



UNITED STATES DEPARTMENT OF COMMERCE
Office of the General Counsel
Washington, D.C. 20230

March 24, 2003

Ms. Elaine Kaplan
Special Counsel
U.S. Office of the Special Counsel
1730 M Street, N.W., Suite 300
Washington, D.C. 20036-4505

Re: OSC File No. DI-01-1549 (Gary Ryan)
Paso Robles, California ASOS

Dear Ms. Kaplan:

Regarding your letter of December 20, 2002 to the Department of Commerce, Secretary Evans has delegated authority to me to review and approve the Department of Commerce's Report regarding this matter.

Based upon an Investigative Report prepared by my staff, I have concluded that the allegations raised by Mr. Ryan concerning the Paso Robles ASOS system lack merit. I enclose a copy of the Report for your reference.

Thank you for the opportunity to address these issues. If you have any questions, please contact Mr. Timothy Conner of my staff on 202-482-1069.

Sincerely,

Jane Dana
Deputy General Counsel

Enclosure



March 24, 2003

MEMORANDUM FOR: Jane Dana
Deputy General Counsel

FROM: M. Timothy Conner *M.T. Conner*
Chief, General Litigation Division

SUBJECT: Investigative Report Regarding Office of Special
Counsel Inquiry Dated December 20, 2002

I. Introduction

The U.S. Office of Special Counsel (OSC) is an independent federal investigative and prosecutorial agency which is authorized by law to receive disclosures of information from current and former federal employees alleging violations of law, rule, or regulation, gross mismanagement, gross waste of funds, abuse of authority, or a substantial and specific danger to public health or safety. 5 U.S.C. §1213. (Tab 1).

On or about December 20, 2002 the Office of Special Counsel sent a letter to Secretary Evans advising that it had received information from Mr. Gary Ryan of Ventura, California, a former employee of the National Weather Service (NWS),¹ which indicated "a substantial likelihood" that one or more of the conditions mentioned above existed with regard to the Automated Surface Observing System (ASOS)² at the Paso Robles

¹ The National Weather Service is a constituent agency within the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce.

² The Automated Surface Observing System (ASOS) is a joint effort of the NWS, the Federal Aviation Administration (FAA), and the Department of Defense, and is a key component of the NWS' modernization program that was implemented in the 1990s. The ASOS systems serve as the nation's primary surface weather observing network in support of weather forecasting and warning functions, as well as aviation operations. As the name implies, ASOS is an automated system of weather sensors that detects sky condition (cloud height and amount),

Municipal Airport³ (Tab 2). We were asked to respond within sixty days or seek an extension of time if necessary. In early January 2003 the Secretary of Commerce's Office of Executive Secretariat assigned to the Office of General Counsel the tasks of conducting an investigation and preparing a response for signature by the General Counsel. Our request for an extension of time until March 24 was approved by phone in mid-February by Catherine A. McMullen, Chief of the Disclosure Unit at the OSC.

The Office of Special Counsel's letter outlines the following case: Gary Ryan, an NWS employee with over thirty years experience, in 1996 "became a supervisor in the NWS Public Service Unit, Southern California regional office".⁴ In this role he was responsible for commissioning about twenty-five ASOS units. Paso Robles was the only field site at which Mr. Ryan recommended against commissioning a fully automated ASOS unit. Mr. Ryan believed that a non-augmented unit at this site would be a degradation of service because meteorological conditions unique to Paso Robles, such as the sudden onset of fog, could not be detected and reported in a timely fashion by the ASOS unit.

Despite Mr. Ryan's recommendation, the ASOS unit at Paso Robles was commissioned on January 18, 2001, and the FAA contract observers there were let go. Therefore, Mr. Ryan has alleged, and the Office of Special Counsel has evidently concluded, that:

1. The commissioning of the Paso Robles ASOS unit as a non-augmented system constituted a degradation of service and therefore violated the Weather Service Modernization Act of 1992; and,
2. Using a non-augmented observation system at Paso Robles constitutes a

visibility, pressure, ambient and dew point temperatures, wind direction and speed, precipitation, and other elements. Prior to the installation of ASOS units at airports around the country, surface observations were recorded by human observers. As ASOS units were commissioned and brought on line, they became the sole source of observations at some airports, while at other, usually larger airports, human observers were retained to augment the ASOS units. Most ASOS units are owned and controlled by the FAA, with the NWS providing maintenance support.

