, and alterations are performed per Parts 43 and 91. *See* 14 C.F.R. § 21.181(a)(1). Any deviation, without FAA approval, from the aircraft's type design renders the aircraft unairworthy.<sup>49</sup> It is unlawful for any person to operate an aircraft in air commerce without a valid airworthiness (or conformity) certificate.<sup>50</sup>

The FAA may reexamine an airman and reinspect any other certificate holder (*i.e.* aircraft, part manufacturer approval holder) at any time and may modify, suspend or revoke a

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<sup>48</sup> The definition of "airworthiness" is derived from this criterion. *See also*, 14 C.F.R. 3.5(a).

One of the most important sections of this regulation is 14 C.F.R. § 21.50, "Instructions for continued airworthiness and manufacturer's maintenance manuals having airworthiness limitations sections." When an aircraft is first delivered from the airplane manufacturer, it must come with maintenance manuals that define the inspection and maintenance actions necessary to maintain the aircraft in an airworthy condition.

<sup>49</sup> While the bar is low to render an aircraft unairworthy, it is not absolute, for in a Letter of Interpretation, FAA counsel wrote the following about when an aircraft is airworthy:

While the statute sets forth the requirements for the issuance of an airworthiness certificate, NTSB case law has recognized the difference between a new aircraft and one that has been in service, *i.e.*, an aircraft may have accumulated a certain amount of wear and minor defects and still be considered to substantially conform to its type certificate and therefore be airworthy, if it still is in condition for safe operation. *Administrator v. Calavaero*, 5 NTSB 1099, 1101 (1986) ("However, we do not agree that every scratch, dent, 'pinhole' of corrosion, missing screw, or other defect, no matter how minor or where located on the aircraft, dictates the conclusion that the aircraft's design, construction, or performance has been impaired by the design defect to a degree that the aircraft no longer conforms to its type certificate."). Important in the NTSB's reasoning was that the FAA had not shown that "the alleged defects or discrepancies had had an adverse impact on the level of safety that an aircraft's conformity with its type certificate is intended to insure, or to counter the substantial evidence adduced by respondent that they had not had such an impact." *Id.* at 1101; *Administrator v. Calavaero*, 5 NTSB 1105 (1986) (quoting in part *Id.* 1101). *See also Administrator v. Frost*, NTSB Order No. EA-4680 (1998).

Letter of Interpretation from the FAA Office of Chief Counsel to the Director, Association of Flight Attendants, March 26, 2008, regarding Request for Interpretation of 14 C.F.R. §§ 91.7(b) and 3.5(a), located at [http://www.faa.gov/about/office\\_org/headquarters\\_offices/agc/pol\\_adjudication/agc200/](http://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/) (last visited Sept. 16, 2016).

<sup>50</sup> *See* 14 C.F.R. §§ 91.7(a), 121.153(a)(2) and 135.25(a)(2).

certificate.<sup>51</sup> 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. See 14 C.F.R. Part 13.

As part of the above process, an aircraft manufacturer can either manufacture its own parts under its production certificate, or it can contract out the manufacture of those parts. The York accumulator at issue here was a component of the CRJ 100/200 series braking system. The CRJ 100/200 series aircraft is a type certificated aircraft manufactured by Bombardier, a Canadian corporation.<sup>52</sup> When parts are provided to the production certificate holder they are accompanied with an FAA Conformity Certificate Form 8130-2.<sup>53</sup> This form includes a certification that the part was manufactured in conformity with data forming the basis for the type certificate and required disclosure of any deviations from the type certificate.

In this case, the aircraft at issue are the Bombardier Commercial Regional Jet (CRJ) series aircraft, specifically the CL-600-2B19 aircraft and the Saab Model 340A/B aircraft. These aircraft were type certificated using Part 25.<sup>54</sup> Part 21 addresses conditions a company must meet to obtain the FAA's permission to manufacture a given aircraft and its parts. Part 23 and 25 set forth the standards a manufacturer must achieve to obtain the type certificate. Part 23 establishes the standards for most small aircraft, aircraft that carry 19 persons or less. The regulations pertaining to the design, production and operation of transport category aircraft used by air carriers are more stringent and contained in Parts 25 and 121. The FAA uses these Parts of the regulations to fulfill the requirement in 49 U.S.C. § 44701 that the Administrator consider the difference between air transportation and other air commerce. Aircraft certificated using this type certificate are the large aircraft the public is accustomed to traveling in during scheduled

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<sup>51</sup> 49 U.S.C. § 44709(a) provides:

**(a) Reinspection and Reexamination.** - The Administrator of the Federal Aviation Administration may reinspect at any time a civil aircraft, aircraft engine, propeller, appliance, design organization, production certificate holder, air navigation facility, or air agency, or reexamine an airman holding a certificate issued under section 44703 of this title.

<sup>52</sup> Although Bombardier is a Canadian company and these aircraft were assembled in Canada, they are type certificated under 14 C.F.R. Part 25. See generally, *Implementation Procedures for Airworthiness covering Design Approval, Production Activities, Export Airworthiness Approval, Post Design Approval Activities, and Technical Assistance Between Authorities*, Under the Agreement between The Government of the United States and The Government of Canada for Promotion of Safety (June 5, 2008)(rev. 1), available at <http://www.faa.gov/search/?omni=MainSearch&q=bilateral+agreement+with+Canada>.

<sup>53</sup> A certificate of conformity provides evidence that a part was produced by a manufacturer holding an FAA-approved manufacturing process. One could also use FAA Form 8130-3, Airworthiness Approval Form, which can be used for multiple purposes such as approval for return to service after maintenance or alteration by an authorized Part 145 repair station, or a U.S. air carrier having an approved Continuous Airworthiness Maintenance Program.

<sup>54</sup> See Type Certificate Data Sheet NO. A21EA for the Bombardier CL-600 series aircraft and TCDS A52EU for the Saab Model 340A/B aircraft. The TCDS can be located at [http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgMakeModel.nsf/Frameset?OpenPage](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/Frameset?OpenPage).

operations.<sup>55</sup> Fourteen C.F.R. § 25.1435 imposes, as part of the type certificate, standards for the aircraft's hydraulic systems. This includes the ability to "[w]ithstand the fatigue effects of all cyclic pressures, including transients, and associated externally induced loads, taking into account the consequences of element failure." *Id.* at § 25.1435(a)(3). Testing must be conducted of the systems, subsystems or elements to subject them to performance, fatigue, and endurance tests representative of airplane and flight operations. *Id.* at § 25.1435(c)(1). Part 25 rules also provide additional criteria over Part 21 certificate aircraft concerning the braking system. *See* 14 C.F.R. § 25.735.

In addition to the type certificate process, the FAA has also instituted a regulatory scheme governing the manufacture and sale of replacement parts. Any person, in addition to the manufacturer, may apply to the FAA for a Parts Manufacturer Approval ("PMA"), which allows the holder to manufacture and sell specific replacement parts directly to the owners of aircraft. One method of obtaining a PMA is to demonstrate that "the design of the [replacement] part is identical to the design of a[n original] part covered under a type certificate."<sup>56</sup> *See* 14 C.F.R. § 21.303(c)(4) (1996).

Replacement parts and parts used to modify a "type certificated" aircraft must be manufactured according to FAA specifications, except under certain limited circumstances. 14 C.F.R. § 21.9.<sup>57</sup> In general, a parts manufacturer must obtain a Parts Manufacturer Approval

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<sup>55</sup> However, the ability to carry passengers is not part of the certification process. In fact, many of these aircraft are used to transport cargo only.

<sup>56</sup> Design approval for PMA can be obtained either on (1) tests and computations grounds, or (2) on the basis of identity. For approval on the first ground, reports and computations must be submitted to the FAA to show design of the part meets airworthiness standards. This appears to be the path Respondent took in pursuing the stainless steel accumulator. For approval on identity grounds, the applicant need only submit its design and parts drawings of the OEM to establish the designs are identical. This method allowed Respondent to produce the York accumulators at issue in this case.

