

September 17, 2011

Carolyn Lerner
Special Counsel
U.S. Office of Special Counsel
1730 M Street, NW, Suite 218
Washington, D.C. 20036

Re: OSC File No. DI-10-2602

Dear Ms. Lerner,

The following is my response to the reports provided to your office by the Secretary of Transportation and the Federal Aviation Administration (FAA) Office of Audit and Evaluation (AAE) concerning file DI-10-2602.

The regulations require that all work performed on aircraft must be accomplished in accordance with approved data. The history of FAA enforcement actions against persons that do not use approved data or perform modifications contrary to approved data can be found in the National Transportation Safety Board (NTSB) legal database. When the aviation safety inspectors (ASI) assigned to the FAA Flight Standards line of business discover that approved data was not utilized or modifications were performed contrary to approved data then they are obligated to take action under FAA Order 2150.3.

However, an internal conflict arises when Flight Standards contemplates taking action and the Aircraft Certification (ACO) line of business back dates and approves changes to the data that were not evident at the time of the modifications then the agency has to take a step back and determine its liability in the violations. I think that the FAA has done that and made a conscious decision to mitigate its liability and exposure over performing its duties.

In the situation with NVIS the Aircraft Certification (ACO) line of business in effect covered up all violations by the installers when it back dated the approvals preventing Flight Standards from meeting its obligations to enforce the maintenance regulations. How, in all good conscience, can one arm of the FAA take a case to the NTSB when the violator is going to present a handful of documents at a hearing showing that while there was a violation upon installation that the other arm of the FAA has stamped and backdated the documents? The evidence demonstrates that Flight Standards actions fizzled out short of its duties due to the actions taken by the ACO to cover up their shortcomings in approving the original data along and trusting the installer even when the STC holder and installer were found untrustworthy and negligent.

In my first legal case for the FAA I was a witness on the stand for 14 hours against a repair station that falsified records. I learned in the legal realm that you cannot know without a doubt what is in a person's head at the time they take an action. Without taking into account what FAA management was thinking I allege that the words and actions of those managers show a strong circumstantial case that my claims are more likely than not to be credible. AAE stated in its report that it did not substantiate five of my allegations. I do want to emphasize at this point that they did not provide any evidence that would refute my allegations or support a legitimate argument that they did not occur.

I specifically provided names of management personnel in my complaint to John Hickey in March 2010. I knew that he would dismiss taking any action but hoped that the seriousness of my plea would drive him to action short of a need for me to take the situation out of the agency for a 2nd independent review by OSC. That did not occur. However, failure of the FAA to require accountability is what drives the culture to waiver in its mission and the mandates set forth by Congress in law. While I did not place Hickey's name on the letter to him and AVS-1 it is a fact that Hickey was making top level decisions on actions concerning the STC early in 2007 as the issues were briefed up through the ANM-100 and ANM-200 to his office and the Administrator at headquarters at the time.

Conclusion

The ASIs familiar with the NVIS issues are confused about their responsibilities due to the instability of headquarters stance on the definition of airworthiness. They are confused when regional leadership advises them to downgrade findings or sanctions. Regional legal counsel also finds itself at a loss for words when asked to consider processing a case with obvious violations that are negated by backdating or approving changes in the data by one arm of the FAA to make it conform to the aircraft after the fact, sometimes months or years later.

The NTSB made a ruling years ago that the FAA can reinterpret its rules at any time but the historical guidance and regulations seem to be very clear when discussing airworthiness. While the Title 14 Code of Federal Regulations (14CFR) Part 1 definitions do not define airworthiness the FAA did codify it in § 3.5 in 2005. The FAA has also published the definition of airworthiness in several advisory circulars and FAA Orders that it has released over the years. Airworthiness means that an aircraft conforms to type design **and** is in a condition for safe operation. There does not appear to be any valid arbitrary basis for management to define it otherwise and still be compliant with the aviation rules and laws.

If the FAA intends to make decisions as they have in the matter of this disclosure then the FAA should publish objective criteria for making a determination of safe versus unsafe conditions so the ASIs have comfort with their responsibilities. I also suggest that all maintenance providers be able to approach Aircraft Certification for approvals and back dating after a modification is found to be deficient by Flight Standards. This would provide equal and fair treatment to all persons performing maintenance and negate the need to expend FAA resources on further investigation or legal actions.

