



Issue Date: 31 December 2018

CASE NO.: 2016-AIR-00003

In the Matter of:

JIRI CERNY,
Complainant,

v.

TRIUMPH AEROSTRUCTURES –
VOUGHT AIRCRAFT DIVISION,
Respondent.

DECISION AND ORDER
DENYING WHISTLEBLOWER COMPLAINT

This matter arises under Section 519 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, 49 U.S.C. § 42121 (“AIR 21”), and the implementing regulations set forth at 29 C.F.R. Part 1979, Subpart B. I held a hearing in this matter from May 15 to 17, 2017, in Dallas, Texas. Attorneys Jane Byrne and Christine Neill represented Jiri Cerny (“Complainant”). Attorneys Chris Harrison and Zachary Hoyt represented Triumph Aerostructures – Vought Aircraft Division (“Respondent”).

At the hearing, the following exhibits were admitted into evidence: Joint Exhibits (“JX”) 1 to 6; Complainant’s Exhibits (“CX”) 1 to 4, 6 to 8, 10 to 12, 14 to 18, 20 to 24, 26 and 27, 29 to 33, 35 to 39, 40 (pages Cerny 2570 to 2785 only), 41 and 42, 44 to 51, 52 (pages Cerny 2289 to 2361), 53 and 54, 58 to 67, 68 (excluding pages Cerny 1980 to 1982), 69 to 88, 90 to 95, 99, 101 to 110, 112, 115 and 116, 118 to 121, 123 to 158, 160 to 165, 170 to 182, and 184 to 192¹; Respondent’s Exhibits (“RX”) 1, 2A, 2C to 2I, 2M to 2W, 3 to 21, 22 (pages 1 to 17 and 27 through 29), 23 to 25, and 27 to

¹ CX 5 was not admitted and Complainant withdrew CX 9, 13, 19, 25, 28, 34, 43, 55 to 57, 89, 96 to 98, 111, 113 and 114, 117, 122, 159, and 166 to 169. Although Complainant withdrew CX 25, an exhibit labeled “Exhibit 25” is included in Complainant’s exhibits without its own tab and seemingly as part of CX 24. This “Exhibit 25” was not considered, although it is noted it is a copy of JX 6 and RX 17. CX 166 was admitted but was later recorded as withdrawn and is not in the record. TR at 514, 648. Complainant did not object when it was listed as withdrawn at the hearing and returned to his counsel. CX 166 is therefore not admitted as it was withdrawn. In his closing brief, Complainant noted that in the May 18, 2017 Order Following Hearing, CX 192 was not reflected as having been admitted. ALJX 1 at 13, n.15. This Decision and Order serves to revise the May 18, 2017 Order to show that CX 192 was admitted.

41.² Hearing Transcript (“TR”) at 22-30, 72, 75, 68, 89, 146, 265-266, 316, 322, 338, 366, 372, 387, 401, 416, 458, 463-466, 471-479, 503-515, 632-637, 643-646, 1025. On May 18, 2017, I issued an Order Following Hearing allowing the parties to address the admission of page Cerny 2288 of CX 52, CX 183, and the redacted version of CX 100. On June 1, 2017, I admitted CX 183 and page Cerny 2288 of CX 52, and denied the admission of CX 100.³

On August 15, 2017, Complainant and Respondent filed simultaneous post-hearing briefs, where were marked ALJX 1 and ALJX 2, respectively. Complainant and Respondent filed simultaneous reply briefs on August 29, 2017, which were marked as ALJX 3 and ALJX 4, respectively.

Complainant alleges he was terminated in violation of the employee protection provisions of AIR 21. As explained below, after a review of the entire record,⁴ I find that Complainant has not proven his case by a preponderance of the evidence and therefore his request for relief is denied.

I. ISSUES IN DISPUTE

The matter presents the following disputed issues:

1. Did Complainant engage in protected activity within the meaning of the AIR 21?
 - i. On or about October 2013, by reporting of the mouse hole cutout issue and design?
 - ii. On or about February 2014, when he reported errors in the MAZ report?
 - iii. On or about April 2014, when he reported safety concerns to his supervisor related to the stress analysis on the E-2 190 fuselage circumferential joint (also described as “errors and problems with the rear fuselage join to center fuselage III in the E-1 Certification Stress Report”)?

² RX 2J, 2K, and 2L were not admitted and Respondent withdrew RX 2B and 26, and pages 18 through 26 of RX 22. Pages 27 through 29 of RX 22 were not withdrawn.

³ At the hearing, some testimony was elicited about the contents of CX 100. *See, e.g.*, TR at 957-958. Because CX 100 was not admitted, the testimony regarding its contents was not considered in my resolution of the issues.

⁴ The record contained many highly technical documents that were not fully explained during the hearing or in the parties’ briefs. For example, CX 52 is titled “Embraer Manual Relating to Joint Allowables,” and appears to include part of the MAZ report. There was no explicit testimony explaining the meaning or context of this exhibit, although I note that portions of the exhibit were withdrawn at the hearing. Other documents that are similarly technical in nature and without sufficient explanation are CX 53, 54, 64, 65, 66, 69, 70, 75, 85, 94, 140, 147, 165. While I considered every document in the record, I lack the expertise to interpret many of these technical documents and without further explanation from the parties regarding their meaning and context, I gave the documents minimal weight as it was not clear how they affect the issues to be decided. Additionally, many of the exhibits admitted are duplicates of other exhibits in the record. I examined and considered each admitted exhibit. Some citations in this Decision refer to multiple exhibits where the information is identical; in other places, only one exhibit of multiple identical exhibits may be cited. A number of exhibits were admitted but are not useful to the resolution of the issues and are therefore not cited to in this Decision and Order. These include: JX 2, 3, and 4; RX 2D, 2M, 2N, 2R/RX 32, 2V, 2W, 20, 21, 22, 23, 31, 37, 41; CX 7, 8, 26, 35 (blank), 44/50, 46, 48, 118, 124, 138/139 (blank), 141, 143, 146, 151, 152, 156, 157, 158, 171 (blank). Each exhibit was considered and is discussed if relevant and probative. Some exhibits may have presented some relevant information but were not sufficiently explained during the hearing or in closing briefs.

- iv. On or about April 2, 2015, when he turned in his APU/Tailcone Checklist?
2. Did Complainant suffer an adverse action when he was terminated on April 2, 2015?
3. Has Complainant shown by a preponderance of the evidence that the protected activities were a contributing factor in the adverse action alleged? 29 C.F.R. § 1979.109(a).
4. If Complainant establishes the elements of his claim by a preponderance of the evidence, then has Respondent established by clear and convincing evidence that it would have taken the same adverse action in the absence of Complainant's protected activity? 29 C.F.R. § 1979.109(a).
5. If Complainant prevails, what compensatory damages, if any, should be awarded? 29 C.F.R. § 1979.109(b). What other appropriate action should be taken to abate the violation, including reinstatement to his former position, compensation, including back pay and other terms, conditions and privileges of that employment, front pay, and attorney's fees and costs?⁵ *Id.*

II. STIPULATIONS

The parties agreed to the following stipulated facts at the hearing:

1. Triumph Aerostructures, LLC is a Delaware limited liability company with a place of business and its corporate offices in Arlington, Texas, and is the legal entity for Triumph Aerostructures – Vought Aircraft Division.
2. The first E-1 E190 (“E-1 Jet”) entered commercial service in November 2005 and was certified by the Federal Aviation Administration (“FAA”).
3. Triumph announced on June 7, 2013, that it entered into a contract with Embraer in 2013 to design and build the E-2 central fuselage section III (“CFIII”), rear fuselage section (“AFT fuselage”) and various rudder and elevator tail section components for Embraer's E-2 jet.
4. Triumph had to comply with all applicable U.S. federal aviation regulations, including FAA regulations, in the design and construction of the components it manufactured for the Embraer E-2 jet program.
5. On January 15, 2016, Triumph delivered its first fully joined Embraer E-2 E190 CFIII/AFT fuselage to Embraer from its Red Oak, Texas facility.
6. On May 24, 2016, the Embraer E-2 E190 had its first test flight in Brazil.

⁵ On May 12, 2017, I granted Complainant's motion to exclude Respondent's assertion that damages should be limited by after-acquired evidence.

7. Embraer has publicly stated that the E-2 E190 is scheduled to enter commercial service in 2018.
8. Embraer has publicly stated that it will seek certification from the Brazilian air authority for the E-2 E190 as well as flight certification from the United States Federal Aviation Administration.
9. Embraer has publicly stated that the aircraft will be marketed in the United States and orders of the E-2 jets have already been placed by U.S. air carriers. Triumph does not dispute that the aircraft will be required to obtain FAA certification prior to delivery to U.S. based commercial carriers.
10. Johnson Service Group (“JSG”) is not an employer or joint employer of Cerny and Triumph is solely legally liable as for any discrimination against Cerny that is found to have occurred in violation of AIR 21.
11. No assertion will be made by any of the Parties that any agreements between or among the Parties require or support a determination that JSG is an employer or joint employer of Cerny.
12. Triumph solely made the decision to terminate Cerny without any input or consultation with JSG.

TR at 37-38.⁶

III. FACTUAL FINDINGS

Background Information

1. Complainant was born in Czechoslovakia, now the Czech Republic, and studied mechanical engineering, completing the equivalent of a Ph.D. in Prague; he did not receive a diploma because he defected.⁷ TR at 55-56; RX 1 at 18-20. He immigrated to the U.S. in 1979, and has since taken a number of certification classes relating to stress analysis. TR at 56; CX 38; RX 1 at 22-27. He has worked in engineering positions in the U.S. since 1979, and has been a stress engineer since approximately 1986 mostly working in aviation. TR at 57. Prior to working for Respondent, Complainant worked at numerous other aviation-related companies.⁸ TR at 58; CX 71.

2. Respondent manufactures aircraft components for commercial, military, and business jet aircraft and provides these products to aircraft manufacturers, including Embraer, Bombardier, and Boeing. *See* CX 36. Respondent contracted with Embraer, a Brazilian company, to design and build pieces of the fuselage of the E-2 commercial jet, including the center fuselage III

⁶ Prior stipulations available at CX 33, 37.

⁷ Complainant’s resume indicates his education at “Czech University” is equivalent to “MSME.” CX 71.

⁸ He has been involved in disputes with prior employers over what he perceived as improper terminations. TR at 391-394; RX 1 at 30-46.

(“CFIII”), the rear (or aft) fuselage, and various tail section components. TR at 76, 560, 582; CX 3; Stip. ¶ 3. The E-2 series is a modification of the prior E-1 series which went into service in the early 2000s. TR at 564-565. The E-2 is not significantly different from the E-1, and was designed to reduce the aircraft’s weight and improve fuel consumption. *Id.* at 564-565. Embraer will seek flight certification from the FAA for the E-2 jet and U.S. air carriers have already placed orders for the jets. Stip. ¶¶ 8, 9.

3. Complainant was hired to work as a contract stress engineer for Respondent by a staffing agency, Johnson Service Group, starting on December 5, 2011. TR at 59-60; RX 2A, 2C, 2D, 2E; CX 2. Complainant’s contract was renewed every six months between December 2011 and March 31, 2015.⁹ TR at 206-207; JX 1. Complainant initially worked on the Bombardier program (also referred to as the BA program), reporting to stress lead John Kebrle and manager Tim Daniel. TR at 61; RX 1 at 55-59; *see* CX 1. Complainant worked on the Bombardier program for 20 months, during which he never received any criticism of his job performance or work quality.¹⁰ TR at 61, 74. Complainant also did not raise any safety concerns during his work on the BA program. *Id.* at 74.

4. Complainant transferred to the E-2 program around August 5, 2013, and was assigned to the aft fuselage group. TR at 76, 81; RX 1 at 59, 63. He worked under stress leads Michael Hoffmann and Todd Mostrog; above Mr. Hoffmann and Mr. Mostrog in the chain of command was manager Greg Whittaker, with whom Complainant had little interaction. TR at 76-77; CX 4. Above Mr. Whittaker was Byron Mueller, who was previously a stress engineer. TR at 525, 850-852; CX 192 at 15-16. He has a Bachelor’s degree in mechanical engineering and a Master’s degree in business administration.¹¹ TR at 850-851; CX 189 at 6. Complainant interacted with Mr. Hoffmann and Mr. Mostrog during group meetings four times a week, and when he was given or delivered a task. TR at 81.

5. Mr. Hoffmann has a Bachelor’s degree and a Master’s degree in mechanical engineering, and previously worked for Boeing and L3 Communications before starting work for Respondent in 2011. TR at 557-558. He originally worked as a stress engineer on the Bombardier program, although he had no interaction with Complainant while they were both with the Bombardier program.¹² *Id.* Mr. Hoffmann became the stress lead for the aft fuselage group on the Embraer program around July or August of 2013. *Id.* at 559. In addition to his managerial duties, he performed stress analysis and engineering work. *Id.* at 591.

⁹ Complainant’s total earnings in 2014 were \$184,814.78. CX 170 at 897; TR at 246. From January until April 2, 2015, he made \$57,574.20. CX 170 at 898; TR at 247; *see also* CX 11, 12, 14.

¹⁰ Some of Complainant’s work during the Bombardier program is provided in the record, *e.g.*, CX 172, 178, 179, 180, as are emails concerning Complainant’s work on the program, *e.g.*, CX 45, 87, 121. Complainant also provided lists of his purported projects on the BA program. CX 88, 120, 177. Additionally, CX 58 is a January 2014 email from Complainant to Tim Daniel thanking him since Mr. Daniel was retiring; Daniel responded thanking Complainant for his hard work and contributions.

¹¹ Mr. Mueller’s performance evaluation for fiscal year 2016 is found at CX 108.

¹² Mr. Whittaker also worked on the Bombardier program at the same time as Complainant, but they were in different groups and Mr. Whittaker had no knowledge of Complainant’s skills. TR at 898.

6. Mr. Mostrog has a Bachelor's degree in aeronautical and astronautical engineering and has worked as a structural engineer for Respondent since August 2005. TR at 810. He worked on various programs, including the Bombardier program with Complainant, before becoming the co-lead on the Embraer fuselage program from October 2013 to July 2015; he is currently a global finite element model lead and stress lead for the Bombardier wing program. *Id.* at 811. Mr. Mostrog did not review any of Complainant's work when they worked on the Bombardier program together. *Id.* at 813. Most of Mr. Mostrog's job as a stress lead while working on the E-2 program was reviewing other people's work. *Id.* at 828.

7. Mr. Whittaker has a BS in mechanical engineering and was a structures engineer with a background in stress analysis; he worked for Respondent for 31 years before he retired in 2016. TR at 893; *see* CX 155. He is currently working at Bell Helicopter. TR at 893. He started working on the Embraer project in June 2013 and in 2015 he was "technologies lead" overseeing the stress group, fatigue and damage tolerance, as well as weights and materials processes. *Id.* at 894, 929-930. Mr. Whittaker did not normally review the engineering work of the stress engineers due to the number of people he supervised, but he had general knowledge about what the stress engineers were working on through conversations with the leads. *Id.* at 930-932. Although Mr. Mueller made the decision to hire or fire personnel, Mr. Whittaker was part of the decision-making process.¹³ TR at 894-895; CX 192 at 17-20.

8. Stress engineers or stress analysts analyze the parts in detail to ensure safety, proper weights, and that the parts will be able to be installed properly, with the primary concern being safety. TR at 652-653. The analysts examine every part, and then bring that analysis to the stress leads to review. *Id.* at 652. The first round of activity for stress engineers on the E-2 project was to produce stress notes, which address the type of material and the type of fasteners needed and support the design department in the selection and sizing of materials. *Id.* at 63, 270. Respondent has a structures manual that dictates what must be contained in the stress notes and what can be relied on as proper reference materials.¹⁴ TR at 65; CX 161.

9. The stress notes are reviewed by the stress leads "at a high level." TR at 718. After the stress notes are accepted, the design information request ("DIR") is produced, which provides information to designers on what type of material to use, what kind of joints and fasteners to use, and what thicknesses to be used. *Id.* at 63-64. The DIRs are submitted for review and acceptance by the lead and managers. *Id.* at 64. The DIR is then given to the designer, and as the design changes, the design comes back to the stress engineers; the process is repeated until both designer and stress engineers feel comfortable. *Id.* at 572-573. Manufacturing is copied on the DIR, but the "primary audience for the DIR is design" and the designers are not physically building anything. *Id.* at 573. The manufacturing engineer then makes sure it will be able to be assembled properly. *Id.* at 574. Around the summer of 2014, Embraer gave Respondent the okay to start manufacturing parts after a "crucial design review," and the "actual build" of the aft fuselage started from September or October of 2014 until delivery of the first fuselage in the summer of 2015. *Id.* at 576, 585. Mr. Hoffmann and Mr. Mostrog would sign off on parts based on the "stress reports" and "analysis

¹³ Mr. Hoffmann and Mr. Mostrog did not have hiring and firing authority. CX 187 at 9; CX 190 at 12.

¹⁴ CX 41 contains various structures manuals that described the importance of fasteners. I reviewed the document and considered it in my resolution of the issues, although there was no testimony regarding this exhibit and the parties did not discuss it in the closing briefs.

notes.”¹⁵ *Id.* at 585.

10. The overall stages of the project progress from the “p-loop” (preliminary loop) stage, which ends in the preliminary design review, to the “d-loop,”¹⁶ to the “cert-loop,” or certification load stage.¹⁷ TR at 566-567, 582. The p-loop stage is a “rough analysis” where any gaps in information are filled in and everything is preliminary. *Id.* at 567-568. This stage ended in December 2013 with the release of the preliminary design review. *Id.* at 568. Between stages, Complainant’s group conducted assessments of the fuselage, looked at documents received, and prepped the global finite element model, which is the mathematical model of the structure. TR at 570; *see* CX 69.

11. The d-loop stage started in March 2014 when they received the loads from Embraer. TR at 569. The loads are very important to get correct early on because everything is affected by the loads. *Id.* at 583. “Loads” generally represent forces that pull, push, twist, bend, etc. *Id.* at 570. There is a push to get things done in accordance with milestones, but if there is a problem that needs to be fixed, they fix it because “if you put the incorrect loads in there, everything else from then on is just wrong” and it is much cheaper to correct issues early on in the process. *Id.* at 584-585. The d-loop phase is where they do most of the detailed design analysis and ran from March 2014 to March 2016.¹⁸ TR at 571. During the d-loop phase, different parts of the aft fuselage were assigned to different stress engineers—Complainant was assigned the APU fittings and the circumferential splice during this stage. TR at 576; *see* CX 135. During the d-loop phase, they write the first flight report, which is the report that states there are no safety issues with a flight test.¹⁹ TR at 577-578. They started working on the first flight report in the fall of 2014 and submitted the first draft of the first flight report in July 2015, which they discussed with Embraer and revised based on Embraer’s comments, until a final draft was prepared in January 2016. *Id.* at 577-580. The first fuselage was delivered to Embraer in the summer of 2015. *Id.* at 585. The first few aircraft built are flight test aircraft on which Embraer runs various tests. *Id.* at 587. At the time of the hearing, the aircraft was still undergoing testing. *Id.* at 589.

¹⁵ Complainant asserted that managers would not let the DIRs proceed with improper or incorrect work, and that once the DIR is accepted, the aircraft component is released into manufacturing. TR at 64, 273-274. It is unclear from the record whether the aircraft component was actually being manufactured once the DIR was fully approved, but from Mr. Hoffmann’s testimony, it appears parts of the aft fuselage were at least being built between fall of 2014 and summer of 2015. *Id.* at 585.

¹⁶ Mr. Hoffmann did not indicate what the term “d-loop” stood for, but that it was the “bigger stage” where most of the detailed design analysis is performed. TR at 571.

¹⁷ Mr. Hoffmann provided this description.

¹⁸ The peak of the workload was during the analysis and drawing release phase of the program, which happened roughly through 2014; 2015 was “mostly” the report-writing phase. TR at 896 (Mr. Whittaker’s testimony).

¹⁹ Complainant refers to this report as a “formal certification stress report” (or “FCSR”) because it had to comply with the certification requirements, but Respondent refers to this report as the “first flight report.” *See* TR at 275-276; CX 187 at 20-21. Mr. Hoffmann explained that the first flight report was filed in July 2015. CX 187 at 32-36. They received comments from Embraer in September of 2015, then submitted a revised report in December of 2015 or January of 2016. *Id.* They received the final set of certification loads in March 2016, and submitted the final certification report on July 31, 2016. *Id.*; *see also* CX 191 at 16-19. There is a “big difference” between a first flight report and the final certification report. CX 190 at 87-88 (Mr. Mostrog’s testimony); *see also* CX 192 at 49-51.

12. There was “zero” incentive to ignore safety concerns because “it’s really expensive to ignore safety concerns because they will get caught, and you will eventually have to fix it. And the later you go in that cycle, the cost just exponentially goes up.” TR at 653 (Mr. Hoffmann’s testimony); *see also* CX 192 at 53-54, 57-58 (Mr. Whittaker describing general policy regarding safety); TR at 1013 (Mr. Echema believed Respondent had a culture of safety and never saw anyone disciplined for raising a safety concern).

13. There are a number of computer programs stress engineers use to complete their work. CATIA is a software program used to produce three-dimensional models of the actual parts used. TR at 179, 596. Stress engineers use the program to get information about the thickness and size of the part, and other similar data. *Id.* at 179. Enovia is a separate system that was embedded in CATIA and is a sort of “filing system” for all of the information related to a particular part. *Id.* at 531, 598. Enovia, in essence, stores parts and CATIA allows the engineers to “view the parts in a 3D space.” *Id.* at 565. These programs are important to be able to use because these parts are what are being designed and sized. *Id.* at 598. Other programs used include Patran, Nastran, SLIM, and Vision. *Id.* at 598-600. Additionally, Engineers use Excel to build templates and tools for their analyses. *Id.* at 600-601.

14. Complainant knew that the E-2 design was subject to certification by the FAA, and that the E-1 had been certified by the FAA. TR at 90. He was aware that in designing and manufacturing the components of the E-2, Respondent had to comply with all applicable federal aviation regulations (“FARs”) in order for the E-2 to be FAA-certified, and all stress engineers, including Complainant, understood they were required to follow these regulations. TR at 90-92, 269; CX 191 at 5; *see also* CX 6 (selected portions of 14 C.F.R. Part 25, “Airworthiness Standards: Transport Category Airplanes”).²⁰ Engineers were to follow the requirements provided by the customer, but that the customer had to meet the FAA guidelines and other aviation regulations such as the Brazilian or European regulations. TR at 824, 847 (Mr. Mostrog’s testimony).

Mouse Hole Design/Skin Cracking Issue

15. In October 2013, Mr. Hoffmann directed Complainant to develop an alternative stress analysis methodology for the E-2’s fuselage frames.²¹ TR at 92; RX 1 at 92. In doing so, he told Complainant to use the E-1 jet certification report as a template since the E-1 had been certified by the FAA. TR at 92-93. In looking at the E-1 report, Complainant noticed that there was a cut-out in the frame, called a “mouse hole,” through which “stringers” pass. TR at 94; RX 1 at 93; CX 27 at 01155.²² The design for the mouse hole came from the E-1 jet and was a “common shear-tied

²⁰ The FAR for Structural Design Criteria is also in the record, along with an accident report discussing an April 2, 2011 crash of an experimental aircraft. CX 61. There was no explanation of the accident report at the hearing or in the briefs.

²¹ In his deposition, Mr. Hoffmann denied giving Complainant this task. CX 187 at 108-109. However, in its closing brief, Respondent asserted Mr. Hoffmann gave Complainant this task. ALJX 2 at 8.

²² CX 27 are notes from a “diary” that Complainant testified he wrote near the time the events occurred. TR at 101-102, 494. However, the manner in which this diary is written renders it suspect. Complainant asserted that he kept the diary from around October 2013 and would update it and save as time went on. RX 1 at 125-126. Portions of this diary appear to be written contemporaneously, but other portions read as if they were written after the fact. For example, the first page lists the date as Friday, October 11, 2013 and states “I have been tasked by my stress lead . . .” CX 27 at 1155. However, it then states, “In May 2014 Embraer in Brazil . . .” *Id.* The next paragraph starts with “Thursday 1/15/14.” *Id.* The next page continues, “On 1/27/14, and on 2/6/14 in writing . . . I’ve escalated my findings,” and

frame design” that was also used on Boeing planes. TR at 603-604. The design is “a pretty common feature that most every aircraft that’s made out of aluminum or uses longitudinal stringers will have at some place on the aircraft” TR at 910 (Mr. Whittaker’s testimony). Complainant believed that there was a significant load that has to pass across the mouse hole area, and he consulted a book called *Practical Stress Analysis for Design Engineers* by Professor Jean-Claude Flabel. TR at 94-95; RX 1 at 93-94; CX 27 at 01155. The Flabel book called this mouse hole design “unacceptable.”²³ TR at 94-95. *Id.* at 95. At the hearing, Complainant conceded that the FAA had approved the E-1 design, but noted that people make mistakes. TR at 99, 403; RX 1 at 98. He acknowledged that the FAA is responsible for interpreting their regulations, but felt that their interpretation is not necessarily correct and if he feels there is a reason to disagree, he will. TR at 404. Complainant has some basic knowledge of air worthiness directives, but is not familiar with aircraft maintenance and is not an expert in the area of “crack growth” or damage tolerance. RX 1 at 101-102.