<sup>57</sup> **§ 21.9 Replacement and modification articles.**

(a) If a person knows, or should know, that a replacement or modification article is reasonably likely to be installed on a type-certificated product, the person may not produce that article unless it is--

- (1) Produced under a type certificate;
- (2) Produced under an FAA production approval;
- (3) A standard part (such as a nut or bolt) manufactured in compliance with a government or established industry specification;
- (4) A commercial part as defined in § 21.1 of this part;
- (5) Produced by an owner or operator for maintaining or altering that owner or operator's product; or
- (6) Fabricated by an appropriately rated certificate holder with a quality system, and consumed in the repair or alteration of a product or article in accordance with part 43 of this chapter.

(b) Except as provided in paragraphs (a)(1) and (a)(2) of this section, a person who produces a replacement or modification article for sale may not represent that part as suitable for installation on a type-certificated product.

(c) Except as provided in paragraphs (a)(1) and (a)(2) of this section, a person may not sell or represent an article as suitable for installation on an aircraft type-certificated under §§ 21.25(a)(2) or 21.27 unless that article--

- (1) Was declared surplus by the U.S. Armed Forces, and
- (2) Was intended for use on that aircraft model by the U.S. Armed Forces.

("PMA") from the FAA by providing evidence that its "design of the part" meets FAA airworthiness requirements and by certifying that it has a "fabrication inspection system" in place to ensure continued compliance with FAA requirements. *See generally id.* § 21.303.<sup>58</sup> Extensive design testing is required to obtain a PMA. However, 14 C.F.R. § 21.303(c)(4) expressly waives this requirement if "the design of the part is identical to the design of a part that is covered under a type certificate."<sup>59</sup> This appears to apply to the case here, as Respondent purchased the design for a product already in production and continued to produce the part.

As part of this highly regulated industry requirements, the reporting obligations under 14 C.F.R. § 21.3 are broad and include an affirmative duty "to report failures, investigate failures, and report design defects to the FAA." *See, e.g., Robinson v. Hartzell Propeller, Inc.*, 326 F.Supp.2d at 631, 657 (E.D. Pa. 2004), *aff'd* 454 F.3d 163 (3d Cir. 2006). Furthermore, "the reporting obligation is ongoing and continuous." *Hetzer-Young v. Precision Airmotive Corp.*, 184 Ohio App. 3d 516, 535, 921 N.E. 2d 683 (Ohio Ct. App. Oct. 8, 2009)(quoting *Long v. Muncie Aviation Co* (Dec. 5, 2008), Ill. Cor. Ct. No. 06 L 006992, slip op. at 19). As a matter of federal policy, "the FAA cannot fulfill its obligation to promote civil aircraft safety if information which may be highly relevant to safety is withheld in the first instance." *Robinson v.*

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The issue of the introduction of unapproved parts on to type certificated aircraft has been the subject of much concern to the aviation industry for decades and was the impetus for enactment of 14 C.F.R. Part 3. *See* 70 Fed. Reg. 54,822 (Sept. 16, 2005). *See* Sharkey, *The Federal Aviation Administration Suspected Unapproved Parts Program: The Need to Eliminate Safety Risks Posed by Unapproved Aircraft Parts*, 65 J. Air L. & Com. 795 (2000).

<sup>58</sup> 14 C.F.R. § 21.9 governs only the (1) production, (2) of modification or replacement parts, (3) for sale, (4) with the specific intent (or with the knowledge it was substantially certain) the parts would be installed on a type certificated product. *Id.*; *In the Matter of Pacific Sky Supply, Inc.*, 1993 FAA LEXIS 206, 1993 WL 833101 (FAA Order No. 93-19) (June 9, 1993)(addressed the old § 21.303 but most of the wording in 21.303 at the time of this decision was moved § 21.9 in 2009. 74 Fed. Reg. 53,385). *See also* FAA Order 8110.42D, *Parts Manufacturer Approval Procedures* (Mar. 21, 2014); FAA Order 8110.118, *Commercial Parts* (Sept. 20, 2012).

<sup>59</sup> The regulations make clear that as a PMA holder, Respondent must strictly comply with the following responsibilities:

Each holder of a PMA must—(a) Amend the document required by § 21.305 as necessary to reflect changes in the organization and provide these amendments to the FAA; (b) Maintain the quality system in compliance with the data and procedures approved for the PMA; (c) Ensure that each PMA article conforms to its approved design and *is in a condition for safe operation*; (d) Mark the PMA article for which an approval has been issued. Marking must be in accordance with part 45 of this chapter, including any critical parts; (e) Identify any portion of the PMA article (e.g., sub-assemblies, component parts, or replacement articles) that leave the manufacturer's facility as FAA approved with the manufacturer's part number and name, trademark, symbol, or other FAA approved manufacturer's identification; (f) Have access to design data necessary *to determine conformity and airworthiness for each article produced under the PMA*; (g) Retain each document granting PMA and make it available to the FAA upon request; and (h) Make available to the FAA information regarding all delegation of authority to suppliers.

14 C.F.R. § 21.316 (*emphasis added*).

*Hartzell Propeller, Inc.* 326 F.Supp. 2d 631, 657 (E.D. Pa. 2004). See also *Butler v. Bell Helicopter Textron* (2003), 109 Cal.App.4th 1073, 1086, 135 Cal. Rptr. 2d 762 (Cal. Ct. App. 2003). Thus, the reporting requirements under 14 C.F.R. § 21.3 impose a responsibility not only to report failures, but also to investigate failures and report design defects that detract from flight safety to the FAA.

One of the options available to a parts manufacturer or operator is to persuade the type certificate holder or air carrier to impose a life-limit on parts.<sup>60</sup> A “life-limited” part means any part for which a mandatory replacement is specified in the type design, the Instructions for Continued Airworthiness, or the maintenance manual. 14 C.F.R. § 43.10(a). Such parts can be limited by accumulated cycles, hours or any other mandatory replacement limit. Here, the Respondent essentially converted the York accumulator to a life limited part and set a life limit as mandated by an airworthiness directive. In order for the aircraft to be airworthy, it had to comply with the imposed life cycles, or else each operation of that aircraft beyond the imposed cycle limit would constitute a violation of the FAA regulations. Depending upon the size of the operator, this could result in a fine as high as \$11,000 per flight. See 14 C.F.R. Part 13 and FAA Order 2150.3B (with change 11).

Finally, a part placed into service on a type certificated aircraft will at some point need to be repaired or replaced. At this stage, the air carrier is primarily responsible that is primarily responsible for the airworthiness of its aircraft, and the performance of all of the maintenance or alterations on its aircraft.<sup>61</sup> Only certificated entities, be it an individual<sup>62</sup> or business,<sup>63</sup> can repair aircraft parts for return to service on a type certificated aircraft. One such entity is a repair facility certificated under 14 C.F.R. Part 145. When performing repairs for an air carrier, a Part 145 repair station must follow that air carrier’s maintenance program, whether the air carrier has a continuous airworthiness maintenance program (“CAMP”) or in certain cases for Part 135 air carriers, can use the aircraft manufacturer’s maintenance manual.<sup>64</sup> 14 C.F.R. § 145.205.

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<sup>60</sup> Life limits on parts can only be imposed by the type certificate holder via 14 C.F.R. § 25.1529, an air carrier via its CAMP, or the FAA through enactment of an airworthiness directive.

<sup>61</sup> See 14 C.F.R. §§ 121.363 and 135.413.

<sup>62</sup> See 14 C.F.R. Part 65 as well as 14 C.F.R. § 43. 14 C.F.R. § 91.403(b) provides: “No person may perform maintenance, preventive maintenance, or alteration on an aircraft other than as prescribed in this subpart and other applicable regulations, including Part 43 of this chapter.”

