Administrative Review Board 200 Constitution Avenue, N.W. Washington, D.C. 20210



In the Matter of:

AVINASH YADAV,

ARB CASE NO. 08-090

COMPLAINANT,

ALJ CASE NO. 2006-AIR-016

v.

DATE: January 7, 2010

L-3 COMMUNICATIONS CORP.,

RESPONDENT.

BEFORE: THE ADMINISTRATIVE REVIEW BOARD

Appearances:

For the Complainant: Bradley K. Glazier, Esq., Bos & Glazier, Grand Rapids, Michigan

For the Respondent:

Mark R. Smith, Esq., Nantz, Litowich, Smith, Girard & Hamilton, PC, Grand Rapids, Michigan

FINAL DECISION AND ORDER

Avinash Yadav filed a complaint with the United States Department of Labor alleging that his employer, L-3 Communications, Inc. violated the employee protection provisions of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR 21 or the Act)¹ when it fired him after he raised air safety concerns about the development of a flight deck information system. A Labor Department Administrative Law

¹ 49 U.S.C.A. § 42121 (Thomson/West 2007). Regulations implementing AIR 21 appear at 29 C.F.R. Part 1979 (2009).

Judge (ALJ) dismissed Yadav's complaint, and he appealed to the Administrative Review Board (ARB). We affirm the ALJ's dismissal.

BACKGROUND

The ALJ comprehensively described the background facts.² We summarize the facts relevant to our decision and present a timeline of events, meetings, and memos that ultimately led to Yadav's discharge at the end of September 2005.

The SmartDeck program and reverse engineering

L-3's Avionics Systems group makes and supplies safety-sensitive components and systems to aircraft manufacturers.³ Yadav started work for L-3 avionics at its Grand Rapids, Michigan, plant on October 18, 2004, as an engineering department manager with a staff of more than 30 engineers.⁴ He was principally involved with the SmartDeck product, an integrated flight information computer system that L-3 was developing for the cockpits of smaller aircraft. SmartDeck consisted of several software units designed to integrate and digitize the older flight control technology.⁵

The Federal Aviation Administration (FAA) oversees the development and production of air navigation systems like SmartDeck through federal aviation regulations (FARs) and designated engineering representatives (DERs). The DERs are employees of companies like L-3 who serve as liaisons with the FAA during the development process.⁶ The FAA has a software assurance standard that covers projects like SmartDeck, which is essentially an airborne, computerized dashboard.⁷ Also, a FAR covers air-safety-related design and performance standards of equipment, systems, and installations for navigation technology on aircraft.⁸

Yadav testified that L-3 hired him to help strengthen the company infrastructure and address a number of development problems the SmartDeck system was facing. The

- ⁴ Joint Exhibit (JX) 3-4, 83; TR at 81.
- ⁵ CX 3.

⁶ Hearing Transcript (TR) at 127, 418-19, 485-86.

⁷ "Software Considerations in Airborne Systems and Equipment Certification," DO-178B. JX 91.

⁸ 14 C.F.R. § 23.1309. *See* JX 90.

² [Recommended] Decision and Order (R. D. & O.) at 2-31.

³ Complainant's Exhibit (CX) 2.

problems mostly stemmed from the magnitude of the integrated SmartDeck computer program.⁹ Yadav explained in engineering terms that his responsibilities were to assure that the requirements initially specified in the SmartDeck product were established (validation) and then to ensure compliance with those requirements (verification).¹⁰ Thus, validation and verification (V&V) at the testing stage played an "absolute and critical" part in moving an integrated product like SmartDeck from the planning stage to final air safety certification by the FAA.¹¹

Initially, Yadav reported to Mark Mishler, director of engineering, but L-3 restructured the SmartDeck employee group in November 2004. Yadav began overseeing verification of both hardware and software requirements for SmartDeck as well as supervising L-3's AYESAS subsidiary, which was located in Turkey and was involved in SmartDeck's "moving map" function.¹² By January 2005, Yadav reported directly to Wendy Ljungren, vice president of engineering.¹³

Over the next six months, Yadav gradually became concerned about a process being used in SmartDeck's development plan known as reverse engineering.¹⁴ This process is the opposite of the usual planning, designing, and building of a product. Instead, the engineer will start with a finished product, like the land speed indicator in an aircraft, and then break down its parts to learn how to build or improve the same product.

Yadav testified that while some reverse engineering was acceptable, "virtually the entire SmartDeck project" was being reverse engineered.¹⁵ L-3 was using a prototype developed by AYESAS to show the viability of the SmartDeck project, but which was never intended to be found airworthy. Thus, Yadav concluded that this prototype could have design flaws, which would pass unnoticed in the reverse engineering process and into the final SmartDeck product. Such undiscovered flaws could therefore present a potential air safety risk. Yadav shared his concerns with Teri Litteral, a software quality

- ¹¹ Id.
- ¹² TR at 88-93.

¹⁴ The FAA defines reverse engineering as "the method of extracting software design information from the source code." JX 50. *See* R. D. & O. at 13 n.16.

¹⁵ TR at 64-66, 274-78, 319-22.

⁹ TR at 56-60, 225-26.

¹⁰ TR at 68.

¹³ JX 96 at 3.

assurance colleague, and L-3's DER, Cheryl Dorsey, but did not raise the issue with Ljungren until August 2005.¹⁶

Meanwhile, Ljungren had instituted weekly status meetings known as Monday Marches at which the SmartDeck managers would discuss their teams' objectives and accomplishments, using metrics progress analysis, as well as issues, roadblocks, and inter-team communications.¹⁷ Mishler was the facilitator for these meetings. He testified that "many, many times" Yadav's team information would not be up to date and action items were not followed up by the next meeting.¹⁸ Yadav claimed that he was waiting on information from other teams, but, Mishler explained, V&V is "at the end of the chain" and L-3 needed Yadav to work with the other teams and do planning phases.¹⁹

Yadav's work performance until August 2005

In April 2005, L-3's president, Adrienne Stevens, asked Yadav and other employees who attended the "Sun-N-Fun" aeronautics trade show in Florida for feedback.²⁰ She wanted to know about the competitive intelligence Yadav had gleaned about other systems; his impressions of products, customers, market, and technology; and potential changes that L-3 should make. Stevens asked Yadav to consolidate his information and provide input to his group.