16. Complainant sketched an alternate design according to Professor Flabel’s book and showed it to Mr. Hoffmann on October 11, 2013. TR at 96, 602; *see* RX 2G. Complainant told Mr. Hoffmann that the E-1 design was inadequate based on the Flabel drawing.²⁴ TR at 602. Mr. Hoffmann responded that the aircraft had been flying in service, certified by the FAA and the ANAC (Brazil’s version of the FAA), that every other frame on the aircraft is the same, and he explained why he thought the design was better than Complainant’s suggested alternative design.²⁵ *Id.* at 602-603, 738. For example, the Flabel design only had six stringers, while the E-2 had over 60. The E-2 design also had a “mid-court,” which would alleviate the high stresses on the skin; the

then it states, “Later in 2014 several times I inquired” *Id.* at 1156. Later, Complainant writes, “At this point I’d like to present the following facts” and launches into an explanation of the APU/Tailcone report. *Id.* at 1159. Further, some of the statements are clearly self-serving and strike me as attempts to cast events in a light more favorable to Complainant. For example, regarding the mouse hole design, Complainant states “I drew a sketch of this detail, and then went to show my concerns, definitely safety concerns, to my supervisor Hoffmann.” *Id.* at 1155. Complainant states regarding the MAZ report: “Base [sic] on such direction, in good faith, for good of the company, I have inspected this Embraer joint document, and found 16 discrepancies, errors, some of them in my opinion could result in a very serious problem, a Safety Issue.” *Id.* (emphasis in original). After considering this document on the whole, I find it is not trustworthy and do not believe that all of the writings are truly contemporaneous of the events discussed. Therefore, I give CX 27 minimal weight as evidence of Complainant’s contemporaneous impressions.

²³ Complainant claimed he developed a “legitimate concern” about skin cracking. TR at 94-95. According to Complainant, skin cracking could lead to disintegration of the fuselage in flight. *Id.* at 95. Complainant claimed this happened to an “Aloha” flight in 1988, “when there was a failure of one fastener and the aircraft disintegrated in the air.” *Id.* Complainant explained at his deposition that a fastener failed, which resulted in the skin peeling off. RX 1 at 102. A flight attendant was ejected from the aircraft but the aircraft managed to land. *Id.* at 102. There is no evidence in the record about this incident or what caused it apart from Complainant’s testimony. Further, Mr. Whittaker denied that skin cracking can cause the disintegration of a fuselage in flight, and testified that “all skins have cracks.” CX 192 at 131; TR at 745. I do not find sufficient evidence in the record to support the claim that skin cracking can cause the disintegration of the fuselage in flight.

²⁴ Complainant testified that he discussed his concerns about the “stress by the fasteners, the abrupt change of the stiffness” with Mr. Hoffmann. TR at 96. As discussed below, I credit Mr. Hoffmann’s account of this discussion rather than Complainant’s.

²⁵ Complainant claimed that Mr. Hoffmann responded that this was not Complainant’s task, and that the E-1 jets did not have any problems. TR at 97. In his deposition, Complainant first asserted he had been reprimanded and told to “shut up” when he showed Mr. Hoffmann the design, but admitted that he was not actually reprimanded or told to shut up, blaming the statement on his English skills. RX 1 at 95-96.

Flabel design had no mid-court. *Id.* at 738. Complainant only presented his design as a better design, but did not provide analysis, numbers, loads, or other information, only a sketch and a picture by Flabel, and when Mr. Hoffmann explained his view back, he never heard about it again. *Id.* at 607, 654, 728-729, 732. Mr. Hoffmann denied that Complainant had said that he thought the design could cause skin cracking. *Id.* at 724. Complainant said there would be increased stresses in the skin, but did not mention a fatigue issue. *Id.* at 738. Increased stresses could cause “several things,” such as buckling, load distribution, or skin cracking; these issues “could be” potential safety issues. *Id.* at 745-746. But, the safety concerns regarding the mouse hole cut out design are no greater than any other safety concerns—they need to be analyzed to make sure the loads are proper and the fatigue team would look at it to make sure there were no fatigue issues. *Id.* at 606.

17. Mr. Hoffmann’s response did not alter Complainant’s view.²⁶ *Id.* at 99, 404. Complainant located papers by Dr. Hart-Smith, who holds a specialist position with Boeing, that warned that there was a potential for skin cracking around the mouse hole due to the tangential loads in the skin. *Id.* at 99. He also pinned the sketch he made to his cubicle as proof that he had a concern. *Id.* at 100, 405. Complainant sent his concerns to peers who did not work for Respondent, but did not say anything to Mr. Whittaker, other supervisors, the FAA, or the separate group working for Respondent that does fatigue analysis on the skins and reviews potential cracking issues. TR at 404, 406; CX 17²⁷ at 137, 148-149. In an email to some of his engineering friends sent on October 13, 2013, Complainant pointed out Embraer’s current design, Flabel’s commentary, and noted that while he “[didn’t] know that this questionable detail is related,” he heard “Embraer has some skin fatigue problems.” CX 17 at 144, 148. Richard Hurwitz²⁸ responded to the email sent by Complainant, “Assuming the skin and the outer cap are fastener [sic] together, I think the fatigue problem would occur at the last fastener(s) adjacent to the stringer.” *Id.* at 148. Complainant responded that “the fatigue problem MAY occur at the last fastener adjacent to stringer. Depending on stress level it DOESN’T have to occur, but it might. In my opinion – and as always I reserve the right to be wrong – what Embraer has, it is a BAD joint.” CX 17 at 148. Complainant did not mention skin cracking.

18. Complainant remembered that around mid-May of 2014, Mr. Hoffmann announced during the group meeting that there were reports of cracks in the mouse hole area on the E-1 jets. TR at 100. On May 18, 2014, Complainant emailed some friends that Embraer had reported skin cracking in the joint. CX 18 at 150. He wrote that he had warned Mr. Hoffmann that the design did not look good to him, and that it “may result in fatigue problem, skin cracking,” but that Mr. Hoffmann had “rebuffed” his concerns because it was not a problem on the existing Embraer

²⁶ In his deposition, Complainant described how he perceived Mr. Hoffmann’s behavior toward him changed after his complaints. After he “made the allegation of the safety concerns of the skin cracking,” while Mr. Hoffmann would laugh and joke with others, he was “just strictly professional” with Complainant. RX 1 at 78.

²⁷ CX 17 is titled “Notes of Cerny and Drawing of Cerny re Skin Cracking Issues.” Portions of the exhibit are emails to his friends, drawings of the part in question, information from Flabel’s book, and emails. Other portions consist of commentary from Complainant about what his concerns were, but do not appear to be written contemporaneously. *See, e.g.*, CX 17 at 133-134, 138-139. I give this commentary little weight as it is unclear when it was written and for what purpose. CX 72 also contains some of the same drawings and emails, as well as the “checklist” related to the APU/Tailcone report, discussed below. CX 72 was not discussed at the hearing or in the closing briefs.

²⁸ Complainant asserted Mr. Hurwitz is an aircraft stress engineer with over 45 years of experience, CX 17 at 148, but there is no confirmation of his qualifications in the record.

fleet.²⁹ *Id.* (emphasis in original). He wrote that he drew a picture of his “better” design and wrote “potential skin cracking” next to it. *Id.* The drawing in the record is difficult to read, but appears to say “Potential fatigue problem” and underneath that, “cracking.” *See* RX 2G. In his May 18, 2014 email Complainant asserted that Embraer was now reporting skin cracking in this joint. CX 17 at 150. He stated that he underlined the date of his sketch and his indication of skin cracking and wrote to his friends, “Let the chickens come home to roost.” *Id.*

19. The E-1 had a skin cracking issue early in the program, years before the E-2 project started, and it was fixed by putting an external “doubler” on the E-1 aircraft that was undergoing testing, with a change in future designs to add an internal doubler. TR at 607-608, 611, 614-615, 910-911; CX 187 at 114-115; CX 192 at 133-135 (Mr. Hoffmann and Mr. Whittaker testimony); *see also* TR at 1006-1009 (Mr. Echema’s testimony). The E-1 had not had problems since and no new skin cracking appeared while Respondent was involved with the E-2 program. TR at 611, 911. Mr. Hoffmann became aware of the prior skin cracking issue in spring of 2014. *Id.* at 616. During their analysis, they had noticed the internal doublers, and Embraer told them that the skin cracking had been a problem previously and that was why the internal doublers were included in the design. *Id.* at 617-618, 746. Embraer explained that the issue was due to the vertical tail attachment “dumping so much loading locally and just fatiguing it.” *Id.* at 746. Mr. Hoffmann was not aware of the issue when Complainant came to him about the mouse hole design in the fall of 2013. *Id.* at 743.

20. Doublers reinforce skins and are very common, and Mr. Whittaker noted that “[m]ost commercial aircraft made out of aluminum probably have a doubler [in this location].” TR at 609, 909. Respondent’s engineers assessed the internal doubler solution and found it “completely adequate.” *Id.* at 612-613. Aircraft are also built to withstand skin cracking, although generally they try to “design around it.” *Id.* at 611. Mr. Hoffmann had never heard of anybody saying that the mouse hole design was unsafe prior to Complainant’s assertions. *Id.* at 613. Mr. Hoffmann admitted that if Complainant’s proposal had been accepted, there would have been no need for internal doublers, but that there “would have been extensive need for a bunch of other rebuild” and would have cost more money because it was “unnecessary.” *Id.* at 747. He noted that “[a]ll skins have cracks,” and that the fatigue analysis is used to “figure out how bad is the skin cracking going to be and when does it start.” *Id.* at 745. Mr. Hoffmann tasked Esteban Hernandez with doing the frame analysis and Derrick Martell with skin checking, and asked the fatigue group to do further fatigue analysis. *Id.* at 746. Fatigue analysis is distinct from any skin cracking issue. *Id.* at 955-956.

21. Complainant believed that Embraer did not have a modification to the original design that strengthened the mouse hole cutout. RX 1 at 96. Complainant understood from fellow stress engineer Jude Echema that stress engineers and a design lead began to work on this area sometime around June 2014. TR at 100-102; CX 27 at 1194. Based on conversations with Mr. Echema, Complainant believed that Embraer put on an external patch and that Respondent modified the frame to insert the internal doubler. RX 1 at 96-97. Complainant was surprised that no one came to him and asked for his opinion on the issue. *Id.* at 98.

22. Respondent did not change the design to add internal doublers—the doublers were already a part of the design. TR at 747; *see also* TR at 954-955. No adjustments were made to the design and no one was tasked with working on a skin cracking issue. TR at 955, 958-959; CX 192 at

²⁹ Complainant’s email also expressed disdain for his “young stress lead” who he referred to as “about 30 yrs, a big mouthie.” CX 18 at 150.

136-137 (Mr. Whittaker's testimony); *see also* CX 187 at 118-119 (Mr. Hoffmann did not task Kathy O'Rourke with making changes in the design because of skin cracking); CX 191 at 24-25. Mr. Whittaker described Complainant's belief in an "emerging" skin cracking issue as a "misunderstanding." CX 191 at 24.

23. Jude Echema works as an aerostructures engineer for a company called Cyient that has had him contracted at Triumph since October 2013. TR at 993-994. He is a fatigue and damage tolerance analyst and was part of the stress analysis group. *Id.* at 994. Fatigue and damage tolerance is analyzing the aircraft structure for the duration of its life; stress analysts analyze the structure for its "maximum once-in-a-lifetime load." *Id.* at 995. Mr. Echema did not know of any safety issues discovered regarding the E-1 during his work with the aft fuselage group. TR at 1005. To test for whether or not the skin will develop crack, the aircraft is tested on the ground to simulate all the loads that the aircraft undergoes. *Id.* at 1005-1008. Mr. Echema explained that testing for skin cracking "simulat[es] all sorts of flights and to make sure this goes through" and that skin cracking is "not a safety issue, as such." *Id.* at 1009. In response to a question about whether it would be a safety issue if the skin cracking were not fixed, Mr. Echema replied that "[t]here's no way it can go through without being fixed" and it would never be "left unattended." *Id.* Mr. Echema reviewed the reports written in 2001 or 2002 for the E-1 when he began his work on the E-2 which showed that tests showed skin cracking on the E-1 that Embraer repaired. *Id.* at 1006-1007, 1010. Embraer fixed the cracking on the E-1 by adding doublers. *Id.* at 1010. For his work on the E-2, Mr. Echema analyzed the structure to make sure it was as good as or better than the E-1. *Id.* at 1011. He was not told specifically to look at the skin cracking issue that happened on the E-1, but skin cracking in general was part of his job. *Id.*

MAZ Report/Joint Allowables Issue

24. Around mid-January 2014, Mr. Whittaker forwarded an email regarding joint strength allowables, stating that the information he was forwarding should be used as a reference and to check that no required information was missing. TR at 112-113, 906, 959-960; CX 15 at 92; CX 47; CX 192 at 119-120. The information forwarded was the data in Embraer Report No. 196MAZ001 ("the MAZ report") which detailed the allowed load capacities for fasteners and joints used in the E-2 program. CX 16 at 96-130; RX 3; TR at 115. Mr. Mostrog forwarded the email to the team and said it was for use with analysis and sizing, and Mr. Hoffmann forwarded the email and asked the team to review the fasteners and let them know if any fastener allowables were missing. CX 47 at 2535; CX 15 at 92. Mr. Hoffmann also suggested to Mr. Whittaker that Complainant review the MAZ report since he was available. TR at 657.

25. Complainant explained that it is important that joint strength allowables are correct because the joints and fasteners are one of the weakest parts of the aircraft structure and are therefore one of the most critical items because they need to hold up under the stress of the load. TR at 114-115. Complainant first followed Mr. Hoffman's instructions and found two or three fastener allowables missing, but then noticed that the reference tables in the MAZ report contained some discrepancies, specifically errors in tables referencing various data. TR at 117-118; RX 1 at 104; CX 16 at 94-95. For example, Table 5.1 in the MAZ report directed engineers calculating joint strength to "Clad 2024-T3/T351" in Table 6.3.1; but, Table 6.3.1 showed "Clad 7075-T6/T651." CX 16 at 94. Complainant explained at the hearing that using the wrong allowable data could create a "negative margin of safety in the joint," which would result in a failure of the joint. TR at 118-119, 128-129; RX 1 at 104-105, 109.

26. As a stress engineer, Mr. Hoffmann would always double- or triple-check the information he uses; he did not believe a “reasonable” engineer would use data from a table without double-checking to make sure he or she is looking at the correct part. TR at 660, 753. Mr. Mostrog agreed that a reasonable stress engineer would not rely on a fastener allowable data in a table without looking at the title to make sure they are looking at the right fastener. *Id.* at 848. Mr. Hoffmann admitted that if an engineer used the wrong value it could be a safety issue, as did Mr. Mostrog. TR at 753, 840; CX 190 at 84. Mr. Whittaker also agreed that, “in theory,” if they used an incorrect allowable in a joint-critical component, it “would obviously fail.” CX 192 at 126. Mr. Whittaker termed the discrepancies in the reference tables that Complainant found as “clerical in nature” and believed that a reasonable engineer would have looked at the table which “would have told you exactly which fastener would have been there.” TR at 908-909.

27. Complainant notified Mr. Hoffmann of three of these discrepancies via email on January 27, 2014, and of an additional 13 discrepancies on February 6, 2014. CX 16 at 94-95; TR at 119. Complainant did not mention any safety concerns or possible violation of regulations regarding these discrepancies in his email, but asserted at the hearing that safety concerns are implied. TR at 417, 494-495; CX 27 at 1157; *see* CX 16 at 94-95. Complainant never indicated any safety concerns about the MAZ report to Mr. Hoffmann.³⁰ CX 187 at 124, 129; TR at 669, 754.

28. Mr. Hoffmann emailed Embraer on February 6, 2014, to alert them to three of the discrepancies; Complainant was copied on the email. CX 116 at 98; RX 2H; TR at 658; RX 1 at 106. Mr. Hoffmann sent a second email with the further discrepancies on February 7. RX 2I. Mr. Hoffmann was not concerned about safety but thought the report should be updated so that the record would be clear. TR at 669. Complainant checked with Mr. Hoffmann periodically to see if the discrepancies were corrected, and mentioned the discrepancies in a group meeting at least once. *Id.* at 126, 534-535, 669. Embraer eventually updated the MAZ report with a corrected table of contents, and Mr. Hoffmann told the group it had been updated.³¹ TR at 670, 754; *see also* TR at 960; RX 4.

29. At the time that Complainant noted the discrepancies “[t]here was really no analysis being done . . . [i]t was all tool-building.” TR at 756. The MAZ report was not used when they got to the “d-loop” stage because they had created an internal fasteners allowable database by that point. *Id.* at 664. The fastener allowable database was created because Mr. Whittaker and Mr. Hoffmann

³⁰ In his deposition, Complainant asserted he told Mr. Hoffmann the discrepancies “can be some big, big safety issues.” RX 1 at 104. Complainant felt that Mr. Hoffmann was “annoyed” he was bringing up the issue and he told Complainant he informed Embraer and that they had different priorities. TR at 127. Mr. Hoffmann denied that Complainant indicated safety concerns about the MAZ report, denied that he criticized Complainant for asking about the corrections in a meeting, and did not recall saying that Embraer had other priorities. CX 187 at 124, 129; TR at 669, 754. I do not find Complainant’s statement that he told Mr. Hoffmann the discrepancies could present a “some big, big safety issues” to be credible.

³¹ In his “diary” Complainant wrote “to my knowledge this issue was never addressed by Embraer.” CX 27 at 1176. It is not clear when Complainant wrote this note. Complainant also wrote, “I cautioned [Mr. Hoffmann] that if incorrect fastener strength values are used, this can one day result in a tragedy. Mr. Hoffmann rebuffed my concerns, that I should stop to worry about it. [sic]” *Id.* Mr. Hoffmann denied that this ever happened. CX 187 at 131. Because it was not clear when the entry was written, and it could have been written in anticipation of this litigation, I give the entry little weight.

wanted a standard table of bearing allowables so that everyone was using the same numbers. *Id.* at 662-663, 907. The internal database was also created partially because of the problems with the MAZ report pointed out by Complainant. *Id.* at 756. Mr. Hoffmann described how putting together the database would require gathering data from a variety of sources and creating a database in Excel. *Id.* at 662-663. Around mid-February 2014, he offered the job to Complainant since Complainant had been the one to find the errors in the MAZ report, but when he asked Complainant to do it, Complainant told Mr. Hoffmann he did not know how to use Excel and refused to do the project.³² *Id.* at 663-664. Frustrated with Complainant, Mr. Hoffmann ended up creating the database himself. *Id.* at 664. Mr. Hoffmann felt he could not trust Complainant because he knew Complainant had used Excel before, “so it’s either he doesn’t know how to use Excel or he just doesn’t want to do the work.”³³ *Id.* at 665. The internal fastener allowable database was on the server and Mr. Hoffmann notified everyone to use the table. *Id.* at 667. Once the table was created, no engineer should have been using the MAZ report. *Id.* at 668.

30. Complainant first testified that Respondent did not develop its own internal reference table, TR at 285, 406, but later admitted there was an internal fastener table that Mr. Hoffmann assigned to him “probably” around October or November of 2014.³⁴ TR at 1014-1015. Complainant denied that he refused to work on the table and asserted he did work on the table by creating a set of spreadsheets from a reference book. *Id.* at 1015-1016. He also estimated that 80 to 90 percent of the final internal reference table was his work. *Id.* at 1016.

31. In December 2014, Complainant met with Mr. Hoffmann about work he had submitted for the 6.2 allowables.³⁵ TR at 127. Mr. Whittaker wanted “the bearing allowable in the load information,” but Complainant contended that there were a “million possibilities” for this because there are unlimited possible thicknesses and thus unlimited number of loads. TR at 127; RX 1 at 79. At the morning meeting, Complainant asked how he could “tabulate some million possibilities,” and alleged that Mr. Hoffman “became very angry,” said he was asking the same question he had already asked, and told Complainant he would take over and that Complainant should prepare the APU and Tailcone report. TR at 127-128. Complainant alleged that his concerns during this December 2014 meeting related to his concerns about the joint allowables, but did not sufficiently explain how. *See id.* at 128. He also said that this incident was related to the internal database that he was tasked with.³⁶ *Id.* at 1016.

32. On December 9, 2014, Complainant had a conversation with Mr. Martell where he mentioned the MMPDS, which is a commercial collection of joint strengths, materials, and fasteners,

³² Mr. Hoffmann’s testimony at his deposition was contradictory: he asserted he asked Complainant to create a spreadsheet of the joint allowables, and that in performing this task, Complainant found the errors. CX 187 at 124-125. However, I find this contradiction to be minor.

³³ Complainant provided evidence he used Excel in his work. TR at 259-260; *e.g.*, CX 63, 76, 78, 81, 92, 93.

³⁴ Mr. Hoffmann asserted the internal spreadsheet had been completed by the d-loop phase, which he contended started around March 2014 and lasted until March 2016. TR at 571, 664.

³⁵ CX 94 may relate to this work, but once again, the exhibit was not discussed at the hearing or in the parties’ briefs.

³⁶ Complainant never made clear or explained how this December 2014 task about the 6.2 allowables is connected to the MAZ report/joint allowables issue.

and noted that the joint allowables in this document were removed because the information was more than eight years old.³⁷ TR at 118, 129; RX 1 at 79. Complainant wondered to Mr. Martell what joint allowables engineers should use. *Id.* Complainant alleged this was related to the same safety concerns regarding joint allowables, but again did not explain how.³⁸ TR at 129-130. Mr. Hoffmann overheard the conversation and, according to Complainant, “shouted” at him that he “should not worry about this and that I should do my job and leave these allowables alone and stop [bugging] Derrick.” *Id.* at 129.

*Circumferential Joint Stress Analysis/Inter-Rivet Buckling Issue*³⁹

33. In April of 2014, Mr. Hoffman and Mr. Mostrog asked Complainant to prepare a stress analysis for the E-2 fuselage circumferential splice joint, and gave him the E-1 report to rely on in preparing his report. TR at 132; CX 67, 68. Complainant reviewed the structural sizing guidelines relating to inter-ribet buckling, and he was concerned about the requirement to have a 15 percent minimum margin of safety for inter-ribet buckling. TR at 138-139. Complainant believed that the E-1 report did not calculate inter-ribet buckling properly based on his knowledge of Flabel, Respondent’s structures manual, and other resources. *Id.* at 139-140. Complainant believed Embraer did not understand inter-ribet buckling because “[i]nter-ribet buckling is not [a] structural fail[ure].” *Id.* at 426. Complainant explained his belief at the hearing that the 15 percent margin of safety would make the splice “tremendously heavy,” adding “extra unnecessary weight” and thus become a safety issue because if an aircraft is too heavy, it does not properly perform. *Id.* at 139. In an email sent to various individuals on April 3, 2015, the day after his termination, Complainant called the 15 percent margin of safety requirement “non-sense” since “there is no [sic] any MS in inter-ribet buckling! And if this Embraer requirement would be followed . . . then you have a tank!”⁴⁰ RX 28. Complainant also claimed at the hearing that the E-1 report showed the skin width as the same for everything around the perimeter of the frame, when the actual design for the E-1 and E-2 had four different stiffnesses. TR at 140. Complainant asserted this could lead to a joint in the splice being overloaded. *Id.*

34. Complainant raised the issue with Embraer’s writing of the margin of error in the inter-ribet buckling calculation with Mr. Hoffmann.⁴¹ TR at 672. Complainant believed he showed

³⁷ Complainant did not indicate what MMPDS stands for. At least part of the MMPDS is included in the record at CX 42, along with what appears to be the MAZ report. This exhibit was not explained at the hearing or in the closing briefs.

³⁸ In his “diary,” Complainant said he “questioned, if we wouldn’t have any joint allowable information like now we got from Embraer (yet questionable, I found 16 discrepancies or errors in it), how could we analyze such joints?” CX 27 at 1177.

³⁹ This instance of alleged protected activity was added later as part of an amendment to the complaint. Complainant moved to amend his complaint to add this instance of protected activity on December 16, 2016, which was granted on January 13, 2017. Order Granting Complainant’s Motion to Amend, 2016-AIR-00003 (Jan. 13, 2017).

⁴⁰ At the hearing, he asserted he was concerned that following the E-1 report would violate the FAR, specifically Section 25.601, which Complainant explained “says that all hazardous and unreliable details which are known to be unreliable and hazardous by experience are not allowed to be on the aircraft,” and Section 25.307, which is “proof of structure.” *Id.* at 139-140. Complainant never raised his concerns about having to add weight to the structure while he worked for Respondent. *Id.* at 683-684. The first time Mr. Hoffmann heard the concern about adding weight to the aircraft was at the hearing. *Id.* at 683.

⁴¹ Mr. Hoffmann remembered Complainant raised the inter-ribet buckling issue in December 2014, when he turned in his report, not in April 2014. TR at 686-687.

Mr. Hoffmann Flabel, the Boeing Design Manual, and Respondent's structural manual. TR at 140-141; *see* CX 64, 65. Mr. Hoffmann told him to speak to one of the engineers in the CFIII group, who Complainant claimed did not help, and then Complainant "mentioned" it again to Mr. Hoffmann, who told him to "do it yourself" using Flabel and Boeing. TR at 141. Complainant felt that Mr. Hoffmann "did not appreciate that I am raising this issue because on the E1, it was flying and everything was fine, and now I am finding some errors in it." *Id.* Mr. Hoffmann denied that Complainant asked to develop an alternative analysis to the E-1 report in accordance with a Boeing design manual and Flabel's practical stress analysis. *Id.* at 759. Regardless, Complainant did not follow Embraer's method. *Id.* at 676.

35. Mr. Hoffmann explained that a margin of safety is a failure of structure, meaning the underlying structure cannot take the load. TR at 672. Complainant was technically correct that inter rivet buckling is not a structural failure, but Mr. Hoffmann explained some customers "write margins to items that do buckle or do have fatigue issues," and that Embraer wanted a 15 percent margin of safety to ensure that there was no buckling at the inter-rivet buckling at the area of the joint where the two fuselage sections joined. *Id.* at 672, 674-675. In Mr. Hoffmann's view, Complainant did not seem to understand what Embraer wanted and Complainant did not raise an actual safety issue since Embraer "had a completely rational reason for having . . . that additional requirement on top of [Respondent's] normal safety margins." *Id.* at 675-676. Mr. Hoffmann did not have the opportunity to explain the issue to Complainant because Mr. Hoffmann "didn't really see the full issue until after [Complainant] was let go on his arguments for why we don't do this." *Id.* at 675.

