

Affidavit of Robert Kroutil

1. My name is Robert Kroutil. I am submitting this statement without any threats, inducements, or coercion to Lesley Pacey, who has identified herself to me as the environmental investigator with the Government Accountability Project. This statement evidences my experience regarding the EPA ASPECT airplane program and its delayed use and misuse during the East Palestine Train Derailment response (Exhibit 1).
2. Until January 27, 2024, I was the data quality project manager at Kalman & Company Inc. under contract with the EPA for the ASPECT airplane or ASPECT program.¹ Working with several colleagues, we developed the sensors in the aircraft. Nearly one million lines of software are on that sensor aircraft, and we wrote them all.
3. ASPECT,^{2,3,4} which stands for airborne spectral photometric environmental collection technology, is EPA's only real-time chemical and radiological detection platform.⁵ It provides infrared and photographs to aid for public health and emergency response incidents. The sensors can detect the existence and volume of chemicals and heat signatures at very low levels. The ASPECT plane flies these sensors at 2800 feet over the target and detects up to 530 different chemical compounds.⁶ The ASPECT plane is the EPA's only always-on-call emergency response system capable of mapping a chemical plume hazard, and to my knowledge is the only technology of its kind that could have been deployed to a civilian

¹ ASPECT: Behind the Science. (n.d.). www.youtube.com. <https://www.youtube.com/watch?v=uVxy-jrcnos>

² "ASPECT Airborne Spectral Photometric Environmental Collection Technology." n.d. Accessed May 9, 2024. <https://www.epa.gov/system/files/documents/2021-11/aspect-fact-sheet-2021.pdf>.

³ US EPA, OLEM. 2013. "ASPECT." www.epa.gov. April 11, 2013. <https://www.epa.gov/emergency-response/aspect>

⁴ Airborne Spectral Photometric Environmental Collection Technology. (2014). https://www.epa.gov/sites/default/files/2014-09/documents/aspect_webinar_slides_09-11-14.pdf

⁵ US EPA, R. 06. (2023, April 13). ASPECT. [www.epa.gov](https://www.epa.gov/la/aspect). <https://www.epa.gov/la/aspect>

⁶ "ASPECT: Flying for First Responders." n.d. www.youtube.com. Accessed May 9, 2024. <https://www.youtube.com/watch?v=f60r9sAozXs>

disaster like East Palestine. I believe that this passive remote sensing technology is the best in the nation and extremely critical to safeguarding the public in the event of a chemical plant explosion or a train car derailment.

4. I have nearly 40 years of experience as an infrared spectroscopist conducting infrared measurements of the atmosphere and have written a number of peer reviewed published reports on the technology.⁷ I was the data manager at Kalman and Company, an EPA contractor, for 10 years where I was a senior scientist. I am one of two people who can interpret and analyze the data collected by the ASPECT sensors.
5. The information from the ASPECT sensor system is obtained through a satellite communications system mounted on the aircraft. We at Kalman & Company do all the data analysis in Kansas. After the program difficulties that occurred with the government program management after East Palestine, I elected to retire. Two of my other colleagues retired as well. I retired due to mounting frustration over the conduct of the director of the ASPECT program.
6. As a senior scientist for Kalman & Company, I interpreted data from ASPECT plane missions and prepared reports for the EPA ASPECT program managers. The EPA ASPECT plane flies out of Addison, Texas at the direction of the EPA ASPECT program manager, a role currently held by Paige Delgado, and is able to start collecting data anywhere in the U.S. within fifteen minutes after liftoff. The plane is usually wheels up ready within an hour as per their contract specifications.⁸

⁷ Kroutil, Robert. 2006. "Emergency Response Chemical Detection Using Passive Infrared Spectroscopy." SPIE Newsroom.
https://www.academia.edu/73666571/Emergency_response_chemical_detection_using_passive_infrared_spectroscopy.

⁸"ASPECT Airborne Spectral Photometric Environmental Collection Technology." n.d.
<https://www.epa.gov/system/files/documents/2021-11/aspect-fact-sheet-2021.pdf>.

7. The EPA ASPECT contractor since 2016, Airborne ASPECT, operates the ASPECT plane and gathers data, which Kalman & Company receives. Kalman & Company analyzes this data and provides the analysis of ASPECT data to the government program managers who provide the data to toxicologists internal to the government.⁹ This data is supposed to be relayed in a short period of time by EPA ASPECT Program Manager Paige Delgado to the incident commander and other first responders. This allows us to determine the plume dimensions of the various chemicals that are spilled or burned that could be a threat to the public. ASPECT is the best capability that the EPA has to provide data immediately to the incident commander which allows first responders, the fire departments, and impacted residents to get the most accurate information about the environment so they can take protective action. But that is not what happened in East Palestine.
8. I am providing this statement out of concern for the health and safety of the residents of East Palestine and because I am troubled with how the ASPECT airplane, a one-of-a-kind sensor system and essential disaster response tool, was not deployed properly during the East Palestine disaster. If used in the appropriate time window and with proper procedures, the ASPECT aircraft has the ability to gather extremely sensitive real-time chemical data as well as thermal data on temperatures that should have resulted in an informed decision about whether the vent and burn¹⁰ was necessary.
9. The ASPECT plane instrumentation also would have detected dangerous chemicals used to inform important decisions regarding first responders and residential evacuations.