Yadav informed her that Ljungren was compiling the attendees' inputs. He then stated that there was a "big hole" at the show where SmartDeck should have been. He added that he was concerned about the company's ability to get the product to market in view of the "systemic, enterprise-wide, structural, organization, leadership, and cultural weaknesses" of the organization and asked Stevens for a "confidential talk."²¹

Stevens testified that she met with Yadav in late April to discuss his concerns. She asked him for written recommendations prior to May 3, when she was meeting with her executive team. At a second meeting with Yadav, Stevens stated that they worked

¹⁶ CX 3 at 4. *See* JX 33. On July 22, 2005, Yadav copied Ljungren on an e-mail to Mishler stating that he was troubled about the quality of the requirements being sent to and used by AYESAS. Yadav asked Mishler to conduct a thorough audit of the process. JX 21.

¹⁷ TR at 493. A metric is a measurement taken at various points in time to show in a measurable way the progress being made in an activity. TR at 72.

¹⁸ See JX 9 (charts showing the weekly overviews of progress in Yadav's V&V group).

¹⁹ TR at 540-43. *See* JX 6, 9, 14.

²⁰ TR at 99-101.

²¹ JX 8.

through the entire strategic plan, functional area by functional area, and again she asked Yadav for written feedback. He did not respond to either request.²²

Also in April, Yadav attended a program review meeting, which he described as a "debacle." Charlie Shafer, L-3's corporate Chief Operating Officer (COO) who had oversight of the SmartDeck project, expressed quite a bit of unhappiness with the presentations at the meeting.²³ Subsequently, Ljungren e-mailed Yadav a list of ten agenda topics and asked to meet with him directly. Yadav responded that the list was "fine," but asked when they were going to address the fundamental, underlying root causes—the "complete lack of systems engineering and program management." He added that these were like the "proverbial pink elephants in the living room" that no one wanted to talk or do anything about. Ljungren replied that the systems design was not what it could be but that "we are stuck with the fundamental system" for the initial FAA certification.²⁴

In early May 2005, Ljungren noted that Yadav's data/slides had not been updated and he responded that he would double check and correct.²⁵

Later that month, Laura Henning, whom Yadav supervised, reported that one of the development teams was misleading the accountants by charging hours to budget accounts that did not represent the work they were actually doing. Yadav forwarded her e-mail to Stevens. He noted that he could "neither endorse nor deny" the allegation as he had made "no attempt to look into it." Stevens responded that Hennings's report would be followed up and that Yadav's suggestions for improvement were welcome.²⁶ Yadav testified that he did not follow up.²⁷

- ²³ TR at 96-99, 459-60.
- ²⁴ JX 10.
- ²⁵ JX 11.
- ²⁶ JX 12.

²⁷ TR at 109-10. Yadav did, however, draft a strongly worded response dated May 4, 2005, that he did not send to Stevens. Rather, this e-mail draft was sent to COO Shafer prior to their September 22, 2005 meeting. JX 12.

²² TR at 254-57, 431, 671-73, 712.

In June 2005, Ljungren learned that, on a January business trip to Ankara, Turkey and back, Yadav had upgraded his airline ticket from coach to first class without L-3 permission at an additional cost of \$5,000.00.²⁸

Ljungren testified that Yadav's Monday March presentations were generally "most disappointing" because his reports showed little progress in meeting his objectives and managing his group. She added that she tried to work with Yadav, but he would blame other groups for his lack of productivity, "finger-pointing" instead of producing.²⁹

For example, Ljungren pointed to a June 2005 e-mail from engineer Frank Donnelly to Yadav warning him of a "crunch time" for up to 350 formal and informal reviews of requirements packages. The e-mail listed the resources needed and added that if the problem were not addressed quickly, the completion deadline of mid-July "could easily slide out to September or even later."³⁰ Ljungren testified that Yadav's group was not supporting the requirements reviews by providing input to Donnelly's group.³¹ Yadav's e-mail to another manager noted that they were "still unable to get [their] act together" and would probably not complete the requirement reviews in the time specified.³²

A June 6, 2005 e-mail from Ljungren to Yadav noted that a V&V weekly testing update showed zero completions with 255 in process and asked: "When will we start seeing movement on the test case development?" Yadav replied "by the end of next week" and noted that the numbers did not present a complete picture so it looked "like there is no movement."³³

Ljungren sent Yadav an e-mail on June 22, 2005, requesting a V&V status report as soon as possible for a corporate program review. Yadav responded that another manager had the report in which some of the dates would have to be adjusted.³⁴ Ljungren

- ³³ JX 15, TR at 503.
- ³⁴ JX 20.

²⁸ JX 16-17, TR at 428-29. *See* JX 19 (L-3's travel policy states that employees are expected to use the lowest logical airfare available and may use business class with prior written approval but may not upgrade at the expense of the company).

²⁹ TR at 495-501. Eddie Young, a development manager who also reported to Ljungren, testified that Yadav's group was "a hit or a miss" on being prepared for the Monday Marches and typically was "not as prepared" as the other groups. TR at 736-39; JX 53.

³⁰ JX 14.

³¹ TR at 502-03.

³² JX 19.

testified that Yadav had promised new plans and a status update for the corporate review, but he did not provide either the plans or an update.³⁵ She added that other managers "were incredibly fed up" with Yadav's performances at the Monday Marches.³⁶

Yadav's memos and meetings with L-3 managers in August/September 2005

At a regularly scheduled weekly meeting on August 17, 2005, Ljungren met with Yadav to discuss "poor V&V metric performance, late arrival of the metrics (only after repeated requests), ineffective Monday reviews, and the July/August [plan revision], which added more than 3,000 hours of work. . . .³⁷⁷ Ljungren testified that she brought up several weekly status reports on her computer screen and questioned Yadav about the deficiencies in his group's performance.³⁸ She stated that one status report referred to poor productivity and unclear plans, but had not been updated for five months.³⁹

Yadav mentioned his concerns about reverse engineering to Ljungren at the August 17 meeting and followed up with a lengthy memorandum dated August 26, 2005.⁴⁰ Yadav pointed out that statements in the SmartDeck software development plan were "highly misleading" about the process being used. Specifically, the statement that the plan consisted of two distinct phases was not true; there was only one phase. Yadav added that the plan did not clearly document the reverse engineering approach L-3 was using in development.⁴¹ Thus, he believed that L-3 was misrepresenting the truth about SmartDeck's development to the FAA, which would certify the project's airworthiness based on that information.