36. In addition, Complainant's analysis was wrong: "[h]e was not doing inter-rivet buckling right" because he was not following Embraer's method, which was identical to the "Broome" analysis, which Mr. Hoffmann described as one of their "Bibles." TR at 676-677; *see also* TR at 684-686 (Mr. Hoffmann pointed out some of the errors in Complainant's analysis). In his back-up analysis, Complainant had a negative 99 percent margin; a reasonable stress analyst would interpret that as an error in the calculations. TR at 679. Mr. Hoffmann believed Complainant "just wrote off" the negative margin, and noted that Complainant failed to include the margin of safety for the inter-rivet buckling anywhere in the report. *Id.* at 680, 682-683. Embraer requested that a margin of safety be calculated, but Complainant stated in his report that "Skin inter-rivet buckling is not a structural failure and therefore nothing like inter-rivet buckling margin of safety," which Mr. Hoffmann characterized as Complainant saying he would not calculate a margin of safety. TR at 683; CX 62 at 1890. In sum, Complainant got an error and wrote it off in his report, instead of checking his geometry and methodology, which is not good engineering. TR at 684.

37. Mr. Hoffmann never discussed Complainant's concerns with Mr. Whittaker. *Id.* at 960. Complainant completed a report for the circumferential splice and provided it to Mr. Mostrog and Mr. Hoffmann around January 2015.⁴² TR at 141-143, 423-424, 677; *see* CX 62, 102. The loads

⁴² Complainant stated this happened in January 2014, but the report is dated January 22, 2015. TR at 143; CX 102. During his testimony, Complainant referred to CX 102. Mr. Hoffmann referred to CX 62. Both exhibits are reports related to the Aft Fuselage to CFIII Circumferential Splice and both are dated January 22, 2015, although the cover page of CX 62 says it is a "draft." Complainant claimed that CX 62 is the "final report which was attached to 1,097 first flight report." TR at 190-191. CX 63 is an extension of CX 62 – the "computational tools" in Excel which Complainant produced. TR at 191. CX 66 is a "proprietary and privileged computational tool" developed by Complainant regarding skin inter-rivet buckling.

he used were “pulled” by his colleague Derrick Martell at the direction of Mr. Hoffmann. TR at 421, 672. Derrick Martell “pulled all the geometry and all the loads for [Complainant]” that were used in the final formal report.⁴³ *Id.* at 801-802. Mr. Hoffmann probably said something similar to “good job” and “thank you” when Complainant turned in his report, but just for turning in the report because he had not yet reviewed it. TR at 688. After he reviewed the report, he found “issues” and errors, and he had Mr. Martell and Chris DeLeon fix the analysis.⁴⁴ *Id.* at 688-690.

APU/Tailcone Attachment

38. In November of 2013, Mr. Hoffmann told Complainant to start to develop the backup structures for the auxiliary power unit (“APU”) and tailcone attachment.⁴⁵ TR at 112. There are a number of fittings on the attachment, and Complainant remembered asking Mr. Hoffmann if he should address those, but according to Complainant, Mr. Hoffmann said no. *Id.* at 112. Mr. Hoffmann remembered telling Complainant that he should do the fittings and lug analysis. TR at 772; CX 187 at 121-122.

39. Complainant turned in a report⁴⁶ for the APU/Tailcone attachment in the beginning of July 2014. TR at 169. Mr. Mostrog asked him why the fitting analysis was not included, and Complainant said Mr. Hoffmann told him not to. TR at 169, 814; RX 1 at 73-74. Mr. Mostrog described the fittings as required information, and said he asked Complainant to incorporate the missing information because he had “specifically asked for it” in the activity log. TR at 814. Mr. Mostrog told Mr. Whittaker that the analysis had not been done due to some sort of miscommunication. TR at 815; CX 190 at 44-45. Mr. Mostrog described other issues with the report, such as the sizing being for past designs, not the E-2; he asked Complainant to go into CATIA and work with his designer to incorporate those changes. TR at 815; CX 190 at 41-42, 64-65. Complainant asked for training in CATIA, and Mr. Mostrog showed him how to get into CATIA and told him he could show him some basics, but that they did not train contractors.⁴⁷ TR at 815-816, 834; *see also* CX 59 at 2216 (Complainant requested training on “how to get through Enovia and CATIA rituals”).

40. Complainant completed the fittings analysis and sent it to Mr. Hoffmann, Mr. Mostrog, and Mr. Whittaker on July 11, 2014. TR at 172; CX 39. Complainant also prepared and submitted the DIR regarding the APU/tailcone attachment in the fall of 2014. TR at 174, 185; CX

⁴³ Complainant asserted he accessed CATIA and took snapshots of the pictures to use in the report. TR at 422-423.

⁴⁴ Complainant asserted that his report was provided to Embraer unchanged. TR at 143. Mr. Mostrog recalled at his deposition that Complainant prepared only a draft of the circumferential splice final report. CX 190 at 35. Mr. Hoffmann asserted that Complainant’s work was “partially incorporated” into the final report, but it was not incorporated unaltered. TR at 760. I find that the report was not submitted unaltered to Embraer, as discussed below regarding which exhibits represent the actual final first flight reports in the credibility section of this decision.

⁴⁵ Mr. Hoffmann referred to this as the “p-loop load analysis.” TR at 771.

⁴⁶ Complainant asserted this report was the stress notes; Mr. Mostrog contended it was the DIR. TR at 169, 813.

⁴⁷ Mr. Mostrog described a later time when he “had to walk [Complainant] through [CATIA] again to make sure that he was pulling the right stuff off of CATIA” TR at 817.

126. The DIR was accepted and, based on Complainant's understanding, the APU/tailcone attachment was released into the manufacturing phase. TR at 175.

41. On October 30, 2014, there was a directive from management to move from stress notes to the formal report phase. TR at 177; CX 128. Mr. Hoffman emailed the group the same day and noted that Complainant's notes on the APU/Tailcone attachment were "pretty solid" and a rough draft should not take very long. TR at 178; CX 129 at 8305.

42. Complainant submitted the draft of the final APU/Tailcone report in December 2014. TR at 186; RX 2U; CX 112, 115, 133. In early March 2015,⁴⁸ Mr. Hoffmann and another stress engineer contractor, Aron Olivera, reviewed the report and suggested changes. TR at 185, 527, 692; CX 187 at 162-164; *see* CX 145. Mr. Olivera's review was "a standard check" of the formulas, geometry, load, etc., and is part of Respondent's normal process. TR at 692. The peer review process was implemented for the report stage in order to have a fresh review of the analysis. *Id.* at 592-593. The two engineers then discuss the comments and try to come to an agreement; if they do not agree, Mr. Hoffmann or Mr. Mostrog would be consulted, and if there is still a disagreement, it would be discussed up the chain of command. *Id.* at 593. If there is a disagreement, the document will not be finalized until the disagreement is resolved. *Id.* at 595. The process is designed to facilitate discussion.⁴⁹ TR at 594. According to Mr. Mostrog, the peer review process was "a common practice." CX 190 at 37. Mr. Olivera told Mr. Hoffmann that the report needed a lot of work. TR at 694.

43. On March 6, 2015, Mr. Hoffmann gave Complainant a "heavily redlined version" of the drafted final report and asked him to incorporate the corrections.⁵⁰ TR at 184; *see* RX 5⁵¹; CX 74. Mr. Hoffmann told him there were formatting issues, that it was hard to follow, and that there were issues with the analyses, fasteners, and geometry that he should fix, and to address everything but ask if he had questions. TR at 700-701. There were several places in the marked-up report where Mr. Hoffmann and Mr. Olivera had question marks, but Complainant never talked to Mr. Hoffmann or Mr. Olivera. *Id.* at 701.

⁴⁸ Mr. Hoffmann was out of the office for about a month from late January to late February to take the Texas Bar exam. TR at 693.

⁴⁹ Complainant asserted that he was never aware of a peer review process on the E-2 program. TR at 1016. In his deposition, he first said he had heard of the peer review process "but it was not [his] duty." RX 1 at 116. He then said that he was not aware of types of reports apart from the APU/Tailcone report that went through the peer review process. *Id.* at 117-118. Complainant reviewed his peer's work in the Bombardier program. *Id.* at 118.

⁵⁰ Complainant remembered that he met with Mr. Hoffman regarding the APU/Tailcone report he had submitted. TR at 184. Mr. Hoffmann denied he met with Complainant, only that he gave him the report with the "comments." CX 187 at 163-165.

⁵¹ Respondent refers to RX 5 as Aron Olivera's red-lined version of the APU/Tailcone report, and RX 6 as Michael Hoffmann's red-lined version of the APU/Tailcone report. However during the hearing, Mr. Olivera testified that RX 5 contained Mr. Hoffmann's edits as well. RX 6 was not referred to during the hearing or in the parties' closing briefs. On the first page of RX 6 is written: "Reviewed: T. Mostrog 5/31/15." Without further information regarding this exhibit, it is unclear how it relates to the issues to be decided.

44. Mr. Olivera described Complainant's work as "below average" due to consistent "basic mistakes" such as geometry not matching the parts being analyzed, materials not being properly correlated, and analysis errors.⁵² TR at 522-523. This indicated to him that Complainant did not perform "thorough checks" or analyze the parts that he was supposed to analyze. *Id.* at 523. Mr. Olivera only reviewed the APU/Tailcone report, not any other work of Complainant's. *Id.* at 527-528. Mr. Olivera believed that Complainant did not have much CATIA experience because he "always needed help to get dimensions," and the report "does not have a CATIA data on it. [sic]" *Id.* at 529. Besides Complainant's report, Mr. Olivera had reported discrepancies or errors in other internal reports, which he described as "minor," and had never been reprimanded or disciplined for reporting discrepancies. *Id.* at 523-524. Sometimes there were disagreements between engineers, but usually these were resolved between the two individuals; he had never been treated negatively or seen anyone else treated negatively for having such disputes. *Id.* at 524-525. He also agreed that two reasonable stress engineers might disagree on what equations needed to be included, and that his equations had been corrected in the past. *Id.* at 553-554.

45. To Mr. Hoffmann, the report was disjointed, did not follow the standard order of sections, and the pictures Complainant used were of the E-1 structure from the E-1 report, not the E-2 structure that they were working on. TR at 694-695. The pictures should have been updated to the E-2 because things changed between the two. *Id.* at 696. Complainant also, at one point, showed a tailcone fitting but said it was an APU fitting. *Id.* at 698. This indicated to Mr. Hoffmann that Complainant did not bring up CATIA, and that he could not trust Complainant's report because he was not showing the right geometry. *Id.* A reasonably competent engineer would not make mistakes like this if they were pulling information from CATIA. *Id.* at 699. Mr. Hoffmann concluded that Complainant did not want to or did not know how to use tools like CATIA, and that "overall [he couldn't] trust him." *Id.* at 699-700.

46. Complainant understood that the redlining means "it is wrong and it has to be changed."⁵³ TR at 198, 286. He was "very surprised" to receive the marked-up document because until that point, everything had been accepted and he had never received a request for revisions like this. *Id.* at 198. Mr. Hoffmann agreed that prior to the APU/Tailcone report, he had never given comments back to Complainant that indicated a need for substantial revision. *Id.* at 775. Complainant would have preferred if Mr. Olivera talked to him about the changes, and he did not speak with Mr. Olivera about the suggested edits because it was too much to discuss, and because he felt that since they did not speak with him, he had to "answer it on the record" for his protection. TR at 289; RX 1 at 119-120, 123.

47. Complainant initially attempted to make the corrections, but then once he looked at the revisions he had "big concerns." TR at 198-199. Complainant explained at the hearing that "if

⁵² See TR at 537-552 for Mr. Olivera's explanation of various errors, including incorrect or superfluous equations, incorrect pictures, and unclear Excel tables.

⁵³ At the hearing, Complainant disagreed that he ultimately could decide what to include or not include in the formal report, stating that "when something is red, it has to be changed" and he was not in control of the document. TR at 286. At his deposition, Complainant conceded that as the author of the report he had the discretion as to whether to incorporate the suggestions or not. RX 1 at 126. In his written response to the comments, he repeatedly emphasized that there are different reasonable methods for arriving at a conclusion that the design is safe. See, e.g., RX 7 at 36, 47, 50, 58.

improper methods are used this is against the FAR 25.307, which says that only the methods which are used in structural analysis are only those which are known by experience to be reliable.” *Id.* at 199. Complainant wrote in an email after his termination that Mr. Olivera only found one legitimate error in the APU/Tailcone report, and that Mr. Olivera had made the corrections in bad faith to try to “nail [him].”⁵⁴ RX 28 at 3307; TR at 374-375.

48. Complainant spent about three weeks preparing a “checklist” that went through each item that was marked, and incorporated everything he believed to be “legitimate” and then explained the changes he did not make because they were “in . . . conflict with engineering science with the Triumph Structures Manual, with the basic mechanical engineering fundamentals.” TR at 199, 456; RX 1 at 120-122. In the introduction to the “checklist,” Complainant stated that engineering is not an exact science and that the key is to “obtain a PRACTICAL, SAFE, and in case of aircraft structure a LIGHTWEIGHT solution within REASONABLE and SOUND approximation.” CX 21 at 1274; RX 7 at 35-37⁵⁵; *see also* TR at 228-229. He explained that “The aircraft structure and its systems should be SAFE and as LIGHT as possible . . . and thus the analytical . . . techniques . . . legitimately leading to lightest structure should be applied . . .” CX 21 at 1275; RX 7 at 37. Regarding the structural joints, Complainant wrote, “the proper and complete bolt analysis (specifically in tension joints), even using two or more different approaches (which don’t have to produce exactly same results), for SAFETY of the aircraft should be fully warranted and appreciated by all.” *Id.* He concluded the introduction by stating he preferred that if someone disagreed with his work, that they come talk to him rather than “scribbling notes” and “exchanging emails.” *Id.* The checklist went through each of the comments on the APU/Tailcone report and indicated whether Complainant incorporated the changes or whether he disagreed with the changes, and why. Complainant turned in this checklist and the revision of the APU/Tailcone report on April 2, 2015, the day of his termination.⁵⁶ TR at 226, 705.

⁵⁴ *See also*, RX 12, Complainant’s email on November 3, 2016. Complainant emailed various individuals a copy of Mr. Hoffmann’s performance review and stated, in part:

And once I gave him back my comments on his “checkers corrections” of my work, within 3 hours I was fired. His checker’s corrections were nothing else than a[n] attempt to sabotage my work, but I said OK, let’s look at what Hoffmann wants from me. And in the process I issued a tracking document, I incorporated what was legitimate, but about 75% I could not incorporate because the request for change were in violation of Statics, Strength of materials, mech. engineering fundamentals, and Triumph Structures Manual. Once I gave these objections back to Hoffmann, certainly he ran to Whittaker – “Fire Bohunk!” And Whittaker and Gestapo man Mueller did.

RX 12 at 3283.

⁵⁵ CX 21 and RX 7 are the same document.

⁵⁶ It is unclear which exhibit represents the final version of the APU/Tailcone report. There are a number of contenders. Respondent asserts the “final version” of the APU/Tailcone report is included as RX 8. Complainant testified that CX 73 is the revised section where he incorporated what he could incorporate. TR at 227. CX 73 appears identical to RX 8. Complainant asserts that CX 101 is the “final First FCSR.” CX 101 differs in various ways from RX8 and CX 73. CX 101 appears significantly different from the other reports, with the exception of RX 6, which appears to be an earlier draft of CX 101 and contains the handwritten notation “Reviewed: T. Mostrog 5/31/15.” The only document with Complainant’s name on it is the red-marked version at RX 5. RX 6 and CX 101 have no name and no space for a name, while CX 73 and RX 8 both have a space for “prepared by” but no name. Given Mr. Hoffmann’s explanation that the final reports do not have analyst’s names on them, it makes sense that CX 101 is most likely the final first flight report for the APU/Tailcone, since RX 8 and CX 73 both have a space for “prepared by.” Regardless of

49. Mr. Hoffmann believed that if an analyst believed a comment, suggestion, or edit violated the FARs, or a safety or customer requirement, the analyst “has full right to object.” TR at 596. If an analyst did not think something satisfied the FAR, Mr. Hoffmann said they would discuss it to “make sure that everybody is on the same page and that we do satisfy the FAR’s because it’s a requirement by the customer.” *Id.*

50. On March 20, 2015, Complainant remembered Mr. Mostrog and Mr. Hoffmann stating that the group was on time with assignments and formal reports. TR at 200. He also remembered that Mr. Hoffmann said there were problems with the CFIII group and specifically with Mr. Behzadpour, which Complainant said heightened his concerns.⁵⁷ *Id.* at 200-201. Mr. Hoffmann remembered saying the CFIII group was behind on their formal reports, but not that Mr. Behzadpour was signing off on reports without checking them. TR at 785-786; CX 187 at 170-171. At a meeting on March 31, 2015, Complainant said he would be done with the APU/Tailcone revisions very soon and indicated that three other final reports were ready. TR at 202-203.

Other Work & Performance Issues

Specific Work

51. In March of 2014, Complainant was assigned to complete stress notes for the fuselage jack fitting, which he completed and submitted around May or June 2014, along with computational tools using Excel. TR at 143-145; *see* CX 77, 78. Mr. Hoffmann did not say anything to Complainant about the quality of the work. TR at 144, 147, 150. Mr. Mostrog recalled that he did not have any issues with the analysis that Complainant submitted, and only that it “went through a redesign and was reassigned later,” which was “sometimes” typical. TR at 838; CX 190 at 73. Mr. Hoffmann had another stress engineer, Kathy O’Rourke, review the jack fitting notes. TR at 763-764. Ms. O’Rourke found issues with the geometry and “realized there was a lot of work and issues between [Complainant] and his designer,” and Mr. Hoffmann reassigned the jack fitting formal report to Ms. O’Rourke to “smooth out whatever was going on between [Complainant] and his designer.” *Id.* at 763-764, 774. Issues with the geometry would not necessarily be noted in the review of the stress notes. *Id.* at 763.

52. Complainant believed Mr. Hoffmann told him to give the jack fitting notes to Ms. O’Rourke because she was assigned to work on longitudinal screen splices but she “would not know how to handle that” and therefore Complainant would be given the longitudinal screen splices, which was “much simpler,” and Ms. O’Rourke would develop his stress notes for the formal report on the jack fitting. TR at 146; RX 1 at 132; *see* CX 79.⁵⁸ Ms. O’Rourke completed the formal report which Complainant claimed contained mostly his work, with Ms. O’Rourke only “mov[ing] things around.” TR at 147-148; *see* CX 80, 106. After Ms. O’Rourke finished the final report, Mr.

which report actually represents the final first flight report, I once again credit Mr. Hoffmann, Mr. Mostrog, and Mr. Olivera that Complainant’s work had to be redone and was not incorporated unaltered in the final reports.

⁵⁷ Fariborz (“Fari”) Behzadpour was the stress lead for the CFIII portion of the fuselage. TR at 560.

⁵⁸ CX 79 is a narrative from Complainant regarding his recollection of events. I give this narrative minimal weight as it unclear when it was written and for what purpose.

Hoffmann sent an email to the group stating that it should be used as a model for other reports. TR at 149; CX 132 at 8332. Mr. Hoffmann denied that he took projects away from other engineers and gave them to Complainant. TR at 712. He never took a project away from Kathy O'Rourke to give to Complainant, and denied that she was not capable of working on the longitudinal splices. *Id.* at 712, 764. He also denied that she only made minimal changes to Complainant's draft. CX 187 at 138-139; *see* CX 80, 106. Mr. Hoffmann described Ms. O'Rourke as "one of the best" and it "would not make sense" to take work away from her to give to Complainant. TR at 712-713; CX 187 at 162.

53. Complainant completed the DIR relating to longitudinal splices, which he submitted in June 2014. TR at 187-188; CX 124. He also completed the DIR for the circumferential splice to aft fuselage, which Complainant alleged was submitted unaltered with the first flight report. TR at 190-191. Mr. Mostrog reviewed the longitudinal and circumferential splice report and was satisfied "at the time," although in his deposition he stated the initial work "had issues with sizing not being correct." TR at 831; CX 190 at 31-32; *see* CX 137. Complainant believed that both DIRs were released into manufacturing. TR at 186-188. For the longitudinal splices, Complainant submitted a formal report, which he thought was accepted and became part of the final report.⁵⁹ TR at 188-189; CX 103, 142.

54. Complainant also completed the stress notes and the DIR for the center fuselage FTI electrical supports and he received no criticism from Mr. Hoffmann or Mr. Mostrog. TR at 186-189; CX 131, 144.⁶⁰ In his deposition, Mr. Mostrog described that in the initial assessment, Complainant's work on the FTI electrical trays "seemed okay." TR at 829; CX 190 at 26. But, Mr. Mostrog had to help Complainant pull the right information off CATIA for the FTI electrical trays and supports. TR at 817. Mr. Mostrog described the electrical trays as a "fairly simple structure." *Id.* at 848. Complainant thought the first flight report for the electrical trays would take two to three weeks. *Id.* at 224. Mr. Mostrog, Mr. Hoffmann, and Mr. Whittaker thought this estimate excessive, and that it should take anywhere from two to three days, to no more than a week. CX 187 at 178-179; CX 190 at 27-28; CX 192 at 188.

55. In addition, Complainant said he completed the DIR and the formal report for the vertical stabilizer,⁶¹ but Mr. Hoffmann said that Complainant did the preliminary stress notes for the vertical stabilizer, but not the formal report; Complainant denied that he did not finish the report. TR at 192-195, 719; CX 83; CX 104⁶²; CX 185; *see* CX 84. Mr. Hoffmann did not dispute that

⁵⁹ CX 75 is titled "Draft of Skin Longitudinal Splices FCSR," but also appears to contain information on the "Tailcone and intercostal installation fittings." This document was not explained at the hearing or in the briefs.

⁶⁰ CX 127 is an email dated September 23, 2014, regarding the CFIII FTI Electrical Tray. CX 130 is an email regarding the DIR for the trays. Neither exhibit was discussed at the hearing or in the closing briefs. CX 136 is an email regarding the "AFT/FTI MATS Releases." It is unclear if this email relates to the FTI electrical tray work, and the exhibit was also not discussed at the hearing or in the briefs.

⁶¹ It is unclear if the "vertical tail" is also the "vertical stabilizer." The parties appeared to use the terms interchangeably. *See, e.g.*, TR at 194, 719.

⁶² CX 82 appears to be the same as CX 104, with the exception that CX 82 is not dated. CX 82 was not discussed at the hearing or in the briefs. Complainant's table of contents regarding his exhibits describes CX 104 as the "Final FCSR." Mr. Hoffmann testified that formal reports do not have analysts' names because that is not the Embraer format. TR at 764. CX 104 has Complainant's name at the bottom. CX 184 is described in the table of contents as "Stress Notes

Complainant turned in “his version” of the vertical tail report, but Mr. Hoffmann stated Esteban Hernandez completed the formal report by “correct[ing] a bunch of geometry [in Complainant’s report], and then insert[ing] it into his frame section of his report.” TR at 719-720; CX 187 at 155-156. Mr. Hoffmann denied that Complainant’s work related to the vertical stabilizer, the circumferential splice, and the longitudinal splices were submitted and accepted without any changes. TR at 720, 760. Mr. Mostrog did not recall any concerns being expressed by other engineers regarding the “vertical tail report.” *Id.* at 832.

56. Complainant described the final “first flight report” as containing nine sections, three of which were completely authored by him and submitted unaltered to Embraer since it has his name on it and a date.⁶³ TR at 150-151. Regarding the other six sections, Complainant believed two sections contained his methodology and another section has at least 50 percent of his work. *Id.* at 150-151, 304. However, the aft fuselage stress report assignments show he was assigned to complete less than 10 percent of the 89 subsections. TR at 315; RX 24. Mr. Hoffmann described the first flight report as consisting of seven sections or 89 sections, depending on how you count them. TR at 769; *see* CX 123.⁶⁴ Mr. Hoffmann remembered that each of the first flight reports assigned to Complainant—the circumferential splice, the longitudinal splices, the APU/Tailcone, and the vertical stabilizer—had to be “rewritten and redone.”⁶⁵ CX 187 at 156-157. But, Mr. Hoffmann never indicated to Complainant that his work needed to be redone or that his work was inadequate. CX 187 at 161, 181; TR at 771.

General Performance

57. Complainant kept a list of assignments throughout the time he worked on the E-2 project, although the accuracy of the list is questionable.⁶⁶ *See, e.g.*, CX 20, CX 160, 160; TR at 83, 87-88. He did not get any indication from Mr. Hoffmann or Mr. Mostrog that his work was deficient with regard to his assignments. TR at 92-83, 89. Mr. Hoffmann described how he would reassign Complainant’s projects to other engineers, but explained that he did not specifically tell Complainant that he was reassigning work because it was wrong. CX 187 at 86-87; *see also* TR at 713. He explained engineers are “not really confrontational people” and that engineers understand

Vertical Stabilizer,” but the actual document is titled stress notes relating to the “Vertical Tail-to-Aft Fuselage Joint” along with stress notes on the “Rear Fuselage, Fin Front Spar-to-Body Joint, Crown Frame 1, Padup Shear Fitting.” Complainant briefly addressed this exhibit at the hearing, TR at 110-11, but its significance is unclear.

⁶³ On the second day of the hearing, Complainant claimed he fully prepared four sections, and then “in big part probably additional three.” TR at 303-304. He then reverted to saying he prepared “100 percent” of three sections. *Id.* at 304.

⁶⁴ CX 134 is identical to CX 123.

⁶⁵ Other than the revisions of the APU/Tailcone, Mr. Whittaker could not say that any of Complainant’s work was untimely. TR at 940. Mr. Whittaker was also aware that Complainant’s reports were rewritten before they were submitted to Embraer. *Id.* at 941.