⁹ “The EPA Dragged Its Feet after the Ohio Train Derailment, Emails Show.” 2023. HuffPost. September 15, 2023. https://www.huffpost.com/entry/epa-east-palestine-derailment-dioxins-foia-emails_n_65030f7ee4b04e47fed4fa5a.

¹⁰ “New Drone Video of East Palestine Train Derailment Shows Intensity of Fire.” n.d. www.youtube.com. Accessed May 9, 2024. <https://www.youtube.com/watch?v=o7IJGtPTz0>.

10. But EPA ASPECT program manager Paige Delgado and other program managers at EPA failed to fly the ASPECT plane the first four days of the derailment when the fires¹¹ were burning. I am privy to that information because I worked for Kalman & Company. I had a monitor in my office to monitor the aircraft's activity. Information gathered in the first four days following the derailment could have informed residents and first responders about chemical threats as well as heat signatures from the tank cars to show the cars were cooling and not in danger of a catastrophic explosion. The EPA should have had this aircraft flying over the train cars so they could detect the heat in the tanks. If they had done so, the ASPECT could have told Unified Command if the vinyl chloride in the train cars were polymerizing. The EPA has equipment for this and apparently chose not to employ it for its intended use.
11. Typically, the aircraft would be deployed within a few hours of a train derailment. Instead, the EPA ASPECT did not fly over the East Palestine derailment and monitor the slow burn of chemicals on the night of the derailment, February 3rd. The EPA also failed to deploy the aircraft to the disaster site on February 4th and 5th while the chemical fires were still smoldering. I know this because I am the quality assurance data manager for ASPECT and during the disaster I watched the aircraft monitors from my office, wondering why the ASPECT aircraft had not yet been deployed.
12. The plane was eventually dispatched from its hangar near Dallas, Texas to Pittsburgh, the closest major airport near East Palestine, three minutes before midnight on February 5th, but I did not observe the aircraft operators, EPA subcontractor Airborne ASPECT,¹² make ANY passes directed by the government over the derailed train on the way to Pittsburgh through

¹¹ 2021. Whistleblower.org. 2021. https://whistleblower.org/wp-content/uploads/2024/05/2-DJI_0086-Rel-1-1.mp4.

¹² "About - Airborne ASPECT." n.d. Airborneaspect.com. Accessed May 9, 2024. <http://airborneaspect.com/about.html>.

the monitoring system I have access to. To me, it makes no sense that they made no passes over the derailment site.

13. The East Palestine derailment was the oddest response I ever observed with the ASPECT program in over two decades with the program. Since it began in 2001, ASPECT has been deployed nearly 180 times to train car derailments, emergency responses, chemical plants, explosions, oil spills and other disasters. I have been involved in each of these deployments. The EPA contract requires the aircraft contractors to be off the ground within one hour of notification and in nearly every case that has happened. It should have been flown the day of the derailment event on February 3. It could have gotten to East Palestine that same day. In my experience with past train derailments, the ASPECT plane has consistently been deployed on the same day of the derailment.

Migraine grounded ASPECT for days?

14. Normally, EPA ASPECT can be deployed by a region, which in this case would have been EPA Region 5, or by the EPA ASPECT Program managers at EPA headquarters in Washington, D.C., but the official deployment of the plane has to be authorized by the Contracting Officer for the contractor Airborne ASPECT. However, if it is a national emergency, then EPA headquarters in Washington D.C can deploy the aircraft.
15. The staff's understanding was that Ed Argenta, who is the employee at EPA headquarters overseeing the entire EPA ASPECT program, saw a news report of the train derailment and sent several text messages over two to three days to Paige Delgado to contact the Contracting Officer at the U.S. EPA headquarters in Washington, D.C. and ask him to deploy the aircraft to East Palestine through the contractors.