Section 3.5 of 14CFR defines airworthy to mean the aircraft conforms to its type design and is in a condition for safe operation and § 43.13 (b) states that each person maintaining or altering, or performing preventive maintenance, shall do that work in such a manner that the condition of the aircraft will be at least equal to its original or properly altered condition. The only way to determine whether the aircraft is properly altered is to compare the approved data used to modify the aircraft to the actual aircraft to determine if it was modified in accordance with the approved data. Evidence shows that the repair station and other installers failed to factually conform their work to the approved data. Section 145.201 (c) states that a certificated repair station may not approve for return to service any article unless the maintenance, preventive maintenance, or alteration was performed in accordance with the applicable approved technical data. Section 91.7 (a) states that no person may operate a civil aircraft unless it is in an airworthy condition and § 135.25 (a) (2) states that no certificate holder may operate an aircraft unless that aircraft is in an airworthy condition and meets the applicable airworthiness requirements. The installers and operators violated these regulations. The FAA failed to follow or enforce the regulations it

put into effect as required by Title 49 USC 44701 and allow its inspectors to perform their duties in accordance with § 44713 even though the helicopters are operated under air carrier regulations and are required to be held to a higher standard of safety.

In regards to the ASI that was punished for issuing improper field approvals I suggest that the FAA demonstrate some dignity and begin to re-establish field employee morale by restoring the inspectors pay with an apology for holding him to a higher standard than management.

Finally, the attachments address the supplemental reports provided by AAE at the request of the Office of Special Counsel. Please refer to the original report dated December 10, 2010, the first supplemental report dated May 18, 2011, and the second supplemental report dated July 22, 2011 because my comments are keyed to them.

Thanks for your time and consideration in the matter,

Sincerely,

A handwritten signature in cursive script, appearing to read "Rand L. Foster".

Rand L. Foster
Aviation Safety Inspector

Attachment 1

Response to AAE Supplemental Report dated May 18, 2011

Page 2, Item 2, 1

The FAA states that it did not intend for the report to provide a comprehensive chronology of the timeline and it did not provide any other data. However, the true timeline does not show any actions except immediately after my complaints. Even those actions taken were designed more to placate the industry than to require compliance with the regulations.

The assistant manager of ANM-200, Rick Domingo, had taken control of the ASU issues for Flight Standards around May 1, 2008, although he was involved in the decisions much earlier while employed as AFS-301. Let me stress that the activities did not increase between the OSC I report and my letter to Hickey in March 2010 and only became more mired in politics to keep the repair station in business and the helicopters in the air rather than mitigate the problems by advising the pilots about how the installations might be defective.

The ANM-100 manager, Ali Bahrami, was aware of the problems well before ANM-200 because the assigned engineer refused to allow the owners of the repair station to continue their practices of performing the work then submitting changes to data or circumventing the agreement about what actions were required for different types of changes to the data. ANM-100 failed to take any timely or proper action as demonstrated by the timeline presented by AAE. Two of the managers, Bradley Pearson and Thomas Archer have retired in the past few months.

In reality, compiling and analyzing the data available to the FAA concerning the repair station would only take about an hour. The PTRS system utilized by the inspectors was never designed for any purpose other than to collect beans for Congress concerning the number of activities accomplished by ASIs. The system has been obsolete for 15 years because it provides little purpose for automated or indepth risk analysis. The entries in PTRS are limited to basic information to identify a repair station, operator, or airman and a text field for comments. Those comments can be printed in a few minutes and evaluated in an hour. Any ASI could determine whether the repair station work was inadequate based on records entered by ASI's.

Item 1a,

The FAA does not present any evidence that it continued activities to resolve the NVIS issues after August 2009 until after my letter to Hickey and Gilligan in March 2010. In fact, the only activities that continued were findings by various Flight Standards offices that were then addressed by the ACO to approve corrections to the drawings. Other than weekly scheduled meetings to discuss how to fix those issues there was no apparent action to stop the repair station from further violations.

The action plan at the time appeared to consist of future high level policy and considerations for future rule making that did not address current unairworthy aircraft or violations by the repair station.

Item 1b,

The first action taken by AVS-1 was to obtain a status report concerning my letter of March 2, 2010 which was answered with Attachment D on March 15, 2010. The response was basically a denial of all allegations. I followed the activities in the office and received information from the

field that indicated that all other activities returned to the status quo of correcting drawings to make the drawings match the aircraft. Even affected FSDOs in other regions felt helpless in taking action because the headquarters was “studying” the situation therefore the FSDOs were not going to take action without support.

No effects from letter of March 2009 were evident until after the May letter to the Administrator and Secretary of Transportation. Even then the only indication I received of any consideration was when Babbitt’s office called and requested another copy of my letter since the copy in their hands was missing page 6. Since I carefully packaged separate letters to each office this indicated that it had been set aside until they received a heads up that something was coming down from OSC.