³⁸ TR at 433-36.

³⁹ TR at 498-500. See TR at 238-40.

⁴⁰ JX 26. In this memo to Ljungren, Yadav noted that "only a fool" could embrace the reverse engineering process being followed in the SmartDeck program. He stated he had no confidence in the integrity of SmartDeck, the "corrupt development process through which it was created, or the leadership that has allowed all this corruption to take place," and that it was thus impossible for him to do his job. Yadav added that Ljungren should not count on him to support her position on this issue.

⁴¹ JX 26; TR at 437-38.

³⁵ TR at 504.

³⁶ TR at 505.

³⁷ See JX 1-6, 8-11 (Ljungren's notes on Yadav's performance at a number of weekly meetings).

Ljungren disagreed with Yadav's assertion about misrepresentation to the FAA, but testified that she asked Yadav on August 30, 2005, to check out whether reverse engineering was an FAA-accepted practice and to talk to other managers and engineers about changing the wording in the development plan to conform to what the engineers were actually doing.⁴²

Ljungren was out of town for two weeks. On her return, she asked Yadav what he had learned; she pointed out that she was "disappointed" that he had not reviewed the SmartDeck development plan the previous May when he had signed off on it or discussed his concerns about the alleged misrepresentation to the FAA with other managers.⁴³ Ljungren added that the tone of his August 26, 2005 memo was inappropriate, given that Yadav had not tried to validate his conclusions about reverse engineering. She asked to meet with Yadav on September 15, 2005, to discuss these issues.

In a September 16, 2005 e-mail to Ljungren, Yadav replied that he did not need to talk with other managers about fixing the plan's wording because the reverse engineering approach to SmartDeck's development was "unacceptable" and was being "grossly misrepresented" to the FAA. Yadav added that as V&V manager, "I cannot and will not allow" the V&V program to proceed unless there were clear answers to his concerns. Yadav stated that it was clear that Ljungren would not be able to address his concerns "on your own." He suggested that she get some help. Yadav concluded:

And please don't take all of this too personally. I do not dislike you as a person and I am not trying to purposely make you unhappy. But I do have a job to do here and it involves making some tough decisions. I wish that doing my job and making you happy were coincidental. But unfortunately, it appears that I cannot do both in this environment. So I have had to make a tough choice. I hope you can understand that.^[44]

Ljungren forwarded Yadav's e-mail to Douglas Pell,⁴⁵ vice president of finance and information technology, and Kathleen Margo, L-3's human resource director, as well

⁴⁵ Pell reacted to Yadav's August 26, 2005 memo in a private e-mail to Margo. He stated that Yadav was interjecting himself into a management level well above his pay grade, was not qualified to be V&V manager because he did not understand the process, was unwilling to perform his responsibility as manager, and was insubordinate in his "overuse of dramatic and offensive language." JX 31.

⁴² TR at 508-09.

⁴³ JX 30.

⁴⁴ *Id.*; TR at 131-33.

as Stevens.⁴⁶ Upon their advice, Ljungren responded on September 19, 2005, by asking Yadav if the development plan needed to be updated prior to an upcoming FAA visit. She stated that there was no intent to misrepresent anything, but "we need your specific input on what you believe the words need to be to be clear about our existing SmartDeck processes."

Ljungren stated in that September 19 e-mail that she was surprised that Yadav had not followed through on her earlier requests to obtain information and input from other managers.⁴⁷ She added that it was "not the first time" that he had raised a significant issue but failed to follow up. Ljungren stated that it was "difficult to resolve issues" without actionable information; she needed his recommendations to help improve the SmartDeck processes. She instructed Yadav to determine if updates to address his concerns were needed before Monday, September 26.

Ljungren testified that even after three meetings with Yadav on August 17 and 30 and September 15, nothing that she had asked for or "very, very little" had been done, and "it was like he was blowing off all my requests."⁴⁸ She added that while she was willing to work with Yadav, she did not feel that he would be able to "start performing as a good manager" and that his performance had "degraded during the month of September."⁴⁹ Ljungren stated in an e-mail to Stevens that L-3 needed to start looking for V&V manager candidates since she did not know whether Yadav would "really engage and work the issues."⁵⁰

On September 19, 2005, Yadav sent Margo a memo informing her that he would pursue his complaint about misleading the FAA regarding SmartDeck's reverse engineering with L-3's corporate office because the leaders of the avionics division "are engaged in a blatantly corrupt practice."⁵¹ He warned her that as human resource director she was responsible for ensuring that no retaliation would be taken against him. Yadav

⁴⁶ JX 28. Stevens told Ljungren that the August 26 memo sounded as if Yadav was resigning and that she did not see how he could be the person needed to lead "at such a critical time in the SmartDeck program." JX 28.

⁴⁷ JX 30.

⁴⁸ TR at 513-14. Yadav testified that he did not specifically comply with Ljungren's requests because his reaction to her e-mail "was to escalate my concern." TR at 291-94.

⁴⁹ TR at 518-19.

⁵⁰ JX 34.

⁵¹ JX 35; TR at 322-27.

exhorted Margo not to allow the leaders of the division "to corrupt you into supporting any such retaliation."⁵²

On September 20, 2005, Yadav met with Stevens and Margo to discuss his concerns about the SmartDeck software development plan.⁵³ Yadav admitted that he had not complied with Ljungren's requests for recommendations to revise the language of the plan.⁵⁴ Stevens stated that she had arranged for an independent assessment of the SmartDeck development plan. The investigation would determine what impact the plan's prototyping and reverse engineering would have on its potential to be certified as airworthy and safe, and whether the language of the plan was being followed internally.⁵⁵ HR director Margo noted that the assessment should focus on Yadav's expressed concerns about L-3's misrepresentations to the FAA.⁵⁶ Stevens also relayed her own concerns to Yadav about his interpersonal communications and disrespectful style in describing the program and the people involved.⁵⁷