<sup>63</sup> See 14 C.F.R. § 21.303 and Part 145. See, e.g., 14 C.F.R. §§ 121.367, 121.374 and 135.411. See also 14 C.F.R. SFAR 36. 14 C.F.R. § 21.5 requires that the aircraft manufacturer provides a currently approved Airplane or Rotorcraft Flight Manual. It should be noted that while the business must be certificated, individuals that work at a repair station need not themselves be certificated under Part 65.

<sup>64</sup> An air carrier under part 121 or 135.411(a)(2), as applicable, must develop and use a CAMP. The CAMP may be (and often is) based upon documents issued by the manufacturer, sometimes called “maintenance planning documents”. However, under § 25.1529, the manufacturer does not develop a CAMP. Nor can the raw information contained in the instructions for continued airworthiness meet the requirements in section 121.369 without extensive additional implementation and administrative data. In short, except for certain operations under Part 135 (aircraft weighing less than 12,500 pounds and that can carry 9 or less passengers), the air carrier cannot choose a manufacturer’s maintenance manual or program as described in 14 C.F.R. 91.409(f)(3).

As shown above, the role of the PMA certificate holder and repair station certificate holder are inextricably intertwined with both the type certificate holder and the aircraft operator (*i.e.* air carrier). *See* 14 CFR § 21.303. A PMA authorizes the manufacturer of a modification or replacement part for sale for installation on a type certificated product.<sup>65</sup> However, it does not include an authorization for the manufacturer to install the replacement part on an aircraft. The air carrier relies upon the PMA's certificate of conformity that the aircraft part is airworthy when it exercises its authority to actually place the part on to the aircraft.

Once an air carrier purchases an aircraft and places it into service, the air carrier must maintain the aircraft. It can maintain the aircraft using its own resources or it can use a company that holds a repair station certificate authorized under 14 C.F.R. Part 145. A repair station is authorized to perform maintenance on air carrier aircraft (listed on the air carrier's operations specifications) under 14 C.F.R. § 43.13(c). The broad requirements of § 43.13(c) are further specified in 14 C.F.R. §§ 145.201, 145.205 and 121.709. The methods, techniques and practices for conducting maintenance on a given air carrier's aircraft are specifically defined in the manual system required to be developed and maintained by the air carrier ...and used by the repair station. *See* 14 C.F.R. §§ 121.133 and 121.135(b)(17), (18) and (20). Of import, once maintenance is performed on an aircraft, it cannot thereafter legally fly<sup>66</sup> until it has been approved for return to service by a certified mechanic<sup>67</sup> or appropriately rated entity. It is worth noting that only a certificated mechanic or appropriately rated repairman specifically trained and authorized by the air carrier, can provide an "approval of return to service" after maintenance. *See* 14 C.F.R. § 121.709. In this case it is the air carrier, not the repair station that approves the aircraft for return to service. When a repair station performs maintenance under § 145.205, the personnel involved are effectively employees of the air carrier.

In sum, the companies and their employees that manufacture and repair aircraft parts are so inextricably intertwined with the overall safety construct of the regulations, that it is unimaginable that those providing such essential safety services by contract to air carriers are not covered under the Act. The production of conforming parts and the maintenance of those parts for installation on transport category aircraft goes to the very heart of Congress's mandate that air carriers have a duty "to provide service with the highest possible degree of safety in the public interest." 49 U.S.C. § 44701(d)(1)(A). Absent extraordinary circumstances, then, an employee of an aircraft parts manufacturer that contracts with a U.S. air carrier is a covered employee under AIR 21.

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<sup>65</sup> When the FAA approves an aircraft, it issues a type certificate under Part 23 or Part 25 of its regulations. 14 C.F.R §§ 21.11-21.53. The type certificate applies to the whole aircraft. Here, Bombardier would hold the type certificate for each of their separate aircraft designs. The FAA must also approve modifications to a particular aircraft, whether designed by the original manufacturer or a third-party, after which the FAA issues a supplemental type certificate ("STC"). 14 C.F.R. § 21.113. An STC enables its holder to manufacture a component or a part for an aircraft system. Any person, in addition to the original manufacturer, may petition the FAA for a PMA, which allows the holder to manufacture and sell specific replacement parts directly to aircraft owners. ("No person may produce a modification or replacement part for sale for installation on a type certificated product unless it is produced pursuant to a Parts Manufacturer Approval . . ."). A PMA covers a part, such as the York accumulator.

<sup>66</sup> *See* 14 C.F.R. § 91.407(a)(1).

<sup>67</sup> 14 C.F.R. § 43.9(a)(4).

A. Complainant's Prima Facie Case

1. Covered Employer

AIR 21 applies only to air carriers, or contractors or subcontractors of air carriers. 49 U.S.C. § 42121(a). There is no evidence in the current record that Respondent is an air carrier.<sup>68</sup> However, there is evidence that Respondent is a contractor or a subcontractor of an air carrier.<sup>69</sup> The statute states “the term ‘contractor’ means a company that performs safety-sensitive functions by contract for an air carrier.” 49 U.S.C. § 42121(e). Neither the statute nor the implementing regulations define what constitutes “safety-sensitive functions.”

Respondent manufactures a York accumulator that is installed on the Bombardier Commercial Regional Jet (CRJ) 200 and Saab 340 aircraft. The CRJ 200 aircraft is utilized by several U.S. (and foreign) air carriers in the conduct of their operations under the auspices of 14 C.F.R. Part 135 or 121. The FAA’s publicly accessible Aircraft Registry database supports the fact that the Bombardier Model CL-600-2B19 aircraft and Saab 340 aircraft are registered in the United States, and at least the CL-600-2B19 are directly owned by air carriers such as Skywest Airlines.<sup>70</sup>

The testimony before this Tribunal is Respondent provided repair or replacement parts to Bombardier and to operators of the CRJ-200 aircraft. In particular, Respondent held a briefing on September 24, 2009 where its air carrier customers participated. *See* RX 63; Tr. at 42-43, 374, 498. Respondent makes this accumulator for the aircraft manufacturer for installation on aircraft that are in turn used by air carriers in the conduct of their operations. Respondent also

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<sup>68</sup> Air carriers, are defined as citizens of the United States who directly or indirectly provide air transportation. 49 U.S.C. § 40102(a)(3). A “citizen of the United States” includes a corporation or association organized under the laws of the United States. 49 U.S.C. § 40102(a)(15)(c). Even under the expansive reading of air carrier in *Cobb v. FedEx Corp. Svcs, Inc.*, ARB Case No. 12-052, ALJ No. 2010-AIR-24 (Dec. 13, 2013), Respondent does not provide direct or indirect air transportation. *Id.* at 10-12. Air transportation means foreign air transportation, interstate air transportation, or the transportation of mail by aircraft. 49 U.S.C. § 40102(a)(5). *See also* 29 C.F.R. § 1979.101.

<sup>69</sup> *See, e.g.* Tr. at 34-35, 40-48, 374 and 498. *See also* RX 20, RX 53, RX 61, RX 63, RX 78 and RX 135 – 137.

<sup>70</sup> *See, e.g.*, [http://registry.faa.gov/aircraftinquiry/NNum\\_Results.aspx?NNumbertxt=417SW](http://registry.faa.gov/aircraftinquiry/NNum_Results.aspx?NNumbertxt=417SW); [http://registry.faa.gov/aircraftinquiry/NNum\\_Results.aspx?NNumbertxt=423SW](http://registry.faa.gov/aircraftinquiry/NNum_Results.aspx?NNumbertxt=423SW); and [http://registry.faa.gov/aircraftinquiry/NNum\\_Results.aspx?NNumbertxt=435SW](http://registry.faa.gov/aircraftinquiry/NNum_Results.aspx?NNumbertxt=435SW).