⁶⁶ Mr. Hoffmann did not dispute that this list had items Complainant had “touched,” but disputed the “descriptors” Complainant used. CX 187 at 173-175. The list of assignments includes “certification stress reports,” and Mr. Mostrog commented that these were not certification stress reports. CX 190 at 89-90. Mr. Whittaker also stated that regarding a number of the listed assignments, he did not believe Complainant prepared the final drafts. CX 192 at 150-152. For example, Complainant asserted he prepared the entire 6.2 allowables, but Mr. Whittaker stated Mr. Hoffmann finished it; Complainant “may have completed it to his satisfaction, but not to ours.” CX 192 at 150-152.

how their performance is based on the number and complexity of their projects, and that Complainant “quickly started getting put on lower and lower grade assignments” CX 187 at 87-88. Mr. Hoffmann did not have any issue with Complainant’s abilities initially, but described how Complainant had general issues with pulling loads and geometry, and how he did not have confidence in Complainant’s ability to pull loads properly. TR at 602, 688, 706-707.

58. Complainant claimed he had worked with CATIA since 1997, but that employees working for Respondent accessed CATIA through Enovia, with which Complainant did not have experience. *Id.* at 179-180. However, coworkers pulled geometry and loads for Complainant. Mr. Hoffmann asked Mr. Martell to help Complainant pull geometry and loads. TR at 672; CX 187 at 76. Mr. Hoffmann described how Mr. Martell came to him “frustrated with constantly having to help [Complainant] out with geometry.” TR at 707; CX 187 at 76. Mr. Olivera observed that Complainant came to Mr. Martell for help and that Mr. Martell showed Complainant how to use CATIA “pretty often.” TR at 531-533; *see also* CX 190 at 68-69 (Mr. Mostrog said Complainant would get other engineers to pull loads for him); TR at 712 (Mr. Hoffmann described how Complainant was “constantly seeking help from Derrick on CATIA and Enovia” and listed a number of other tasks he struggled with). Mr. Mostrog remembered that Complainant “was having issues with both” Enovia and CATIA, that he “walked [Complainant] through” using CATIA, and once he showed him how, Complainant “showed that he was capable of doing it.” TR at 835-836; CX 190 at 53-54. Mr. Hoffmann also showed Complainant how to use various programs, but the next time he gave him an assignment, Complainant “would refuse to do it or refuse to use those tools.” CX 187 at 78. Complainant would ask for training in different computer programs “[a]lmost every time” Mr. Hoffmann gave him an assignment, but Respondent did not train contractors because they were expected to know how to use the computer tools.⁶⁷ CX 187 at 77-80.

59. Mr. Hoffmann showed him “a few times” how to use the computer program SLIM and Complainant “seemed to struggle with it,” but they “worked around it.” TR at 707. Complainant was familiar with the programs Patran and Nastran but used them “very seldom” at Respondent.⁶⁸ TR at 181-183; *see* CX 162, 163. Mr. Hoffmann did not believe that Complainant’s work showed use of Patran and Nastran. TR at 781; CX 187 at 79. In addition, while Complainant is familiar with Microsoft Excel and used Excel to prepare stress notes, DIRs, and formal reports,⁶⁹ TR at 181-182, Mr. Mostrog and Mr. Hoffmann felt his use of Excel was lacking. Mr. Mostrog described Complainant’s Excel spreadsheets as “cumbersome and confusing.” CX 190 at 69. Mr.

⁶⁷ Complainant testified he requested training in Enovia but did not receive any and ended up asking a coworker for assistance in using Enovia. TR at 180. He said his coworker showed him how to use it in thirty minutes, after which he alleged he did not have trouble accessing and using CATIA. TR at 180; *see* CX 51 at 2269-2273. CX 51 is Complainant’s “notebook” with what appear to be contemporaneous notes. *See also* CX 119. CX 60 is also a notebook of Complainant’s work, but from his time on the Bombardier program. CX 60 was admitted over Respondent’s objection that it was self-serving. After reviewing the document, I find it is only minimally relevant as it was not written during Complainant’s time on the Embraer project. Further, it does not provide much insight into his work, and no insight into how his work may have been evaluated by others.

⁶⁸ CX 49 shows an email to many of Respondent’s employees regarding Nastran licenses. Even though Complainant was included in this email, I do not find it persuasive on any issue before me.

⁶⁹ When he worked for Lockheed Martin, Complainant said he produced a computational routine that became a tool for many engineers, but said that after he produced this tool he was treated differently because of jealousy. TR at 390-91.

Hoffmann believed that Complainant did not know how to use Excel at the level contract stress engineers should. CX 187 at 80.

60. In early- to mid-2014, Mr. Hoffmann informed Mr. Whittaker that Complainant had trouble with computer-based analysis. TR at 900-901. They discussed what tasks Complainant was capable of doing and “pursued those tasks that were more in line with [Complainant’s] capabilities.” *Id.* at 902. Mr. Whittaker had several conversations with Mr. Hoffmann about what to assign to Complainant to get some productive work out of him since Complainant “struggled with using computer-based analysis tools . . .” *Id.* at 913. Mr. Whittaker was aware Complainant had trouble pulling data out of CATIA and at times had used incorrect data from the previous Aernnova report for his analysis. *Id.* at 914. Regarding what work they would assign to Complainant, Mr. Hoffmann and Mr. Mostrog “would struggle to find something that we could get productive work out of Complainant, because we kept finding geometry errors, showing that he’s not pulling CATIA, kept seeing old pictures in his reports and his stress notes and stuff like that . . .” and they started to lose trust in him, but still wanted to try to get productive work out of him. *Id.* at 710. Mr. Hoffmann knew Complainant was a “very smart individual” but believed that:

. . . he never wanted to work for us. He never wanted to work with us. He would come by and say this is the way you do it, and then walk away, but never give any proof, never do the follow-up work, never go pull the geometries, never show how things work. He was constantly hostile to assignments that we would try to assign him.

Id. at 711. Mr. Mostrog described problems with his job performance as issues “getting timely work from him, and issues with him being combative about reviews and not wanting to do the work; issues with his skill level; not being able to pull parts up in CATIA; not being able to pull loads; having to have others pull loads for him. . . .”⁷⁰ CX 190 at 48-49.

61. Complainant did not receive any criticism from Mr. Hoffmann or Mr. Mostrog about being slow or unproductive and he believed he finished all of his assignments timely. TR at 153, 196. Additionally, from the time he started until June 2014, no one had expressed any concern to him about the quality of his work.⁷¹ *Id.* at 168. Complainant believed no other stress engineers produced as many stress notes and formal reports as he did, and that he was “much faster” than the

⁷⁰ Complainant mentioned more than once in the record that Mr. Hoffmann was much younger than him, and he felt that Mr. Hoffmann did not treat him with the proper amount of respect. *See* CX 18 at 150; CX 27 at 1157. As Complainant wrote in his “diary,” “any disrespectful and abusive treatment at workplace is simply wrong and of no value.” CX 27 at 1157. However, it does not appear he took his own advice, as he was often disrespectful, dismissive, and unprofessional when discussing Mr. Hoffmann, Respondent, and Respondent’s employees. *See* CX 18 at 150, RX 2Q, RX 28, RX 33. For example, Complainant wrote an email about someone at work crawling out of a hole like a snake. RX 2Q. In his deposition, he asserted he could not remember who he was speaking about. RX 1 at 134-135. In an email the day after he was fired, he referred to Mr. Whittaker as “Rat,” Mr. Hoffmann as “Gopher,” and the “Iranian asshole who bullied me at Gulfstream in Savannah,” presumably Mr. Behzadpour, *see* TR at 164, RX 1 at 43-47, as “Snake.” RX 28. He “gave them these nicks, because they deserve those very descriptive nicks.” *Id.* He also complained about coworkers being “idiots.” RX 33.

⁷¹ In his annual review, Mr. Hoffmann stated he “handled older engineers’ egos,” referring to Complainant.⁷¹ TR at 800; CX 182 at 7635. Mr. Hoffmann explained that he “tr[ie]d to not upset [Complainant’s] sensibilities” when giving him comments, because Complainant would respond with comments suggesting that Mr. Hoffmann did not have enough experience. TR at 800-801.

allotted 5 hours per page.⁷² TR at 195-196; *see also* RX 20. However, Mr. Mostrog disputed that Complainant prepared the most first flight reports, and asserted that “almost everyone” produced more than Complainant. CX 190 at 91. Mr. Hoffmann said Complainant’s draft of the first flight report for the circumferential and longitudinal splice subsections was “generally” timely, although in his deposition he stated none of the first flight reports were submitted timely. TR at 765-766; CX 187 at 146-148; *see* TR at 768, CX 123. Mr. Hoffmann admitted that he could not think of any stress notes that Complainant turned in that were not fully approved but contended Complainant did not do as much work as many of the other stress engineers. TR at 719, 769; CX 187 at 148. While he may have been assigned a similar number of sections in the first flight report, Mr. Hoffmann noted that other engineers were assigned larger sections. TR at 770.

62. Complainant was offered overtime when it was available and Complainant asserted that overtime was not offered to every stress engineer. TR at 212-214, 268. However, the only person he knew of who did not work overtime was an employee, not a contractor, and he was not aware of any contractors that were not receiving overtime. TR at 303; *see generally*, RX 13, 14, 15, CX 14, 107, 150; *see also* CX 192 at 74-75. Mr. Hoffmann believed that stress engineers typically worked 50 hours per week. TR at 796; CX 187 at 46-47. Mr. Mostrog was not aware of Complainant ever being denied overtime due to a quality of work issue, but Mr. Hoffmann believed he told Complainant “a few times” that he could not work extra overtime because he did not feel like Complainant was being productive with his overtime usage. TR at 827; CX 187 at 52-55.

July 2014 Meeting with Mr. Whittaker

63. In July 2014, soon after the conversation about the missing fitting analysis in the APU/Tailcone report, Complainant met with Mr. Whittaker, which was the first time he had a meeting with him.⁷³ TR at 169. Mr. Hoffmann and Mr. Mostrog had complained to Mr. Whittaker that Complainant was unproductive and much slower in completing his work than others.⁷⁴ TR at 775; CX 187 at 83. They did not ask for Complainant’s termination, but asked for him to be removed from the group.⁷⁵ TR at 776-777. Mr. Whittaker told Mr. Hoffmann and Mr. Mostrog to try to find productive work for Complainant to do. TR at 777; CX 187 at 84. Mr. Whittaker did not want to terminate Complainant as long as he could get useful work out of him, which is why they

⁷² Mr. Hoffmann was not aware of a 5-hour-per-page standard. CX 187 at 152-153.

⁷³ Mr. Whittaker first had a problem with Complainant’s performance in late summer of 2013 when he noticed that Complainant was often absent on Friday afternoons after lunch. He learned Complainant “was working a flexible schedule that he set for himself which was outside the core hours that we were supposed to be working.” TR at 899. Mr. Whittaker sent Complainant an email that this was “unacceptable” without first getting approval. *Id.* at 899-900. Complainant recalled that Mr. Whittaker ignored him in social interactions, such as refusing to greet him or not acknowledging Complainant holding the door open for him. *Id.* at 78.

⁷⁴ Mr. Mostrog described discussing Complainant’s job performance “in passing” during status meetings with Mr. Whittaker. CX 190 at 48-51.

⁷⁵ When asked about the topics discussed, Mr. Whittaker said there was “general discussion” about Complainant disappearing from his desk, his lack of computer skills, and that it took him too long to complete a project, but that the quality of the work was not brought up at that point in time. TR at 953; *see also* CX 192 at 102-106. In his deposition, Mr. Hoffmann described the discussion as relating to not being able to get productive work from Complainant. CX 187 at 60, 83.

tried to find something he was productive at that was within his ability. TR at 924. Mr. Mostrog and Mr. Hoffmann did not discuss performance concerns with Complainant himself. TR at 778, 835; CX 187 at 85. Mr. Whittaker also had complaints from the stress lead from the CFIII group, Mr. Behzadpour, that Complainant had been spending too much time in that area talking about non-work-related issues. TR at 903; CX 192 at 94. There was “some sort of a verbal confrontation,” after which Mr. Whittaker felt like he needed to talk to Complainant.⁷⁶ TR at 903. Mr. Hoffmann also remembered Mr. Behzadpour complaining that Complainant was distracting his group. CX 187 at 61-63. He and Mr. Mostrog decided to bring up the issue generally in a group meeting, rather than address it directly with Complainant or “pick on anybody specifically.” *Id.* at 64-65.

64. During the meeting between Mr. Whittaker and Complainant, Mr. Whittaker told Complainant he had reports that Complainant was watching his iPad at work, talking on the phone, and talking too much to other people. TR at 170, 903. Complainant believed they also discussed the fact that he did not do the fittings and lock analysis on the APU. TR at 170; RX 1 at 73. Mr. Whittaker recalled that the only things he discussed was the amount of time Complainant was spending in the CFIII group area and watching sports on his iPad, not the fittings analysis. TR at 904-905; CX 192 at 95-97, 153.

65. Complainant admitted he talked to his wife on the phone, sometimes in the hallway or downstairs since he was speaking in Spanish and did not want to disturb others. TR at 170; RX 1 at 75. Complainant alleged at the hearing that other stress engineers talked on the phone to friends or family members, which Mr. Mostrog confirmed.⁷⁷ TR at 170, 836. Complainant admitted he had watched a sporting event on his iPad at work once. TR at 163. He alleged that other stress engineers watched sporting events on their phones or computers “[s]ometimes all the time.” *Id.* Mr. Hoffmann and Mr. Mostrog told the group to not watch sports, after which Complainant did not watch another sporting event at work.⁷⁸ *Id.* at 163-164, 171. Group emails had also been sent out reminding personnel not to use the internet during working hours and that they were expected to work “core hours” and not work from home. RX 2S, 2T.

66. According to Complainant, he would talk to Mikhail Shepsonoval, who worked a few cubicles away in the CFIII group, every couple of days for about 10 minutes, mostly in Russian. TR at 164-165. However, the record reflects that Complainant spoke with Mr. Shepsonoval more frequently. Complainant told Mr. Whittaker when he spoke to Mr. Shepsonoval, he was helping him with principles of mechanical engineering. TR at 171; RX 1 at 75. Mr. Hoffmann believed it was unlikely they were talking about work since the two worked on “completely different things,” and

⁷⁶ Mr. Behzadpour had the same complaints in approximately February 2015. TR at 913. Mr. Whittaker had personally observed Complainant in the CFIII area “on a time or two for what [he] thought was an extended period of time.” *Id.* at 946. Complainant would speak with Mikhail Shepsonoval, who was part of the CFIII group. *Id.* at 164-165, 777, 947. Mr. Whittaker did not speak with Mr. Shepsonoval because he was “at his desk where he should have been. It was [Complainant] that was out of place.” *Id.* at 947. Complainant previously “had issues” with Mr. Behzadpour, with whom Complainant had worked at another company. TR at 164; RX 1 at 43-47.

⁷⁷ Mr. Hoffmann also conceded that other people would look at their cell phones, but it was “kept to a minimum” and was “never to the extent of [Complainant]” CX 187 at 68.

⁷⁸ Mr. Hoffmann admitted that he told the group about general performance issues such as being away from one’s desk and watching iPads, but never directly spoke with Complainant. TR at 777-779. He observed other individuals socializing “but saw more with [Complainant],” though never pulled him aside. TR at 779.

any help they were providing each other should not have required talking for an extensive amount of time. TR at 710; CX 187 at 68-69. One day, Mr. Whittaker observed Complainant at Mr. Shepsonoval's desk for 30 or 40 minutes, which he thought was excessive. CX 192 at 168. Mr. Hoffmann or Mr. Mostrog never told Complainant that he was spending too much time talking with Mr. Shepsonoval, and Complainant said no coworkers complained to him that he was being disruptive. *Id.* at 165. Complainant claimed other people would sit in the work area and talk about non-work related events for 15 to 20 minutes at a time and the Mr. Mostrog and Mr. Hoffmann were aware of this, but never indicated other employees were being disruptive. *Id.* at 166-167.

67. At the July 2014 meeting, Complainant recalled telling Mr. Whittaker that he would get the fittings and lock analysis done as soon as possible. TR at 171; RX 1 at 76. Complainant alleged that Mr. Whittaker accepted all of his explanations and concluded the issue with the fittings and lock analysis was a misunderstanding. TR at 171; RX 1 at 73-76. Complainant also remembered that Mr. Whittaker "praised" him and repeated a couple of times that there were no concerns with his work. TR at 171-172; RX 1 at 74. Mr. Whittaker denied praising Complainant's performance; Mr. Whittaker had heard some feedback about Complainant's performance from Mr. Hoffmann and praising him would not have been something he would have done at that point in time.⁷⁹ TR at 904, 949; CX 192 at 153-154.

68. Complainant alleged that he did not frequently leave his work area to go to other parts of the building. TR at 167-168. But Mr. Hoffmann observed Complainant walking around outside and talking on his cell phone for more than 10 or 15 minutes at time. TR at 707-708; *see also* CX 190 at 52 (Mr. Mostrog recalled being in a meeting and seeing Complainant in the parking lot on his phone for the duration of the meeting, up to an hour or two). It was acceptable to take personal calls as long as it was not to an "excessive" degree. TR at 708. Mr. Hoffmann also reported that people who sat near Complainant were "annoyed" by the "excessive talking and arguing and theories and back stories and histories and stuff like that" that Complainant engaged in. TR at 708; *see also* CX 187 at 68-69. Mr. Hoffmann told the group during the morning meeting to keep this to a minimum, and he informed Mr. Whittaker, but never wrote down any of the complaints. TR at 708-709, 782; CX 187 at 85. Mr. Hoffmann was aware that Complainant was watching the World Cup on his iPad, and also noted that Complainant would walk around the office with his iPad in a brown accordion-type folder and would "disappear." TR at 709. It was also "always difficult to find [Complainant]." *Id.* at 709-7010. Mr. Whittaker recalled that Complainant was "gone from his desk for periods of time that were unaccounted for and questionable." CX 192 at 175. Mr. Whittaker conceded that it was not uncommon for people to have a "certain amount of non-work conversation in their workplace" but that it is "not something they should spend a significant amount of time doing." *Id.* at 948. Mr. Whittaker did not talk to Complainant about being away from his desk too much and he did not tell Mr. Hoffmann or Mr. Mostrog to talk to him about the issue, but while Complainant was there every day, he was not at his work space the whole day during core hours. *Id.* at 951. Other engineers were not gone from their desks as much as Complainant was. *Id.*

⁷⁹ After the meeting with Mr. Whittaker in July 2014, Complainant met with Kurt Kraus, who was a manager on the Bombardier program, to ask him if he could return to the Bombardier group. TR at 175. Complainant recalled that Mr. Kraus told him that he could not take anyone from Embraer and that there was not enough space in the Bombardier program, but that if he could, Complainant would be "number one." *Id.* at 176. Respondent objected to this testimony on hearsay grounds; I allowed it, noting that such an objection will go to the weight affording the testimony, not its admissibility. TR at 175-176. Formal rules of evidence do not apply in this proceeding. 29 C.F.R. § 1979.107(d).

Other Assessments of Complainant's Behavior and Work

69. Mr. Olivera did not make any complaints about Complainant, but noted he “used to talk a lot.” TR at 528.

70. Leslie Hlavicska, a stress analyst who worked under Complainant in the early 1990s, as well as later in his career around 2011, has “a very high degree of regard for [Complainant’s] technical competency.” *Id.* at 342, 344-345. Mr. Hlavicska described Complainant’s work as “quick and meticulous” and believed he was proficient in Excel. *Id.* at 345-347. Mr. Hlavicska worked for Respondent on the Bombardier program from August 17, 2015, to February 24, 2017, when his contract (also through JSG) was terminated. *Id.* at 348-349.

71. Landon Lay is an aeronautical engineer and stress analyst with a degree in mechanical engineering. TR at 977-978. He was in manufacturing engineering for about three and a half years and in stress analysis for 12 and a half years and currently works as a contractor for LMI Aerospace onsite at Triumph. *Id.* at 978. Mr. Lay worked with Complainant for a year in 2005; Complainant was his mentor and taught him about the stress analysis field. *Id.* at 978, 981. Mr. Lay remembered that in 2005 Complainant was “consistently working at his desk” and was not “roaming around the halls or anything or doing extracurricular activities.” *Id.* at 982. Based on his observations of Complainant in 2005, Mr. Lay believed that Complainant meets the skill level Triumph requires of its stress engineers. *Id.* at 982-983. Over the years, they have emailed “every once in a while” and get together “very few times,” and would discuss engineering matters. TR at 983; *see* RX 25, 30. Mr. Lay uses a spreadsheet “on and off” developed by Complainant that was developed in Excel and contains equations. TR at 984; *see* CX 164 at 3458. Mr. Lay described Complainant as an “above average” stress engineer in comparison with other stress engineers he has worked with. TR at 987-988.

72. Mr. Echema worked in the same group as Complainant and was in the cubical next to Complainant. TR at 994-995. He knew Complainant talked on the phone, but it did not bother him and he never saw Complainant watching sports at work. *Id.* at 1001. Mr. Echema did not believe there was an unusual amount of laughing or talking by employees generally. *Id.* at 1004-1005. Mr. Echema did not review Complainant’s work but thought he had the requisite skill to be a stress engineer. *Id.* at 1004.

Termination

73. Mr. Whittaker first spoke with Mr. Mueller around February of 2015 about Complainant’s performance issues. TR at 852, 915; CX 189 at 14-15. Mr. Mueller remembered the issues as excessive errors in Complainant’s analysis that required re-working and some issues using analysis tools like CATIA, Patran, Nastran, and Excel. TR at 852; CX 189 at 15. Mr. Mueller decided that they needed to monitor the situation and that because he was a contract engineer, if he did not have the necessary skills, they “would look at letting him go.” TR at 852-853; CX 189 at 15. In late March 2015, Mr. Mueller consulted with Mr. Whittaker again, who told him that Complainant had not improved, so they decided that once he finished his current task they would terminate him. TR at 853, 856 (decision to terminate was made “probably about the third week of March”); *see also* 915-916; CX 189 at 17-18; CX 192 at 181-182. Mr. Whittaker had not mentioned any of the complaints about Complainant beyond his technical performance, such as the excessive talking, and

both conversations were “fairly brief.”⁸⁰ TR at 853. At the time they decided to terminate Complainant, Mr. Mueller was not aware of any of his alleged protected activity. TR at 857-858; CX 189 at 19. Mr. Mueller did not ever review any of Complainant’s work and did not investigate any of Mr. Whittaker’s assertions, but relied on Mr. Whittaker, Mr. Hoffmann, and Mr. Mostrog. TR at 859-860; CX 189 at 18.

74. Complainant’s contract was renewed on March 31, 2015, two days before he was terminated.⁸¹ TR at 207; JX 1. In a letter dated March 10, 2015, Mr. Mueller requested the renewal through October 2015. TR at 866-867; CX 10 at 12; CX 189 at 23-24. Mr. Mueller explained that if they do not extend the contract, the contract engineer’s badge will not be valid, and that they normally extend contract engineers with the understanding they can be terminated at any time within that extended period. TR at 887. The letters requesting the extension state that the engineer is a “vital team member.” *See generally*, CX 10. This language is standard and used in every letter requesting the extension. TR at 887.

75. Mr. Whittaker called Mr. Hoffmann and Mr. Mostrog into his office “several weeks” before Complainant’s termination, in late February or early March, to ask what Complainant was working on and whether they could cover his work.⁸² TR at 818, 914, 961; CX 187 at 182-183; CX 192 at 167-168. Mr. Mostrog told him Complainant was working on the APU/Tailcone report and the FTI electrical tray, and that they could cover these reports without Complainant. TR at 818-819. Mr. Whittaker never told Complainant his employment was in jeopardy prior to his termination. TR at 970.

76. After Mr. Hoffmann reviewed the draft APU/Tailcone report in March 2015 and found the same issues they had been having with Complainant, he discussed the issues with Mr. Whittaker. TR at 713. Mr. Whittaker told him when Complainant was done incorporating changes with the report, Complainant would be terminated.⁸³ TR at 713-714; *see also* TR at 922. Mr. Whittaker was willing to let Complainant finish his work because he knew it would take some time to process the termination paperwork⁸⁴ and “he needed to have something for him to work on at that point.” TR at 964. At this point, the E-2 project had reached the stage where they were running out of assignments for Complainant. *Id.* at 714. Mr. Whittaker described this stage as

⁸⁰ Mr. Mueller did not speak with Mr. Hoffmann about Complainant until the morning of his termination, when he and Mr. Whittaker were trying to find Complainant to terminate him. TR at 863. At this time, Mr. Hoffmann mentioned the other non-engineering-related performance issues. *Id.*

⁸¹ Complainant’s contract was also renewed on March 10. TR at 867; CX 189 at 24. Mr. Mueller explained that the decision to terminate him had not been made at that point although he “was not doing quality work.” TR at 867, 886-887.

⁸² Mr. Whittaker remembered that this meeting “started” with a complaint from the CFIII lead. TR at 914; CX 192 at 172.

⁸³ Respondent’s answer to Complainant’s interrogatory on when the termination decision was made stated it was made on or about April 2, 2015. CX 26 at 5; TR at 963. Mr. Whittaker admitted that this was not accurate. CX 192 at 22. The interrogatory also states that “Greg Whittaker talked to Michael Hoffmann and Todd Mostrog prior to Cerny’s contract assignment being terminated.” CX 26 at 5.

⁸⁴ Mr. Mueller testified they could terminate someone in a matter of a couple of hours. TR at 855. This was not Mr. Whittaker’s understanding. TR at 965; *see also* CX 192 at 198.