I’ll reiterate my statement above that the data contained in the FAA databases is simple and straightforward. There is very little to analyze other than reading comments in the PTRS that show non-compliance. While the later 2010 audit referred to in the AAE report shows that other installers and operators were non-compliant they fail to include any comparison to ASU’s compliance issues in the charts. The finding that other installations also have problems only aggravates the situation since this should have been resolved in 2007 with ASU and all other installers becoming fully compliant without further study.

Item 3,

The AAE response indicates that there must be specific evidence that a condition is disqualifying and unsafe beyond all reasonable doubt. I agree that there must be specific evidence but “safe” is only part of the equation in determining whether an aircraft is airworthy. Certainly, unsafe would be an egregious situation but the simple fact is that the aircraft must conform to the approved condition, not one that is judged on the basis of whether it is safe or not. The condition of “safe” is subjective in that the FAA simply made a judgment that the modifications (even those that contained filters where pilots could not see caution lights or read instruments or light reflections that rendered the goggles less than effective) were safe as long as no accident had been attributed to the NVIS modifications. The same line of thinking could have also averted the grounding of countless American Airlines aircraft since no fires or crashes had occurred because the wiring bundles seemed to be tied up sufficiently even though they were not tied up “exactly” as per the maintenance data. The FAA appears to be taking a convenience of interpretation depending upon the timing of their needs rather than making decisions based on sound principles.

Determining conformity is the only method that the FAA has to make sure that a particular modification meets the safety and guidance requirements. Grounding the fleet was not appropriate but neither was turning a blind eye. The FAA has a legal process to adequately address the questionable safety of the installations and mitigate the risk through airworthiness directives. The fact is that the FAA failed to take any follow-up action prior to the second disclosure to OSC and did not utilize any process to force compliance.

I would also like to note that if policy decisions that allow operation of unairworthy aircraft are sound then all non-conformities should be judged on whether they are “safe” or not. The FAA enforcement policies should be adjusted for all legal cases against maintenance providers and operators in order to prevent arbitrary application of the regulations.

Item 4,

The FAA denies use of an airworthiness directive under § 39 except in cases of known unsafe conditions even though this was the only legal means to allow continued operation of the aircraft. When a pilot must mitigate vision issues with goggles by avoiding the areas of windshields where reflections interfere with vision or a pilot must operate an aircraft when he cannot read the instruments or see the warning lights there appears to be a high probability of a known unsafe condition on NVIS modified aircraft.

Attachment E concerns the risk analysis that was performed and indicates a very high rate for accidents at night when NVIS would be utilized. The analyst adjusted the accident rate for the number of ASU modified aircraft and did not find a higher rate. This appears to be the basis of low risk due to non-conformity of the installations. However, the risk analysis did not include data concerning the number of installations where the pilots were having vision issues due to light interference (something that the FAA inspectors were told not to evaluate using the goggles during the 2010 audit) or aircraft where the filters were improper and the gauges or instruments could not be read during the day or night.

Item 5,

Installers did not check day and night readability on installations. The installers did not have any method to identify the part numbers of the filters once removed from the plastic bags that were labeled with the part numbers. The FAA had no method during the 2010 audit to determine whether the proper filters were installed because they were not marked with part numbers. Again, the inspection teams were cautioned against using goggles to evaluate the installations during the 2010 audit.

Item 7,

I vehemently object to the AAE finding that the ASIs failed to perform adequate surveillance and oversight. The situation generated by management certainly left the ASIs confused about their roles when there was conflicting support for their responsibilities. The repair station complained at every opportunity against the ASIs and management accommodated those complaints at the expense of the inspectors morale. ASIs suggested writing enforcement cases but were rebuffed and their actions were subverted by management. At some point the ASIs had to make a decision to try to ignore the repair station in order to tolerate the climate generated by their superiors.

The report indicates that nearly all aircraft examined had conformity issues whether generated by the repair station original installations or changes incorporated by the owner/operators after the modification. The overall problem with NVIS installations is lack of clarity concerning FAA's expectations concerning published requirements. The lack of guidance available to maintenance personnel and owner/operators only intensifies the problem over time.

Finally, as stated in Item 3, **AAE clearly states that only the absence of legal action by the FAA is the basis that allows an aircraft to continue operation in a condition unknown as to whether it is safe or unsafe** even when the aircraft most likely does not conform to its approved condition. The situation is very clear that the FAA made a knowledgeable and conscious decision to not pursue corrective or legal action on NVIS installations. Every person and patient becoming a HEMS passenger or crew member should feel comfort in that determination when they are landing or departing a dark, remote, and unfamiliar location.