As of Sept. 16, 2016, there were 146 Saab Model 340A/Bs aircraft on the US registry. [http://registry.faa.gov/aircraftinquiry/AcftRef\\_Results.aspx?Mfrtxt=SAAB&Modeltxt=340&PageNo=1](http://registry.faa.gov/aircraftinquiry/AcftRef_Results.aspx?Mfrtxt=SAAB&Modeltxt=340&PageNo=1). As of Sept. 16, 2016, there were 554 Bombardier Model CL-600-2B19 aircraft on the US registry. This was the CL-600 model that was the subject of AD 2010-22-02 and AD 2011-23-08, the Airworthiness Directives concerning the York accumulator. [http://registry.faa.gov/aircraftinquiry/AcftRef\\_Results.aspx?Mfrtxt=BOMBARDIER&Modeltxt=CL-600&PageNo=1](http://registry.faa.gov/aircraftinquiry/AcftRef_Results.aspx?Mfrtxt=BOMBARDIER&Modeltxt=CL-600&PageNo=1).

Additionally, the airworthiness directives themselves address the number of aircraft using this accumulator. For example, AD 2011-23-08 (RX 137) states that it will impact 605 CL-600-2B19 aircraft of U.S. registry.

repairs or provides direct replacements of these same types of accumulators for this same make and model aircraft for the air carriers when a replacement or repair is needed. The un rebutted testimony is Respondent holds a parts manufacturer approval and is a repair station<sup>71</sup> and provided direct repair and support for the York accumulator to airline customers as well as OEM customers such as Bombardier and Saab. Tr. at 508-09. As such, it has an affirmative duty to “report any failure, malfunction, or defect in any product or article manufactured by it that it determines has resulted in any of the occurrences listed in paragraph (c) of this section.” 14 C.F.R. § 21.3(a). One such occurrence is brake system failure caused by structural or material failure during operation. 14 C.F.R. § 21.3(c)(7).

The overarching purpose of the Act is to protect employees that report safety related concerns.<sup>72</sup> *Cobb v. FedEx Corp. Svcs., Inc.*, ARB Case No. 12-052, ALJ 2010-AIR-24, slip op. at 12-13 (Dec. 13, 2013). Contractors provide a critical role in aviation safety. As such, the FAA places many obligations upon the air carrier to ensure oversight of its contractors, particularly those who manufacture and provide parts that are to be placed on type certificated aircraft. Congress mandated that “assigning and maintaining safety as the highest priority in air commerce.” 49 U.S.C. §40101(a)(1).<sup>73</sup> It is antithetical to the purpose of the Act to argue that “safety-sensitive function” extends only to employees of air carriers, like the mechanic who installs an aircraft part, and not to the entity that actually manufactured the aircraft part at issue. It is just as important to safety that the part is manufactured correctly as it is that the part be installed correctly onto the aircraft. In other words, the manufacture of aircraft parts is a “safety-sensitive function.”

The focus of the Act is to protect the public by promoting disclosure of potentially unsafe conditions, be it while actually operating the aircraft or maintaining the aircraft. This does not mean that all employees of contractors or subcontractors of air carriers are protected by the Act. Whether the employee of a given contractor or subcontractor are protected hinges upon a nexus of their duties to air commerce safety. The party seeking the benefits of the protection bears the burden of establishing this nexus.

Here, Respondent provided a “safety-sensitive function” when it manufactured and placed into the stream of commerce the York accumulator for use on commercial aircraft used in

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<sup>71</sup> Tr. at 46, 364-65, and 534. Further, Respondent in RX 144 at 4 admitted that it was a Parts Manufacturer Approval holder.

<sup>72</sup> See 146 CONG. REC. S1247-07, S1252 (daily ed. Mar. 8, 2000) (statement of Sen. Grassley) (“Whistle-blower protection adds another, much needed, layer of protection for the traveling public using our Nation’s air transportation system.”); 146 Cong. CONG. REC. S1255-01, S1257 (daily ed. Mar. 8, 2000) (statement of Sen. Hollings) (AIR 21 includes “whistleblower protection to aid in our safety efforts and protect workers willing to expose safety problems.”); 146 Cong. CONG. REC. H1002-01, H1008 (daily ed. Mar. 15, 2000) (statement of Rep. Boehlert) (the whistleblower provisions will “ensure that aviation workers can blow the whistle on safety problems without looking over their shoulders and fearing retaliation.”).

<sup>73</sup> This provision applies to Chapter 421 of title 49 U.S.C., the Chapter where the whistleblower protections at issue are located. Congress separately directed that the Administrator of the FAA to consider certain safety considerations in the public interest. Foremost of those factors is the assigning, maintaining, and enhancing safety and security as the highest priorities in air commerce. 49 U.S.C. § 40101(d)(1).

air commerce.<sup>74</sup> It is undisputed that York accumulators were installed on U.S. commercial aircraft, specifically part numbers 08-60163-002 and 08-60164-002, and these accumulators were subject to airworthiness directives. *See* RX 135; RX 136; RX 137. This Airworthiness Directive (AD) further provides that it “results from mandatory continuing airworthiness information (MCAI),” which originated by Canadian Airworthiness Directive CF–2010–24. In the “explanation of affected accumulators,” the FAA AD clarifies that “[t]he actions specified in the MCAI apply only to [Respondent’s] accumulators.” RX 136 (75 Fed. Reg. at 64,637). Moreover, in issuing the FAA AD, the FAA “found that the *risk to the flying public* justifies waiving notice and comment prior to the adoption of this rule.” *Id.* (*emphasis added*). Thus, this FAA AD alone demonstrates that the component parts at issue that Respondent manufactured were ultimately used on type-certificated aircraft manufactured by one of its customers, Bombardier; such aircraft undoubtedly serviced the American consumer.

To ensure end-state airworthiness when Respondent’s customer places the parts that Respondent supplied on a type-certificated aircraft, those parts must conform to their design, or to the approved modification of their design.. *See generally* 14 C.F.R. §§ 21.121-21.165; *see* 14 C.F.R. § 21.1(b)(1) (“Airworthiness approval means a document issued by the FAA for an aircraft, aircraft engine, propeller, or article which certifies that the aircraft, aircraft engine, propeller, or article conforms to its approved design and is in a condition for safe operation”). As a PMA holder, Respondent cannot reasonably dispute that it must perform this testing pursuant to mandatory FAA regulations if it wishes to continue selling component parts as a PMA to its customers. Section 21.303(a)(4) provides:

The applicant for a PMA must apply in a form and manner prescribed by the FAA, and include: . . . Test reports and computations necessary to show that the design of the article meets the airworthiness requirements of this subchapter. The test reports and computations must be applicable to the product on which the article is to be installed.

Moreover, PMA holders must, *inter alia*, “[m]aintain the quality system in compliance with the data and procedures approved for the PMA” and “[e]nsure that each PMA article conforms to its approved design and is in a condition for safe operation.” 14 C.F.R. § 21.316. Thus, Respondent’s additional contention that it performed this required testing solely for its own internal risk management and quality control purposes borders on disingenuous.

Respondent disputes that it provided safety-sensitive functions by contract for an air carrier. Specifically citing Respondent-manufactured accumulators involved in this case, the FAA AD provides, “An unsafe condition exists that requires immediate adoption of this AD,” due to cases of accumulator failures on airplanes, “resulting in the loss of the associated hydraulic system and high-energy impact damage to adjacent systems and structure,” which “could consequently *reduce the controllability of the airplane.*” 75 Fed. Reg. at 64,637 (*emphasis added*).

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<sup>74</sup> The aircraft manufacturer must maintain quality of the parts it uses in the production of an aircraft and the regulations make it responsible for the quality control of all parts that leave the manufacturer’s facility for placement on one of its aircraft. *See* 14 C.F.R. § 21.146.

Because Respondent provided a “safety-sensitive function” to American air carriers – and because this “safety sensitive function” was implicated in the FAA AD– I find that the weight of the evidence establishes that Respondent is a contractor or subcontractor of an air carrier for purposes of the Act. Given the evidence in this case, Complainant need not show that a particular part was placed on a particular aircraft of a particular air carrier to satisfy his burden of proof. Aviation parts are well-regulated and it is reasonable to conclude that Respondent, as a parts manufacturer with a PMA, provided an approved part to be installed on an aircraft for which it was designed; an aircraft commonly used by air carriers.

