



The View from Washington

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The View from Washington this month focuses five blocks south of my office here in Washington. With all of the activity in the past few months on ELTs, GPSs and RVSM, you can see all of general aviation rotating about the axis of FAA Headquarters. If you didn't know better, you might mistake 800 Independence Ave. for the center of the universe.

To question their absolute authority might be viewed as professional heresy. But this is a democracy and to quote Mr. Nick Sabatini, the FAA's Associate Administrator for Regulation and Certification, from a public statement he gave in July 2004, "As a citizen you have the right to question your government." And in 2003, as part of the Administrator's Customer Service Initiative, Mr. Sabatini sent a memo that spelled out his expectations. His memo stated that "all AVR Customers can expect from us an environment without fear of retribution when our decisions are questioned or challenged." So maybe it's truly not heresy! We'll see.

In the early 1600s Galileo Galilei wrote that "the Sun is located at the centre of the revolutions of the heavenly orbs and does not change place, and that the Earth rotates on itself and moves around it." Galileo's scientific research and observations validated the 15th century observations of Nicolaus Copernicus. In his book *The Little Commentary*, Copernicus set out his theory of a universe with the sun at its center. Copernicus based his con-

clusions on a number of these axioms which included: The Earth's center is not the center of the universe; the center of the universe is near the sun; and the rotation of the Earth accounts for the apparent daily rotation of the stars.

The scholars of the time rejected such logic and chose instead to believe that the solar system rotated about the Earth and that the earth was stationary. Regardless of the facts, disregarding all indications that the earth was round, ignoring the indications that the earth was a part of the solar system which rotated around the sun, regardless of all of the fact, the scholars of the day just wouldn't listen. In fact, while the physical world may have revolved around the sun, the axis of the theological world went through Rome. They (the church) possessed all knowledge and no matter how much science was presented, they possessed absolute authority and were infallible.

In publishing his findings and challenging the theories of the theologians, Galileo committed an act of heresy.

Today, the aviation theologians of 800 Independence Ave. again reject the science, reject the indications that their theories are flawed, and reject their role in the disharmony of the industry. To these theologians who interpret the Federal Aviation Regulations and publish interpretive guidance to their inspector workforce and the public, the aviation world revolves around 800 Independence Ave. and no amount of scientific input will sway their opinion of the truth!

They have been blessed with

unquestionable authority for all things aviation, and as such have been deemed infallible by the powers on Capital Hill. Of course it is Capital Hill which routinely challenges the logic of these aviation theologians. And in responding to the challenges of the law makers, these theologians expound the teachings of aviation theories as if scientific truths with such tenacity that the uneducated accept these theories as truths to be preached to the public.

The challenges that plague 800 Independence Ave. are not new. For at least the past 10 years, the indicators have been there. Much like, service difficulty reports, the data already exists that shows a defect in the design and operation of specific offices but there's no one there to review the data.

The challenge is not with the individuals in the field who work tirelessly day in and day out to produce the best product they can. The challenge is the lack of supervision, management and direction at FAA headquarters.

In 1997, the Bureau of Labor Statistics (BLS) proposed to re-write the standard occupational classifications. Their focus was to simplify the reporting process for employers. The problem was, BLS collected the only demographic data for the certificated aviation mechanics. That's correct, BLS collected employment demographic data which showed that 52 percent of certificated A & P's worked for airlines and the rest worked in

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manufacturing and general aviation. The data also showed that of the approximately 370,000 FAA-certificated mechanics, only about 169,000 actually worked primarily on aircraft (the reported data separated maintenance responsibilities from supervisory or support responsibilities). The FAA was notified of the BLS proposal but failed to become involved. The individuals who should have been involved were too busy and their management failed to make it a priority. As a result, the aviation industry (and mechanic recruiting efforts) has lost irreplaceable data. It must be heresy to expect the FAA to work with other government agencies. If it doesn't reside at 800 Independence Ave., it must not be important!