³ Paso Robles is about 25 miles north of San Luis Obispo, and about 220 miles north of Los Angeles. It is on the interior side of the Santa Lucia Mountain range in the Salinas Valley, about 20 miles due east of the coast.

⁴ More specifically, Mr. Ryan became the Data Acquisition Program Manager in the Oxnard, California Weather Forecast Office (WFO). As part of his duties, he acted as that office's ASOS Commissioning Officer. The Oxnard WFO is in the Western Region of the National Weather Service, headquartered in Salt Lake City.

substantial and specific danger to public safety.

OSC's letter goes on to state that, according to Mr. Ryan, the ASOS at Paso Robles "was unreliable at the time it was commissioned," and "had a long and clearly documented history of unreliability at the time it was commissioned." Records supplied by Mr. Ryan allegedly reflect this unreliability. An additional factor contributing to the danger of operating an ASOS unit without human observers is the fact that the nearest maintenance support for the equipment is approximately three hours away.

The following documents (see Tab 2) were attached to OSC's letter:

1. Some ASOS logs showing ASOS readings and observed manual readings at Paso Robles on selected dates from December 1999 through March 2000, and for the month of May 2000.⁵
2. A report prepared by Mr. Ryan on January 29, 2002 entitled "ASOS Safety Concerns: A Comparison of Weather Observation Elements Taken By the Automated Surface Observation System (ASOS) vs. Human Observers". This document is an indictment of the ASOS system as a whole, but is not specifically directed to problems at Paso Robles.
3. A letter dated July 26, 2001 from Kenneth M. Mead, the FAA Inspector General, to Senator Olympia Snowe, responding to the Senator's request for a "limited review" of the FAA's ASOS program. There is no mention of the Paso Robles ASOS in this document.
4. An internal FAA memorandum dated July 26, 2001 from Alexis M. Stefani, Assistant Inspector General for Auditing, to the Administrator of the FAA, briefly describing the letter to Senator Snowe and providing a courtesy copy for the Administrator. There is no mention of the Paso Robles ASOS in this document.
5. An internal FAA memorandum dated August 29, 2001 from the Assistant Administrator for Financial Services/CFO to the Assistant Inspector General for Auditing concurring in the recommendation of the OIG that the FAA "revisit and finalize plans for improving ASOS." There is no mention of the Paso Robles ASOS in this document.

⁵ *N.b.*, contrary to allegations in the December 20 letter, these records do not reflect "observations for the several months preceding, and immediately following, the date the ASOS was commissioned." The ASOS was commissioned on January 18, 2001, and these records date from the winter and spring of 2000.

II. Conduct of the Investigation

On January 3, 2003, a copy of OSC's December 20, 2002 letter and attachments was sent by our office to Brigadier General (retired) John J. Kelly, Jr., the Director of the National Weather Service. General Kelly responded on January 21, 2003 (Tab 3).

After receiving NWS' written response, I met with the following NWS headquarters officials on January 30, 2003 to discuss this matter:

John McNulty, Jr.
Director, Office of Operational Systems
Tim Ross
Surface Observing Program Manager
Joseph Facundo
Chief, Observing System Branch
Glenn Tallia
Senior Counselor for Atmospheric and Space Services and Research
NOAA General Counsel's Office

I also consulted by phone from Salt Lake City with the following NWS Western Region officials:

Robert Diaz
Chief, Systems Operations Division
NWS Western Region
Joseph Lachacz
Regional Maintenance Specialist
NWS Western Region

During the week of February 10, I traveled to the NWS's Western Region headquarters in Salt Lake City and met with Kristine Nelson. Ms. Nelson is currently the Western Region's Aviation Meteorologist and NEXRAD Meteorologist. For a number of years up until August 1, 2002, and during the time in question, Ms. Nelson was the Western Region's ASOS Meteorologist and played a significant role in the Paso Robles ASOS commissioning.