## 2. Protected employee

AIR 21 extends whistleblower protection to employees in the air carrier industry who engage in certain activities that are related to air carrier safety. The statute prohibits air carriers, contractors, and their subcontractors from “discharg[ing]” or “otherwise discriminat[ing] against any employee with respect to the employee’s compensation, terms, conditions, or privileges of employment because the employee (or any person acting pursuant to a request of the employee)” engaged in the air carrier safety-related activities the statute covers.

The employee is protected if he:

- (1) provided, caused to be provided, or is about to provide (with any knowledge of the employer) or cause to be provided to the employer or Federal Government information relating to any violation or alleged violation of any order, regulation, or standard of the Federal Aviation Administration or any other provision of Federal law relating to air carrier safety under this subtitle [subtitle VII of title 49 of the United States Code] or any other law of the United States; [or]
- (2) has filed, caused to be filed, or is about to file (with any knowledge of the employer) or cause to be filed a proceeding relating to any violation or alleged violation of any order, regulation, or standard of the Federal Aviation Administration or any other provision of Federal law relating to air carrier safety under this subtitle or any other law of the United States; . . . .<sup>75</sup>

This Tribunal also notes that the Complainant was responsible for the quality control of York accumulators that are going to be placed on an aircraft operated by air carriers. Tr. at 620. This case arose due to the tests which determined whether, and if so for how long, this particular part was safely installed and utilized on commercial aircraft. Therefore, it follows that the individual performs a safety-sensitive function, per se, when such an individual is tasked with evaluating whether the part meets the specific requirements for later installation on an aircraft.

This Tribunal is aware that earlier cases have limited “safety-sensitive functions” to those activities where the employee is subject to the FAA’s drug and alcohol monitoring program. This Tribunal affirmatively rejects this notion.

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<sup>75</sup> 49 U.S.C. § 42121(a)(1) and (2). Subsections (3) and (4) are not applicable in this case. An employer also violates AIR 21 if it intimidates, threatens, restrains, coerces, or blacklists an employee because of protected activity. 29 C.F.R. § 1979.102(b).

During promulgation of the Department of Labor's rules implementing the Act, the National Whistleblower Center (NWC) specifically raised the issue of the term "safety-sensitive functions." OSHA responded as follows:

The NWC suggested that the definition of "safety-sensitive" should include persons who work for contractors who are in a position to witness and or identify the misconduct of other employees or contractors as opposed to reporting only on the employee's own employer. OSHA agrees that "safety-sensitive functions" include security-related activities, but believes that the definition as written is adequate.

68 Fed. Reg. 14,099, 14,101- 02 (Mar. 21, 2003)<sup>76</sup>.

The guidance from this response is not particularly illuminating; however, it does suggest that security-related activities are a subset of "safety-sensitive functions."

OALJ precedent also supports the broad reading of the phrase "safety-sensitive." In *Cobb v. FedEx Corp. Svcs., Inc.*, ARB Case No. 12-052, ALJ 2010-AIR-24 (Dec. 13, 2013), the ALJ had to determine whether an employee that worked as a Senior Project/Process Analyst for a FedEx subsidiary was an employee protected by the Act. To answer this question of law, the ALJ turned to the definition of "safety-sensitive function" contained in FAA drug and alcohol testing regulations. *Id.* at 3. "Safety-sensitive functions" under those regulations include flight crewmember duties, flight attendant duties, flight instruction duties, aircraft dispatcher duties, aircraft maintenance and preventive maintenance duties, ground security coordinator duties, aviation screening duties, and air traffic control duties. However the scope and purpose of those rules were far narrower than those set forth in whistleblower statutes.<sup>77</sup> *Cobb* itself recognized

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<sup>76</sup> A copy of the federal register can be found at [https://www.osha.gov/FedReg\\_osha\\_pdf/FED20030321.pdf](https://www.osha.gov/FedReg_osha_pdf/FED20030321.pdf).

<sup>77</sup> The Omnibus Transportation Employee Testing Act of 1991, 49 U.S.C. §§ 45101-45107, requires drug and alcohol testing of safety-sensitive transportation employees in aviation and other transportation industries. Under the Act's authority, the Department of Transportation (DOT) promulgated regulations requiring pre-employment, random, and post-accident drug and alcohol tests for employees throughout the transportation industry. 49 C.F.R. Part 40. The FAA promulgated drug and alcohol testing regulations specific to aviation. In 2007, the drug and alcohol testing regulations applicable to air carriers operating under Part 121 were found in Part 121, Appendices I (drug testing program) and J (alcohol misuse prevention program). Section 121.457 required each certificate holder or operator operating under Part 121 to test each of its employees who performed a safety-sensitive function for certain drugs in accordance with the standards forth in Part 121, Appendix I. Air carriers operating under Part 121 also were required to test employees performing safety-sensitive functions for alcohol misuse in accordance with the standards set forth in Appendix J under Section 121.459(b). In 2009, the drug and alcohol testing regulations for Part 119 certificate holders were consolidated in a new 14 C.F.R. Part 120. 74 Fed. Reg. 22,563 (May 14, 2009). The requirements of § 121.457(a) are now set forth in the Federal Aviation Regulations (FAR) at 14 C.F.R. § 120.35. Consequently, under the current drug and alcohol regulations, 14 C.F.R. § 120.105, the following duties are considered safety sensitive functions:

- (a) Flight crewmember duties.
- (b) Flight attendant duties.

that a broad definition of “air carrier” was necessary to give full effect to the purpose underlying the Act. “Furthermore, by prohibiting ‘contractors and subcontractors,’ as well as air carriers, from retaliating against employees for engaging in protected activity, Congress conveyed a clear aim to promote *comprehensive* aviation safety.” *Id.* at 10 (*emphasis added*).

In *Wallum v. Bell Helicopter Textron, Inc.*, Case No. 2009-AIR-00006 (Apr. 2, 2009), prior to a hearing on the complaint, Bell filed a motion to dismiss on the grounds that it was not an air carrier or contractor and was therefore not a covered employer under AIR 21. In granting the motion for summary decision, the administrative law judge referenced the House Report which alluded to the FAA’s drug and alcohol program. *Id.*, slip op. at 4.<sup>78</sup> As the complainant did not perform one of the eight functions identified in the FAA’s drug and alcohol provisions of the regulation, the ALJ reasoned that the complainant was not protected under the Act.<sup>79</sup> On appeal, the Administrative Review Board reversed and remanded the case for further consideration. *Wallum v. Bell Helicopter Textron, Inc.*, ARB No. 09-081 (Sept. 2, 2011). The Board found that the ALJ had not considered “whether [the complainant]’s reference to the internet evidence bearing on the issue of coverage could show that [the respondent] was an air carrier or a contractor as defined by AIR 21 and thus a covered employer subject to AIR 21’s whistleblower provisions. Nor did the ALJ address [the complainant’s] argument that [the respondent’s] website *showed other air safety aspects of its business.*” *Id.*, slip op. at 6-7 (*emphasis added*).<sup>80</sup> Essentially, the Board in *Wallum* recognized that an application of the FAA’s drug and alcohol provisions to a given case was not the sole and determining factor of whether a respondent was an air carrier under the Act.

Here, Complainant worked as an engineer who was tasked with investigating the failure of a component used on a particular aircraft used by particular air carriers operating in air commerce. His specific role was to ascertain and correct the problems of the York accumulator.

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- (c) Flight instruction duties.
  - (d) Aircraft dispatcher duties.
  - (e) Aircraft maintenance and preventive maintenance duties.
  - (f) Ground security coordinator duties.
  - (g) Aviation screening duties.
  - (h) Air traffic control duties.