“mostly writing reports” and he believed that writing reports “really wasn’t within [Complainant’s] ability” because his reports “were poorly organized, poorly written” and he had trouble pulling the CATIA dimensions to incorporate into the reports. *Id.* at 923. At this point, Mr. Hoffmann was not thinking about the mouse hole design issue since it had come up in 2013 and he “never heard about it again.” *Id.* at 714. He also was not thinking about the issues with the MAZ report. *Id.* Regarding the issue with inter-rivet buckling, Mr. Hoffmann had on his mind that Complainant “refused to do the methods that were safe.” *Id.* Mr. Whittaker was not aware Complainant had raised concerns about the mouse hole design, or about any issue with the circumferential splice and the inter-rivet buckling. *Id.* at 920-921. At the time he was terminated, he had “no thoughts [regarding the MAZ report] whatsoever, because that wasn’t really an issue to me as far as any concerns with the document.” *Id.* at 921. Mr. Whittaker also had not seen the revised APU/Tailcone report with the checklist. *Id.*

77. To terminate contract engineers, Respondent has a “contract labor termination report” that is filled out.⁸⁵ TR at 854. On Friday, March 27, 2015, Mr. Mueller sent the termination report via email to Mr. Whittaker for him to review for accuracy.⁸⁶ RX 9; JX 5; CX 23; TR at 854-855. The report stated that the termination was due to “[e]rrors in analysis and the amount of rework of items were excessive, and well above what is expected for an experienced contract engineer.” RX 9 at 6395; JX 5; CX 23. Mr. Mueller indicated Complainant would not be welcome on another assignment because “[t]he excessive rework was too much of a burden on the program schedule and Stress Lead that had to review the work.” *Id.* Mr. Whittaker responded via email the same day that the report “adequately state[d] the issues.”⁸⁷ RX 10; CX 23; TR at 918. The date set for Complainant’s termination would have been shortly after they finalized the form. *Id.* at 918-919.

78. On April 1, 2015, Mr. Whittaker sent Mr. Mueller an email asking for confirmation that the next day would be Complainant’s last day. CX 110 at 6399; *see also* CX 149. The same day, Mr. Mueller confirmed that he had processed the termination paperwork, and stated they needed to inform him by early afternoon but could let him finish out the day. *Id.* at 6398. Mr. Mueller asked Mr. Whittaker if he was comfortable with informing Complainant, but Mr. Whittaker said Complainant “can be somewhat argumentative,” so Mr. Mueller decided they would talk to Complainant together.⁸⁸ *Id.* Mr. Whittaker considered it “just a coincidence” that Complainant was fired within hours of turning in the APU/Tailcone report. TR at 970. Complainant was supposed to turn in the report that day, but they had decided to terminate him as of that day whether he turned it in or not. CX 192 at 193-194.

⁸⁵ *See also* CX 31, JSG “Employee Change Form” indicating Complainant’s assignment was completed on April 2, 2015.

⁸⁶ The start date and date of termination on this document is incorrect; the final version had the correct termination date and left the start date blank. TR at 871, 967-969; *compare* RX 9 at 6365, JX 5 *with* CX 24. The email from Mr. Mueller also did not have a signature block like other emails from Mr. Mueller. TR at 968; *compare* CX 110 *with* RX 9, JX 5. Mr. Mueller explained at his deposition that he uses previous forms and then edits them. CX 189 at 41-44.

⁸⁷ During the hearing, Mr. Whittaker stated the comments were “inadequate,” but this appears to be either an error in the transcription or a misstatement by Mr. Whittaker. *See* TR at 918.

⁸⁸ In this email, Mr. Whittaker and Mr. Mueller also discussed the transfer of another engineer, Max Silvia, from the BA program to the Embraer program. *See* CX 110. Mr. Silvia spoke Portuguese and helped replace another engineer who spoke Portuguese. TR at 716.

79. At the 9:00 a.m. meeting on April 2, 2015, Mr. Hoffmann asked Complainant about the revision of the APU/Tailcone report. TR at 223-224, 702. Complainant said he would give him the corrected report after the meeting, and Mr. Hoffmann told him to start working on the FTI electrical trays formal report. *Id.* at 224, 701. Mr. Hoffmann assigned Complainant the FTI electrical trays report, even though he “knew [Complainant] wasn’t going to be doing it” because Mr. Whittaker had told Mr. Hoffmann the day before that April 2 would be Complainant’s last day.⁸⁹ *Id.* at 702; *see also* TR at 819 (Mr. Whittaker told Mr. Mostrog and Mr. Hoffmann “that week” that Thursday would be Complainant’s final day).⁹⁰ Mr. Hoffmann had Complainant give his other work to other engineers (circumferential splice work to Derrick Martell and the vertical tail work to Esteban Hernandez), and gave him an assignment “because it would be weird for him to turn in an assignment and . . . not give him anything.” TR at 702-705; *see also* RX 1 at 141.

80. After the morning group meeting on April 2, Mr. Hoffmann went to another meeting at 9:30 a.m. and returned to his desk around 11:00 a.m., where he found the revised APU/Tailcone report and Complainant’s checklist sitting on his desk. TR at 705; CX 187 at 165-166, 177. Complainant remembered giving Mr. Hoffmann the redlined copy of the APU/Tailcone report, the revised version incorporating some changes, and the “checklist” with his explanation of what he felt he could not incorporate. TR at 226; RX 1 at 142; *see* CX 21, 73. Mr. Hoffmann remembered taking the documents to Mr. Whittaker, although Mr. Whittaker denied that Mr. Hoffmann gave him the checklist and the revisions. TR at 705, 791, 971-972; CX 187 at 186. Mr. Hoffmann did not review the documents, although he stated in his deposition that he told Mr. Mostrog that Complainant refused to incorporate the changes.⁹¹ TR at 790-791; CX 187 at 187.

81. After Complainant turned in the APU/Tailcone Report on April 2, he started to work on the FTI electrical tray report. TR at 229. Mr. Mueller came by Mr. Whittaker’s office mid to late morning to find Complainant and went to Complainant’s desk but he was not there.⁹² TR at 863, 919; CX 192 at 194-195. They came back later around 11:00 a.m., but Complainant still was not at his desk. TR at 919. Mr. Hoffmann checked with Mr. Whittaker around 11:00 a.m. “or so,” and learned from Mr. Whittaker that he could not find Complainant. TR at 705; CX 187 at 185-186.

⁸⁹ At his deposition, Mr. Hoffmann did not remember giving Complainant the FTI trays work on April 2 “because it was his last day.” CX 187 at 177-178. Complainant believed he was given the FTI trays work because other engineers were getting behind and he is “very fast.” RX 1 at 142.

⁹⁰ CX 148 is an email from Mr. Whittaker to the group about not working that holiday weekend. Complainant made no argument regarding this exhibit, but noted the table of contents that it “relates to issue of when decision to terminate Cerny actually occurred.” I do not find that the fact that this email included Complainant implicates when the decision to terminate him was made.

⁹¹ Mr. Mostrog did not review Complainant’s checklist. TR at 843; CX 190 at 57-60. He reviewed the APU/Tailcone report the week after Complainant was terminated. CX 190 at 60-61. Ultimately, the disputes regarding who reviewed the checklist and when are to non-material issues and do not directly affect the issues decided or the credibility of either party. As discussed later in the decision, however, when there are discrepancies on minor points, I gave more weight to Respondent’s witnesses over Complainant.

⁹² Complainant claims he was at his desk, except for 10 minute break or to go to bathroom, from 9:45 a.m. until lunch, which he took from 12:05 p.m. to 1:10 p.m. TR at 319; RX 1 at 142-143. Given the credible testimony regarding Complainant’s unpredictable presence at his desk, I find it more likely than not that he was not at his desk when Mr. Whittaker and Mr. Mueller went to find him, and he was likely gone for more than a 10 minute break.

Complainant “showed back up” at 1:00 p.m., at which point Mr. Whittaker informed Mr. Mueller and the two of them took Complainant into Mr. Mueller’s office.⁹³ TR at 919-920; CX 192 at 195.

82. Around 1:15 p.m., Mr. Mueller and Mr. Whittaker told him he was terminated. TR at 229-230. Complainant alleged Mr. Whittaker said his performance was unacceptable and he was not getting his money’s worth.⁹⁴ TR at 230; RX 1 at 143-144; RX 25; CX 22 at 702. Mr. Whittaker remembered that Mr. Mueller told Complainant it was his last day and he was let go for performance issues; he did not remember any statement about “not getting his money’s worth.” TR at 920, 970. They did not tell him that he was being terminated due to lack of work. *Id.* at 231. Complainant was “shocked” because he had “never heard any criticism like this.” *Id.* at 230-231. He asked if it was a misunderstanding or if he could be transferred back to the BA program, but Mr. Mueller said no, and that he needed to leave by 5:00 p.m.⁹⁵ *Id.* at 230. Mr. Whittaker went back his office and by 5:30 p.m., Complainant had not come by to turn in his badge and have him walk Complainant out; he went to check, and found that Complainant was gone. TR at 920; *see also* CX 109.

83. After he was terminated, he went to the Bombardier chief engineer, Steve Jackson, and asked if he could transfer back to the Bombardier program. TR at 232; RX 1 at 145. According to Complainant, Mr. Jackson offered to talk to Mr. Mueller and Complainant said he witnessed Mr. Jackson enter Mr. Mueller’s office and speak with him, but Mr. Jackson never got back to Complainant. TR at 232; RX 1 at 146. Mr. Mueller disputes that he ever spoke with Mr. Jackson on the day of Complainant’s termination.⁹⁶ TR at 874-875; CX 189 at 34-35. Complainant also told Mr. Echema he had been fired, and Mr. Echema “sympathized with him.” TR at 1012. Mr. Echema was surprised Complainant was terminated because he did not “hear of anything leading to it happening,” but admitted that he “probably wouldn’t.” *Id.*

84. On April 3, 2015, Complainant emailed various people, including Les Hlavicska, and described what he believed happened. RX 28; TR at 363-365. He said that turning in his checklist triggered his termination, and proceeded to described his time on the E-2 project as characterized by “intellectual envy,” “cockiness,” “unfriendliness,” and “disrespectful treatment.” RX 28; *see also* RX 34. Complainant attached to the email the APU/Tailcone report and his checklist and explanations. RX 28; TR at 365.

⁹³ Mr. Mueller was not sure if Mr. Hoffmann was present. TR at 883. In his deposition, he believed either Mr. Hoffmann, Mr. Mostrog, or both were present. CX 189 at 31-32.

⁹⁴ In his deposition, Complainant said he tried to show them what work he had done for them, and stated, “And Mueller said like – Mueller, chief of gestapo, ‘Go to the wall. Close your eyes. I will shoot you. I expedited the request for your termination.’” RX 1 at 144. Complainant clarified that Mr. Mueller did not actually say this, but it was Complainant’s “feeling,” that he had “no remedy.” *Id.*

⁹⁵ Mr. Whittaker could not recommend he be transferred based on his performance on the Embraer program. TR at 923.

⁹⁶ This factual dispute is on a non-material issue and does not directly affect the issues decided or the credibility of either party. As discussed later in the decision, however, when there are discrepancies on minor points, I gave more weight to Respondent’s witnesses over Complainant.

85. On April 9, 2015, Complainant emailed Mr. Mueller to request a reconsideration of his termination. TR at 233; JX 6; RX 17; CX 91.⁹⁷ He copied a number of other people on the email.⁹⁸ TR at 233. He explained why he believed his work was not unacceptable, and argued that there had been an implied contract when Mr. Hoffmann told the group in March 2015 that they would have jobs until at least the end of the year.⁹⁹ JX 6 at 707-708; TR at 233. He argued that the reason for his termination was his handing in of the APU/Tailcone report and his “checklist.” JX 6 at 709-710. He stated he could not incorporate the requested changes because it would violate engineering principles, and contradict the Vought Structures Manual. JX 6 at 706; TR at 488-489. He contended that his firing might make other employees fearful of questioning or objecting to “questionable practices, unsafe designs, disregard for Vought Structural Manual, violation of engineering principles, illegal practices, etc.” which could, he argued, “evolve into an unfortunate tragedy” given that they manufacture aircraft. JX 6 at 709. He included with his email a number of attachments, including copies of his work and professional references.¹⁰⁰ JX 6 at 711; TR at 234.

86. Mr. Mueller read the first couple paragraphs of the email but did not look at the attachments. TR at 856-857, 881. Mr. Mueller forwarded the email to the Human Resources manager Yvette Broussard and asked if he should respond; she advised him not to respond. TR at 856-857, 878; CX 189 at 36-37. At the hearing, Mr. Mueller read part of the April 9 email and did not see any safety concerns brought up in the email. TR at 882. Mr. Whittaker met with Ms. Broussard and others to discuss why Complainant was terminated. *Id.* at 922. Mr. Whittaker did not remember the specifics of the meeting, but he would have conveyed that his termination was for performance issues. *Id.*

87. In response to Complainant’s April 9 email, Complainant received a letter dated April 29, 2015, from David Whitney, Vice President of Human Resources for Respondent, stating that they were not able to substantiate Complainant’s allegations that it acted improperly in terminating his contract and that the decision to terminate his contract “following the completion of [his] last task was based on both workload requirements and performance issues.” CX 32; TR at

⁹⁷ RX 17 and CX 91 are identical to JX 6.

⁹⁸ Mr. Whittaker was copied on the email but did not remember the email. TR at 925, 928; JX 6.

⁹⁹ Complainant recalled that during a group meeting on March 26, 2015, Mr. Hoffmann told the group that there was plenty of work until the end of the year and that no one needed to look for work elsewhere. TR at 201-202; RX 1 at 133-134. Complainant had been worried because of rumors there would be less work, but now told his family that he would not have to worry about work. RX 1 at 133-134; RX 2P; RX 36; TR at 202. However, while he admitted that he said there was work, Mr. Hoffmann denied telling them not to look for work or saying that there was an increase in work. TR at 706. He believed he said that the budget covered everyone in the group through the end of the year. *Id.* at 786; *but see* CX 187 at 175-176 (During his deposition, Mr. Hoffmann denied saying that there was a budget for everyone in the group through the end of the year, or telling the contractors not to look for work). Mr. Mostrog remembered that they discussed the workload and that they had continuing work, but denied at the hearing that Mr. Hoffmann told the engineers not to look for work. TR at 820-821; *but see* CX 190 at 98-99. Complainant admitted that as a contractor, work was not guaranteed and he could be fired at any time. TR at 448-449.

¹⁰⁰ Also on April 9, 2015, Complainant received a message from Mr. Shepsonoval, who had heard that Complainant would not be hired back. RX 40; TR at 476-478.

235. Mr. Mueller, Mr. Whittaker, and Mr. Hoffmann were not involved in any investigation done by Human Resources.¹⁰¹ TR at 793, 882, 929.

88. Respondent continued to hire stress engineers throughout 2015 through different contracting companies.¹⁰² TR at 875; CX 29, 30; RX 18; *see also* CX 153. According to Mr. Mueller, the hiring advertisements covered a broad swath of positions. TR 876. Mr. Whittaker noted that shortly after Complainant was terminated, a number of stress engineers left the aft fuselage group.¹⁰³ TR at 897; RX 19. None of those people were replaced, except for one who replaced the point person in Brazil; the replacement engineer spoke Portuguese and was Brazilian. TR at 897.

Post-Termination

89. After he was terminated, Complainant posted his resume with recruiting agencies, including JSG and Chipton-Ross.¹⁰⁴ TR at 237. He heard from these recruiting agencies that Respondent had 10 openings for stress engineers. TR at 238-239; CX 29, 30. Chipton-Ross submitted Complainant's resume to Respondent, but he never heard back. TR at 239-240; CX 29. Complainant applied for unemployment, which required him to submit at least five applications for work per week.¹⁰⁵ TR at 240. He received a job offer from Mooney Aircraft in Chino, California, which he accepted. TR at 241-242; CX 99. He began working for Mooney as an employee (not a contractor) on July 13, 2015, for a salary of \$145,000 per year. TR at 242, 248; *see also* CX 90, 173, 174, 175. He is not eligible for overtime and because he is an employee, he is not eligible for the "per diem split" as a contractor, which is a per diem allowed when a contractor maintains permanent residency in a different location, which Complainant has. TR at 242-243. He received a favorable performance review on November 17, 2015. CX 86. The move to Southern California affected his family, and it was "much, much more expensive" in Southern California. TR at 244.

90. Complainant's termination caused "marital difficulties" and trouble sleeping. TR at 250, 254-255, 262. He also experienced "eye floaters" and paid \$170.80 for eye treatment. TR at 251-252; CX 95. In his deposition, he contended his eye problems were caused by stress from his termination, although he has no formal diagnosis or evidence related to the cause of his eye issues.¹⁰⁶

¹⁰¹ In his deposition, Mr. Whittaker was asked if he spoke with anyone at Human Resources about Complainant's April 9 complaint, which Mr. Whittaker denied. CX 192 at 212-213.

¹⁰² Mr. Mueller asserted that during March 2015, Respondent was not hiring stress engineers on the Embraer program. CX 189 at 30.

¹⁰³ CX 154 is a termination document for a Don Lee dated October 3, 2014. The parties did not discuss this document in the hearing or their briefs.

¹⁰⁴ Complainant wrote in an email to an old mentor on March 1, 2015, that he planned to retire, but at the hearing called this an "emotional reaction." RX 35 at 700; TR at 466, 491.

¹⁰⁵ He at first testified that he had an interview with HondaJet but did not get an offer. TR at 241, 481; *see also*, RX 23 at 14. But later in the hearing and in his deposition he said he was not able to apply because of a car accident. TR at 483; RX 1 at 47-48.

¹⁰⁶ Respondent objected to the Complainant's testimony about the cause of these eye issues at the hearing; the objection was not explicitly sustained, but I noted that such testimony would generally call for an expert opinion. TR at 251-252. The testimony at the deposition is admissible, but I gave it very little weight as it is based on Complainant's own understanding and research on the internet, not a doctor's opinion on causation. *See* RX 1 at 155-156.

RX 1 at 154-155. He has also sought treatment for anxiety, his blood sugar, blood pressure, and cholesterol. TR at 253; RX 1 at 159-160; *see* CX 176, 181. He felt “betrayed” by his termination because he believed he did his best work and was punished for it.¹⁰⁷ TR at 262. He said he was given a formal diagnosis of anxiety and depression and given medication, but could not recall the name of the medication. *Id.* at 253-254. Prior to his termination, he had not been diagnosed with anxiety, depression, or high blood pressure. *Id.* at 254. He did not exercise for a while, which resulted in weight gain and a torn muscle once he started exercising again. *Id.* at 256. He also asserted he is now afraid to bring up safety concerns for fear of being terminated. *Id.* at 255-256. In addition, he has had to travel for the litigation and has lost wages for being at the hearing to testify. *Id.* at 258.

IV. CREDIBILITY DETERMINATIONS

In deciding this matter, the administrative law judge (“ALJ”) is entitled to weigh the evidence, draw inferences from it, and assess the credibility of witnesses. 29 C.F.R. § 18.12; *Germann v. Calmat Co.*, ARB No. 99-114, ALJ No. 1999-STA-15, slip op. at 8 (ARB Aug. 1, 2002). In weighing the testimony of witnesses, the ALJ may consider the relationship of the witnesses to the parties, the witnesses’ interest in the outcome of the proceedings, the witnesses’ demeanor while testifying, the witnesses’ opportunity to observe or acquire knowledge about the subject matter of the witnesses’ testimony, and the extent to which the testimony was supported or contradicted by other credible evidence. *Ass’t Sec’y & Mailloux v. R & B Transportation, LLC*, ARB No. 07-084, ALJ No. 2006-STA-12, slip op. at 9 (ARB June 16, 2009); *Safley v. Stannards, Inc.*, ARB No. 05-113, ALJ No. 2003-STA-54, slip op. at 6, n.3 (ARB Sept. 30, 2005). An ALJ “should provide findings concerning witness demeanor in connection with resolution of conflicts in the pertinent controverted testimony.” *Seater v. S. Cal. Edison Co.*, 95-ERA-13, slip op. at 17 (ARB Sept. 27, 1996). In resolving conflicts in testimony, “the ALJ may also rely on factors related to the content of the witnesses’ testimony, *e.g.*, internal inconsistency, inherent improbability, important discrepancies, impeachment and witness self-interest.” *Id.*; *see also Carbo v. U.S.*, 314 F.2d 718, 749 (9th Cir. 1963) (the credibility of witnesses “involves more than demeanor. It apprehends the over-all evaluation of testimony in the light of its rationality or internal consistency and the manner in which it hangs together with other evidence.”).

A. Complainant

Respondent argues that Complainant is not credible for a variety of reasons. Respondent argues Complainant is a “vexatious and frequent litigant” who bragged in an email about his desire to “get” Respondent, and argues that Complainant’s pursuit of his claims are motivated by “personal distaste for Michael Hoffmann and Complainant’s dislike of having his skills questioned and his contract terminated. ALJX 2 at 16, 19; *see* RX 11; RX 39.”¹⁰⁸ Respondent also argues that

¹⁰⁷ Complainant also filed an EEOC complaint claiming his termination was due to his national origin as well as retaliation for refusing to incorporate changes to the APU/Tailcone report that he felt would violate the FAR. RX 16 at 914. He said in the complaint that he had not received criticism that his work was deficient “or reprimands or disciplinary actions.” RX 16 at 914; TR at 328-329.

¹⁰⁸ In an email to a former colleague, Complainant discussed his lawsuits against Respondent and Mr. Whittaker, stating “I want to get these fucking hateful good ole’ boys, race traitors, for long time! By their balls!” RX 11; RX 39. In this

Complainant's story "conveniently shifted" throughout this litigation, calling his overall credibility into doubt. ALJX 2 at 19. For example, Respondent notes that claims Mr. Hoffmann was upset with him in December 2014 and that he complained about inter-rivet buckling in April 2014 were added later once it "became clear that Triumph made the decision to terminate [Complainant] prior to him turning his Checklist and Explanation report." ALJX 4 at 14. Further, Respondent argues Complainant's "testimony is riddled with major inconsistencies and obvious exaggerations and his general demeanor at the hearing was evasive and uncooperative," and cites examples of his inconsistent testimony. ALJX 4 at 12-13.

A number of inconsistencies in Complainant's testimony lead me to conclude that his testimony should be given little weight. For example, Complainant claimed in his deposition that he was aware of a peer review process, but at the hearing claimed he was not aware of a peer review process and had never participated in one. F.F. ¶ 42. He also claimed that there was no internal fasteners allowable database, but then later not only admitted this document existed, but insisted he created 80 to 90 percent of it. F.F. ¶ 30. Regarding this document, he said that he never refused to create the document only that it was taken away from him. *Id.* However, he also complained that he could not complete the document because there were a million possibilities. F.F. ¶ 31. This indicates that he was not creating the document since it was impossible, in his estimation.

Another contradiction is that he first asserted he completed three sections of the first flight report (which he described as consisting of nine sections, and Mr. Hoffmann asserted contained seven sections), and then later contended he completed four parts of this report. F.F. ¶ 56. Further, he later admitted that he was only responsible for 10 percent of the 89 subsections. *Id.* It defies common sense, and is contrary to simple mathematics, that while he was assigned 10 percent of the subsections, he somehow completed 30 to 40 percent of the final report. Further, Complainant's insistence that his reports and work were submitted unaltered and made up a significant portion of the first flight report, while the record and common sense indicate otherwise, tends to corroborate Complainant's managers' assertions that he was difficult and unreceptive to feedback and criticisms.

An additional contradiction is Complainant's claim that he knew how to use CATIA and demonstrated that use through the inclusion of CATIA pictures in his work. Mr. Hoffmann and Mr. Mostrog described Complainant's failure to use CATIA effectively—either due to his inability or refusal to actually pull the information from the program himself. F.F. ¶¶ 45, 54, 57, 60. This description was supported by Mr. Olivera's recollection that Complainant asked Mr. Martell for help "pretty often" and the assertion that the final reports contained different pictures than those contained in Complainant's drafts. F.F. ¶¶ 44, 57. After an over-all evaluation of the witness testimony and a review of the record, I find it more probable that Complainant's assertions that he only needed help using Enovia and asked Mr. Martell for help once, after which used the computer tools without problem, are simply not credible. Complainant repeatedly cited to the fact that his reports contained CATIA pictures; however, this does not necessarily support his assertions if he was constantly asking his colleagues to pull the loads and pictures for him. His claims are simply not supported by the record, and I find the testimony to the contrary more compelling.

same email, he alleges former colleagues at a different company had a "grudge" against him for his "works, competency, knowledge, production." RX 11; RX 39.

Complainant also made some assertions that are contradicted by the record. For example, he believed that the E-2 design was modified to account for skin cracking, which appears to be a misunderstanding. The record is clear, through the testimony of Mr. Hoffmann, Mr. Whittaker, and Mr. Echema, that the E-2 design was not redesigned due to skin cracking at the mouse hole area. The other engineers' testimony was convincing and consistent—any skin cracking in that area was fixed years prior on the E-1 model. F.F. ¶¶ 19, 23. This misunderstanding by Complainant does not negatively affect his credibility per se, but it tends to show that he may have misperceived certain events in a light most favorable to him.

Another discrepancy is Complainant's testimony that his draft of the first flight reports was incorporated unchanged into the final first flight report. I am not convinced that the exhibits Complainant cites as containing the final first flight reports given to Embraer are actually the final report. *See* CX 102, 103, 104. For example, Respondent argues that in Complainant's draft of the vertical tail to aft fuselage report, he used incorrect pictures copied from the earlier drawings in the E-1 report, and that the correct CATIA models used in the final report are found at CX 183 at 5749. *Compare* CX 104 at 5480-5481 *with* CX 40 at 2752-2753. Additionally, Mr. Hoffmann explained that the final reports provided to Embraer do not have the stress analysts' names on them, but the exhibits Complainant cites to still have Complainant's name at the bottom. F.F. ¶ 56; *see* CX 105, 106, 183. The report also has a date in February 2015, whereas Mr. Hoffmann testified that the final first flight report was given to Embraer in July 2015. F.F. ¶ 11. Further, I credit Mr. Hoffmann, Mr. Mostrog, Mr. Olivera, and Mr. Whittaker's testimony that Complainant's reports required significant re-work and were not submitted unaltered to Embraer (see discussion below). F.F. ¶¶ 55, 56. The discrepancy again detracts from his overall credibility. The testimony and evidence from Respondent was more convincing on this point, and it cautions against giving Complainant's perception of events significant weight.

Another consideration is Complainant's statement that he wanted to "get" Respondent, which calls into question whether he brought this case in good faith.¹⁰⁹ Additionally, Complainant's credibility is compromised by his repeated assertion that his "diary" was written contemporaneously, when it appears to have been supplemented at later dates, perhaps in anticipation of litigation, to present the facts more favorably to Complainant. The document does not appear to be written contemporaneously, and Complainant's assertion that it was casts doubt on his truthfulness in general.