That same day, Yadav e-mailed COO Shafer directly, seeking an "urgent" meeting with him. Yadav attached his September 16 memo, another dated May 4, 2005, that he had not sent out because it was "too strong," and Ljungren's September 19 memo.⁵⁸ Yadav stated in his e-mail to Shafer that he needed to decide whether he would stay with L-3 or move on, but he did not think he could continue working under the questionable leadership in place. Yadav added that if his "extraordinary step" in meeting with Shafer turned out to be "not justified or not in the interest of the company," then he would apologize and resign.⁵⁹

Shafer and Yadav met in New York on September 21, 2005, and discussed his concerns.⁶⁰ Yadav testified that Shafer was receptive, but did not agree with the alleged

⁵² JX 35. 53 Id. 54 TR at 302-05. 55 JX 42-43, 47; TR at 157, 230-37. 56 JX 49, 55. 57 JX 35. 58 JX 39. 59 JX 40. 60 JX 46.

misrepresentations to the FAA or leadership characterizations that Yadav presented. However, Shafer did agree to review Yadav's proposed solution.⁶¹

On September 22, Ljungren reminded Yadav to respond to her previous requests and expressed surprise that he had met with Shafer.⁶² She stated that Yadav should "work the issue rather than jet set around." Ljungren reminded Yadav that if he was not satisfied, they would talk with the FAA or an independent DER. She believed that they would find that "our processes, while not ideal, are acceptable." She added: "It bugs me that you didn't work the issue before elevating to [Shafer]."⁶³

Yadav replied with a "write-up" the same day. He stated that there was a "mismatch" between what the company had told the FAA about the SmartDeck development plan and what the company was actually doing. Yadav added that the mismatch could be corrected by changing what L-3 was telling the FAA about its reverse engineering approach or changing the approach. He stated that he preferred the latter option because it would "significantly lower" the development risk and safety considerations of the SmartDeck project.⁶⁴

On September 23, Ljungren again asked Yadav for his suggestions about changing the wording of the development plan to comply with his concerns about misrepresentations to the FAA and said she would hold off updating the plan until she received his input. In her September 23 e-mail, she noted that she had asked for his recommendations on August 30 and a week ago.⁶⁵

In a September 27 e-mail, Yadav responded that he was the wrong person to provide the changed wording because he was not responsible for software development. Rather, the problem was that several managers were engaged in such development, "according to their own unique methods," and no one person was accountable. Yadav stated that Ljungren would have to get appropriate wording from each of the managers to resolve the problem and would "need to figure out the best solution to address all areas."⁶⁶

- ⁶³ JX 66.
- ⁶⁴ JX 56.
- ⁶⁵ *Id*.

⁶⁶ JX 67. Stevens forwarded the September 27 e-mail to Pell for comments. He responded that Yadav was not a team player. Pell added that if he had been asked by his vice-president to "help the cause," he would not have continued to "bad-mouth the process" and the boss and then refuse to help the team. JX 67.

⁶¹ TR at 165-69. On September 29, 2005, Yadav sent his proposal for "Evolving a Culture of Flawless Performance with Integrity" to Shafer. JX 74-75.

⁶² JX 45.

That same day, Yadav forwarded to Stevens his e-mail response to Ljungren along with this message:

I can't believe that I have to tell your VP of Engineering how to do her job! . . . [S]he keeps insisting that I "work the issue" and provide her with specific actionable steps. . . . The bottom line is that this engineering organization is out of control and . . . your VP of Engineering does not have the ability to exercise the control and governance over the organization that she is charged with governing. This is a very scary fact!^[67]

Yadav asked for a meeting with Stevens to "share" his "constructive solution" to the problem of inadequate control and governance of the SmartDeck project.⁶⁸

Stevens thanked Yadav and asked: "When will you respond to the other action items?"⁶⁹ Yadav replied that the only other action item was for him to send Stevens the recommendations he had made to Ljungren. Stevens responded that the other action item was for him to define clearly his expectations for improved communication, related to his belief that Ljungren and the senior management team were not "appropriately addressing" his concerns.⁷⁰ Yadav responded that he wanted to work with Ljungren first on that issue and would meet with her on Monday.⁷¹

Yadav met with Ljungren on Monday after he sent another e-mail to her about his discussions with other managers and their concerns about reverse engineering. In this message, he reiterated that the SmartDeck project was on an "extremely risky path." He had hoped that Ljungren would appreciate and share his concerns and either elevate them

⁷¹ JX 60.

⁶⁷ JX 67.

⁶⁸ *Id.* Stevens forwarded Yadav's e-mail to Shafer, noting that it was one of his "multiple rants" this week. She also informed Margo that she had told Yadav he was "out of line and missing the point." Yadav was not acting as part of the team and was working against the team. JX 68.

⁶⁹ JX 57.

⁷⁰ JX 58.

or help him to do so. He insisted that the lack of integrity in L-3's engineering approach was "practically unanimous."⁷²

On September 28, 2005, the investigators sent Stevens a memo on their independent review of the SmartDeck development process. They concluded that the software development plan had "minor shortcomings" but was "not misleading in any way." They added that the document was typical of those that capable avionics equipment manufacturers submitted to the FAA and that the SmartDeck development processes were well suited to produce safe avionics systems.⁷³ Margo testified that she told Yadav about the results of the investigation.⁷⁴

The next day, Mishler, who supervised Yadav when Ljungren was on travel, sent an e-mail to Yadav.⁷⁵ Mishler stated that he had not received a written response to an earlier request sent on September 21 for an action plan due by September 26.⁷⁶ Mishler had noted in the earlier e-mail that Yadav needed to lead the overall V&V effort, deliver results on time, and improve morale within his teams. He added:

You are accountable to carry SmartDeck through the V&V hurdles, so it is important for you to set a clear example of ownership, accountability, and resolution of issues. The expectation for the Monday program reviews is that you are prepared and well informed on the progress in all areas of your group. . . . We need the benefit of your insight and expertise by offering solutions and driving performance, instead of hiding behind the less than optimal performance of the groups feeding you information.^[77]

Yadav replied that he did not know that Mishler expected a written response and that he did not recall any action items he had failed to do since the previous Monday's meeting.⁷⁸ Yadav offered a nine-point exposition of his responsibilities acknowledging his accountability but pointing out that he could "not work magic." Yadav then stated

⁷² JX 66.
⁷³ JX 71. See JX 23.
⁷⁴ TR at 405.
⁷⁵ JX 76.
⁷⁶ TR at 556-58; JX 53.
⁷⁷ JX 83.
⁷⁸ Id.

that he was "outright offended" at the "preposterous" idea that he and his V&V team were hiding behind the poor performance of others. He challenged Mishler to provide specific examples of the shortcomings and discuss any failings with him.