For nearly 10 years, FAA specialists have been working to review, correct and enhance the field approval process. They conducted FAA-only meetings to gather as much information and technical data as possible to resolve internal challenges. They conducted public meetings to gather the public's perception of the problems and challenges. The FAA's working group met behind closed doors working on the best recommendations possible. The specialists assigned dotted the "i's" and crossed the "t's" and finally published the best solution for all involved. Then the challenges came. First from inside the agency, then from the outside (often instigated by the FAA's own employees). Instead of standing up and defending their employees, Headquarters' leadership ducked behind the biggest barriers they could find and let their employees take the hits. Like the leadership of the Inquisition, the FAA's leadership fails to recognize data and fails to support their specialists and instead allows chaos to exist.

Today, two years after the "revised

and improved" guidance was published, the guidance has still not been fully implemented.

For more than two years the FAA leadership has committed to streamlining modern GPS equipment installations (twice at AEA conventions). Although the aircraft certification engineers have determined that typical GPS installations really are not major alterations (AC 20-138a), the theologians in Flight Standards disagree. It (the AC) wasn't invented there (in Flight Standards) so the AC must be flawed. Forget the fact that the aircraft and the determination of the effect of alterations to the aircraft are owned by and often determined by or in consultation with the aircraft certification engineers. Forget the fact that the Flight Standards inspectors (maintenance technicians by trade) are approving the data for the alteration, not the degree of the alteration. The headquarters theologians refuse to look at the data, they refuse to listen to their colleagues, and their supervisors refuse to hold them accountable.

This week, the General Accounting Office published a report titled: *Better Management Controls are Needed to Improve FAA's Safety Enforcement and Compliance Efforts*". This report like so many others points to the lack of program measurement and accountability within FAA management structure as a prime factor in an inefficiently run government organization.

But one must not be so bold as to point out the deficiencies of the organization too loudly or like the Inquisition that convicted Galileo of heresy for challenging the beliefs of the theologians, anyone who challenges the "experts" at 800 Independence Ave. must be prepared to pay the price in spite of the FAA's senior leadership's Customer Service Initiative.

In 2003, the senior leadership of the FAA instituted a program of Customer

Service. Anyone at anytime can challenge a field inspector's decision up the chain of command. CSI is intended to help rein in arbitrary decisions; the regulated public is encouraged to challenge decisions from the individual inspector if the public doesn't agree with the ASI. And if necessary, challenge their decision to the next higher authority up through the chain of command until the public understands and accepts the edict, or the edict has been appropriately reviewed and supported or rejected based on federal regulations. That is the right of the regulated. This is a good program and AEA supports the Administrator's efforts. However, we have found that more often than not, the misinformation that disrupts the aviation industry is originating at 800 Independence Ave.

But did FAA headquarters really intend CSI to apply to them or did they, like Congress, write a regulation that applied to everyone BUT THEM?

A serious breach exists between the field inspector workforce and the senior leadership of the FAA. The breach is with the bridge that is supposed to carry information and communication between headquarters and the field. But instead of the leadership in headquarters taking responsibility for the poor communications, they instead encourage the public to hold the field inspector accountable for following flawed instructions and challenge their decisions through the CSI process. The breach is the flawed and often contradictory instructions that are being sent from FAA headquarters to their field employees, not the ASI's efforts to follow these instructions.

Like the theologians of the 1600's, today's FAA leadership chooses to reject the science and data, and continues to preach the gospel of a universe that rotates about their planet. The hope of industry is for the senior leadership of the FAA to overthrow the

Inquisition that seems to exist at FAA headquarters.

And this seems to have begun. The Administrator and her management team have discussed with industry on numerous occasions the FAA's move towards an ISO 9000 Quality System. This program should help to implement programs to establish realistic management goals, measure the effectiveness of these programs and then hold the managers accountable to the overall success and performance of these programs.

However, ISO 9000 is not intended to fix flawed products, only to ensure that an organization defines its goals and then works towards achieving the printed goals. If the goals are flawed, the organization will successfully achieve the flawed goals.