Respondent also characterizes Complainant as a "serial litigator who has sued or complained about almost every employer who has ever fired him." ALJX 2 at 19. This assertion is unsupported in the record, and I do not find any prior litigation Complainant was involved in with previous employers to be relevant to his credibility.

Importantly, Complainant's demeanor at the hearing did not inspire confidence in his perception or version of events. He did not appear candid in his responses and his perception

¹⁰⁹ Complainant also claimed at the hearing that he had no problem with certain ethnicities, but the language he used in his emails, and even later at the hearing, strongly suggests otherwise. *Compare* TR at 388 *with* RX 11, RX 27, RX 29, RX 30, TR at 399; RX 11; RX 39. Complainant argued these statements are irrelevant as they were found after a search of Complainant's computer during the discovery process. ALJX 3 at 4, n.2. Complainant is correct that these emails are not evidence of any motivation for Complainant's termination. However, I find them relevant to Complainant's credibility, although only because his testimony at the hearing contradicted the record.

appeared skewed by sense of his own engineering prowess in comparison to others'. He downplayed or dismissed any shortcomings in his job performance, rather than honestly addressing them.

I find Complainant's overall perception of events is not credible given his tendency for self-aggrandizement, which was apparent during the hearing and is echoed elsewhere in the record. In many of his emails, Complainant attacked others, accused others of jealousy of his skills, and showed a tendency to create a self-serving narrative that does not accurately reflect the facts. Additionally, Complainant at times displayed a proclivity for exaggeration, which cautioned against taking him at his word. For example, he claimed at his deposition that after he brought up the mouse hole design, Mr. Hoffmann told him to "shut up," before admitting this was not true. F.F. ¶ 16. He also referred to Mr. Mueller as "gestapo man" or "chief of gestapo," F.F. ¶¶ 47, 82, which, at the very least, severely distorts his role. Other exaggerations include his claim that he was responsible for more stress notes and formal reports than anyone else and that he was "much faster" than the allotted amount of time; and that not everyone received overtime while he always did, when he later admitted that he was not aware of any contractor who did not receive overtime. F.F. ¶¶ 61, 62. Complainant's demeanor, combined with the evidence of the record, particularly his emails and written notes, demonstrate that this case is more about Complainant's quarrel with his managers' evaluation of his work, his belief in his own engineering superiority, and his feeling that his supervisors did not show him the amount of respect he felt he deserved.

Overall, I did not trust Complainant's recollections and version of events and give his testimony little weight. Moreover, to the extent that Complainant's recollection on minor facts conflicted to recollection from Respondent's witnesses, I gave Respondent's witnesses more weight.

B. Respondent's Manager Witnesses

Complainant cites to a number of inconsistencies in Respondent's witnesses' statements to argue that they are wholly without credibility. ALJX 1 at 29-33¹¹⁰; ALJX 3 at 9, 13. Respondent contends that Complainant's argument is based on "trivial or non-existent inconsistencies." ALJX 4 at 12.

Overall, I found Mr. Hoffmann, Mr. Whittaker, Mr. Mostrog, and Mr. Mueller's testimony to be credible and entitled to significant weight. Mr. Hoffmann's and Mr. Whittaker's testimony contained a few inconsistencies which I discuss below. Overall, I found that each of these witnesses testified candidly at the hearing and that their testimony was grounded in their knowledge of the relevant facts and concerned topics on which they were knowledgeable and in which they had substantial training. Further, other evidence in the record such as emails and credible witness testimony generally supported their testimony.

a. Michael Hoffmann

Complainant argues that Mr. Hoffmann's testimony between deposition and trial was so contradictory that it cannot be found credible. ALJX 1 at 31.

¹¹⁰ Complainant attached four demonstrative "exhibits" to his closing brief that quote from the record to demonstrate the supposed inconsistencies in various testimony. These attachments do not present any new information and were used by Complainant for convenience.

Complainant contends that Mr. Hoffmann's testimony regarding Complainant's presentation of an alternative design differed between his deposition and at the hearing. ALJX 1 at 31. After reviewing the relevant portions of transcripts of the deposition and the hearing, *see* CX 187 at 111, TR at 603, 654, 744, I find that any discrepancy is minor and more likely a result of the way the questions were worded. Complainant contends Mr. Hoffmann's testimony was inconsistent because the first day of testimony he stated that Complainant told him he agreed with Flabel that the mouse hole design was inadequate, but the next day denied that Complainant said the current design was unacceptable. I find such a discrepancy slight and did not detract from Mr. Hoffman's overall credibility. Mr. Hoffmann's testimony was consistent in that Complainant presented an alternative design but never linked it to any potential skin cracking, only to increased stresses in the skin.

Complainant argues Mr. Hoffmann asserted Complainant did not know how to use Excel, and argues that he knows how to use Excel as demonstrated by his use of Excel in numerous reports, thereby refuting Mr. Hoffmann's assertions. ALJX 1 at 8, n.7. However, Mr. Hoffmann did not simply assert that Complainant did not know how to use Excel. He asserted that when he asked Complainant to prepare a fastener allowable database calculating the bearing allowables, Complainant replied "I don't know how to use Excel, I don't know how to do that, I refuse to do that." F.F. ¶ 29; TR at 664. Mr. Hoffmann continued, "I don't know why he wouldn't do it, but he just—he wouldn't do it for me." TR at 665. Mr. Hoffmann then referred to Complainant's statement that he did not know how to use Excel as "a BS answer" and commented, "how could he not know how to use Excel," because he "know[s] Complainant has shown . . . a little bit of Excel before, so it's either he doesn't know how to use Excel or he just doesn't want to do the work." TR at 665. The record demonstrates that Complainant produced spreadsheets in Excel, but Mr. Hoffmann's testimony demonstrates that he did not actually believe that Complainant did not know how to use Excel. Mr. Hoffmann did not believe this was an honest excuse and believed that Complainant did not want to do the work. Mr. Hoffmann's testimony on this subject was candid and believable. Complainant's argument that he, in fact, knows how to use Excel and that therefore Mr. Hoffmann's account is suspect missed the point—the argument is not that he had no idea how to Excel, it is that he refused to do the work.

Complainant argues that Mr. Hoffmann said he reviewed the checklist at his deposition but denied reviewing it at the hearing. ALJX 3 at 13. At his deposition, Mr. Hoffmann testified he "did a quick glance through" of the checklist on April 2 and gave it to Mr. Whittaker. CX 187 at 186-187. He also testified that he told Mr. Mostrog that Complainant did not incorporate the comments and asked Mr. Mostrog if he ever expressed these concerns to him. *Id.* At the hearing, Mr. Hoffmann testified that when he received the checklist he gave it immediately to Mr. Whittaker and told him he had not looked at it yet; he later denied "reviewing" it when it was left on his desk. TR at 705, 790. I do not find this to be a significant discrepancy. Mr. Mostrog testified that Mr. Hoffmann came to him that morning and told him that Complainant had turned in the checklist. CX 190 at 62. While Mr. Mostrog also testified that Mr. Hoffmann did not say anything else about the document, I do not find this to present a credibility issue. The witnesses in this case were testifying about a passing conversation that happened over two years prior; it is understandable that the details may not align exactly. Further, I find that Mr. Hoffmann's testimony that he "glance[d] through" the document is not necessarily inconsistent with his testimony that he did not "review" the document. Similarly, the discrepancy about whether Mr. Whittaker received the checklist the morning of April 2 or only received it after the fact does not detract from Mr. Hoffmann's credibility in any significant way. CX 191 at 190, TR at 971-972. Mr. Hoffmann's testimony was overall consistent and corroborated by other evidence in the record.

Complainant cites to a number of other inconsistencies, including: testimony regarding the MAZ report; Mr. Hoffmann's testimony regarding conversations with Complainant about inter-rivet buckling; statements about the timeliness of Complainant's first flight report drafts; and statements about whether there was a budget for everyone through the end of the year. *See* CX 187 at 46, 123-126, 134, 175-176, TR at 672, 750-754, 758-759, 765, 786. I have reviewed these statements and do not find them significant enough to impact Mr. Hoffmann's credibility. Many of the statements, in context, are not contradictory, and where they are, I find the contradiction to be minor. Complainant also points out in a footnote that Mr. Hoffmann is a licensed lawyer and has "an important ethical obligation" to be candid before this tribunal. ALJX 3 at 13, n. 6. The insinuation is noted, but I did not find Mr. Hoffmann to be misleading, less than candid, or not credible; in fact, I found the opposite to be true. Overall, as discussed further below, I found Mr. Hoffman to be a credible and believable witness and gave his testimony significant weight, and more importantly, credited his version of events when they were contradicted by Complainant.

C. Todd Mostrog

Mr. Mostrog's testimony was consistent with no significant credibility issues. Complainant contends Mr. Mostrog's testimony regarding the FTI Electrical Trays was inconsistent. ALJX 1 at 30-31. Mr. Mostrog testified at his deposition that Complainant's work "seemed ok" in the initial assessment, while at the hearing testified that "there was back and forth" regarding Complainant's work. I do not find this to be an inconsistency, and it in no way affected the weight I give to his testimony or his credibility. Complainant also points to Mr. Mostrog's inconsistent testimony about what Mr. Hoffmann said in a March 2015 group meeting regarding whether there was a budget or workload for the contractors so that they did not have to look for work. ALJX 1 at 31; F.F. ¶ 87. I do not find this discrepancy consequential. It is a minor inconsistency about a conversation that happened years prior at one of many meetings the group had, and is regarding a relatively immaterial conversation. Mr. Mostrog was overall credible and convincing and I gave his testimony significant weight.

D. Greg Whittaker

Complainant contends that certain statements Mr. Whittaker made are inconsistent and he therefore lacks credibility. ALJX 1 at 29. The first example Complainant refers to is the fact that Mr. Whittaker answered in an interrogatory that the decision to terminate Complainant was made on or about April 2, 2015, but then testified at his deposition and hearing that the decision was made in March of 2015. ALJX 1 at 29; F.F. ¶ 73. While this inconsistency is concerning, Mr. Whittaker's testimony at his deposition and the hearing that the decision was made earlier than April 2 was consistent, supported by emails in the record, and supported by other witness testimony. Overall, I do not find that the inconsistency has a significant impact on Whittaker's credibility.

Complainant next points to Mr. Whittaker's testimony regarding whether he spoke with anyone at Respondent's Human Resources department. ALJX 1 at 29. At his deposition, Mr. Whittaker asserted that he had no discussions with Dave Whitney, director of Human Resources, nor anyone under his supervision about any allegations Complainant made in his April 9 email. CX 192 at 212-213. However, he claimed at the hearing that he met with Yvette Broussard in Human Resources to discuss why Complainant was terminated. TR at 921-923. Complainant argues that "such totally conflicting accounts in sworn testimony" demonstrate Mr. Whittaker's lack of

credibility. ALJX 1 at 29. I find this inconsistency can likely be explained by semantics. At the deposition, Mr. Whittaker was asked about participating in an investigation; at the hearing, he was asked if he at some point met with someone from Human Resources to discuss Complainant's termination and he admitted that there was a "meeting." I find this to be a minor contradiction that does not affect Mr. Whittaker's credibility.

Complainant points to Mr. Whittaker's statement regarding the mouse hole design that there were "subtle adjustments made to several parts" as contradictory of his and other managers' statements that changes were not made to the E-2 design. ALJX 1, Attachment 4. I do not find this statement to be inconsistent or affect Mr. Whittaker's credibility. After making the somewhat equivocal statement that "those areas were being – subtle adjustments were made to several parts," he continued, "The statement that said Vought began to reinforce the skin is incorrect. The skin was already reinforced." CX 192 at 137. This statement clarifies his position and is consistent with other testimony.

As stated above, I found Mr. Whittaker to be candid at the hearing and find that his testimony was based on his own knowledge of the events. The inconsistencies in his testimony were minor and I find his testimony entitled to significant weight.

E. Byron Mueller

Mr. Mueller's testimony was consistent with no significant credibility issues. He testified candidly about the subjects on which he had knowledge, and there were no notable discrepancies or internal contradictions in his testimony. I find that his testimony is entitled to significant weight.

F. Other Witnesses

I did not find any credibility issues with any of the other witnesses who testified at the hearing.

Jude Echema was credible and believable in his demeanor. He explained his opinions well and his statements were based on his personal observations and concerned topics on which he was knowledgeable. Aron Olivera was similarly credible, and I found no reason to discount his testimony regarding the APU/Tailcone report or his observations of Complainant's behavior at work.

Landon Lay and Les Hlavicska were also both credible, although they did not provide particularly relevant testimony. Mr. Lay's testimony related to his knowledge of Complainant's work over one year in 2005. Mr. Hlavicska's testimony regarding Complainant's skills was based on knowledge gained in the early 1990s and around 2011. Given that neither of these witnesses worked with Complainant during the period in question, his work on the Embraer project from 2013-2015, I found their observations of Complainant's skill too remote in time to have any significant impact on the issues to be decided.

V. ANALYSIS AND CONCLUSIONS OF LAW

To prevail on an AIR 21 whistleblower complaint, the complainant must prove by a preponderance of the evidence¹¹¹ that he or she engaged in activity protected by AIR 21, suffered an unfavorable personnel action, and that the protected activity was a contributing factor in the unfavorable personnel action. 49 U.S.C. § 42121(b)(2)(B)(iii); 29 C.F.R. § 1979.109(a). If the complainant proves that protected activity was a contributing factor in the personnel action, the respondent may nevertheless avoid liability if it proves by “clear and convincing evidence” that it would have taken the same adverse action in the absence of the protected activity. 49 U.S.C.A. § 42121(b)(2)(B)(iv); 29 C.F.R. § 1979.109(a).

There is no dispute that Complainant was subject to an unfavorable personnel action when Respondent terminated his employment. AIR 21 provides that a covered employer may not “discharge,” or “otherwise discriminate against an employee with respect to compensation, terms, conditions, or privileges of employment” because of an employee’s protected activity. 49 U.S.C. § 42121(a); 29 C.F.R. § 1979.102(a). The parties agree and the evidence shows that Complainant was terminated. ALJX 1 at 2; ALJX 2 at 15; F.F. ¶ 82. Complainant was therefore subject to an unfavorable personnel action when he was terminated. *See* 49 U.S.C. § 42121(a); 29 C.F.R. § 1979.102(a) (prohibiting “discharge” because of protected activity). Accordingly, the remaining issues are whether Complainant can show by a preponderance of the evidence that he engaged in protected activity, and if so, whether the protected activity contributed to the adverse action. Respondent can then avoid liability by showing Complainant would have been terminated regardless of the protected activity. If Respondent fails to make this showing, the appropriate remedy then needs to be determined.

A. Protected Activity

An employee engages in protected activity under AIR 21 “any time [he or] she 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-009, slip op. at 7 (ARB Feb. 13, 2015); 49 U.S.C. § 42121(a)(1). The complainant need not prove an actual violation of a regulation, order, or standard relating to air carrier safety, as long as the complainant’s belief in a violation is reasonable.¹¹² *Furland v. Am. Airlines, Inc.*, ARB No. 90-102, ALJ No. 2008-

¹¹¹ “[T]he preponderance of the evidence standard requires that the employee’s evidence persuades the ALJ that his version of events is more likely true than the employer’s version. Evidence meets the preponderance of the evidence standard when it is more likely than not that a certain proposition is true.” *Joyner v. Georgia-Pacific Gypsum, LLC*, ARB No. 12-028, ALJ No. 2010-SWD-1, slip op. at 11 (ARB Apr. 25, 2014) (internal citations omitted).

¹¹² Respondents contend that the complaint must implicate safety definitively and specifically. ALJX 2 at 20, citing *Rongas v. SE Airlines*, ALI No. 2004-AIR-3, slip op. at 18 (ALJ June 30, 2004). While this was the standard advanced in earlier ARB holdings, the ARB has since concluded that the “specificity standard is inappropriate and inconsistent with the AIR 21 whistleblower statute.” *Ocbione v. PSA Airlines, Inc.*, ARB No. 13-061, ALJ No. 2011-AIR-12, slip op. 8-9 (ARB Nov. 26, 2014), citing *Sylvester v. Paraxel Int’l LLC*, ARB No. 07-123, ALJ Nos. 2007-SOX-39 and 42 (ARB May 25, 2011). In *Sylvester*, the ARB held that the “definitively and specifically” standard was inconsistent with the Sarbanes-Oxley Act’s language. *Sylvester*, ARB No. 07-123, slip op. at 17-18. The *Sylvester* panel framed the relevant question as whether a complainant reported conduct that he or she *reasonably believes* constituted a violation of relevant federal law, and not whether that information “definitively and specifically” described one or more of those violations. *Id.* at 19. In *Ocbione*, the ARB noted that AIR 21 likewise contains a “reasonable belief” standard and the relevant inquiry is whether

AIR-011, slip op. at 5 (ARB July 27, 2011). Therefore, an employee “satisf[ies] the protected activity requirement where (1) the employee’s report or attempted report is ‘related to a violation or alleged violation of an FAA requirement or any federal law related to air carrier safety, and (2) the employee’s belief of a violation is subjectively and objectively reasonable.’” *Sewade*, ARB No. 13-098, slip op. at 8.

A complainant proves a belief is subjectively reasonable by showing he or she actually believed that the conduct complained of constituted a violation of relevant law. *Sylvester v. Paraxel Int’l LLC*, ARB No. 07-123, ALJ Nos. 2007-SOX-39 and 42 (ARB May 25, 2011), citing *Harp v. Charter Commc’ns*, 558 F.3d 722, 723 (7th Cir. 2009)¹¹³; see also *Burdette v. ExpressJet Airlines, Inc.*, ARB No. 14-059, ALJ No. 2013-AIR-16, slip op. at 5, (ARB Jan. 21, 2016). The objective reasonableness of a complainant’s belief should be assessed based on “the knowledge available to a reasonable person in the same factual circumstances with the same training and experience as the aggrieved employee.” *Burdette*, ARB No. 14-059, slip op. at 5 (citing *Sylvester*, ARB No. 07-123, slip op. at 15); *Van v. Portneuf Medical Center*, ARB Nos. 11-028, 12-043, ARB No. 2007-AIR-002, slip op. at 7 (ARB Jan. 31, 2013).

1. Mouse Hole Cutout Design/Skin Cracking

Complainant argues he became concerned about the mouse hole design and possible skin cracking after reviewing the E-1 reports and that he communicated this concern to Mr. Hoffmann on October 11, 2013. ALJX 1 at 4; F.F. ¶ 15. He alleges that skin cracking can cause disintegration of the fuselage in flight, violating FAR Sections 25.307(a), 25.601, and 25.603.¹¹⁴ ALJX 1 at 4.

the complainant reasonably believed that the information provided related to a violation or alleged violation of an FAA requirement or any federal law related to air carrier safety. *Ochione*, ARB No. 13-061, slip op. at 8-9.

¹¹³ Whistleblower complaints under the Sarbanes-Oxley Act are governed by the same legal burdens of proof as those under AIR 21, see 18 U.S.C. § 1514A(b)(2), as are other whistleblower statutes including the Surface Transportation Assistance Act (see 49 U.S.C. § 31105(b)(1)) and the Federal Rail Safety Act (see 49 U.S.C. § 20109(d)(2)).

¹¹⁴ FAR Section 25.601, titled “General” under “Design and Construction,” states: “The airplane may not have design features or details that experience has shown to be hazardous or unreliable. The suitability of each questionable design detail and part must be established by tests.” 14 C.F.R. § 25.601.

Section 25.307, titled “Proof of Structure” under the heading “Structure,” states:

(a) Compliance with the strength and deformation requirements of this subpart must be shown for each critical loading condition. Structural analysis may be used only if the structure conforms to that for which experience has shown this method to be reliable. In other cases, substantiating tests must be made to load levels that are sufficient to verify structural behavior up to loads specified in § 25.305.

(b), (c) [Reserved]

(d) When static or dynamic tests are used to show compliance with the requirements of § 25.305(b) for flight structures, appropriate material correction factors must be applied to the test results, unless the structure, or part thereof, being tested has features such that a number of elements contribute to the total strength of the structure and the failure of one element results in the redistribution of the load through alternate load paths.

14 C.F.R. § 25.307.

Section 25.603 states: “The suitability and durability of materials used for parts, the failure of which could adversely affect safety, must— (a) Be established on the basis of experience or tests; (b) Conform to approved specifications (such as industry or military specifications, or Technical Standard Orders) that ensure their having the strength and other properties assumed in the design data; and (c) Take into account the effects of environmental conditions, such as temperature and humidity, expected in service.”

Respondent argues that Complainant did not actually believe the mouse hole design was a safety issue, that any such belief is not objectively reasonable, and that he did not show that the complaints were related to safety in general. ALJX 2 at 18, 21-22.

After a review of the record, although I find it is a very close call on this issue, I find it more likely than not that Complainant provided information related to a violation or potential violation of a federal law related to air carrier safety when he brought up the mouse hole design to Mr. Hoffman, and that he actually believed in such a violation or potential violation. However, I do not find that his belief was objectively reasonable, and therefore he did not engage in protected activity.

Initially, since I find Complainant only minimally credible, his own testimony about his actual belief at the time is entitled to little weight. However, other factors weigh in favor of finding that he believed that the mouse hole design potentially violated laws related to air carrier safety.

Complainant's account that he believed a "significant load" needed to pass across the area and that the design was "unacceptable" according to Flabel, F.F. ¶ 15, is buttressed by the email he sent to his friends on October 13, 2013. F.F. ¶ 17. While he equivocated at first when he said that he did not know if the mouse hole design was related to the skin fatigue problems he heard about, later in the email chain he described the design as a "BAD joint." F.F. ¶ 17. He noted that a "fatigue problem MAY occur," that it did not have to occur, "but it might." F.F. ¶ 17. Additionally, Complainant's drawing of the "better" design included the words "potential fatigue problem" and "cracking." F.F. ¶ 18. This notation, specifically the "cracking" comment, suggests he believed that the mouse hole design could cause cracking. Mr. Hoffmann admitted that fatigue could result in a number of conditions, including skin cracking. F.F. ¶ 16.

Complainant's later email regarding the mouse hole design is less persuasive of his actual belief in October 2013. Complainant's May 18, 2014 email more explicitly referenced skin cracking and asserted that he had told Mr. Hoffmann about the potential for skin cracking in October 2013.¹¹⁵ F.F. ¶ 18. I find that this email comports with Complainant's tendency to re-frame events in the light most favorable to him: once he heard that there was skin cracking, his account became that he had actually warned of skin cracking. However, while this email reflects negatively on Complainant's credibility overall, his earlier email and Mr. Hoffmann's testimony that he complained about increased stresses on the skin due to the mouse hole design still weighs in favor of finding Complainant actually believed in his role as a stress analyst that the mouse hole design presented a safety issue.

As Respondent notes, Complainant did not have expertise in field of damage tolerance, i.e., when skin cracking becomes a problem, or maintenance policies or skin cracking in general. ALJX 4 at 3. However, this fact makes it more likely that he believed the mouse hole design was unsafe, since he did not have the same expertise as Mr. Echema, who testified that there was no safety issue regarding skin cracking. *See Sylvester*, ARB No. 07-123, slip op. at 14-15 (A complainant's

¹¹⁵ The record established that Complainant misunderstood what happened in May 2014 regarding the skin cracking on the E-1 aircraft. He believed that the E-1 jets developed skin cracking in May 2014 and that Respondents tasked engineers to address this issue on the E-2 aircraft. F.F. ¶ 21. However, there were no modifications done to the E-2 aircraft and the doubler solution was in place long before Respondents were involved in the design and manufacture of the E-2. F.F. ¶¶ 20, 22, 23. Nevertheless, because Mr. Hoffmann was not aware of the skin cracking issue at the time Complainant brought him his "better" design, this misunderstanding does not affect the analysis.

educational background and sophistication is relevant in evaluating the subjective reasonableness of his or her concerns).

Respondent argues that if Complainant truly believed the issues about the mouse hole were critical and could lead to aircraft failure or disintegration, he would have followed up on his purported complaints. ALJX 2 at 18. Complainant need not communicate his concern to the FAA or other managers in order to engage in protected activity, although it does suggest that he may not have believed that the mouse hole design would lead to a disintegration of the fuselage as he claimed at the hearing. He also never mentioned it again to Mr. Hoffmann or anyone working for Respondent after Mr. Hoffmann disagreed with him. F.F. ¶ 16. Complainant need not keep renewing a complaint for it to be genuine, but his failure to mention it again to his managers or anyone else working for Respondent weighs against finding that he held a subjectively reasonable belief that it presented a violation. His failure to press the issue calls into question whether he truly believed the mouse hole design would lead to a disintegration of the fuselage at the time he made his complaint, but nonetheless, I find his failure to press the issue or to provide more information to Mr. Hoffmann does not outweigh the other evidence of his actual belief in a safety issue, namely his comments in his email about the mouse hole design being a bad joint that may lead to skin fatigue.

Also weighing against finding that Complainant had a subjectively reasonable belief is that he only presented his design as a “better” design, but did not provide any analysis to Mr. Hoffmann. F.F. ¶ 16. While Complainant need not convey his reasonable belief in order for it to be protected, *see Newell v. Airgas, Inc.*, ARB No. 16-007, ALJ No. 2015-STA-6, slip op. at 11 (ARB Jan. 10, 2018), the fact that he did not mention safety, FARs, or any other regulation or potential violation suggests that he did not have an actual belief that the mouse hole design presented a safety problem. *See Sylvester*, ARB No. 07-123, slip op. at 15 (while there is no requirement to convey a reasonable belief to management, “[c]ertainly, those communications may provide evidence of reasonableness”); *Knox v. U.S. Dep’t of Labor*, 434 F.3d 721, 725 (4th Cir. 2006).