<sup>78</sup> The House Report that accompanies the Act provides the following in its section-by-section summary when addressing the term contractor in § 42121(e):

Subsection (e) uses a definition of “contractor” *similar to* the one found in the drug testing rules at 14 CFR 121, Appendix I. This will ensure that employees actually have some expertise in a safety- sensitive position in order to avail themselves of the protections offered by this legislation. (*emphasis added*)

H.R. REP. NO. 106-167, pt. 1, at 121 (1999).

Use of the phrase “similar to” can reasonably be interpreted to mean not limited to. Again, the focus is on the employee’s contribution to providing safety in air commerce.

<sup>79</sup> See footnote 78, *supra*.

<sup>80</sup> This issue was never resolved because the parties ultimately settled the matter. See *Wallum v. Bell Helicopter Textron, Inc.*, DOL Case No. 2009-AIR-00006, *Order Granting Joint Motion to Dismiss with Prejudice* (Mar 7, 2012).

The problems associated with this part spurred the FAA (and certain of its foreign counterparts) to issue an airworthiness directive.<sup>81</sup> The FAA issues an airworthiness directive when it finds that an unsafe condition exists in the product; and the condition is likely to exist or develop in other products of the same type design. 14 C.F.R. § 39.5. The existence of an airworthiness directive is per se evidence of a safety-sensitive issue. Therefore, Complainant has established that his duties were safety-sensitive functions. Accordingly, I find that Respondent is a contractor of one or more air carriers and that Complainant has established by the preponderance of evidence that he was an employee protected by the Act. 49 U.S.C. § 42121(a).

### 3. Protected Activity

Under the Act, no air carrier, or contractor or subcontractor of an air carrier, may discriminate against an employee because the employee:

(1) provided, caused to be provided, or is about to provide (with any knowledge of the employer) or cause to be provided to the employer or Federal Government information relating to any violation or alleged violation of any order, regulation, or standard of the Federal Aviation Administration or any other provision of Federal law relating to air carrier safety under this subtitle or any other law of the United States; (2) has filed, caused to be filed, or is about to file (with any knowledge of the employer) or cause to be filed a proceeding relating to any violation or alleged violation of any order, regulation, or standard of the Federal Aviation Administration or any other provision of Federal law relating to air carrier safety under this subtitle or any other law of the United States; (3) testified or is about to testify in such a proceeding; or (4) assisted or participated or is about to assist or participate in such a proceeding.

49 U.S.C. § 42121(a)(1)-(4).

The Board has explained, “As a matter of law, an employee engages in protected activity any time [h]e provides or attempts to provide information related to a violation or alleged violation of an FAA requirement or any federal law related to air carrier safety, where the employee’s belief of a violation is subjectively and objectively reasonable.” *Sewade v. Halo-Flight, Inc.*, ARB No. 13-098, ALJ No. 2013-AIR-9, slip op. at 7-8 (Feb. 13, 2015) (citing 49 U.S.C.A. § 42121(a)) (emphasizing, “an employee need not prove an *actual* FAA violation to satisfy the protected activity” provided that the employee’s report concerns a federal law related to air carrier safety and the employee’s belief that the violation occurred is subjectively and objectively reasonable”) (emphasis in original).<sup>82</sup> Thus, the “complainant must prove that he reasonably believed in the existence of a violation,” and the reasonableness of this belief has

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<sup>81</sup> See RX 135.

<sup>82</sup> Moreover, that “management agrees with an employee’s assessment and communication of a safety concern does not alter the status of the communication as protected activity under the Act, but rather is evidence that the employee’s disclosure was objectively reasonable.” *Benjamin v. Citationshares Mgmt., LLC*, ARB No. 12-029, ALJ No. 2010-AIR-1, slip op. at 5-6 (Nov. 5, 2013); see also *Sewade*, ARB No. 13-098, slip op. at 8 (“When an employee makes a protected complaint, the employer’s response (positive or negative) does not change that AIR 21 protected activity has occurred”).

both a subjective and an objective component. *Burdette v. ExpressJet Airlines, Inc.*, ARB No. 14-059, ALJ No. 2013-AIR-16, slip op. at 5 (Jan. 21, 2016). Regarding the former, “To prove subjective belief, a complainant must prove that he held the belief in good faith.” *Id.* Regarding the latter, the Board explained: “To determine whether a subjective belief is objectively reasonable, one assesses a complainant’s belief taking into account the knowledge available to a reasonable person in the same factual circumstances with the same training and experience as the aggrieved employee.” *Id.* (evaluating the reasonableness of belief of the *Burdette* complainant, a pilot, against that of a pilot with similar training and experience) (internal quotation marks omitted). However, the Board observed, “mere words do not create an FAA violation when the parties’ actual conduct does not violate FAA regulations.” *Hindsman v. Delta Air Lines, Inc.*, ARB No. 09-023, slip op. at 6 (June 30, 2010). Though the complainant “need not cite to a specific violation, his complaint must at least relate to violations of FAA orders, regulations, or standards (or any other violations of federal law relating to aviation safety).” *Malmanger v. Air Evac EMS, Inc.*, ARB No. 08-071, slip op. at 9 (July 2, 2009). Similarly, “once an employee’s concerns are addressed and resolved, it is no longer reasonable for the employee to continue claiming a safety violation, and activities initially protected lose their character as protected activity.” *Id.* at 8 (internal quotation marks omitted) (holding that the complainant did not engage in protected activity since he knew that his concerns had already been resolved at the time he complained to management and “did not reasonably believe that safety violations existed at the time he made his complaint”).<sup>83</sup>

The communication of safety related issues to “other authorities” can constitute a protected activity only if the employee has a subjectively and objectively reasonable belief that a violation occurred. *Seward v. Halo-Flight, Inc.*, ARB No. 13-098, ALJ No. 2013-AIR-9, slip op. at 7-8 (Feb. 13, 2015)(citing 49 U.S.C. § 42121(a)). Further, the Act does not require Complainant to have actually communicated with the FAA prior to sending the email, in order for this action to constitute a protected activity. Title 49 U.S.C. § 42121(a)(1) extends protection to those that are *about to provide* information relating to any violation of the FAA.

#### Discussion of Protected Activity<sup>84</sup>

The question then becomes: was Complainant’s belief that there was a violation subjectively and objectively reasonable. I find that it was not. Consequently, Complainant is unable to establish a prima facie case, under the Act and his complaint must be dismissed.

The nature of Complainant’s alleged protected activity is unclear, and this fact generally weakens Complainant’s argument that he subjectively and objectively believed he engaged in a protected activity. Complainant conducted tests of the York accumulator for Respondent to ascertain the reason for its failure. He also developed a new accumulator to replace the one that was in production and in use at the time. Complainant correctly notes that Respondent, as the

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<sup>83</sup> See also *Carter v. Marten Transp., Ltd.*, ARB Nos. 06-101, 06-159, ALJ No. 2005-STA-063, slip op. at 9 (June 30, 2008); *Williams v. U.S. Dep’t of Labor*, 157 Fed. App’x 564, 570 (4th Cir. 2005); *Patey v. Sinclair Oil Corp.*, ARB No. 96-174, ALJ No. 1996 STA-20, slip op. at 1 (Nov. 12, 1996).

<sup>84</sup> Unlike the standard for a motion for summary decision, evidence introduced at the hearing is no longer entitled to be looked at in the light most favorable to Complainant, who has the burden of placing evidence of protected activity in the record. See Tr. at 6-7 and 771.

holder of a parts manufacturing approval authorization, was responsible to ensure that each article manufactured conformed to its approved design and is in a condition for safe operation. 14 C.F.R. § 21.316(c). However, the evidence presented indicates that FAA officials were made aware of the problems with the accumulator early in the process, at latest by March 2009.<sup>85</sup> RX 29; RX 33; Tr. at 140. The evidence presented at the hearing establishes that Respondent continually informed the FAA of the testing and results of that testing. Tr. at 235-37, 300, 304, 309,360, 381, 453-57, 516-18; 562-65, 672. RX 28; RX 31; RX 33; RX 51; RX 52; RX 60; RX 75; RX 78. Moreover, Complainant was aware that the test results had been communicated to the FAA.<sup>86</sup> Tr. at 140, 149, 165, 173, 193, 277; RX 37. Furthermore, the FAA had issued a letter of investigation to Respondent concerning the York accumulators. RX 72. In short, there is little doubt that Respondent and its senior management, including Complainant, knew that the FAA was informed of the troubles with the York accumulator.