Next I flew to California and met for about two hours with Mr. Ryan. I then met with Todd Morris, the Meteorologist-in-Charge (MIC) of the Weather Forecast Office (WFO) in Oxnard. Mr. Morris was the MIC of this office during the time in question and was Mr. Ryan's supervisor during this period and until Mr. Ryan left government service.

While in California I also had a phone conversation with Roger Oxborrow, the Airport Manager of the Paso Robles Municipal Airport concerning the ASOS unit, how it has been functioning over the past year or so, and whether he has received any complaints from airport users concerning the ASOS.

After my return to Washington, I spoke to Vicki Nadolski, the current Regional Director of the NWS' Western Region, who also held this position during the time in question. I also spoke to Andrew Rorke, an Aviation Meteorologist in the Oxnard WFO who was designated the ASOS Commissioning Officer after Mr. Ryan left the NWS in June 2001, and who initially recommended that the Paso Robles ASOS unit be commissioned in January 2001. In addition, per the recommendation of Mr. Ryan, I spoke by phone with Mr. Tim Kellett, the former manager of the Paso Robles contract observer operation (and an observer himself) at Paso Robles.

When I met with Mr. Ryan in California, I learned that he had submitted numerous documents to the OSC that had not been provided to us. Mr. Ryan expressed concern that I had not been given copies of these documents. He gave me one such document dated May 29, 2001, entitled "Statement of Gary Ryan: The role of the Automated Surface Observing System (ASOS) in reporting Official Weather Observations for the National Weather Service and the Federal Aviation Administration" (Tab 4).⁶ He said he would send me copies of the other documents, but I never received anything further from him. OSC provided these to me on March 6, 2003 (Tab 5).

III. Factual Background

A. Modernization of the National Weather Service

In the early 1990s, the National Weather Service undertook a modernization program that involved new observational technology, new information and forecast systems, and a new organizational structure. The new observing systems included the WSR-88D Next Generation Weather Radar (NEXRAD), the Next Generation Geostationary Operational Environmental Satellites (GOES-Next), and ASOS. This modernization program was implemented pursuant to the "Weather Service Modernization Act," signed into law on October 29, 1992, P.L. 102-567, Title VII, 106 Stat. 4303; 15 U.S.C. 313, note. (Tab 6)

⁶ This document postdates Mr. Ryan's departure from federal service. In it, he reiterates his argument that the Paso Robles ASOS should be an augmented system with human observers. He also condemns the National Weather Service's modernization program in general as being "dubious" and in particular condemns the use of ASOS nationally as creating a serious deterioration of weather observation quality.

The Modernization Act required that the NWS could not commission (approve for official use) an ASOS located at an airport unless the NWS and the FAA determined that the weather services provided after commissioning would continue to fully comply with the FAA's applicable aviation flight rules. 15 U.S.C. § 705(c).

Also, the Act specified that criteria be developed regarding the commissioning of ASOS sites before the system could be fully automated. Such criteria were published in the Federal Register and codified at 15 C.F.R. Part 946 in December 1993 (Tab 7). Among other things, the regulations required that, before an ASOS or NEXRAD unit was commissioned, an NWS Commissioning Report used to document that (a) the system involved would perform to the Government's specifications; (b) the system had been tested on site and performed reliably; (c) satisfactory maintenance support was in place; and (d) the system satisfactorily supported field office operations, would need to be prepared and approved. 15 C.F.R. Part 946.5(a).

B. Mr. Ryan's Role in the Commissioning of the Paso Robles ASOS

As is further discussed below, the NWS did not own the Paso Robles ASOS, and did not determine its level of service. However, it did retain the responsibility for maintenance of the system and acted as commissioning agent for the FAA as per the joint NWS/FAA ASOS commissioning criteria found in I.A.1 of Appendix A to 15 CFR Part 946 (Tab 7). The Paso Robles ASOS was commissioned on January 18, 2001 (see ASOS Commissioning Report at Tab 9).