However, on balance, I find that Complainant more likely than not felt the mouse hole design was “unacceptable.” Further, given that the stress analysts’ primary role is to analyze parts for safety, F.F. ¶ 8, I find it more likely than not that safety was Complainant’s concern at the time, and that his presentation of a “better” design, combined with his informing Mr. Hoffmann that the other design was “unacceptable” or “inadequate” sufficiently implicates air carrier safety.

While I find Complainant actually believed that the mouse hole design presented a potential violation of air carrier safety laws, I find that Complainant has not shown by a preponderance of the evidence that such a belief was objectively reasonable. Complainant argues his belief was objectively reasonable because: 1) after Complainant reported his concern about the design, Embraer reported skin cracking on the E-1, 2) Complainant documented his concerns in an email, and 3) Mr. Echema and Ms. O’Rourke were tasked with working on the skin cracking issue in May 2014.¹¹⁶ ALJX 1 at 5-6. I am not persuaded by Complainant’s arguments.

¹¹⁶ Complainant argues that an employee need just show there was “some logic or some judgment” underlying the conduct for it to be protected, citing *Sitts v. COMAIR, Inc.*, ARB No. 09-130, ALJ No. 2008-AIR-7, at 13-14 (ARB May 31, 2011). However, the “some logic or some judgment” reasoning was the ALJ’s, and the ARB did not affirmatively endorse this method, but affirmed the ALJ’s findings as they were supported by substantial evidence.

Complainant argues that the design he reviewed “in fact lead to the exact problem that he anticipated of skin cracking,” and was therefore objectively reasonable. ALJX 1 at 6. Respondent argues that the mouse hole design was never a safety issue because skin cracking is “inevitable,” and “engineers put test fuselages through fatigue testing to determine the rate that skin cracks develop and then build a maintenance program that addresses those cracks before they can become an issue.” ALJX 2 at 22.

The fact that the original design developed skin cracking is the strongest evidence in favor of finding Complainant’s belief that the mouse hole design potentially violated a relevant regulation is objectively reasonable. Embraer felt that the skin cracking in this area warranted the inclusion of doublers, which is evidence that it was a problem that needed to be addressed. Further, Mr. Hoffmann testified that Complainant’s design would have made the doublers unnecessary. F.F. ¶ 20. Mr. Whittaker noted that while aircraft are built to withstand skin cracks, they try to “design around it.” F.F. ¶ 20.

On the other hand, Mr. Whittaker testified that the mouse hole feature was a common design that is used on many aircraft. F.F. ¶ 15. Further, while Mr. Hoffmann testified that the potential consequences of increased skin stresses, including skin cracking, “could be” potential safety issues, he also explained that the safety concerns regarding the mouse hole were no different than other safety concerns, and that he never heard any other engineer mention a safety concern about the mouse hole. F.F. ¶¶ 16, 20. He also testified that all skins have cracks and that the fatigue analysts are tasked with addressing how bad it will be and when it will occur, F.F. ¶ 20, suggesting that skin cracking is common and commonly addressed by the engineers in their review of the aircraft components. I found Mr. Hoffmann credible and credit these statements. Importantly, Mr. Echema described how testing for skin cracking happens while the aircraft is on the ground, and how skin cracking is “not a safety issue, as such.” F.F. ¶ 23. Mr. Echema also described how there is “no way” skin cracking would not be addressed in the testing phase, which is why such an issue is not a safety concern. F.F. ¶ 23. I find that a reasonable engineer with as much experience as Complainant should have known that they typically try to “design around” skin cracking and that it was not unusual, and that these issues are worked through during the extensive testing that happens on the ground, as explained by Mr. Echema. F.F. ¶¶ 20, 23.

Additionally, the FAA and ANAC approved the E-1 design, F.F. ¶¶ 15, 16, and while Complainant asserted the FAA can make mistakes, this is further evidence that it was not objectively reasonable to believe that the E-1 design was unsafe. Complainant argues that just because the FAA approved the design does not mean it is unreasonable to be concerned about the safety of the design. ALJX 3 at 2, 5-6, citing *Menendez v. Halliburton, Inc.*, ARB No. 09-002-003, ALJ No. 2007-SOX-5, at 13-14 (ARB Sept. 13, 2011). *Menendez* arose under the Sarbanes-Oxley Act whistleblower protections. In *Menendez*, the complainant believed that his employer was not complying with accounting standards related to revenue recognition. *Menendez*, ARB No. 09-002-003, slip op. at 11. The complaint resulted in two internal investigations and one external investigation, the latter carried out by the Securities and Exchange Commission (“SEC”). The SEC ultimately approved of the accounting methods. The ARB upheld the ALJ’s finding that the belief was both subjectively and objectively reasonable, cautioning that the fact that an agency found there was no violation of the relevant law does “not necessarily” undermine the reasonableness of the belief. *Id.* at 13-14. There are sound policy reasons for this holding and part of the reason there is a “reasonable belief” standard and not a requirement to show there would have been an actual violation—encouraging the reporting of potential violations. And, Complainant is correct that the fact that the FAA approved

the design is not *necessarily* a reason to question the objective reasonableness of Complainant's belief. However, the situation here is distinguishable from the situation in *Menendez*. The design here had been approved by the FAA and the E-1 jet had been flying for over 10 years without any issues. The analysis in *Menendez* would likely have been different if the employee had complained about an accounting practice that had long been approved by the SEC. Further, in *Menendez* the ALJ noted that the fact investigations were done both internally and by the SEC demonstrated that both the employer and the SEC "shared some of Menendez's concerns." *Id.* at 13. The same cannot be said here.

Respondent argues that Complainant would have known, or should have known, that the design had already been tested and modified by Embraer in development of E-1 series and had been bolstered by the doublers. ALJX 2 at 18, 21. Complainant argues that his concerns were based on the E-1 design without considering the doublers and that he brought the design to Mr. Hoffmann's attention before Mr. Hoffmann became aware of the internal doublers. ALJX 1 at 5; ALJX 3 at 6. The record demonstrates that at the time Complainant brought his design to Mr. Hoffmann, neither were aware of the doublers. F.F. ¶ 19. Therefore, I do not find the fact that the doublers had fixed the skin cracking problem relevant to whether Complainant's alleged concerns, at the time and with the information available to him and Mr. Hoffmann, qualified as protected activity. The presence of the doublers indicate there was no *actual* issue about skin cracking because the issue had been addressed; however, it does not matter whether there was an actual issue with the design, just whether Complainant provided information about and reasonably believed that the issue was a violation or potential violation of relevant regulations. The objective reasonableness of his concern is evaluated based on the knowledge available at the time, *Burdette*, ARB No. 14-059, slip op. at 5, and at the time, neither Mr. Hoffmann nor Complainant knew about the internal doubler solution.

Overall, I find that while skin cracking did appear early on in the E-1 program and Embraer addressed the issue with a doubler, Complainant did not meet his burden in demonstrating that the mouse hole design presented an objectively reasonable safety concern.

Complainant's argument that Jude Echema was tasked with analyzing the structure to make sure there would not be the same skin cracking issue and that Ms. O'Rourke and Mr. Echema were tasked with modifying the design is unpersuasive because it is contrary to my findings of fact. As explained above, there were no modifications made and Mr. Echema testified that his analysis of the structure was part of his normal duties and had nothing to do specifically with the mouse hole design or any specific skin cracking danger. F.F. ¶ 23. In addition, the fact that Complainant "documented his concerns in an email" is irrelevant to an evaluation of the objective reasonableness of any concerns about the mouse hole. Objective reasonableness is evaluated based on whether an employee with similar training and experiences as the complainant would have the same belief in the same factual circumstances. *Burdette*, ARB No. 14-059, slip op. at 5. Complainant's emails have no bearing on this determination. Although one person responded to Complainant's email commenting on what location he would expect fatigue to appear, F.F. ¶ 17, there was no substantiated evidence regarding this person's credentials. More importantly, his email does not necessarily imply that he believed the mouse hole design violated or could violate a relevant regulation or law, only that he thought "the fatigue problem would occur at the last fastener(s) adjacent to the stringer." F.F. ¶ 17. Without more information about this person's credentials and what he actually believed about the issue, I do not find this statement persuasive as evidence of the objective reasonableness of a concern about the mouse hole design. Complainant also argues that he cited "accredited references" in support of his assertions. ALJX 1 at 6. However, Mr. Hoffmann

explained how he thought the Flabel design did not account for the specifications of the E-2. F.F. ¶ 16.

Respondent also argues that Complainant only has his own unsupported testimony that skin cracking can lead to disintegration of the airplane, and that he never made this assertion to anyone working for Respondent. ALJX 2 at 9. Complainant's allegation that skin cracking can lead a flight to disintegrate is based on his own testimony only; there was no evidence about the 1988 incident or what caused it in the record.¹¹⁷ Because I find Complainant's testimony entitled to little weight, his assertion alone is insufficient for me to conclude that the 1988 incident was caused by skin cracking. Mr. Whittaker also directly contradicted this statement, and I found him more credible. F.F. ¶ 15. I do not find sufficient evidence in the record to support the claim that skin cracking can cause the disintegration of the fuselage in flight, and therefore this claim does not support finding any belief that skin cracking due to the mouse hole design was unsafe is objectively reasonable.

After considering the entire record, I find that the evidence does not preponderate that Complainant's belief that the mouse hole design presented a safety issue was objectively reasonable. Thus, I find that Complainant did not engage in protected activity related to the mouse hole skin cracking issue.

2. Errors in the MAZ Report/Joint Allowables Issue

Complainant argues his concerns about the joint allowables in the MAZ report were reasonably related to FAA regulations and air safety. ALJX 1 at 6. He contends the document that referred engineers to wrong joint strength allowables could lead to a negative margin of safety and failure of the joint, violating the same FAR Sections, 25.307(a), 25.601, and 25.603. ALJX 1 at 7; F.F. ¶ 25. Respondent argues that Complainant did not actually believe the errors in the MAZ report presented a safety or regulatory violation and that any such belief is not objectively reasonable. ALJX 2 at 18, 22-23.

The evidence demonstrates that Complainant did not have a subjectively or objectively reasonable belief that his reporting of the discrepancies in the MAZ report could lead to violation of the FARs.

Complainant argues his concerns were subjectively reasonable because he emailed Mr. Hoffmann and reported the discrepancies to him directly. ALJX 3 at 2. Complainant's testimony that he actually believed at the time that he was reporting a violation or potential violation of the FARs is not credible. His credibility overall is suspect, and the circumstances surrounding his

¹¹⁷ Complainant asserts in a footnote of his reply brief: "Cerny notes that the Court may take judicial notice of published FAA regulation documents, including the following, which reflect that aircraft weight and balancing is a significant factor in determining [sic] if an aircraft is safe to operate: https://www.faa.gov/regulations_policies/handbooks_manuals/aircraft/amt_handbook/media/FAA-8083-30_Ch04.pdf." I decline to take judicial notice of this document. First, it is not clear how it relates to the question at hand or Complainant's assertion that skin cracking caused the disintegration of an aircraft in 1988. Second, this Office's rules provide that "On motion of a party or on the judge's own, official notice may be taken of any adjudicative fact or other matter subject to judicial notice. The parties must be given an adequate opportunity to show the contrary of the matter noticed." 29 C.F.R. § 18.84. Burying a request for official in a footnote in a reply brief does not constitute a properly filed motion, and does not allow Respondent an adequate opportunity to show the contrary of the matter noticed.

communications regarding the MAZ report do not indicate he actually believed he was informing Mr. Hoffmann that the wrong joint strength allowable could lead to a negative margin of safety and failure of the joint. As Respondent points out, ALJX 2 at 18, Complainant's email about the discrepancies did not mention a concern about engineers using the wrong joint strength allowable, negative margins of safety, failure of joints, or any safety concern or violation of the FARs. F.F. ¶ 27. As explained above, he need not explain the reasonableness of his belief in order to engage in protected activity, but it is evidence that he did not actually hold this belief at the time. *Sylvester*, ARB No. 07-123, slip op. at 15. Complainant asserted he told Mr. Hoffmann the discrepancies could present safety issues, but I do not credit his testimony. I credit Mr. Hoffmann's testimony that Complainant never indicated any safety concerns related to the MAZ report errors.

Complainant also argued at the hearing that safety concerns are implied, F.F. ¶ 27, but I did not find sufficient evidence to support this assertion. It is clear that it is important that the joint strength allowables used in calculations are correct, but Mr. Hoffmann, Mr. Mostrog, and Mr. Whittaker did not believe a reasonable engineer would rely on data without double-checking it was correct, and Mr. Whittaker termed the discrepancies "clerical."¹¹⁸ F.F. ¶¶ 25, 26. While Mr. Hoffmann, Mr. Mostrog, and Mr. Whittaker admitted that using the wrong data could potentially present a safety issue, they did not believe that this was a reasonable possibility, and I credit their testimony.¹¹⁹

Even if he had a subjectively reasonable belief that he was complaining about a safety issue that could result in a negative margin of safety and failure of the joint, Complainant did not demonstrate that his communications about the MAZ report presented an objectively reasonable concern about a potential safety violation. Respondent argues that Complainant's concern that an engineer would blindly follow the data was "hypothetical" and "defies credulity," and that Complainant did not know what other engineers relied on for their fastener allowable data. ALJX 2 at 23. As explained above, Mr. Hoffmann, Mr. Mostrog, and Mr. Whittaker all credibly testified that a reasonable engineer would not blindly rely on the tables to find the correct data.¹²⁰ Complainant argues that the fact Mr. Hoffmann forwarded Complainant's findings of the errors in the MAZ report and they were eventually corrected shows his concerns were objectively reasonable. ALJX 1 at 8; ALJX 3 at 7-8; *see* F.F. ¶ 28. However, this does not indicate the reasonableness that the errors were a safety issue, only that there were errors that Mr. Hoffmann felt Embraer should be aware of and should fix. F.F. ¶ 28. I credit Mr. Hoffmann's testimony that he was not concerned about

¹¹⁸ Complainant argues that Respondent "repeatedly states that 'no reasonably competent engineer' would miss that the table of contents referred them to a wrong table, yet neither Whittaker, Hoffman, or Mostrog, who presumably are competent engineers, noted the alleged discrepancies raised by [Complainant]." ALJX 3 at 8. I do not find this argument persuasive. Complainant also argues that the data in the MAZ report was wrong, not just missing. ALJX 3 at 8. However, this is a mischaracterization—some of the reference tables were wrong, but the data was not.

¹¹⁹ Respondent argues that if Complainant actually believed the errors presented a safety issue, he would not have refused to develop the spreadsheet for internal use. ALJX 2 at 18-19. In response, Complainant cites his claim that he prepared spreadsheets that included 80 to 90 percent of data. ALJX 3 at 3. I do not credit Complainant's statement that he prepared 80 to 90 percent of the data, but I also do not find his refusal to prepare the report particularly relevant to his subjective belief.

¹²⁰ Respondent also notes that the report lists the name of the fastener in large, bold type-face at the top of each section, and that a reasonable engineer would not miss this information. ALJX 2 at 23. There was no testimony regarding this assertion, but even if there were, I do not find it to be a persuasive argument.

safety when he forwarded Complainant's email, only that he thought the record should be clear. Contrary to Complainant's characterization, *see* ALJX 3 at 7-8, Respondent's forwarding of the corrections to Embraer does not inherently indicate that it "agreed" there was a safety concern.

Respondent also argues that the data in the report "was never meant to be relied on as a production document," and therefore never could have posed a safety issue. ALJX 2 at 23. However, as Complainant notes, ALJX 3 at 3, Mr. Whittaker told them it should be a reference source and Mr. Mostrog originally forwarded it for the engineers to use in "analysis and sizing." F.F. ¶ 24. Therefore, while the internal database was the document ultimately used for analysis, it was not unreasonable to believe that the MAZ document would be used as a reference. Nevertheless, this does not change my analysis or conclusions; while the MAZ report may have been used at some point by engineers as a reference, Complainant's communications about the MAZ report errors were not reasonably related to any violation or potential violation of a relevant statute. Complainant also notes that the internal reference table was created partially due to the errors he pointed out. ALJX 1 at 8; F.F. ¶ 29. Again, I do not find that this transforms his communications about the discrepancies into protected activity.

Respondents also contend that Complainant was tasked with reviewing the data, and his "alleged whistleblower activity in this case was merely him doing the task Triumph asked him to do." ALJX 2 at 23. However, merely because whistleblower activity arises out of one's assigned duties does not disqualify that activity as being protected. *See Vinnett v. Mitsubishi Power Sys.*, ARB No. 08-104, ALJ No. 2006-ERA-29, slip op. at 10-11 (ARB July 27, 2010).

In sum, Complainant has not shown by a preponderance of the evidence that when he communicated about the MAZ report discrepancies, he reasonably believed he was providing information relating to violation or possible violation of a relevant regulation. Therefore, I do not find it to be protected activity within the meaning of AIR 21.

3. Circumferential Joint/Inter-Rivet Buckling Issue

Complainant argues he raised safety issues about inter-rivet buckling and the margin of safety of the E-2 190 CF III to Aft fuselage circumferential joint. ALJX 1 at 8. He asserts that Embraer's minimum inter-rivet buckling margin of safety of 15 percent "would result in a joint in the splice being overloaded and lead to joint failure." *Id.* at 8-9. Complainant argues that the 15 percent margin of safety "would make the splice tremendously heavy and add weight to the structure, creating a safety issue because it would not perform," thus violating FAR 25.307(a) and FAR 25.601. *Id.* at 8. Complainant also argues that inter rivet buckling was not calculated correctly because the guideline indicated the skin width would be the same for everything when in actuality there were skins of different stiffness. *Id.* at 9. Respondent argues that the 15 percent margin of safety was not a violation of a federal law or regulation, and that Complainant did not actually believe the inter-rivet buckling issue was related to safety and that any such belief is not objectively reasonable.¹²¹ ALJX 2 at 19, 23-25.

¹²¹ Respondent cites to CX 19 in support of its arguments against Complainant's reasonable belief, but CX 19 was not admitted at the hearing.

The evidence demonstrates that Complainant believed that the 15 percent margin of safety was not necessary, but not that he actually believed at the time that Embraer's guidelines presented a safety risk, nor that any such belief would have been objectively reasonable.

Complainant asserted at the hearing that following Embraer's method would result in the aircraft being "tremendously heavy" which would pose a safety risk since heavy aircraft do not perform properly. F.F. ¶ 33. But, I do not find that Complainant actually believed this at the time that he refused to do the margin of safety analysis. I find it more likely that Complainant simply disagreed with Embraer's methods and chose to do his own analysis. While he mentioned in an email on April 3, 2015, that the Embraer requirement would result in a "tank," I do not find this sufficient to support his assertion that he believed the Embraer requirement posed a safety concern. Instead, the evidence demonstrates that Complainant did not agree with Embraer's methods, chose to do his own analysis, and then later tried to convert his disagreement into a safety concern by making the "heavy aircraft" argument after he was terminated. Complainant never mentioned a belief to Mr. Hoffman that the Embraer requirement would make the aircraft dangerously heavy, nor did he argue that it presented any safety issue.¹²² F.F. ¶¶ 33, 36. His statement in his draft report that skin inter-rivet buckling is not a structural failure does not mention safety, the weight of the aircraft, or anything about the thickness of the skin.¹²³ F.F. ¶ 36.

Complainant argues that "testimony about the technical underpinnings of the employee's belief constitutes sufficient evidence to establish a belief is subjectively reasonable," citing *Menendez v. Halliburton, Inc.*, ARB No. 09-002-003, ALJ No. 2007-SOX-5, at 12 (ARB Sept 13, 2011). ALJX 3 at 4. However, in *Menendez* the ARB noted that the ALJ found the complainant had a subjectively reasonable belief because he "testified, at length and in great detail, about the technical underpinnings and the rationale for his belief." Slip op. at 12. This does not mean that merely citing "technical accredited resources" without explanation is sufficient to establish a subjectively reasonable belief. I did not find that Complainant sufficiently explained how these technical resources supported a belief that his arguments regarding the margin of safety represented a genuine, good faith belief in potential safety concerns; further, and more importantly, I did not find him credible.

Even if Complainant actually believed that Embraer's requirements presented a safety issue, such a belief was not objectively reasonable. I do not credit Complainant's self-serving testimony that any concerns about the inter-rivet buckling and Embraer's margin of safety requirement was objectively reasonable. Further, Mr. Hoffmann credibly testified as to why a customer may want to have a margin of safety for inter-rivet buckling, and further explained how Complainant's analysis was flawed. F.F. ¶¶ 36, 37. Respondent also notes that the margin of error requirements and the

¹²² Respondent makes much of the fact that Complainant amended his complaint to include the inter-rivet buckling issue after Respondent submitted a motion for summary decision and only "explicitly" claimed it was related to safety after his termination. ALJX 2 at 19. That Complainant amended his complaint has no bearing on my conclusions. More relevant is the fact that during his deposition, Complainant stated that to his recollection, there were only three complaints concerning safety and did not include this issue as one of the complaints. RX 1 at 126-127. However, this is only a minor consideration in the overall determination that Complainant did not actually believe at the time that Embraer's requirements presented a safety issue.

¹²³ There is little evidence beyond Complainant's brief testimony at the hearing about the skin width issue Complainant cites in his closing brief. See ALJX 1 at 9. Complainant has not shown that he had a reasonable belief that this issue presented a violation or potential violation of a relevant statute or regulation.

approach to inter-rivet buckling was used on the E-1 and was approved by the FAA. ALJX 4 at 5. That the E-1 was approved by the FAA and has been flying without any problems, as even Complainant admitted (F.F. ¶ 34), suggests that the methods used by Embraer did not violate relevant air carrier safety laws, and that a concern that the margin of safety requirements would make the aircraft “tremendously heavy” is not objectively reasonable.

Complainant contends that Mr. Hoffmann allowed him to develop a different methodology and that his “proposed alternative safe design” was approved by management and submitted in the first flight report unaltered. ALJX 1 at 9-10. First, I credit Mr. Hoffmann’s testimony that he did not ask Complainant to develop an alternative analysis. F.F. ¶ 34. Further, as Respondent argues, approval of a proposed alternative method, even if accepted as true, does not necessarily mean that Embraer’s method was unsafe. *See* ALJX 4 at 5. Second, Mr. Hoffmann testified that Mr. Martell had to fix the report and that Complainant’s margins were incorrect and would not have been accepted by a reasonable engineer. F.F. ¶¶ 36, 37. As discussed above regarding Complainant’s credibility, I do not find that Complainant’s work was incorporated unaltered into the first flight reports, which negates Complainant’s argument that Respondent agreed with Complainant and his belief was therefore objectively reasonable. *See* ALJX 1 at 10, ALJX 3 at 9.

Complainant also argues that a safety concern does not have to be substantiated for it to be objectively reasonable. ALJX 3 at 9. While true, Complainant has not shown that an engineer with similar training and experiences would believe Embraer’s requirements for the circumferential joint analysis presented a safety issue as articulated by Complainant. It is Complainant’s burden to demonstrate it was objectively reasonable, and he has failed to meet this burden.

Therefore, I find that Complainant did not have a reasonable belief that he was providing information related to a violation or alleged violation of a relevant law.

4. APU/Tailcone Report

Complainant argues that he engaged in protected activity when he refused to incorporate the requested changes on the APU/Tailcone Report and submitted his “checklist” of why he could not make such changes. ALJX 1 at 10. He contends this refusal and his checklist of explanations were reasonably related to FAA regulations and air safety because some of the requested changes violated engineering science and the Triumph Structures Manual. *Id.* at 11. Complainant argues that making the requested changes would have violated FAR Section 24.307, which requires only methods used in structural analysis be those known by experience to be reliable. *Id.* at 12.

Respondent does not address Complainant’s subjective belief that his refusal to incorporate changes in the APU/Tailcone report and his submission of the checklist related to a safety issue. *See* ALJX 2 at 18-19. Respondent contends, however, that any such belief was objectively unreasonable. *Id.* at 25-27.

Although certain evidence suggests Complainant’s belief that incorporating the suggested changes to the APU/Tailcone Report may not have been based on a genuine belief in a potential safety issue, overall the weight of the evidence shows that Complainant actually believed that making the suggested changes would have violated engineering standards and presented a safety issue. Some evidence suggests that Complainant objected to the changes because he was upset that his report was subject to a peer review and he believed Mr. Hoffmann and/or Mr. Olivera wanted to

“sabotage” his work. F.F. ¶ 47. However, Complainant explained in his cover letter to the checklist that he believed the requested changes were in conflict with “engineering science” and “basic mechanical engineering fundamentals.” F.F. ¶ 48. He wrote that the aircraft should be as safe and as light as possible, and linked this goal to using certain analytical techniques. *Id.* He reiterated such concerns in his April 9, 2015 emailed letter. F.F. ¶ 85. While Complainant’s credibility is overall suspect, I find that the evidence weighs in favor of finding that he actually believed that incorporating some of the changes suggested by Mr. Hoffmann and Mr. Olivera would have violated engineering principles, which would sufficiently implicate relevant safety laws.

Nonetheless, I find that Complainant has not shown that his belief was objectively reasonable. Both Mr. Olivera and Mr. Hoffmann testified regarding the number of mistakes Complainant’s draft report contained. F.F. ¶¶ 42, 43, 44, 45. Complainant argues that the corrections did not reflect technical errors, with the exception of one. ALJX 1 at 14. However, I credit Mr. Hoffmann’s and Mr. Olivera’s testimony over Complainant’s on this subject. Mr. Hoffmann and Mr. Olivera testified that the report had major errors and needed substantial review. It is Complainant’s burden to show that his belief that the requested changes would have been a violation was objectively reasonable; he failed to demonstrate that an engineer with his level of training would have held this belief, and there was evidence that at least two other engineers with similar training would not hold this belief.