Given the nature of Respondent's business as well as the nature of Complainant's work for Respondent, Complainant clearly intended that the "other authorities" alluded to in his January 4, 2010 email to Mr. Johnson included the FAA. Prior to Complainant's January 4, 2010 email, and against the advice of his human resource manager,<sup>87</sup> Mr. Johnson opted to retain Complainant without demotion or dock in salary.<sup>88</sup> Mr. Johnson only terminated Complainant's employment after Complainant's January 4, 2010 email, in which Complainant represents an intent to disclose the accumulator test results to "other authorities."<sup>89</sup>

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<sup>85</sup> The evidence of record establishes that the FAA was aware of an issue with an accumulator as early as 2006. RX 4. However, it is clear that by March 2009, Respondent had informed the FAA of issues with these particular accumulators.

<sup>86</sup> However, Complainant was evasive in his answers during cross-examination on this point. *See* Tr. at 140-49.

Further, even if his actions somehow could be construed as initially protected, it loses that character once the concern was being addressed. Here, not only was the FAA aware of the problem, but they acknowledged that it was a safety issue and started proposing airworthiness directives as early as February 2009. *See* RX 20. And the evidence is undisputed that Respondent was actively engaged with FAA and its customers to identify defective accumulators; limit the risk of further failures; and it was attempting to find the root cause of the accumulator failures. *See also Malmanger v. Air Evac EMS, Inc.*, ARB No. 08-071, slip op. at 9 (July 2, 2009) ("once an employee's concerns are addressed and resolved, it is no longer reasonable for the employee to continue claiming a safety violation, and activities initially protected lose their character as protected activity." *Id.* at 8.

<sup>87</sup> Tr. at 722.

<sup>88</sup> Mr. Johnson only removed Complainant from his responsibilities of the lab to enable him to focus on the stainless steel accumulator. The change did not impact Complainant's title and salary, but it did affect his end of year bonus was. This Tribunal found Mr. Johnson's reasoning for not giving Complainant a bonus reasonable and credible.

<sup>89</sup> Mr. Johnson said that he "was appalled" at the email. "Only an employee that had no interest in staying in the company would ever write such an angry email." Tr. at 593. This email elicited an immediate response from Mr. Johnson, which, given the events that had transpired, was not unexpected. Given all of the shortcomings identified by Respondent in Complainant's performance in 2009, the tone used by Complainant in his email to the president of the company could be described as, at best, ill-advised. As Respondent's human resource personnel had previously recommended to Mr. Johnson termination of Complainant's employment, it is more than reasonable following receipt of Complainant's email that he took their advice.

Complainant asserts that he subjectively believed he committed a protected activity when he reported Respondent for inaccurately reporting the failures and supporting data to the FAA, thereby misleading them as to the seriousness of the problem. Compl. Br. at 4. Further, Complainant alleges that the cost to Respondent to replace the defective York accumulators was the reason for Respondent's retaliation against him. *Id.* at 5. Complainant argues that his protected activity occurred when, although Respondent recommended replacing the accumulators at 28,000 cycles, Complainant apparently recommended replacement sooner. As support for this contention, he referenced Transport Canada's airworthiness directive that only authorized a 4,000 flight cycle life before mandatory replacement of the accumulator. *Id.*

Complainant offered little, if any, evidence to support his assertions that he objectively and subjectively believed he engaged in protected activity. As Respondent correctly observed, Complainant "offered no proof that he reported, either to [Respondent] or the FAA, anything that he could reasonably have believed to be a violation of an FAA regulation or order." Resp. Br. at 30. Further, once Complainant learned of the Retlif and then the Young & Franklin test results, he never contemporaneously objected to the results. If anything, the evidence suggests that Complainant was given multiple opportunities prior to his termination to raise concerns about the methodology of these tests. For example, Complainant admitted that he did not contact the FAA at any time between October 25, 2009 and January 4, 2010 to report a safety issue with the accumulator. Tr. at 194. Complainant only raised allegations of retaliation after Respondent relieved him of his duties and after he flew to California to seek new employment. Tr. at 189-90. The fact that Complainant waited until after he was fired to engage in alleged protected activity undermines his argument that he held a subjective and objective belief that he engaged in protected activity.

Complainant provided neither credible testimony nor documentary evidence that would support this claim of retaliation.<sup>90</sup> Further, even if he had proffered such evidence, his assertion

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<sup>90</sup> None of the below incidents are a result of protected activity. However, this Tribunal addresses the assertion to be thorough and for the benefit of the parties.

Complainant asserts that his removal from responsibility of the accumulator testing in March 2009 constituted an act of retaliation. Complainant offered no evidence to support this contention. To the contrary, the overwhelming evidence was that Respondent transferred the testing from Complainant's control to facilities at Young & Franklin because Complainant told Respondent's senior management that the lab Complainant supervised lacked the capacity to handle the additional testing. Tr. at 61-62 and 150. *See also* Tr. at 246, 265, 440, 448, 497, 558, 651, 653, 712-13. Further, on February 27, 2009, Complainant himself recommended more testing be conducted. *See* RX 22; Tr. at 552. Moreover, the evidence establishes that Complainant remained informed, and part of the team that oversaw the tests that occurred at Young & Franklin. Tr. at 152-57.

At this same time Respondent's lab was focused on the stainless steel accumulator, a product under the supervision of Complainant and of some importance to Respondent. It is undisputed that resolution of the problems with the York accumulator was a priority of Respondent. Transferring testing of the part to another facility to continue that process was eminently reasonable. It is disingenuous to argue retaliation when Complainant was the one that told Respondent's management that his lab did not have the ability to conduct needed testing and then to claim he was surprised when testing is given to another lab in this close knit company. This Tribunal separately finds that removal from responsibility of the accumulator testing in March 2009 was not an adverse act. There is no evidence that Respondent's actions caused any adverse action to Complainant. He retained all of his duties, responsibilities, pay and title. If anything,

does not relate to any type of protected activity. If anything, the evidence establishes that Complainant withheld information from Respondent's senior management. The Act is not designed to protect one from *not* disclosing supposed safety related information. Thus, his failure to disclose his execution of these tests cannot be a protected activity. Furthermore, the evidence presented at the hearing established that Complainant's removal from supervising the lab stemmed from Bombardier's audit that found several key deficiencies in Respondent's quality assurance processes; processes that were the Complainant's responsibility. Moreover, there is no evidence that Complainant provided information, or intended to provide information, regarding a violation of any safety regulation at or near the time of his removal.

The January 4, 2010 email is the only action by Complainant that could remotely be considered a protected activity; it is not. In this email to Mr. Johnson, Complainant raised issues with the company about the manner of testing conducted by Young & Franklin. RX 117. This rationale starkly differs from his November 3, 2009 explanation for the reasoning behind his test. In his note to Mr. Johnson in November 2009, Complainant justified performing this test by proposing that proof pressure of an accumulator can improve its fatigue life. Complainant sought to perform this test to ascertain whether he could apply this technique to the stainless steel

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Respondent transferred the testing functions for the purpose of easing Complainant's burden so he could focus on the stainless steel accumulator.