Early on September 30, 2005, Yadav sent Ljungren an e-mail stating that he had been informed of the results of the investigation that Stevens initiated, but did not see any explanation of why his concerns were unwarranted. He added that if the results were enough for L-3 to feel comfortable with the risks he had articulated, "then so be it." Yadav apologized for any "inappropriate conduct" he may have done in raising his concerns.⁷⁹

Later that day, Yadav met with Ljungren and human resources director Margo. Ljungren reviewed Yadav's performance issues and concluded that it would be better if he left L-3 avionics.⁸⁰ Margo explained that Yadav's employment was ended because she, Stevens, and Ljungren agreed that he could not be a successful V&V manager "given his opinion of us" as managers and his opinion of how the company was being run.⁸¹ Yadav was given the option of voluntary resignation or discharge for cause if he did not sign a release agreement. He refused to sign and was discharged.

The September 30, 2005 termination memorandum listed the following reasons for Yadav's discharge:

- 1. Yadav had "strong tendencies" to make complaints and accusations without specific examples or suggestions for improvement.
- 2. Yadav showed significant lack of follow-up and follow-through on requests for information from Ljungren and Stevens.
- 3. Yadav failed to demonstrate active management in a timely manner by implementing solutions or creating resolutions.
- 4. Yadav exercised poor judgment and thus created additional costs and engaged in activities that added no value to the process.
- 5. Yadav demonstrated a lack of communication and working of issues with subordinates, colleagues, and his direct supervisor.
- 6. Yadav disregarded the policies of L-3 regarding ethics, foreign nationals, and travel as well as those dealing with communications and being out of the office.
- 7. Yadav exhibited poor communication and coordination skills, misrepresented the truth, and failed to lead his team and create an environment of positive morale.

⁷⁹ JX 77.

⁸⁰ JX 80.

⁸¹ TR at 410-11, 608-09.

The memo concluded that Yadav was hired for his expertise and experience in "mature engineering environments" and was expected to help to build the infrastructure that L-3 needed to produce the SmartDeck program. "However, the delinquencies in your performance create additional issues in the business that negatively influence[d] the SmartDeck project rather [than] work[ing] toward achieving this important objective."⁸²

Yadav filed a complaint with the Labor Department's Occupational Safety and Health Administration (OSHA), which dismissed his complaint on May 15, 2006.⁸³ Yadav requested a hearing, which the ALJ held on March 6-8, 2007. In an April 30, 2008 [Recommended] Decision and Order (R. D. & O.), the ALJ dismissed Yadav's complaint. He appealed to the Administrative Review Board (ARB or Board).

JURISDICTION AND STANDARD OF REVIEW

The Secretary of Labor has delegated her authority to decide this matter to the ARB.⁸⁴ In cases arising under AIR 21, we review the ALJ's findings of fact under the substantial evidence standard.⁸⁵ Substantial evidence means "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion."⁸⁶ Thus, if substantial evidence supports the ALJ's findings of fact, they shall be conclusive.⁸⁷ The ARB reviews the ALJ's legal conclusions de novo.⁸⁸ The ARB generally defers to an ALJ's credibility determinations, unless they are "inherently incredible or patently unreasonable."⁸⁹

⁸⁵ 29 C.F.R. § 1979.110(b).

⁸⁶ Universal Camera Corp. v. NLRB, 340 U.S. 474, 477 (1951).

⁸⁷ *Mehan v. Delta Air Lines*, ARB No. 03-070, ALJ No. 2003-AIR-004, slip op. at 2 (ARB Feb. 24, 2005); *Negron v. Vieques Air Link, Inc.*, ARB No. 04-021, ALJ No. 2003-AIR-010, slip op. at 4-5 (ARB Dec. 30, 2004).

⁸⁸ *Rooks v. Planet Airways, Inc.*, ARB No. 04-092, ALJ No. 2003-AIR-035, slip op. at 4 (ARB June 29, 2006).

⁸⁹ Jeter v. Avior Tech. Ops., Inc., ARB No. 06-035, ALJ No. 2004-AIR-30, slip op. at 13 (ARB Feb. 29, 2008).

⁸² JX 79. Ljungren testified that she initially drafted this memorandum based on performance issues, with input from Stevens, but as the situation escalated in September, the memo became a termination letter. TR at 408.

⁸³ Administrative Law Judge Exhibit (ALJX) 1-2.

⁸⁴ See Secretary's Order 1-2002, 67 Fed. Reg. 64,272 (Oct. 17, 2002); 29 C.F.R. § 1979.110.

DISCUSSION

The Legal Standard

AIR 21 provides: "No air carrier or contractor or subcontractor of an air carrier may discharge an employee or otherwise discriminate against an employee with respect to compensation, terms, conditions, or privileges of employment because the employee . . . provided . . . to the employer or Federal Government information relating to any violation or alleged violation of any order, regulation, or standard of the Federal Aviation Administration or any other provision of Federal law relating to air carrier safety under this subtitle or any other law of the United States."⁹⁰

Thus, when an employee provides an employer or the federal government information relating to any violation or alleged violation of any FAA order, regulation, or standard or any other provision of federal law related to air carrier safety, he or she engages in activity protected under AIR 21. As we said in *Evans v. Miami Valley Hosp.* & *CJ Sys. Aviation Group, Inc.*, protected activity consists of two elements: (1) the information that the employee provides must involve a purported violation of a regulation, order, or standard relating to air carrier safety, though the employee need not prove an actual violation; and (2) the employee's belief that a violation occurred must be objectively reasonable.⁹¹ The information provided to the employer or federal government must be specific in relation to a given practice, condition, directive, or event that affects aircraft safety.⁹²

To prevail against L-3 under AIR 21, Yadav must prove by a preponderance of the evidence that (1) he engaged in protected activity; (2) L-3 knew that he engaged in the protected activity; (3) L-3 took an unfavorable personnel action against him; and (4) the protected activity was a contributing factor in the adverse action.⁹³ Yadav will be entitled to relief unless L-3 demonstrates by clear and convincing evidence that it would have fired him in the absence of the protected activity.⁹⁴

⁹¹ ARB Nos. 07-118, -121, ALJ No. 2006-AIR-022, slip op. at 12-13 (ARB June 30, 2009).