Complainant argues that his concerns were objectively reasonable because the APU/Tailcone report was based substantially on stress notes submitted in July 2014 which were accepted without comment or criticism and the design was released to the manufacturing phase in August 2014. ALJX 1 at 14; ALJX 3 at 10, 12. As stated above, it is unclear whether the design was being manufactured as soon as the DIR was fully approved. F.F. ¶ 9. Further, Mr. Hoffmann testified that the stress notes are reviewed “at a high level,” F.F. ¶ 9, which may explain why errors were not commented on earlier. *See also* F.F. ¶ 51 (issues with geometry would not necessarily be noted in the review of the stress notes). Mr. Hoffmann did not explain why such errors would not be found in the review of the DIR, although he noted that the primary audience for the DIR is the design team. F.F. ¶ 9. Overall, I rely on and credit Mr. Hoffmann and Mr. Olivera’s testimony that the APU/Tailcone report contained the errors they claimed.

Complainant also contends that his concerns were objectively reasonable because he turned in the report in December 2014 and heard nothing back until March 2015. ALJX 1 at 14. Mr. Hoffmann explained that he did not return the draft until March 2015 because he was out of the office studying for the bar. F.F. ¶ 42. The delay in no way implicates the objective reasonableness of his refusal to incorporate corrections, nor does it indicate that the corrections were unnecessary.

Respondent and Complainant argued about whether or not the red-line changes were suggestions or mandatory changes. *See* ALJX 3 at 10, ALJX 2 at 25. I do not find it directly relevant whether the edits were voluntary or mandatory; what matters is whether Complainant’s refusal to implement the changes represented a reasonable belief that the changes would result in a violation of a regulation, order, or standard relating to air carrier safety. If Complainant actually believed that the changes were wrong, it does not make it less reasonable to object if the edits were merely suggestions. I am also unpersuaded by Respondent’s argument that the report was in the early phases and had many layers of review to pass through, and therefore there was no safety issue. ALJX 2 at 26. Even if the report is in very early stages and presented no actual safety issue at the time, the analysis is concerned with whether or not Complainant’s belief in a safety issue was

reasonable. That there may have been no real safety issue regarding the report because it was in its early stages may be relevant to the objective reasonableness of Complainant's concerns. However, in context, I do not find that this is particularly relevant here. Even if the report was in the very early stages and had many layers of review to go through, as Mr. Hoffmann testified, the earlier safety concerns are caught, the better. *See* F.F. ¶ 12.

Overall, while Complainant demonstrated he actually believed that his refusal to incorporate changes and his submission of the checklist and explanation was related to relevant safety laws, he did not demonstrate that this belief was objectively reasonable. He therefore did not engage in protected activity related to the APU/Tailcone report and his checklist and explanations.

B. Contributing Factor

Legal Standard

A complainant must prove, “as a fact and by a preponderance of the evidence,” that protected activity was a contributing factor in the unfavorable personnel actions taken by his or her employer. *Palmer v. Canadian Nat'l Railway*, ARB No. 16-035, ALJ No. 2014-FRS-154, slip op. at 16 (ARB Sept. 30, 2016) (reissued with full dissent Jan. 4, 2017). A “contributing factor” is “any factor which alone or in connection with other factors, tends to affect in any way the outcome of the decision.” *Cobb v. FedEx Corp. Servs. Inc.*, ARB No. 16-030, ALJ No. 2010-AIR-24, slip op. at 5 (ARB Sept. 29, 2017). To rule for an employee at this step, the ALJ must be persuaded that it is more likely than not that the protected activity played any role in the adverse action, and the ALJ may consider any relevant, admissible evidence in making this determination. *Palmer*, ARB No. 16-035, slip op. at 17-18, 52. The ARB has emphasized that the standard is low and “broad and forgiving”: The protected activity need only play some role, and even an “[in]significant” or “[in]substantial” role suffices. *Id.* at 53 (citations omitted).

A complainant may establish that the protected activity was a contributing factor by direct or circumstantial evidence. *Bechtel v. Competitive Tech., Inc.*, ARB No. 09-052, ALJ No. 2005-SOX-033, slip op. at 12 (ARB Sept. 30, 2011). Circumstantial evidence may include temporal proximity, pretext, inconsistent application of an employer's policies, an employer's shifting explanations for its actions, antagonism or hostility toward a complainant's protected activity, the falsity of an employer's explanation for the adverse action taken, and a change in the employer's attitude toward the complainant after he or she engages in protected activity. *Id.* Proving causation through circumstantial evidence “requires that each piece of evidence be examined with all the other evidence to determine if it supports or detracts from the employee's claim that his protected activity was a contributing factor.” *Benjamin v. Citationshares Management, LLC*, ARB No. 12-029, ALJ No. 2010-AIR-1, slip op. at 11-12 (ARB Nov. 5, 2013). An ALJ must consider the circumstantial evidence as a whole and not in discrete pieces when asking whether the evidence establishes contribution. *Bobreski v. J. Givoo Consultants, Inc.*, ARB No. 13-001, ALJ No. 2008-ERA-003, slip op at 17-18 (ARB Aug. 29, 2014).

Analysis

Complainant has not established that he engaged in protected activity under AIR 21. However, based on the evidence as a whole, and as explained below, even if he had, I find that none of the alleged protected activities were a contributing factor in his termination.

1. Mouse Hole Design

In the Order Denying Summary Decision in this matter, I found that regarding the mouse hole design, Complainant is not entitled to an inference of causation through temporal proximity since his objection to the design occurred in October 2013 and he was not terminated until April 2015.¹²⁴ Order Denying Summary Decision, 2016-AIR-00003, at 14 (Nov. 17, 2016).

Generally, “the closer the temporal proximity, the greater the causal connection there is to the alleged retaliation.” *Blackie v. D. Pierce Transportation, Inc.*, ARB No. 11-054, ALJ No. 2009-STA-00043, slip op. at 9 (ARB Nov. 29, 2012), citing *Franchini v. Argonne Nat’l Lab.*, ARB No. 11-006, ALJ No. 2009-ERA-014, slip op. at 10 (ARB Sept 26, 2012) (“Temporal proximity is an important part of a case based on circumstantial evidence, often the ‘most persuasive factor,’” quoting *Beliveau v. U.S. Dep’t of Labor*, 170 F.3d 83, 87 (1st Cir. 1999)); *Warren v. Custom Organics*, ARB No. 10-092, ALJ No. 2009-STA-030, slip op. at 11 (ARB Feb. 29, 2012). However, temporal proximity is not dispositive. *Robinson v. Northwest Airlines, Inc.*, ARB No. 04-041, ALJ No. 2003-AIR-022, slip op. at 9 (ARB Nov. 30, 2005) (“For example, where the protected activity and the adverse action are separated by an intervening event that *independently* could have caused the adverse action, there is no longer a logical reason to infer a causal relationship between the activity and the adverse action.”). While comparing the “temporal gap” to other cases “can be used as a guideline to determine some general parameters of strong and weak temporal relationships . . . context matters.”¹²⁵ *Franchini*, ARB No. 11-006, slip op. at 10. “Determining what, if any, logical inference may be drawn from the temporal relationship . . . is not a simple and exact science but requires a ‘fact intense’ analysis,” and in evaluating causation, the ALJ should “evaluate the temporal proximity evidence presented by the complainant on the record as a whole, including the nature of the protected activity and the evolution of the unfavorable personnel action.” *Id.* at 10-11; *see also Spelson v. United Express Systems*, ARB No. 09-063, ALJ No. 2008-STA-39, slip op. at 3, n.3 (ARB Feb 23, 2011) (“An inference of causation is decisive at the prima facie level of proving a case, but is not dispositive at the merits stage, when a complainant is required to prove each element by a preponderance of the evidence.”).

On the record presented at the hearing, I reaffirm the finding that Complainant is not entitled to an inference of causation based on temporal proximity regarding the mouse hole design because the mouse hole objection was lodged 1.5 years before Complainant’s termination and the record demonstrates that Complainant’s intervening job performance was sub-par. Further, Mr. Hoffmann credibly established that at the time of Complainant’s termination, he was not thinking

¹²⁴ At the hearing, Respondent’s counsel requested clarification on whether the ruling on temporal proximity regarding the mouse hole design meant that this instance of alleged protected activity would be dismissed. TR at 10. This section is intended to clarify how this ruling impacts the overall issues and why such a ruling would not result in this instance of alleged protected activity being dismissed.

¹²⁵ *See, e.g., County v. Dole*, 886 F.2d 147, 148 (8th Cir. 1989) (court of appeals reversed the Secretary for failing to find that a 30-day temporal gap in that case was sufficient to support an inference of retaliation). *See also Goldstein v. Ebasco Constructors, Inc.*, No. 1986-ERA-036, slip op. at 11-12 (Sec’y Apr. 7, 1992), *rev. on other grounds sub nom. Ebasco Constructors, Inc. v. Martin*, 986 F.2d 1419 (5th Cir. 1993) (causation established where seven or eight months elapsed between protected activity and adverse action); *Blackie v. D. Pierce Transportation, Inc.*, ARB No. 13-065, ALJ 2011-STA-055, slip op. at 13 (ARB June 17, 2014) (affirming finding of causation where ALJ determined 10 days was evidence of “striking temporal proximity.”)

about the mouse hole design issue since it had come up in 2013 and he had never heard anything about it again. F.F. ¶ 76.

Complainant attempts to move the mouse hole complaints forward in time to May 2014, which he asserts is when “their validity became apparent” because Mr. Echema was tasked with approving the doubler fix. ALJX 3 at 12; ALJX 1 at 25. However, Mr. Echema was not tasked with “approving” the doubler fix, but only with examining the skin fatigue in line with his regular duties. Further, the fact that skin cracking issues on the E-1 design became known to Respondent in May 2014 does not implicate any of Complainant’s asserted protected activity regarding the mouse hole. His communication regarding the mouse hole happened in October 2013. There is no indication in the record that he renewed any concerns or initiated any further communications with his managers regarding the mouse hole in May 2014. Therefore, there is insufficient temporal proximity between the mouse hole complaints in October 2013 and his termination in April 2015 to support contribution on that ground.

The presence or lack thereof of temporal proximity is only one factor in considering whether protected activity was a contributing factor in Complainant’s termination. Circumstantial evidence may also include pretext, inconsistent application of an employer’s policies, an employer’s shifting explanations for its actions, antagonism or hostility toward a complainant’s protected activity, the falsity of an employer’s explanation for the adverse action taken, and a change in the employer’s attitude toward the complainant after he or she engages in protected activity. *Bechtel*, ARB No. 09-052, slip op. at 12.

Complainant’s primary argument is that the evidence demonstrates he was a competent engineer, and therefore Respondent’s argument that he was underperforming is not credible. ALJX 1 at 15-24. Respondent argues that it had “legitimate reasons to terminate [Complainant] that occurred after his purported complaints,” namely that his supervisors believed “that he had limitations on his ability to use the technical tools necessary to complete his job, exhibited poor performance and spent too much time away from his workspace.” ALJX 2 at 29.

After reviewing the record, I am persuaded that Respondent terminated Complainant due to his inability, or unwillingness, to use the required computer programs and his inability to produce “useful” work, in addition to his habit of not being at his desk consistently. I find that no alleged protected activity played any role in his termination.¹²⁶ I do not find compelling evidence of any pretext regarding Respondent’s reasoning for his termination. Complainant claims he was a great engineer who produced voluminous amounts of quality work, but the testimony of Mr. Hoffmann,

¹²⁶ At the time he decided to terminate Complainant, Mr. Mueller had no knowledge of Complainant’s alleged protected activity. F.F. ¶ 73. However, he relied on the assessments of Mr. Whittaker, Mr. Hoffmann, and Mr. Mostrog, who, between the three of them, knew about the various alleged protected activity. F.F. ¶ 73. However, the Supreme Court has found that a “cat’s paw” theory of causation can apply in whistleblower cases. *Staub v. Proctor Hosp.*, 562 U.S. 411, 419-22 (2011). A “cat’s paw” theory of causation applies when the protected activity has no bearing on the decision-maker, but does bear on the actions of a lower-level supervisor, who in turns acts to bring the adverse action about. *Id.* at 415; see also *Bobreski v. J. Givoo Consultants, Inc.*, ARB No. 09-057, ALJ No. 2008-ERA-003, slip op. at 16 (ARB June 24, 2011). The discriminatory actions of the lower level supervisor must still be the proximate cause of the final, adverse action. *Staub*, 562 U.S. at 421. Neither of the parties discussed the cat’s paw theory, but since Mr. Mueller had no knowledge of the alleged protected activity and relied on information from Mr. Whittaker, Mr. Hoffmann, and Mr. Mostrog, I have examined all of the managers’ decision-making.

Mr. Mostrog, Mr. Whittaker, and Mr. Olivera established otherwise. *See* F.F. ¶¶ 36, 37, 42, 44, 45, 51, 53, 55, 56, 58, 59, 60, 61. Their testimony was detailed and consistent. Other witnesses' testimony regarding his technical skill is not convincing; these witnesses either had no direct knowledge or their knowledge was distant in time and not based on his work on the Embraer program. Complainant argues that his work was incorporated unaltered into the final first flight reports, contradicting the testimony that his work was deficient. ALJX 1 at 19, 24. However, as discussed above, I do not find that Complainant's work was incorporated unaltered as he claims. There was also consistent testimony from Complainant's managers that his non-technical job performance was lacking, as he was gone from his desk for long periods of time and was distracting to others. F.F. ¶¶ 63, 64, 65, 66, 68. Once again, I credit Complainant's managers' accounts of his behavior at work over his own.

Complainant argues that if an employee was having severe job performance issues that could lead to termination, it would be expected that a manager would speak with them. ALJX 1 at 21. Mr. Hoffmann and Mr. Mostrog admitted that they did not speak with Complainant about his inadequate work. F.F. ¶¶ 57, 61. But, Mr. Hoffmann explained how they would reassign his work and trust that Complainant was getting the message that his work was not up to par. F.F. ¶ 57. While this conflict-avoidance technique strikes me as an unwise supervisory strategy, I credit the explanation and do not find this to be compelling evidence of pretext.¹²⁷

Complainant also contends that he could use Excel or CATIA, as shown by works he submitted showing such use. ALJX 1 at 22. Although his submitted work shows CATIA and Excel, his managers and Mr. Olivera testified consistently and credibly that Complainant had to ask others to pull the loads from CATIA. F.F. ¶¶ 44, 45, 54, 58. The mere presence of CATIA images in his work proves nothing regarding his skill level. Further, Mr. Hoffmann and Mr. Mostrog testified that Complainant's use of Excel was not at the level they would expect, not that he could not use Excel at all. F.F. ¶ 59.

Complainant further contends that it is not credible that Respondent would repeatedly extend Complainant's contract, refer to him as a "vital team member," and grant him overtime if his performance was not good. ALJX 1 at 22-24. I find Respondent's explanation believable—that they were attempting to get productive and useful work out of him, and that his contract was extended until they no longer felt they could get such work out of him. F.F. ¶¶ 60, 63, 73. Mr. Mueller also explained that the contract extension language was the same for every letter, and that he was extended the last time because otherwise his badge would expire, and he was still working on his last assignment. F.F. ¶ 74. Further, overtime was granted to every contractor, and Mr. Mostrog testified that he denied Complainant extra overtime because he felt he was not being productive with his time. F.F. ¶ 62.

Complainant also argues that Mr. Hoffmann was hostile toward him following his protected activity. ALJX 1 at 27. Complainant cites Mr. Hoffmann's "rebuffing" of Complainant's concerns

¹²⁷ It is also not my role to "sit as a super-personnel department" and second-guess Respondent's business decisions. *See Jenkins v. U.S. Environmental Protection Agency*, ALJ No. 1988-SWD-2, ARB No. 98-146, slip op. at 39 (ARB Feb. 28, 2003). Instead, it is my role to "scrutinize the record for evidence that the Respondent's proffered explanations are false and a pretext for discrimination." *Id.*; *see also Stojicevic v. Arizona-American Water*, ALJ No. 2004-SOX-73, ARB No. 05-081, slip op. at 10, n.27 (ARB Oct. 30, 2007); *Muzyk v. Carlswald Transportation*, ALJ No. 2005-STA-60, ARB No. 06-149, slip op. at 7, n. 31 (ARB Sept. 28, 2007). As discussed above, the record does not establish that the explanation was false and a pretext for retaliation for any protected activity.

about skin cracking and joint strength allowables, and contends that Mr. Hoffmann “became angry” with him and “verbally attacked” him regarding the joint allowables in December 2014. These assertions rely on Complainant’s own testimony, which I do not find credible. Further, Complainant argues that Mr. Hoffmann’s statement in his performance review that he “handled older engineers’ egos,” in reference to Complainant, is evidence of hostility. I do not find this argument persuasive. Such a statement in Mr. Hoffmann’s performance review is simply a statement of fact, and implies no hostility toward Complainant. I also credit Mr. Hoffmann’s, Mr. Whittaker’s, and Mr. Olivera’s testimony that Respondent valued safety and would not ignore safety concerns. F.F. ¶ 12. Mr. Hoffmann testified that there was “zero” incentive to ignore safety concerns, which supports the finding that he would not have been hostile to legitimate safety complaints or concerns brought to him by his engineers.

Complainant also argues that Respondent’s reasons for his termination are “shifting and contradictory,” citing Mr. Whitney’s letter describing the termination as “based on both workload requirements and performance issues.” ALJX 1 at 34; *see* F.F. ¶ 87. Complainant argues the evidence shows work on the Embraer project was not winding down. ALJX 1 at 34-35. For example, Complainant cites Mr. Hoffmann’s statement in March 2015 that there was plenty of work until the end of the year and that Respondent was hiring stress engineers throughout 2015. F.F. ¶¶ 85, 88. However, I credit Mr. Whittaker’s testimony that a number of stress engineers left the aft fuselage group after Complainant was terminated, and that none were replaced with the exception of one engineer who replaced the only Portuguese-speaking engineer. F.F. ¶ 88. Mr. Mueller explained that the hiring advertisements covered a broad swath of positions. F.F. ¶ 88. Further, I credit Mr. Whittaker’s testimony that Complainant’s skills were not adequate for the report-writing phase that the project had entered into. F.F. ¶ 76.

Overall, I find no compelling circumstantial evidence that Complainant’s concerns about the mouse hole design played any role whatsoever in Respondent’s decision to terminate his contract. Therefore, even if he had engaged in protected activity when he complained about the mouse hole design it was not a contributing factor in the adverse action.

2. MAZ Report & Inter-Rivet Buckling Issue

Regarding the reporting of errors in the MAZ report and the inter-rivet buckling issue, I incorporate the analysis above. The circumstantial evidence does not support a finding that either incident was a contributing factor in Complainant’s termination. The only additional considerations, besides temporal proximity discussed next, is Mr. Hoffmann’s testimony that the inter-rivet buckling issue was on his mind to the extent that Complainant “refused to do the methods that were safe.” F.F. ¶ 76. After considering the circumstantial evidence as a whole, I do not find that this statement, when considered against the record as a whole, demonstrates that any concerns about the inter-rivet buckling issue affect in any way the outcome of the decision to terminate Complainant’s contract.

Regarding evidence of temporal proximity for the MAZ report issue, Complainant contends that he complained about joint allowables throughout 2014 and twice in December 2014. ALJX 1 at 25. Complainant’s original emails about the MAZ report occurred in January and February 2014, F.F. ¶ 27, placing these reports more than a year before his termination, which I find too remote in time to infer a causal connection. However, Complainant and Mr. Hoffmann asserted that Complainant would check in about the MAZ report errors periodically during 2014, and Complainant then linked his complaints about joint allowables in December 2014 to the MAZ

report issues. F.F. ¶¶ 28, 31, 32. Respondent argues that “asking about the status of Embraer’s corrections to the MAZ Report in December 2014 cannot possibly be contorted into an independent safety complaint” ALJX 4 at 15. If Complainant’s mentioning of the joint allowables issue in December 2014 could constitute protected activity, it would bring the activity much closer to the adverse action—the two would be less than five months apart. However, while five months provides for a stronger inference of causation, after examining the circumstantial evidence as a whole, I do not find that any complaints about the joint allowables were a contributing factor in his termination. *See Bobreski*, ARB No. 13-001, slip op at 17-18.

Complainant contends that his complaints about the inter-rivet buckling issue happened in April 2014. ALJX 1 at 25. This would place his protected activity a year before his termination, which I again find is too remote in time to infer a causal connection. However, Mr. Hoffmann remembered that Complainant mentioned the inter-rivet buckling issue in December 2014, not April, which would bring the protected activity within five months of his termination. Similarly to my finding above, while this timing would result in a stronger inference of causation, an evaluation of the evidence on the whole leads me to conclude that the inter-rivet buckling issue did not contribute to Complainant’s termination.

After considering the circumstantial evidence as a whole, as discussed above and in the section regarding the mouse hole design, I do not find that the evidence establishes that any concerns related to the MAZ report or the inter-rivet buckling issue contributed to the adverse action.

3. APU/Tailcone Report

After considering the evidence, I am persuaded that Mr. Mueller decided to terminate Complainant prior to his submission of the checklist and revised APU/Tailcone report and that therefore, it could not have been a contributing factor in his termination.

I credit Mr. Whittaker’s and Mr. Mueller’s testimony that they discussed Complainant’s termination in late March 2015. F.F. ¶ 73. Their testimony is supported by the weight of evidence in the record – Complainant had been having issues as far back as mid-2014. F.F. ¶¶ 60, 63. Mr. Mostrog and Mr. Hoffmann met with Mr. Whittaker “several weeks” before Complainant’s termination to discuss whether they could manage Complainant’s work. F.F. ¶ 75. Mr. Mueller emailed Mr. Whittaker on March 27, 2015, asking him to review the contract labor termination report. F.F. ¶ 77. Further, Mr. Whittaker sent Mr. Mueller an email on April 1, 2015, confirming that April 2 would be Complainant’s last day. F.F. ¶ 78. It is undisputed that Complainant turned in the revised APU/Tailcone report along with his checklist and explanations on April 2, 2015. Since I find that the decision to terminate him was made prior to that date, it could not have contributed to the decision to terminate him.

Complainant contends the evidence shows that Respondent’s assertion that the decision to terminate him prior to April 2, 2015 is “not true.” ALJX 1 at 25-26. In support of this argument, Complainant makes a number of assertions. First, Complainant contends that “it makes no sense” that Respondent would wait for Complainant to revise the APU/Tailcone report “over several weeks” if his job performance was so deficient. *Id.* at 25. I do not find this argument persuasive. It makes sense that Respondent would want to get the most work possible out of Complainant, and to have him finish his last project before terminating him. Second, Complainant argues that at the

morning meeting on April 2, Mr. Hoffmann assigned Complainant the FTI Electrical trays work, which he contends would have taken two to three weeks. *Id.* I do not credit Complainant's assertion that it would have taken weeks; Mr. Mostrog, Mr. Hoffmann, and Mr. Whittaker thought this should take between two days to one week. F.F. ¶ 54. Further, Mr. Hoffmann's explanation that he knew Complainant would not be finishing it but that it would look strange if he did not assign him a project makes sense. F.F. ¶ 79. Next, Complainant argues that after he submitted the APU/Tailcone report, Mr. Hoffmann reminded him to finish the FTI Electrical Trays analysis even though Mr. Whittaker asserted they were already trying to terminate him. ALJX 1 at 25. I do not credit Complainant's statement that Mr. Hoffmann reminded him about the assignment again, as I find it more plausible that Complainant left the report on Mr. Hoffmann's desk. *See* F.F. ¶ 80. Complainant also argues that Mr. Whitney stated that the decision to end your assignment with Triumph *following* the completion of your last task" suggests the decision was made following completion of the last task. ALJX 1 at 26. This semantic argument is unconvincing; the decision was made *prior* to the completion of his last project that he would be terminated following his last project.

Complainant next argues that the conflicting evidence regarding the contract labor termination report and Mr. Whittaker's signed answers to interrogatories that Complainant's employment was terminated on or about April 2, 2015, indicates the decision was not made earlier. ALJX 1 at 25-26. Complainant also contends that the March 27, 2015 email does not contain the signature under Mr. Mueller's name that is on all other emails that he produced, the form attached to the email contains an incorrect start date, and it indicates the termination would take place in the afternoon, which is contrary to the testimony that they wished to terminate him in the morning. *Id.* at 25-26. I do not find any of these arguments compelling. I discussed Mr. Whittaker's interrogatory responses above, and Mr. Mueller explained that he uses previous forms and edits them, which explains the incorrect information.

Accordingly, I find that even if Complainant's turning in of the APU/Tailcone report and his checklist and explanations was protected activity, it occurred after the decision was made to terminate him and was therefore not a contributing factor in his termination.

Because I find that Complainant did not engage in protected activity, and that even if he did, none of it was a contributing factor in his termination, I need not discuss Respondent's affirmative defense nor Complainant's requested remedies and damages. Complainant failed to prove his case by a preponderance of the evidence; therefore, his complaint and request for relief is denied.

ORDER

1. Complainant did not engage in protected activity within the meaning of AIR 21.
2. Complainant suffered an adverse action when Respondent terminated his employment on April 2, 2015.
3. Complainant has not shown that any alleged protected activity was a contributing factor in his termination.

4. Complainant's request for relief is denied.

SO ORDERED.

RICHARD M. CLARK
Administrative Law Judge

NOTICE OF APPEAL RIGHTS: To appeal, you must file a Petition for Review ("Petition") with the Administrative Review Board ("Board") within fourteen (14) 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

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. § 1978.110(a). Your Petition must specifically identify the findings, conclusions or orders to which you object. You may be found to have waived any objections you do not raise specifically. *See* 29 C.F.R. § 1978.110(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, in cases in which the Assistant Secretary is a party, the Associate Solicitor, Associate Solicitor for Occupational Safety and Health. *See* 29 C.F.R. § 1978.110(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. §§ 1978.109(e) and 1978.110(b). 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. § 1978.110(b).

The preliminary order of reinstatement is effective immediately upon receipt of the decision by the Respondent and is not stayed by the filing of a petition for review by the Administrative Review Board. 29 C.F.R. § 1978.109(e). If a case is accepted for review, the decision of the administrative law judge is inoperative unless and until the Board issues an order adopting the decision, except that a preliminary order of reinstatement shall be effective while review is conducted by the Board unless the Board grants a motion by the respondent to stay that order based on exceptional circumstances. 29 C.F.R. § 1978.110(b).