16. I learned all of these details at an EPA ASPECT meeting this last fall in Olathe, Kansas that I attended between EPA ASPECT program managers and the government contractors including Kalman & Company and other government employees. At that meeting, EPA ASPECT Program Manager Paige Delgado said she did not answer her phone or see text messages Ed was sending her in the days after the derailment because she had a migraine and turned off her phone. Her assistant, the EPA ASPECT technical manager and Contracting Officer Representative was on vacation during the derailment and throughout the ASPECT mission in East Palestine.
17. If both of them were not available, then someone at EPA really should have been able to substitute fulfilling the agency's mission and deploy the aircraft. Her boss Ed Argenta should have called the Contracting Officer for Airborne ASPECT, who was also authorized to deploy the EPA ASPECT plane. The leadership of the EPA Region where the incident occurred, Region 5, could have also stepped in and deployed ASPECT if they could not get in touch with any of the EPA ASPECT headquarters staff. It makes no sense that EPA would not have a better way to deploy the ASPECT aircraft in the event of a national emergency.
18. You would think that if Ed Argenta could not get in contact with EPA ASPECT Program Manager Paige Delgado, then he would have gone to the Contracting Officer themselves and requested to get the aircraft up there in an emergency. If I couldn't get ahold of the person in charge, I would find someone else in the program to deploy the ASPECT. But apparently, they didn't do anything. As far as I know, they just sat there and waited. They should have gotten that plane up there immediately, within four or five hours after the derailment, not days later. That is how it has been done in every other chemical plant explosion or train

derailment. The longest delay I can remember is an hour and a half to get off the ground. It was due to a maintenance issue. It only happened one time.

19. That plane is supposed to be available and ready to go 24/7. So, the EPA ASPECT Airbone ASPECT contractors could have jumped in the airplane and flew up. It takes a while to get from Dallas to East Palestine in a very slow single engine plane. But it goes 150 knots so it can be there in a couple of hours to five hours or so and it can get up there and then start making passes. You want to fly over a train derailment in the first five to ten hours after the incident and while the fires are still burning. It is really advantageous if you have a plume. That big black plume – and fires that occurred after the derailment – is when you want to get in and collect data. The EPA ASPECT airplane should have made passes over the derailment site right away but certainly before the vent and burn. I think they chose not to know.

No chemical data gathered on day of the plume

20. On February 6, the day of the detonation and chemical plume, the plane stayed grounded at the airport in Pittsburgh. I know the EPA publicly blamed the reason why the plane had to stay grounded on low ceiling and icing conditions, but I suspect they could have flown it above the cloud deck and still detected the chemicals. That's a common solution. They could have flown above the plume like the other airplanes that were flying in and out of Pittsburgh that day.¹³ The ASPECT often flies over plumes in similar weather conditions but in a couple of missions they have stayed grounded before due to concerns regarding icing of the wings.

¹³ “Weather History | Weather Underground.” n.d. Www.wunderground.com.
<https://www.wunderground.com/history/daily/us/oh/east-palestine/KPIT/date/2023-2-6>.

21. However, EPA ASPECT did not authorize the plane to fly until the next day.¹⁴ Notably, the weather data reveals that there was no barrier to flying February 6, 2023, as it was a typical winter day without FAA warnings. Commercial and pleasure craft airplanes flew takeoffs and landings continuously during the critical plume deposition hours.¹⁵

ASPECT System operators shut chemical sensors off over contaminated creeks^{16 17}

22. When the plane finally flew on February 7, the plume (Exhibit 2)¹⁸ had dissipated, and system operators onboard the ASPECT made only a couple of passes over the derailment site. I knew the plume was gone due to photographs that were taken by the aircraft, which showed no smoke or fires. They flew about 30 hours after the open detonation. They did two flights that day and based on my knowledge of the sensor field of view, did not fly in a sensor package to point in the correct location (Exhibit 3). The FTIR, the Fourier Transform Infrared Spectrometer, is a sensor that has a ½ degree field of view and an eight-foot-wide view on the ground. It has higher spectral fidelity. Both sensors are coupled together and work in tandem with each other.

¹⁴ “U.S. EPA Responses to Questions for the Record -December 2023 House Energy and Commerce Committee Subcommittee on Environment, Manufacturing, and Critical Materials Hearing on ‘Government Response to East Palestine: Ensuring Safety and Transparency for the Community’ the Honorable Bill Johnson.” 2023. <https://docs.house.gov/meetings/IF/IF18/20230328/115562/HHRG-118-IF18-Wstate-ShoreD-20230328-SD026.pdf>.

¹⁵ Brandon Marc. 2023. “Passenger Photo While Plane Flew near East Palestine, Ohio ... Chemical Fire after Train Derailed.” February 15, 2023. https://www.reddit.com/r/pics/comments/112ptb9/passenger_photo_while_plane_flew_near_east/?utm_source=embedv2&utm_medium=post_embed&utm_content=post_body&embed_host_url=https://www.snopes.com/fact-check/airplane-smoke-clouds-ohio-train-derailment-photo/.

¹⁶ Stonesifer, Nick. 2024. “A Year after Ohio Derailment, Pair Monitor Waterways: ‘There’s Still Something Going On.’” Pennlive. February 16, 2024. <https://www.pennlive.com/news/2024/02/a-year-after-ohio-train-derailment-pair-monitor-area-waterways-to-prove-theres-still-something-going-on.html>.