⁹² Id.

⁹³ See 49 U.S.C.A. § 42121(a), (b)(2)(B)(iii); Peck v. Safe Air Int'l, Inc., ARB No. 02-028, ALJ No. 2001-AIR-003, slip op. at 6-10 (ARB Jan. 30, 2004) (explaining scope of coverage, procedures, and burdens of proof under AIR 21).

⁹⁴ See 49 U.S.C.A. § 42121(b)(2)(B)(iv). *Cf.* 29 C.F.R. § 1979.104(d). See, e.g., *Negron*, slip op. at 6; *Peck*, slip op. at 9.

⁹⁰ 49 U.S.C.A. § 42121(a).

Clear and convincing evidence or proof denotes a conclusive demonstration; it is "[e]vidence indicating that the thing to be proved is highly probable or reasonably certain."⁹⁵ Thus, the clear and convincing standard of proof is more rigorous than the preponderance-of-the-evidence standard but lower than the beyond-a-reasonable-doubt criterion of criminal cases.⁹⁶ Thus, in an AIR 21 case, clear and convincing evidence that an employer would have fired the employee in the absence of the protected activity overcomes the fact that an employee's protected activity played a role in the employer's adverse action and relieves the employer of liability.

L-3 violated AIR 21 in firing Yadav

Both Yadav and L-3 stipulated that L-3 was a covered employer under AIR 21 and that Yadav was an L-3 employee.⁹⁷

The ALJ stated that Yadav engaged in protected activity under AIR 21 when he complained to Ljungren about the extent of the reverse engineering in the SmartDeck prototype and the misrepresentation of its software development plan to the FAA under FAR 23.1309 and the FAA's software guidance manual for airworthiness certification of airborne systems and equipment.⁹⁸

Substantial evidence supports this finding. As V&V manager, Yadav was charged with ensuring the integrity of the development process, which was "very critical to ensuring the safety of the product."⁹⁹ Yadav pointed out to Ljungren and others that the reverse engineering process itself could mask design flaws in the software components of SmartDeck that might impact the air safety of the finished product.¹⁰⁰ Thus, Yadav's communications to Ljungren and Stevens in August and September related definitively and specifically to the FAA's software safety standards and the FAR covering design technology.¹⁰¹

- ⁹⁷ R. D. & O. at 3.
- ⁹⁸ JX 91; R. D. & O. at 34.
- ⁹⁹ TR at 115-16, 130-32, 263-65.
- ¹⁰⁰ TR at 279, 370-73; JX 23.
- ¹⁰¹ See footnotes 7-8.

⁹⁵ BLACK'S LAW DICTIONARY 577 (7th ed. 1999).

⁹⁶ *Barker v. Ameristar Airways, Inc.* ARB No. 05-058, ALJ No. 2004-AIR-012, slip op. at 5 n.2 (ARB Dec. 31, 2007).

The ALJ also stated that L-3 "stipulated and acknowledged" that Yadav engaged in protected activity and that L-3 knew of this activity.¹⁰² Thus, we need not decide whether Yadav's complaints about the reverse engineering process constituted protected activity because L-3 conceded this element in its post-hearing brief and does not contest the issue on appeal.¹⁰³ Therefore, we agree with the ALJ that Yadav established that he engaged in protected activity. Yadav then had to prove that his protected activity contributed to his discharge.

In concluding that Yadav's protected activity contributed to his discharge, the ALJ relied on the timing of Yadav's August 26 memo and his discharge on September 30, and Stevens's action in excluding his input into the investigation in September.¹⁰⁴ The ALJ noted that, while the investigation¹⁰⁵ into Yadav's concerns concluded that SmartDeck's development processes were "well suited to produce safe avionics systems," Stevens, who instigated the investigation, excluded Yadav from participation. The ALJ found that Yadav, who had initially raised the idea of such an investigation, had no opportunity to inform the investigators about his concerns regarding reverse engineering and misrepresentations to the FAA. The ALJ determined that Stevens's action influenced her "determination to continue consideration" of his discharge and thus showed that Yadav's safety concerns contributed to his firing.¹⁰⁶

In cases in which an employer articulates several reasons for its adverse action and a complainant successfully challenges the credence of one of those reasons, the factfinder is permitted (though not required) to conclude that the complainant has shown that protected activity was at least a contributing factor to the decision.¹⁰⁷ Here, the ALJ concluded that Yadav "challenged the credence" of L-3's reasons for firing him, hereby contributing to its decision to fire him.¹⁰⁸

¹⁰³ Respondent's Post-Hearing Brief at 3 n.1.

¹⁰⁴ **R. D. & O. at 34**.

¹⁰⁵ The ALJ stated that "[f]oremost among the reasons advanced for terminating" Yadav's employment was the September 29, 2005 investigation report to Stevens. R. D. & O. at 35. However, the termination memo does not mention this investigation. JX 79.

¹⁰⁶ R. D. & O. at 36.

¹⁰⁷ *Majali v. AirTran Airlines*, ARB No. 04-163, ALJ No. 2003-AIR-045, slip op. at 11 n.11 (ARB Oct. 31, 2007).

¹⁰⁸ R. D. & O. at 35.

¹⁰² R. D. & O. at 33.

The record demonstrates that L-3 fired Yadav within six weeks of his complaints to Ljungren about L-3's misrepresentations to the FAA and within the same month he sent his memo to Margo about possible retaliation. Ljungren forwarded Yadav's August 26 e-mail raising his safety concerns to Stevens and Margo in mid-September. Stevens reacted by telling Ljungren that, based on Yadav's behavior, he was not the person needed to lead the SmartDeck program and that L-3 needed to start looking for a replacement.¹⁰⁹ Margo responded by stating that Yadav should not be pushed into "thinking [that L-3 was] going to jeopardize his job because that might send him straight to corporate with a claim of retaliation."¹¹⁰ Finally, the September 30 termination memo itself mentioned Yadav's August 26 memo as an example of his tendency to complain without offering solutions. Based on this evidence, we agree with the ALJ that Yadav proved that his protected activity contributed to his discharge.