Attachment 2

Response to AAE Supplemental Report dated July 19, 2011

Item 1,

The audit findings identified specific potential safety findings on ASU modified aircraft and aircraft by other installers. The ASU items were not included in the chart to support the implication that other installers had the same level of non-compliance. Those safety findings were not processed in accordance with the enforcement Order 2150.3 to prevent further violations.

Item 4,

AAE stresses that the FAA's position is that installer is required to make the day and night readability determination as if the FAA has no obligation to ensure the truthfulness of the records. This is distressing since the repair station and an employee were found to have falsified records and demonstrated lack of integrity for those records to be trusted as being accurate without detailed evaluation. Even the early findings proved that the installers did not do night or day readability determinations as they simply did the installation, filled out the paperwork, and went home. There were no final tests to determine whether the installation was even met basic visual compliance as required by 14CFR43 and 14CFR145 after maintenance was performed and prior to return to service.

The purpose of any follow-up conformity evaluation by the FAA was obfuscated when it followed the same routine as the installer during the audit. The paperwork is a theoretical demonstration of the installation and the physical installation must be verified each and every installation.

The problem with the installations was that **no person** actually did any conformity after installation for readability, including the FAA when it did the special emphasis evaluations as part of the 2008-2009 corrective action plan and the 2010 audits. An inspector performing a comprehensive review of the records could in no manner perform a quality conformity test. Evaluating the filters by looking at a drawing without knowing the part numbers on the actual filters serves no purpose.

The FAA responds that an ASI would refer to the STC package to establish the part number applicability of the filters. Since part numbers are not permanently placed on the filters a conformity determination would be impossible. ASI's are unable to determine which filters are actually installed and therefore unable to determine if they conform to the data. In addition, the Phase 2 audit plan included instructions that ASI's not attempt to view the aircraft at night or with night vision goggles and leave determination of proper installations up to the operator. In other words, ASIs were not allowed to perform a "final" inspection as required by the regulations when any work is performed.

Phase 1 and Phase 2 Audit Findings Charts

The audit findings charts do not include data on ASU. However, the charts do indicate that there is a serious lack of controls on how NVIS alterations are accomplished by all of the STC holders. The basic failure of the STC holder documentation to match the modification on the aircraft is a serious violation of 14CFR43.

Phase 3 Action Plan

The Phase 3 plan failed to require action against the STC holders on the audit findings. The failure to sanction the STC holders does not encourage voluntary compliance with regulations and is contrary to FAA Order 2150.3.

Notice 8900.152 Special Emphasis Inspection of NVIS Lighting Installations

The notice is for ASI's and does not obligate owner/operators. ASI's are instructed to perform visual inspections of the installations. However, there are no actual part numbers on the filters installed on the instruments and radios for an ASI to make a determination of whether the installation conformed to the documentation. In addition, there are no instructions to utilize the goggles under night conditions to evaluate whether the installation appears to meet its purpose. The ASI instructions do not include any reference to processing formal notification of discrepancies to the operators so they would be obligated to take corrective action. The instructions are simply to brief the operators on the findings and list the discrepancies in the PTRS system.

OIG Analysis

The certificate surrendered by ASU was surrendered to be recorded as revocation as stipulated by Order 2150.3 when an enforcement has already been initiated. The purpose of surrendering for revocation was to expedite recertification of the repair station. Even then, the person chosen to re-certify ASU was a long time personal friend of the owners and he expedited the process by failing to address all of the requirements for certification.

The ASI that performed the field approvals and was punished did nothing different from management that allowed the repair station to continue defective installations and operators to continue flying the unairworthy aircraft without a legal solution to address the violations. Historical information revealed that the ASI had been involved in the very first NVIS installations when the process existed solely on field approvals until the FAA developed experience and further guidance for the installations.

In contrast there is no apparent punishment for management level employees even though there is evidence that indicates that those gentlemen had knowledge of the situation and purposely failed to take appropriate action in a timely manner when the only appropriate action would be enforcement of the regulations and guidance in effect at the time they became aware. The result is that appropriate and timely action has been deferred for at least 4 years as they contemplated cost and FAA resources needed to rectify the problem then resorted to risk analysis based on limited data that did not consider all possible factors related to safe operation using the defective modifications.

In the long run, even those considerations were built on a false premise because the FAA has expended at least \$2 million on studying the situation with up to 50 or more employees working the issues from time to time over the last 3 years. When it comes down to the bottom line the fact is that the men that made the decisions did not do their jobs. They did not do their job when it comes to their sworn duties to regulate aviation and protect the public safety.