¹⁷ East Palestine creeks visibly contaminated year after train derailment. (2024, February 2). NewsNation. <https://www.newsnationnow.com/us-news/midwest/ohio-train-derailment/east-palestine-creeks-visibly-contaminated/>

¹⁸ Delgado, Paige, Jill Chemical, Photometric Lead, Taylor Jillianne@epa, Gov, Charles Miller, Miller Charles, and T@epa. 2023. “ASPECT Mission Supporting: Region 5 On-Scene Coordinator ASPECT Response to East Palestine Derailment, East Palestine, Ohio Airborne Spectral Photometric Environmental Collection Technology ASPECT TEAM.” <https://www.epa.gov/system/files/documents/2023-02/ASPECT%20Summary%20%20Report%20--%20East%20Palestine%20Derailment%20Rev1.pdf>.

23. The EPA ASPECT Program Manager Paige Delgado was instructed by my boss at Kalman & Company to fly a "Christmas tree pattern" over the derailment site. This information was emailed to her as well as discussed in a Teams call that included me, EPA officials and other contractors. After my review of the data, it is my understanding that the ASPECT flights were not run in the traditional Christmas tree pattern (Exhibit 4). About an hour before the vent and burn, he recommended this to EPA ASPECT Program Manager Paige Delgado via email (Exhibit 5). He told Delgado in that email when they fly over East Palestine on February 6 during the open burn of chemicals, the ASPECT would see mostly phosgene and vinyl chloride from the BLEVE (boiling liquid expanding vapor explosion) and open burn. But those chemicals are hard to detect after the fact. Unfortunately, they did not fly on February 6 and when they flew on February 7, they had only about three passes over the derailment site and then a couple of passes downwind.
24. Other Kalman & Company employees and I tried to do the best with what we had. We usually get 10 to 12 times as much data from a mission than we got from the ASPECT plane deployment on February 7. We had very little data from over the derailment site and since the plane was not flown in the Christmas tree pattern, the readings may not have been taken in the correct locations.
25. The ASPECT has automated methods of detection for chemicals. When the plane is flying, the automated processing looks for 78 compounds while a longer hand review was looking for many more compounds. ASPECT can detect any compound that is infrared active in either the 3-5 and 8-12 micron wavelength spectral region. This chemical list of 78 compounds is essentially the chemicals most likely to be encountered in transportation

related incidents and that are also infrared active in either the 8-12- or 3-5-micron spectral wavelength region.¹⁹

26. For East Palestine, we focused carefully on looking for signatures of vinyl chloride and phosgene. Both of these compounds are extremely strong infrared absorbers and, thus, the detection limit, which is the level at which ASPECT is able to detect a chemical, is very good. ASPECT can detect both vinyl chloride and phosgene at very low levels. However, the aircraft only flew over the train derailment site a day after the tank cars were ignited in an open burn. There were no smoke plumes visible in any of the photos for any of the passes. Furthermore, there was no chemical vapor that could be detected because the derailment site was wet because it had been extinguished by the firefighters. The system works much better over plumes and active fires.

Also, sensors were turned off over the critical paths.

27. The ASPECT made passes over the contaminated creeks²⁰ supposedly to monitor for the variety of air toxins. However, when we got ready to make passes on February 7, the EPA ASPECT program manager Paige Delgado inexplicitly instructed the Airborne ASPECT system operator in the aircraft to turn off all of the chemical detecting sensors over the creeks during both flights. I and other colleagues heard EPA ASPECT Program Manager Paige Delgado during a Teams conference call with the EPA ASPECT contractors on February 7 when the plane was flying over East Palestine request the system operators in the aircraft

¹⁹ “Airborne Spectral Photometric Environmental Collection Technology.” 2014.

https://www.epa.gov/sites/default/files/2014-09/documents/aspect_webinar_slides_09-11-14.pdf.

²⁰ “East Palestine Creeks Visibly Contaminated Year after Train Derailment.” 2024. NewsNation. February 2, 2024. <https://www.newsnationnow.com/us-news/midwest/ohio-train-derailment/east-palestine-creeks-visibly-contaminated/>.

only collect photos over the creek areas. We also heard her tell system operators to turn off the EPA ASPECT's chemical detection system over the creek areas.

28. My colleagues and I thought this was an extremely odd request. I asked her during that call, "Do you really want to do this?" and I got no response back. We could not figure out why she was doing that. The creeks over which the EPA ASPECT chemical sensors were turned off include Sulphur Run, Leslie Run and Little Beaver Creek. If you look at the data set, Airborne ASPECT only collected geo-corrected photos over the creeks for all flights and have absolutely no chemical data over the creeks. I had never heard of turning off the sensor in any mission previous to the train derailment at East Palestine.
29. The ASPECT software can detect and quantify 78 compounds automatically using artificial intelligence methods and over 530 chemical compounds during a hand review. This is to help assess what the threat level is. The chemical sensors can detect phosgene and vinyl chloride because the technology is designed for emergency response chemical vapor detection. The sensor is primarily a vapor detection, which is why it does not detect dioxin. However, if the creeks were contaminated with butyl acrylate and other chemicals, the sensors would have detected them. Butyl acrylate is one of the 78 transportation chemicals that are programmed with AI automatic detection algorithms. I suspect that if they did not turn off the sensors over the creeks we would have known if these chemicals were present and at what concentration almost immediately.
30. Since I was responsible for the QA/QC for these chemical sensors, in addition to asking in our EPA Teams meeting why they turned off the chemical sensors over the creeks as we were speaking to them on February 7 while the mission was progressing, I also asked the EPA ASPECT Program Manager Paige Delgado to make additional passes with the airplane over