Because he found Yadav's protected activity to be a contributing factor, the ALJ concluded that L-3 violated AIR 21 and that Yadav was entitled to relief unless L-3 demonstrated by clear and convincing evidence that it would have fired him absent his protected activity.¹¹¹

L-3 would have fired Yadav absent his protected activity

The ALJ found that L-3 discharged Yadav because he refused to perform his V&V managerial duties and not because he raised safety issues regarding the SmartDeck development plan. The ALJ noted that Yadav's August 26 memo to Ljungren stated that her position on the SmartDeck software development plan made it "impossible" for him to do his job and that she should not count on him to support her. Thus, the ALJ determined that not only did Yadav threaten to stop performing the duties of his V&V position if the SmartDeck project was not scrapped, but also he failed to provide L-3 managers with specific corrections or improvements to the SmartDeck plan. Specifically, Yadav did not produce the information Mishler had requested, he did not talk with other managers as Ljungren had directed, and he did not validate his own concerns about the SmartDeck development plan.¹¹² The ALJ thus concluded that the business reasons L-3 advanced in its termination letter constituted clear and convincing evidence that L-3 would have fired Yadav absent his protected activity.¹¹³

- ¹¹² R. D. & O. at 38, 41.
- ¹¹³ *Id.* at 42.

¹⁰⁹ JX 28.

¹¹⁰ JX 29.

¹¹¹ R. D. & O. at 42. See 49 U.S.C.A. § 42121(b)(2)(B)(iv).

On appeal, Yadav argues that the ALJ erred in concluding that L-3 would have fired him absent his protected activity because the ALJ "essentially ignored" direct evidence of L-3's retaliatory motivation as demonstrated in the testimony of Teri Litteral and in the termination memo itself.¹¹⁴

Litteral, a quality assurance representative in the Dayton, Ohio, office, stated that Stevens had told her that Yadav was fired because he had gone over her head to COO Shafer about his concerns and that such an action was not acceptable.¹¹⁵ The ALJ did not "ignore" Litteral's deposition testimony. While he found her testimony credible, the ALJ determined that her statement about the chain of command was speculative and irrelevant to L-3's ultimate motivation for Yadav's discharge—his failure to perform his managerial duties.¹¹⁶ Therefore, we reject this argument.

The September 30, 2005 termination memo mentioned Yadav's August 26, 2005 memo and "follow-up discussions" and e-mails through September 19 as one example of his tendency to offer complaints without suggested resolutions.¹¹⁷ The ALJ found that the termination memo addressed the major issues underlying L-3's decision to discharge Yadav—lack of response to management's requests for specific actions or reports, failure to maintain scheduling objectives for V&V, and refusal to offer specific wording to correct the development plan language.¹¹⁸ Inasmuch as the termination memo was based, not on Yadav's protected activity of raising air safety concerns, but on his practice of refusing to participate in the solution of those concerns, this argument is not persuasive.

Yadav also argues that the ALJ erred in relying on evidence that L-3 did not consider in its termination decision, thus substituting his judgment for that of the employer. Yadav contends that, in concluding that L-3 would have fired him absent his protected activity, the ALJ gave undue weight to his PowerPoint presentation to Shafer, Mishler's September 21, 2005 e-mail to him, and Pell's September 19 e-mail to Margo.¹¹⁹

The ALJ discussed the Shafer presentation and Mishler's e-mail at some length and stated that they "provided additional credence" to his conclusion that L-3 established by clear and convincing evidence that it would have fired Yadav absent his protected

¹¹⁷ JX 79.

¹¹⁸ R. D. & O. at 30.

¹¹⁹ Complainant's Brief at 23-26. JX 31. See footnotes 45, 66.

¹¹⁴ Complainant's Brief at 19-22.

¹¹⁵ CX 5 at 37.

¹¹⁶ R. D. & O. at 10, n.10. Stevens denied making this statement to Litteral. TR at 765.

activity.¹²⁰ The ALJ noted that Yadav failed to recognize that L-3 hired him because of his perceived capability to show management where and why their SmartDeck development plan was not working. However, Yadav continued to maintain that it was not his job to provide specific corrections or improvements that could be initiated or adopted to correct the safety issues he raised. The ALJ concluded that Yadav "was persistent in his conviction that he could not perform V&V functions unless management first addressed his perceived safety concerns, which he refused to verify, other than by invoking philosophical engineering principles."¹²¹

Contrary to Yadav's argument, the September 30, 2005 termination memo does refer to Mishler's September 21 e-mail requesting an action plan prior to September 26 as an example of Yadav's "[s]ignificant lack of follow up and follow through" with requests from other managers.¹²² Further, the ALJ acknowledged that L-3 did not rely on the PowerPoint documents Yadav sent to Shafer in its decision to discharge him.¹²³ Finally, the ALJ did not give undue weight to Pell's "stern letter" in concluding that L-3 met its burden of proof. He simply stated in his recitation of the facts that the e-mail "supported his conclusion that clear and convincing evidence had been presented regarding Yadav's documentary exchanges with Ljungren in August and September" that Yadav would have been fired absent his protected activity.¹²⁴ Therefore, we reject this argument.

Finally, Yadav generally avers that the ALJ erred in concluding that the manner in which Yadav raised his concerns and his refusal to perform his duties constituted clear and convincing evidence that L-3 would have fired him absent his protected activity. Yadav argues that his conduct and strong language did not disrupt L-3's business operations and were necessary because L-3 was ignoring his concerns. Also, Yadav contends that the record evidence does not support the ALJ's conclusion that Yadav was fired for refusing to perform his duties as V&V manager.¹²⁵ We reject these arguments because substantial evidence in the record amply supports the ALJ's findings, as noted above.

¹²⁵ Complainant's Brief at 26-30.

¹²⁰ **R. D. & O. at 40**.

¹²¹ *Id.* at 41. *See* JX 25, TR at 63-64, 319-21.

¹²² JX 79.

¹²³ **R. D. & O. at 41.**

¹²⁴ *Id.* at 24.