Responsibility for the commissioning of the Paso Robles ASOS resided in the Oxnard, California Weather Forecast Office. Mr. Ryan became the ASOS Commissioning Officer at the Oxnard WFO in 1996. In this capacity he evaluated and made recommendations regarding the commissioning of many ASOS units in Southern California in the late 1990s. The Paso Robles ASOS was scheduled for commissioning in the late summer or fall of 2000. However, in late 1999 and early 2000 it was apparent to Mr. Ryan, as well as others, that the Paso Robles ASOS unit was not functioning properly. Mr. Ryan indicated to me that the unit had been relocated from San Luis Obispo, and he categorized it as "a lemon." It produced numerous discrepancies regarding the elements it was reporting, particularly as to visibility and cloud height/ceiling. The unit was slow to report fog, which would roll into the airport environment with little notice, and was slow to report the area clear when the fog dissipated. It would report clouds when it was clear and snow when no precipitation was falling. This assessment was substantiated by logs being kept by the observers during this testing phase in late 1999 and early 2000. The logs compared what the ASOS reported with what observers actually saw. (see Tab 2).

Mr. Ryan attributed some of these problems to malfunctions in the unit itself, and others to the innate incapacity of ASOS to report certain data in an accurate and timely fashion. He believed that ASOS in general, and the Paso Robles unit in particular, inadequately reported accurate visibility and ceiling conditions. This was true especially because of the unusual fog morphology of the Salinas Valley and the Paso Robles Airport. Frequently a "doughnut effect" would descend on the airport, with fog around the edges of and on the approaches to the airport, while sky remained clear above the ASOS unit. Thus the unit would erroneously report the airport as being clear.

On May 9, 2000, Mr. Ryan inspected the Paso Robles ASOS and found a number of problems, including inadequate maintenance, frequent false reports by the equipment, and confirmation of his previously expressed belief that the unit was unreliable because of meteorological conditions. As a result of this inspection, on June 2, 2000, in his capacity as the ASOS Commissioning Officer, Mr. Ryan sent a letter to Roger Oxborrow, Manager of the Paso Robles Airport, with copies to the FAA and the NWS Western Region, indicating that the NWS supported continuation of the Federal Contract Weather Observing Station at the airport following commissioning of the ASOS (Tab 10). This letter apparently had not been approved by Mr. Ryan's manager, Todd Morris, the Meteorologist-in-Charge of the Oxnard WFO, nor had it been approved by the NWS' Western Region.⁷ In addition, the letter contradicted FAA policy which had already determined that the Paso Robles ASOS would not be augmented by human observers upon commissioning.

After discovering that the letter had been sent, Mr. Morris ordered Mr. Ryan to send another letter to all parties rescinding the earlier letter. Mr. Ryan did so that same day (Tab 10). The NWS' position on this matter is that, while the Paso Robles ASOS still had problems in the spring of 2000, the time for commissioning had not yet arrived and corrective actions had not been taken yet. Mr. Ryan's action therefore was premature, unauthorized and made determinations contrary to official NWS and FAA policy.

After this incident, relations between Mr. Ryan and his superiors at the Oxnard office and at Regional headquarters deteriorated rapidly. Mr. Ryan was advised that he would probably receive a letter of reprimand and be suspended as a result of this and other alleged infractions (failure to follow instructions, unprofessional conduct, etc.). Shortly after this incident Mr. Ryan put himself on sick leave in mid-June 2000 as a result of stress-related medical problems, and never returned to work. After being out on extended

⁷ Mr. Ryan claims that the letter had been approved by his supervisor, Todd Morris. Mr. Morris denies this, and the sequence of events that followed the publication of this letter indicates that the letter probably had been sent without authorization.

sick leave, he retired from federal service in May 2001.

Mr. Ryan feels very strongly that he was treated unfairly during this time. His superiors at the NWS disagree. My investigation indicates only that, from an objective viewpoint, it appears Mr. Ryan issued his June 2 letter prematurely and without proper authority. It also appears that this whole matter contributed to his premature departure from the NWS, and I cannot discount the possibility that this is, to some extent, the motivating factor behind his submission to OSC.