the creeks with the sensors turned on. I never got a response back from the EPA ASPECT program manager Paige Delgado and to my knowledge they never made any additional passes over the creek areas.

31. This is unprecedented in my experience for the ASPECT aircraft to turn off any sensors during an emergency response. I never understood what the EPA's logic was. Other personnel will also confirm that the sensors were turned off by the EPA ASPECT program manager, Paige Delgado, over the creeks at East Palestine. It does not make any sense.

EPA's ASPECT could have prevented the vent and burn

32. Also, the EPA's ASPECT plane has sensors that gather heat signatures on the ground. Had EPA flown the aircraft before the vent and burn, then the EPA would have obtained information to prove what NTSB (National Transportation Safety Bureau) investigators recently determined: the five vinyl chloride train cars that derailed were cooling and not in danger of causing a catastrophic explosion.²¹

33. The argument that me and my colleagues at Kalman & Company all gave the program managers is that you need to get ASPECT in the air immediately and go over those tank cars, because ASPECT can tell you all the temperatures of the train cars and if you had any concern they were going to blow up, you are going to be able to find it with the EPA's ASPECT aircraft.

²¹ "Explosions, Controlled Burn in East Palestine Train Derailment Were Unnecessary, NTSB Official Head Says - CBS News." 2024. Wwww.cbsnews.com. March 7, 2024. <https://www.cbsnews.com/news/east-palestine-train-derailment-controlled-burn-unnecessary-jennifer-homendy-senate-hearing/>.

34. But the ASPECT plane did not get up into the air until February 7 and they never flew over East Palestine again. That was the day after the vent and burn and by then, most of the smoke had cleared. By that time, it was too late.²²

EPA touts ASPECT technology as part of its rigorous data in East Palestine anyway

35. The EPA in news articles and on its website for East Palestine claims to have continuously been testing the air since the derailment and that the air was safe to breathe.^{23,24}

36. EPA Administrator Michael Regan²⁵ touted²⁶ the ASPECT program in press conferences and in news reports following the East Palestine disaster. He said that during the East Palestine response, the EPA deployed the latest and greatest technology with state-of-the-art sensors. He said that ASPECT was providing the EPA with excellent information to determine where the threat was. However, they didn't even get the plane up there in time to use that technology and then they turned off the sensors over the contaminated creeks which could have shown the chemicals that remained after the vent and burn.

Protocols now “proprietary”/No QAQC or QAPP

37. The EPA Quality Assurance/Quality Control (QAQC) written policy requires an open-source set of standard operating procedures. This is so they can be reviewed and challenged. In

²² Deliso, Meredith. 2023. “East Palestine Derailment: Timeline of Key Events in Toxic Train Disaster.” ABC News. March 14, 2023. <https://abcnews.go.com/US/east-palestine-derailment-timeline-key-events-toxic-train/story?id=97522161>.

²³ US EPA, REG 05. 2023. “Background.” www.epa.gov. April 3, 2023. <https://www.epa.gov/east-palestine-oh-train-derailment/background>

²⁴ “Remarks for the East Palestine Press Conference, as Prepared for Delivery.” www.epa.gov. April 10, 2024. <https://www.epa.gov/speeches/remarks-east-palestine-press-conference-prepared-delivery>.

²⁵ “Remarks for the East Palestine Press Conference, as Prepared for Delivery.” www.epa.gov. April 10, 2024. <https://www.epa.gov/speeches/remarks-east-palestine-press-conference-prepared-delivery>.

²⁶ “U.S. EPA Responses to Questions for the Record -December 2023 House Energy and Commerce Committee Subcommittee on Environment, Manufacturing, and Critical Materials Hearing on ‘Government Response to East Palestine: Ensuring Safety and Transparency for the Community’ the Honorable Bill Johnson.” 2023. <https://whistleblower.org/wp-content/uploads/2024/05/HHRG-118-IF18-Wstate-ShoreD-20230328-SD026.pdf>.

November 2022, prior to the East Palestine incident, we wrote a general set of Standard Operating Procedures (SOPs) and submitted them for government review. When you are dealing with highly technical sensor system and aviation, you write SOPs on the collection of data over a specific flight path. We wrote a common core set of open-source procedures, but we could never find out if they were using them during the East Palestine response or had any SOPs at all.