First, in the September 30, 2005 memorandum,¹²⁶ Ljungren stated that in e-mails, memos, conversations, and meetings, Yadav made complaints and accusations but failed to offer specific examples and suggestions for solutions. For example, Stevens wanted a full report from Yadav about the April "Sun 'N' Fun" trade show, but instead of complying Yadav complained that L-3 had organizational and leadership weaknesses and should have exhibited its SmartDeck product at the show. Further, Yadav informed Ljungren about the issue of alleged misrepresentations to the FAA about reverse engineering, but when asked to ensure that the wording in the SmartDeck plan was revised to reflect the development process more accurately, he declined to take part in changing the language.¹²⁷

Second, Ljungren stated in the memo that she and others repeatedly asked Yadav for information and input on various phases of the SmartDeck development, but Yadav "blew off" their requests for feedback. For example, Ljungren asked Yadav to talk with other engineers about whether reverse engineering was an acceptable practice, but he responded in a memo that denigrated her managerial ability. Ljungren also asked Yadav to meet with her after the April 2005 "debacle" presentation to discuss ten objectives aimed at addressing the problems raised. Yadav responded that the list was fine but provided no input and insisted that the problems were organizational. In late June, Ljungren asked for V&V metrics for a program review as soon as possible. Yadav told her that he believed another manager had them in her spreadsheet and that some metrics would need to be adjusted.¹²⁸

Stevens twice asked Yadav for written feedback after meeting with him in April about improvements to the SmartDeck development plan, but he did not respond to either request. Donnelly warned Yadav of a "crunch time" for reviews of the requirements package and asked for extra people to handle the work, but Yadav failed to respond.¹²⁹ As noted, Mishler requested an overall action plan from Yadav by September 23 due to increasing concern that the SmartDeck schedule was slipping, but Yadav did not respond until the afternoon of the day he was fired.

Third, Ljungren cited Yadav's failure to manage his group by implementing solutions or creating resolutions. For example, instead of following up on Hennings's report in May of misrepresentations by his teams to the accountants, Yadav forwarded Hennings's e-mail to Stevens and noted that he had not looked into the allegations.

¹²⁶ JX 79. Ljungren also submitted a February 28, 2006 statement outlining her perceived deficiencies in Yadav's performance. JX 94.

¹²⁷ As further examples, Ljungren noted Yadav's August 26 memo to her and his September 19 memo to Margo.

¹²⁸ JX 20.

¹²⁹ TR at 267-68.

Ljungren inquired in June about zero progress in testing and a status report for an upcoming corporate review. Yadav simply replied that the testing numbers reported did not present a complete picture and that another manager had the data Ljungren needed but some dates would have to be adjusted. Also, Ljungren noted that at the Monday meetings Yadav's group was usually "delinquent in at least one area," but his response was to blame others for the problem.

Fourth, Ljungren stated that Yadav exercised poor judgment, thus creating additional costs, and engaged in activities that added no value to SmartDeck's development process. Ljungren noted that Yadav had not raised his concerns about reverse engineering until August 2005, ten months after he was hired, but meanwhile more than \$2.5 million was spent monthly on the software development program.¹³⁰ Further, Yadav's trip to corporate headquarters on September 22 to see Shafer was expensive and could have been handled over the telephone or when Shafer was in Grand Rapids the following week.¹³¹ Finally, Yadav spent considerable time and effort producing a PowerPoint presentation on corporate responsibility for COO Shafer, but this did not involve SmartDeck development or his duties as manager.

The fifth and seventh reasons Ljungren outlined in the termination memo stated that Yadav demonstrated a lack of communication and coordination skills and an inability to lead his team, establish positive morale, and work the issues with his subordinates, colleagues, and her, his direct supervisor. For example, she noted that Yadav's written memos were "dramatic, offensive, and rambling" but lacked specific recommendations. Ljungren testified that Yadav characterized his concerns about the safety aspects of reverse engineering as an ethics issue in a memo to Margo instead of engaging with other managers and engineers to develop and implement a solution.¹³² Ljungren told Yadav in a September 22, 2005 e-mail that she was "surprised" he went to see Shafer when he should have worked the issue. And she reminded Yadav that back in August she had been willing to bring in the FAA to address his concerns about reverse engineering, but he had not cooperated.¹³³

Finally, Ljungren stated that Yadav disregarded L-3 policies on time and attendance, and travel. For example, on a trip to Turkey to oversee the AYESAS project, Yadav upgraded his flight to first class, at a cost of \$5,000.00, without obtaining permission. Ljungren found out about the upgrade only because Yadav encouraged other

¹³³ JX 45.

¹³⁰ TR at 260-66, 473; JX 79.

¹³¹ JX 47.

¹³² TR at 460. The ethics violation investigators concluded that Yadav's allegations of misrepresentation to the FAA about the reverse engineering of SmartDeck's software were without merit. JX 72.

employees to upgrade and the travel office called for authorization. Finally, Ljungren asked Yadav in a September 20 e-mail why he would be out of the office for two days since she had seen no travel plans for him and expected the usual teleconference meeting the next day.¹³⁴

There is no question that SmartDeck was an important aircraft part which, if marketed without resolution of potentially inherent design flaws in its production, could contribute to system failure and the possibility of a disastrous incident; thus, as the ALJ found, safety was "at the heart of every engineering decision."¹³⁵

Nonetheless, L-3's reasons for discharging Yadav demonstrate that he failed to fulfill the responsibilities of his managerial position to resolve the development issues in the SmartDeck project and to move the program to completion. The numerous e-mails and memos in the record support L-3's decision to fire Yadav because he did little or nothing to implement solutions beyond outlining the problems and criticizing other managers. In sum, Yadav became part of the problem instead of using his expertise and experience to find solutions and make the SmartDeck project ready for FAA certification. Therefore, we agree with the ALJ that L-3 proved by clear and convincing evidence that it would have fired Yadav absent his protected activity.

CONCLUSION

Substantial evidence supports the ALJ's finding that Yadav engaged in protected activity, which was a contributing factor in L-3's decision to discharge him. Substantial evidence also supports the ALJ's findings that L-3 would have fired Yadav absent his protected activity because he failed to perform the duties of his position. Thus, the ALJ properly concluded that L-3 established by clear and convincing evidence that it would have fired Yadav absent his protected activity. Therefore, we **AFFIRM** the ALJ's recommended decision and **DENY** Yadav's complaint.

SO ORDERED.

WAYNE C. BEYER Chief Administrative Appeals Judge

OLIVER M. TRANSUE Administrative Appeals Judge

¹³⁴ JX 45-46.

¹³⁵ R. D. & O. at 37.