In the FAA's case, the overall goals should be to improve communication and efficiency of the entire organization; to have one voice resonate from FAA headquarters. An aircraft can have only one Captain. Crew Resource Management teaches to utilize all of your resources before making a decision, but when that decision is made, the entire crew must work together to achieve that goal. As such, after the Administrator uses all of her available resources to make a decision, the entire headquarters staff must align themselves behind that decision, and headquarters must speak with a single voice. Only then can the Administrator's Customer Service Initiative work effectively.

ISO 9000 and last year's CSI initiative are noble goals. And these programs have great potential, however, every discussion of these programs talk about fixing what's outside of the Washington beltway. The challenge will be to fix what's inside the beltway. AEA is committed to supporting the Administrator and her programs to improve the regulatory processes of the FAA. However, the foundation of

the entire organization lies at 800 Independence Ave. It does not make sense to remodel the organization until the foundation has been inspected, strengthened and rebuilt.

For these new initiatives to truly work as they are intended both FAA and industry needs to be able to work together. The Association along with the aviation industry stands ready to help, but before we point fingers at the field inspectors let us all make sure that there is one voice from FAA Headquarters.

For the good of the aviation industry, the FAA employees, and the flying public, it is time for the FAA theologians to realize that the earth is round and that they are but a fixed location on a rotating orb. □

Frequently Asked Questions

TOPIC:

FAA Enforcement

The following answer is extracted from the Government Accounting Office's July 2004 report on Aviation Safety.

QUESTION: How many enforcement actions result in fines?

ANSWER: During fiscal years 1993 through 2003, the FAA closed about 196,000 enforcement cases that involved nearly 200,000 enforcement actions against entities and individuals. Overall, about 53 percent of the actions were administrative, such as warning notices, and 28 percent were legal sanctions such as fines or suspension or revocation of a certificate. The remaining 18 percent of cases were closed with no action being taken by the agency.

In fiscal year 2003, the FAA closed about 15,000 enforcement cases.

The GAO analysis showed that the FAA was more likely to assess fines against commercial entities, such as air carriers and repair stations, and to take certificate sanctions against individuals, such as pilots and mechanics.

Note: AEA offers these Frequently Asked Questions (FAQs) in order to foster greater understanding of the Federal Aviation Regulations and the rules that govern our industry. AEA strives to make them as accurate as possible at the time they are written, but rules change so you should verify any information you receive from an AEA FAQ before you rely on it. AEA DISCLAIMS ANY WARRANTY FOR THE ACCURACY OF THE INFORMATION PROVIDED. This information is NOT meant to serve as legal advice – if you have particular legal questions, then these should be directed to an attorney.

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Regulatory Update

United States

Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft

The Federal Aviation Administration (FAA) has created a new rule for the manufacture, certification, operation, and maintenance of light-sport aircraft.

Light-sport aircraft are aircraft that weigh less than 1,320 pounds (1,430 pounds for aircraft intended for operation on water) and are heavier and faster than ultralight vehicles and include airplanes, gliders, balloons, powered parachutes, weight-shift-control aircraft, and gyroplanes.

The FAA considers this action necessary for them to address advances in sport and recreational aviation technology, lack of appropriate regulations for existing aircraft, several petitions for rulemaking, and petitions for exemptions from existing regulations. The intended effect of this action is to provide for the manufacture of safe and economical certificated aircraft that exceed the limits currently allowed by ultralight regulation, and to allow operation of these aircraft by certificated pilots for sport and recreation, to carry a passenger, and to conduct flight training and towing in a safe manner.

Proposed Advisory Circular (AC) 20-FIS-B, Safety and Interoperability Requirements for Initial Domestic Flight Information Service-Broadcast

The FAA announced the availability of a proposed Advisory Circular (AC) 20-FIS, Safety and Interoperability Requirements for Initial Domestic Flight Information Service-Broadcast (FIS-B). This proposed AC supports

the use of Flight Information Service-Broadcast weather and other aeronautical data link products for enhanced situational awareness. In it, we (1) describe a standardized way to identify the data communications operations environment, (2) how to execute an operational hazard assessment, and (3) allocate resulting safety and interoperability requirements for installing FIS-B equipment.