38. During the East Palestine response, our team was left in the dark on many levels. We were never privy to the SOPs for the East Palestine flights on February 7 and EPA ASPECT Program Manger Paige Delgado did not give us access to them. We were told the procedures used by the ASPECT operators to collect data were “proprietary,” so they were unknown to any of us analyzing the data. We had never heard that before. These procedures are the ground rules for gathering all the necessary data. If they are unreliable, so is the data. It just does not make any sense that you would hide the procedures from the public and any of the folks trying to analyze the data.

39. We are tasked with analyzing the data from the flights. But we never saw a SOP. We did not know how the data was collected, so we had no idea what the quality of that data was. We just have to go through the data and report what it is showing us. Whenever we asked them, “What is going on?” in an effort to learn their procedures, Paige Delgado would just say, “Well, it is proprietary.” It was indicated to us by Paige Delgado that EPA government personnel used “proprietary” data collecting procedures developed by the EPA contractor, Airborne ASPECT. My colleagues and I believe that since we wrote the original software for EPA ASPECT and designed the hardware for the plane, and this is a government program, all these procedures are required to be open to the public, or at least to us. All of this makes me

question whether the EPA ASPECT contractor's proprietary procedures were nonexistent during the East Palestine flights on February 7, 2023. If so, was the data gathered arbitrarily?

40. Airborne ASPECT also would not share its protocols. They did not want to talk with us, and they did not ask for help. We asked them, "How do you collect the data? What are your procedures?" But we never got answers or saw any Quality Assurance Project Plan (QAPP).

41. Those procedures must be open to the public because the public has to know how that data was collected. The contractor claims and EPA accepts that all their procedures are now proprietary, and nobody can see how they collected data. We don't understand how they are proprietary because we wrote the software and we're saying they're open domain, they're public. How can they say they are proprietary?

Asked by ASPECT program manager to write new protocols because they did not have them during the East Palestine response

42. We subsequently found out three weeks after the East Palestine ASPECT flights the ASPECT did not have any approved Standard Operation Procedures during its East Palestine disaster flights. About three weeks after the incident in East Palestine, during one of our weekly conference calls, the Program Manager Paige Delgado asked us about the QAPP (Quality Assurance Project Plan). She said her boss Ed Argenta had requested QAPP, but she did not have one. She said she was starting to receive EPA FOIA requests for information.

43. EPA ASPECT Program Manager Paige Delgado asked my boss at the time at Kalman & Company to write the procedures on how the data should be collected.²⁷ She told us to develop new QAQC procedures after the fact and back date the procedures to make it look like they were in place before the East Palestine derailment. She directed my boss to predate

²⁷2024. Whistleblower.org. 2024. <https://whistleblower.org/wp-content/uploads/2024/05/Robert-Kroutil-Statement.mp3>.

the quality assurance data plan in which he would not even consider or do. She made these requests over a Teams conference call with several contractors on the line.

44. To this day, I still do not have any evidence or documentation to describe what processes were used to collect data at East Palestine. These guys with Airborne ASPECT produced zero SOPs. They produced zero SOPs on the sensors. We created the SOPs for the sensors, so I do not know why it was proprietary. One of the problems we were having is that the ASPECT program managers really do not know how to operate the system. But they also do not ask for help. There was no dialogue on operating procedures. They never called for our help. They did not seem to want any help when we offered.

EPA ASPECT Program Manager instructed contractors to take steps to avoid FOIA discovery

45. On a Teams call with our scientific team around February 15, 2023, several weeks after the derailment, Paige Delgado told Kalman & Company not to put the words *East Palestine* in the subject line or in the body of our emails because they could be discovered through FOIA.²⁸ Other employees will confirm her directive but want to remain anonymous.

Told to withdraw my FOIA request or lose my job

46. The vice president for Kalman & Company, told me I would be fired after the EPA found out that I had filed a Freedom of Information Act (FOIA) request with the EPA in June 2023 (Exhibit 6). He said I would be fired within 24 hours if I did not rescind the FOIA, so I did. He told me that submitting FOIAs was against policy at Kalman & Company in their EPA contract. I checked my contract, and I could not find anything specifying that.

²⁸ United States Department of Justice. 2019. "FOIA.gov - Freedom of Information Act." Foia.gov. 2019. <https://www.foia.gov/>.

47. I filed this FOIA out of frustration, because no one would tell us the current operating procedures for the ASPECT plane. So, I asked specific questions about the East Palestine response in the FOIA. I did the FOIA because I could not find any QA/QC or QAPP documents for the East Palestine mission. No one would give them to us.

Scientists: ASPECT report summary data inconclusive

48. After looking at the data from East Palestine, we could tell the data provided from the ASPECT plane's two East Palestine flights on February 7 was incomplete and irregular. We had limited confidence in the data.