Complainant similarly, but independently, asserts that his removal from responsibility for Respondent's lab in November 2009 and the subsequent announcement within the company was retaliatory. *See* RX 102. The removal of Complainant from his supervisory duties in November 2009 occurred as a result of a combination of issues. First, the evidence suggests that, while Respondent afforded Complainant the opportunity to participate in the Young & Franklin testing, he was either too busy performing other duties or chose not to actively participate in that testing. The evidence supports Respondent's position that it sought Complainant's input concerning the testing; the team members, however, choose not to accept all of his recommendations. Second, Complainant opted to conduct other testing of the York accumulator without the knowledge of other members of management. Moreover, evidence suggests that he told his subordinates not to disclose that the testing was occurring. To compound matters, Complainant performed this testing without any formal written protocols. Tr. at 578-79. This occurred after Complainant told management, just six months prior, that his lab did not have the resources to perform the needed testing on the York accumulators. Tr. at 184, 265. The witnesses uniformly testified that resolution of the York accumulator failures was a priority for Respondent. Respondent presented testimony that Complainant demonstrated shortcomings with delegating tasks, recruiting needed engineering personnel, interacting with fellow managers and adapting to the changing business model. Respondent was attempting to move from manufacturing parts from existing plans and specifications purchased from prior mergers to developing and manufacturing its own parts. Then in November 2009 two events occurred; Complainant encouraged an employee to change test results and Bombardier subjected Respondent to an audit. Tr. at 395-97, 411-13; RX-105. "[T]he straw that [broke] the camel's back" was the adverse findings in the Bombardier audit. Tr. at 585. This audit made major findings that squarely were shortcomings within Respondent's lab, the lab Complainant managed.

Finally, Complainant asserted that his termination of employment in January 2010 was an act of retaliation. There is no question that Complainant's January 4, 2010 email was the catalyst resulting in his termination of employment three days later. Complainant's January 4, 2010 email preceded the meeting with Mr. Johnson. RX 117. In this email Complainant referenced disclosing the results of the various accumulator testing "with you, your customers and other authorities if needed." *Id.*

accumulator. But in the email he sent to Mr. Johnson, he asserted that his tests indicated that the Young & Franklin tests were faulty. *Compare* RX 117 with RX 92.

The timing of this email causes one to pause. Complainant generated this email after he had flown to California and obtained other employment, and after he learned that Respondent's senior management had questioned his performance. Complainant presented no evidence that, during this period, he objected to the testing. Rather, he objected to his removal from the testing. The purpose of the Act is to shield employees from retaliation related to prohibited activities. It cannot be used as a sword to force an employer's hand to act when it is confronted with an employee who has already made plans to end his employment. When weighing the evidence presented, it appears to this Tribunal that Complainant sent the January 4, 2010 email to elicit a response, perhaps even to provide a reaction such as termination of employment. He should not have been surprised, given the tone of the email, that he obtained an unfavorable response.

Complainant could not have sent the January 4, 2010 email with a subjectively or objectively reasonable belief that he was alerting Respondent to the accumulator problem because, at that point in time, Complainant knew that Respondent made the FAA aware of the accumulator problem as early as April 24, 2009, based on email correspondence. RX 37, Tr. 149. Since he did not send the January 4, 2010 email with that good faith belief, Complainant could not have subjectively believed that an unreported safety violation had occurred. Likewise, an individual with the same engineering expertise, who had received an email notifying him that the FAA already knew of the accumulator problem as Complainant had, could not objectively believe that Respondent was unaware of the safety violation. Accordingly, this Tribunal finds that the January 4, 2010 email was not a protected activity because Complainant did not have a subjective belief and an objectively reasonable belief that a safety violation had occurred.

Thus, Complainant has failed to establish that any of his actions were protected activities and thus his complaint must be dismissed.

V. CONCLUSION

This Tribunal finds that the Complainant is an employee protected by the Act and the Respondent is a contractor or subcontractor of an air carrier. However, Complainant has failed to establish that he engaged in protected activity as defined in 49 U.S.C. § 42121(a)(1)-(4). Accordingly, I hereby dismiss Complainant's complaint with prejudice.

ORDER

The Complaint of William Lee is hereby **DISMISSED**.

**SCOTT R. MORRIS**  
Administrative Law Judge

Cherry Hill, New Jersey

**NOTICE OF APPEAL RIGHTS:** To appeal, you must file a Petition for Review (“Petition”) with the Administrative Review Board (“Board”) within ten (10) business days of the date of issuance of the administrative law judge’s decision. The Board's address is: Administrative Review Board, U.S. Department of Labor, Suite S-5220, 200 Constitution Avenue, NW, Washington DC 20210, for traditional paper filing. Alternatively, the Board offers an Electronic File and Service Request (EFSR) system. The EFSR for electronic filing (eFile) permits the submission of forms and documents to the Board through the Internet instead of using postal mail and fax. The EFSR portal allows parties to file new appeals electronically, receive electronic service of Board issuances, file briefs and motions electronically, and check the status of existing appeals via a web-based interface accessible 24 hours every day. No paper copies need be filed.

An e-Filer must register as a user, by filing an online registration form. To register, the e-Filer must have a valid e-mail address. The Board must validate the e-Filer before he or she may file any e-Filed document. After the Board has accepted an e-Filing, it is handled just as it would be had it been filed in a more traditional manner. e-Filers will also have access to electronic service (eService), which is simply a way to receive documents, issued by the Board, through the Internet instead of mailing paper notices/documents.

Information regarding registration for access to the EFSR system, as well as a step by step user guide and FAQs can be found at: <https://dol-appeals.entellitrak.com>. If you have any questions or comments, please contact: [Boards-EFSR-Help@dol.gov](mailto:Boards-EFSR-Help@dol.gov)

Your Petition is considered filed on the date of its postmark, facsimile transmittal, or e-filing; but if you file it in person, by hand-delivery or other means, it is filed when the Board receives it. *See* 29 C.F.R. § 1979.110(a). Your Petition must specifically identify the findings, conclusions or orders to which you object. You waive any objections you do not raise specifically. *See* 29 C.F.R. § 1979.110(a).

At the time you file the Petition with the Board, you must serve it on all parties as well as the Chief Administrative Law Judge, U.S. Department of Labor, Office of Administrative Law Judges, 800 K Street, NW, Suite 400-North, Washington, DC 20001-8002. You must also serve the Assistant Secretary, Occupational Safety and Health Administration and the Associate Solicitor, Division of Fair Labor Standards, U.S. Department of Labor, Washington, DC 20210. *See* 29 C.F.R. § 1979.110(a).

If filing paper copies, you must file an original and four copies of the petition for review with the Board, together with one copy of this decision. In addition, within 30 calendar days of filing the petition for review you must file with the Board an original and four copies of a supporting legal brief of points and authorities, not to exceed thirty double-spaced typed pages, and you may file an appendix (one copy only) consisting of relevant excerpts of the record of the proceedings from which the appeal is taken, upon which you rely in support of your petition for review. If you e-File your petition and opening brief, only one copy need be uploaded.

Any response in opposition to a petition for review must be filed with the Board within 30 calendar days from the date of filing of the petitioning party’s supporting legal brief of points

and authorities. The response in opposition to the petition for review must include an original and four copies of the responding party's legal brief of points and authorities in opposition to the petition, not to exceed thirty double-spaced typed pages, and may include an appendix (one copy only) consisting of relevant excerpts of the record of the proceedings from which appeal has been taken, upon which the responding party relies. If you e-File your responsive brief, only one copy need be uploaded.

Upon receipt of a legal brief filed in opposition to a petition for review, the petitioning party may file a reply brief (original and four copies), not to exceed ten double-spaced typed pages, within such time period as may be ordered by the Board. If you e-File your reply brief, only one copy need be uploaded.

If no Petition is timely filed, the administrative law judge's decision becomes the final order of the Secretary of Labor pursuant to 29 C.F.R. § 1979.110. Even if a Petition is timely filed, the administrative law judge's decision becomes the final order of the Secretary of Labor unless the Board issues an order within thirty (30) days of the date the Petition is filed notifying the parties that it has accepted the case for review. *See* 29 C.F.R. §§ 1979.109(c) and 1979.110(a) and (b).