AEA's comments on the draft can be viewed on Resource One.

Technical Standard Order--C157, Aircraft Flight Information Services--Broadcast (FIS-B) Data Link Systems and Equipment

The FAA announced the availability of and requests comments on a proposed Technical Standard Order (TSO)-C157, Aircraft Flight Information Services-Broadcast (FIS-B) Data Link Systems and Equipment. The proposed TSO tells manufacturers seeking TSO authorization or letter of design approval what minimum performance standards (MPS) their FIS-B Data Link System and Equipment must first meet for approval and identification with the applicable TSO markings.

Advisory Circular 23.1311-1B, Installation of Electronic Displays in Part 23 Airplanes

The Agency announced the availability of and requests comments on a proposed AC. Proposed AC 23.1311-1B provides information and guidance concerning an acceptable means, but not the only means, of compliance with Title 14 of the Code of Federal Regulations (14 CFR), part 23, applicable to the installation of electronic displays in part 23 airplanes. This AC contains over 20 updates since the last issuance. Two of the major revisions

are new sections: field-of-view and color for weather displays.

Comments should be submitted as soon as possible.

Technical Standard Order--C158, Aeronautical Mobile High Frequency Data Link (HF DL) Equipment

The Agency announced the availability of the proposed Technical Standard Order (TSO)-C158, Aeronautical Mobile High Frequency Data Link (HF DL) Equipment. The proposed TSO tells manufacturers seeking TSO authorization or letter of design approval what minimum performance standards (MPS) their HF DL equipment must first meet for approval and identification with the applicable TSO markings.

Proposed Technical Standard Order (TSO)--C159, Avionics Supporting Next Generation Satellite Systems (NGSS)

The FAA also announced the availability of a proposed Technical Standard Order (TSO) C-159, Avionics Supporting Next Generation Satellite Systems (NGSS). This proposed TSO tells persons seeking a TSO authorization or letter of design approval what minimum performance standards (MPS) their Next Generation Satellite Systems (NGSS) must meet to be identified with the applicable TSO marking.

Canada

Transport Canada issues Policy Statements on Avionics Modifications

Transport Canada Civil Aviation (TCCA) has published several policy

statements and documents as a result of issues raised by AEA Canada at the Avionics Modification Workshops in June 2000 and November 2003.

The issues raised at the 2000 workshop, concerning compliance with AWM 525.1333(c) for installations of additional equipment to systems for required equipment; the need for pitot-static isolation valves for installation of an ADC on aircraft with two pitot sources; and the requirements for connecting a standby attitude indicator to a battery bus, have been addressed on TCCA's Avionics Engineering website at:

<http://www.tc.gc.ca/CivilAviation/certification/engineering/avionics/Workshop00/menu.htm>

At the 2003 workshop, TCCA presented their position on design guidelines and human factors considerations for installation of IFR GPS receivers in Part 23 aircraft. TCCA has now published Policy Letter (PL) #523-008 on this subject. The PL provides guidance on acceptable locations for the CDI and GPS receiver when no remote annunciators are to be used; and defines the minimum acceptable remote annunciators and their acceptable location to ensure an efficient and concise instrument scan. The PL also addresses the definition of a "Center Radio Stack" in relation to positioning of remote annunciators. TCCA's position has been rationalized with existing regulations and guidance material, in particular FAAAC 20-138A. PL 523-008 may be viewed at:

<http://www.tc.gc.ca/CivilAviation/certification/guidance/523-008.htm>

TCCA has prepared a Policy Letter, PL 571-001, to define the installation eligibility of substitute or replacement bearings in aeronautical components. This PL has been prepared as a result of enforcement action taken by TCCA against some instrument overhaul shops, and subsequent considerable pressure from AEA Canada to clarify