49. We had only eight minutes worth of data for four hours of the total East Palestine mission to work with. We decided during the ASPECT flights on February 7 that the EPA ASPECT operators needed to go back and collect more data. We told this to Program Manager Paige Delgado during the ASPECT flight over East Palestine on February 7 while we were monitoring the flight on a screen and talking to her on a call. But the EPA ASPECT Program Manager Paige Delgado said that the mission was complete. They flew away on February 7, and the planes never returned.

50. To summarize, we looked at some of the flight patterns on February 7, and they didn't seem to be consistent or flown where the plume had gone. By the time they flew, they missed the main event anyway and the sensors were turned off over the creeks. So, we wrote in our report that the results were inconclusive. We had so little data that it was sort of written under duress from EPA. The folks from EPA listed on the ASPECT report never looked at any of the data or cared to have a conference call with us to discuss the results.

51. But when the official East Palestine EPA ASPECT report was posted on EPA's website, it did not reflect our assessment of the uncertainty of the limited data. The ASPECT plane was up in the air for a couple of hours on February 7 but ASPECT only collected 8 minutes of chemical data over the targets. Normally out of the two-hour flight we have at least a half hour or an hour of data where we have the chemical sensors on. ASPECT usually makes multiple runs over several days. It was a haphazard deployment. They wanted to wave the flag and get out of there. So this report was very limited in scope.
52. We don't know what happened before or after the passes. The executive summary analysis was changed to modify the conclusion. The revised summary said the vent and burn was a success and there was only a low detection of chemicals.²⁹

Security Breaches

53. While at work, my colleague learned in January 2024 that ASPECT was having some ongoing cybersecurity problems. As they were in Kansas pulling the ASPECT technology equipment off the aircraft on April 19 so the plane could undergo some maintenance and upgrades, my colleague found some hidden cameras. When a colleague of mine deinstalled the equipment on April 19 so the airplane could undergo maintenance, all the cables, connectors and cameras were found in the airplane. It might have been for security reasons, but we never heard anyone telling us they were doing that.
54. Around this same time, I and two other EPA contractor colleagues in late January 2024 identified a data breach in a government computer belonging to the EPA ASPECT program.

²⁹ Delgado, Paige, Jill Chemical, Photometric Lead, Taylor Jillianne@epa, Gov, Charles Miller, Miller Charles, and T@epa. 2023. "ASPECT Mission Supporting: Region 5 On-Scene Coordinator ASPECT Response to East Palestine Derailment, East Palestine, Ohio Airborne Spectral Photometric Environmental Collection Technology ASPECT TEAM." <https://www.epa.gov/system/files/documents/2023-02/ASPECT%20Summary%20%20Report%20--%20East%20Palestine%20Derailment%20Rev1.pdf>.

This computer is the primary system that operates the EPA ASPECT program and generates data for EPA servers. The computer is located in the EPA ASPECT aircraft in a hangar in Addison, Texas. It includes a satellite system in which an unsecured network is operated with no hardware firewalls.

55. The EPA Office of Inspector General (OIG) started an IT (Information Technology) audit.

The complaint was to notify the government of a potential data breach within the EPA ASPECT aircraft government owned computer that led to a loss of government data and possible corruption of primary emergency response data.

56. The EPA OIG contacted me and asked me to submit a statement, which I did. My

"confidential" complaint was submitted on April 2, 2024, to the OIG in which I indicated my belief that responsibility for the breach rested with EPA ASPECT Program Manager Paige Delgado. A week or so went by and the next thing we knew, I found out from a colleague that Paige Delgado had my name. I thought my complaint was supposed to be confidential.

Bid violations

57. Another EPA contractor working with EPA ASPECT, Spectral Systems Global Inc. (SSI), in 2022 had the highest technical evaluation and the lowest cost bid to oversee ASPECT's daily operations. They won the bid. But within a few days, SSI was told the bids were on hold.

With no explanation, the Airborne ASPECT group was given a chance to bid on the contract and thereby won the bid without SSI receiving the opportunity from the government to

address any issues or bid again, nor were they provided with notice that this bid was awarded to Airborne ASPECT.³⁰ This was all extremely odd.

Long history with ASPECT

58. I am a PhD chemist with 40 years' experience. I helped design the software for the ASPECT airplane when I was at the Department of Defense (DOD). I was the Department of Defense Program Manager for the remote sensing equipment employed in defense programs and I transferred in 2000 to Los Alamos National Laboratory, where I remained for nine years.
59. In 2001, I was a senior scientist out at Los Alamos National Laboratory, in Los Alamos, New Mexico, where I was awarded the Distinguished Performance Award (Exhibit 7) in 2005 to develop this technology. I was selected for this award by the Los Alamos senior staff for technical contributions to advance the Nation's security. I had a number of projects at that time. However, the award (Exhibit 8) identified ASPECT technology as groundbreaking. At the time, Los Alamos had about 8,000 Ph.Ds. in the areas of chemistry, physics, electrical engineering, and biochemistry. It is one of the premier government-sponsored scientific institutions in the United States.
60. My colleagues and I at Los Alamos' Integrated Reachback Center also received a medal from the EPA in support of the citizens of Louisiana during Hurricanes Katrina and Rita (Exhibit 9). ASPECT was the only Government emergency response aircraft flying for 72 hours in Louisiana after Hurricane Katrina landed. We provided emergency response data that was used by locals and various people all the way up to the White House.

³⁰ "Contract 68HERH23F0056 Airborne Aspect." n.d. www.highergov.com. Accessed May 9, 2024. <https://www.highergov.com/contract/68HERH23D0003-68HERH23F0056/>.

61. The technology I helped develop at Los Alamos was transferred from DOD to EPA for the ASPECT plane. The afternoon of 9-11, our country was concerned that we had no airborne chemical detection capabilities for the country and if you remember 9-11, the island of Manhattan New York was basically closed off. EPA had all their equipment and trucks and they could not get over the bridge for at least 24 hours to do any kind of monitoring of the Twin Towers or Manhattan after 9-11. The ASPECT program was initiated by Christine Todd Whitman, who was director of EPA back in the 9-11 days, George Bush's days, and the technology that I developed at the DOD was transferred from the DOD to EPA, because back then we didn't have Department of Homeland Security.
62. The afternoon of 9-11, we needed the ASPECT plane because the country was worried about getting hit by a chemical attack the next week by the terrorists, and that's how the ASPECT program grew and that's how it got to the EPA. It probably should be in FEMA (Federal Emergency Management Agency) or Department of Homeland Security or something like that, but it got stuck in EPA and they never got removed. It just always sat at the EPA. Throughout the years, I wrote many peer-reviewed research papers on the technology I developed for the ASPECT plane.

Concerned about ASPECT's Future and Residents Impacted by Derailment

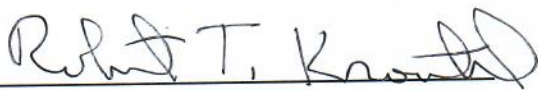
63. The ASPECT plane is the only one of its kind.
64. The EPA ASPECT program in recent years has been suffering from a lack of knowledgeable program managers. There have been three changes in management recently in the program and there has been turnover in the EPA Nuclear Consequence Management Advisory Division (CMAD). One CMAD manager has been there two weeks. The person in that position before them resigned.

65. I worry about incompetency and the large number of turnovers in the program. The EPA has three folks running this program with only two years of experience with a combined number of zero scientific publications to assist them working on ASPECT.
66. There has been a lot of turnover in the EPA ASPECT program. There have been seven EPA ASPECT program managers within the last four years. Every six months to a year, it seems that we have a new boss. Paige Delgado has been director of the program since 2022. Her boss, Ed Argenta, the former associate director of CMAD (EPA Nuclear Consequence Management Advisory Division) and former branch chief of the EPA ASPECT Program, also transferred jobs from the EPA after the East Palestine response and has now taken another position as a government employee within the Department of Defense Threat Reduction Agency (DoD DTRA) in Washington D.C. EPA has finally replaced his position. However, that person has only been in the job a few weeks. In addition, the CMAD Director, who is the overall supervisor, resigned about two months ago. The replacement for the director's job also has been in place for only a few weeks.
67. In April, colleagues of mine were asked to take all the equipment off of the plane due to an annual inspection and a 5-year corrosion test for rust on the wings. The plane is getting its regular repairs. But my guess is maybe the ASPECT program is not coming back. If so, this is our chance to get the technology equipment off the plane so the U.S. government has the chance to use it in the future. These sensors on the ASPECT are irreplaceable. I estimate they are worth 10 million dollars based the original cost and assembly of the sensors. Not even the DoD has anything close to this technology for responding to disasters and scan for potential threats. It is a very important technology and I want to see it used for a long time to come.
68. Unfortunately, the EPA staff has been decimated in its level of technical competence.

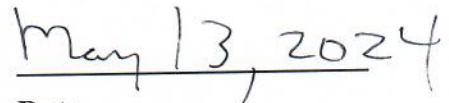
69. We had equipment that could have answered a lot of questions and saved exposure in East Palestine – even prevented the vent and burn – but it was not deployed and operated to collect that information in a timely manner and did not use the correct methods. This is why I am speaking out.

70. Unless major changes are made at EPA and with the ASPECT program, it is not going to get any better and EPA will be flying blind after the next chemical spill the way it did in East Palestine. I am disheartened that this important technology was not used properly to collect vital decision-making data for East Palestine following the derailment. My concern for the good people of East Palestine and my desire to inform them of the EPA's failures to protect them prompted me to speak out.

I have read the foregoing 23-page statement, and it is true, accurate and complete to the best of my knowledge and belief.



Affiant signature



Date