TC's position on this subject. The PL essentially harmonizes TCCA's policy with that of the FAA, as identified in HBAW 98-19A. To be acceptable, a replacement bearing must have TSO-C149 approval, and there must be a statement from the bearing manufacturer that the replacement bearing is the same part as that supplied to the instrument manufacturer. If the instrument manufacturer alters the part number from that supplied from the bearing manufacturer, then only that re-identified bearing may be used. The PL separates bearing replacements into two classes: Major Repairs (for critical applications), and Minor Repairs (for non-critical applications). Critical applications are defined as ones where failure of the bearing would result in immediate catastrophic effect on the aircraft. Instrument bearings would not fall into this category and hence will be classified as a minor repair, with substitution documented in the applicable technical record. AMOs who intend to install substitute bearings should describe their procedures for control of these substitutions in the Maintenance Policy Manual. At the time of writing this regulatory update, PL 571-001 had not been published. AMOs should check for issue of the PL on TCCA's web site at: <http://www.tc.gc.ca/CivilAviation/certification/guidance>

Europe

EASA:

As of July 19th, EASA appointed the last of the four main department directors. Francesco Banal was appointed as the Director of the Quality and Standardisation Directorate. This appointment completes the structure of the Agency, which has now its four Directorates,

Rulemaking, Certification, Quality and Standardisation and Administration, in place.

Banal, a 57 year old Italian, will be responsible to ensure that EASA high quality standards are properly, uniformly and consistently implemented and maintained across the European Union. This role covers first the standardisation and inspection of National Aviation Authorities and secondly the supervision of the quality of the work performed by the Agency, National Aviation Authorities and qualified entities executing tasks on behalf of EASA.

The third EASA organised industry workshop to be held in Cologne on November 18th was announced on the EASA website. It is not clear what the topic will be, but on the second industry workshop a strong vote of the participants was made towards a Part 66/147 workshop.

The address for EASA's headquarters was published on the website valid from November 3rd this year. It will be: Ottoplatz, 1, D-50679 Cologne, Germany.

JAA:

JAA issued a Notification of Availability of Proposed changes to FAA Advisory Circular 27-1B and 29-2C and invited JAA members to send comments to FAA.

MG (miscellaneous guidance) 17 of the referenced AC's is describing installation guidelines for Helicopter Terrain Awareness and Warning Systems (HTAWS) and Guidelines for the development and certification of Rotorcraft advanced flight controls (AFC).

EUROCONTROL:

The vertical expansion for 8.33 kHz Frequency spacing above FL 195 in the European Region is planned to be operational in the latter part of

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October 2006.

At present, there are approximately 10,400 VHF assignments documented in the ICAO COM-2 Table and it has been estimated, by the 8.33 kHz Vertical Expansion Study Report, that there will be a demand for about 2,300 new assignments in the period until 2015.

Eurocontrol Agency has established a Mode S Enhanced Surveillance Exemption Corrodination Cell (ECC) in order to support the operational introduction of SSR Mode S. State Regulatory Authorities have delegated the ECC to manage exemption requests and to notify exemptions on their behalf in the following circumstances:

- Where aircraft avionics do not permit the extraction and transmission of the full set of downlink aircraft parameters (DAPs) as described on the EASAwebsite. (The list provides the currently available details of aircraft and their capabilities for providing DAPs. This list will be updated on a regular basis.)

- When aircraft operators show a clear intent to equip their aircraft as soon as practicable after March 31, 2005 but before March 30, 2007 and who experience genuine technical issues or supply problems, causing delays that are beyond their control. In these circumstances, operators may also apply for a partial alleviation from the Mode S Elementary Surveillance requirements in order to install the wiring for Aircraft Identification reporting at the same time as the wiring for Enhanced Surveillance DAPs.

- For aircraft that have an out-of-service date before December 31, 2007.

- For aircraft conducting flights, under existing rules, for the purpose of flight testing, delivery or for transit

into and out of maintenance bases. (These exceptional cases may be granted strictly limited duration exemptions. In recognition of the special nature of such requests they will be processed via alternative channels. Further details will be announced on this site as they become finalized).

- For aircraft that intend to conduct only occasional IFR/GAT flights (under 30 hours per aircraft per annum). □

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