After Mr. Ryan's departure in June 2000, Andrew Rorke, the Oxnard WFO's Aviation Liaison Officer, was appointed in July 2000 to replace him as the ASOS Commissioning Officer. Commissioning had been scheduled for August 2000 but, because of the continuing problems with the Paso Robles ASOS, was postponed temporarily.

Until this time maintenance of the Paso Robles ASOS was the responsibility of the Hanford, California WFO. In August 2000 this responsibility was transferred from the Hanford WFO to the Oxnard WFO. A number of problems then were discovered, including wires that had been frayed during installation and needed to be replaced. Also, water was found to be leaking into the unit, causing short circuits which led to false readings. Repairs were made. In addition, the computer that ran the ASOS unit was in a room without air conditioning, which had led to overheating of the ASOS control unit, causing the unit to shut down or give false readings. An air conditioner was installed and these malfunctions ceased.

As a result of these and other repairs, the data reported by the ASOS unit stabilized. A 90 day evaluation was performed from October 10, 2000 until January 10, 2001. The unit was formally commissioned, with FAA approval, on January 18, 2001, indicating that the commissioning criteria as outlined in Appendix A to 15 C.F.R. Part 946 had been met (see ASOS Commissioning Report, Tab 9). The FAA contract observers were let go within a week or two of this date.

I attempted to obtain copies of the ASOS comparison logs for this testing period to see how the ASOS unit compared to the human observations and was told by the NWS Western Region that they had been "lost." However, I was able to obtain a list of Monthly System Availability rates for Paso Robles from January 2002 through January 2003, indicating that the availability and accuracy rates for the ASOS averaged a little over 99% (Tab 11). Also, conversations with Mr. Rorke, the local ASOS Commissioning Officer, Kristine Nelson, the Regional Commissioning Manager, and Roger Oxborrow, the Paso Robles Airport Manager, lead me to believe that the ASOS was functioning properly and reliably at the time of commissioning, and through the present.

IV. Investigative Conclusions

A. The NWS Did Not Violate the Weather Service Modernization Act at Paso Robles.

The Modernization Act contemplated a consolidation of NWS field offices and the complete automation of some units. Section 706 (b) of the Act, titled "Certification," provides that the "Secretary [of Commerce] shall not close, consolidate, automate, or relocate any field office, unless the Secretary has certified that such action will not result in any degradation of service."

Referring to this section and to Mr. Ryan's allegations, OSC proposes that the NWS violated the Modernization Act because the automation of the Paso Robles surface observing function was tantamount to the closure of a "field office" that resulted in a degradation of service.

OSC's proposal is contradicted by the facts. Prior to, during, and after the commissioning of the ASOS unit at Paso Robles, the surface observing function at that location was an FAA operation and the observers were FAA contractors. NWS maintained the ASOS unit, which task included testing and preparing it for commissioning. But NWS did not own or control the ASOS. Section 702 of the Modernization Act defines "field office" as "any National Weather Service Office or National Weather Forecast Office." There was no NWS field office at Paso Robles. Thus, since no NWS field office was automated, the "no degradation of service standard" of Public Law 102-567 did not apply to the commissioning of the ASOS at Paso Robles.

From about mid-1992 through the mid-90s, the NWS, the FAA, and DOD installed ASOS units at approximately 850 airports in the United States. During the initial stage of ASOS implementation, manual observations were continued while the system was tested to determine whether each ASOS site could operate as a stand-alone operation or required human augmentation. Beginning in 1994, the FAA and the aviation industry began working together closely to evaluate the needs and requirements of the aviation community with regard to surface observations at each airport in the country. This process culminated in the ranking of all airports according to four levels of detail required in the weather observation for that site. The first category, known as Service Level D, is completely automated. In this category the ASOS observation constitutes the entire observation. There is no human augmentation.

The Paso Robles ASOS unit was installed in February 1996, and the FAA assigned to it the category of Service Level D (*see* Federal Register Notice of June 25, 1996 at Tab 8).

Thus, the FAA—not the NWS—made the decision to automate the Paso Robles ASOS operation. Therefore, the allegation that automating the Paso Robles ASOS was a violation of law by the NWS is not accurate.

B. The Paso Robles ASOS Did Not Constitute a Degradation of Service and Does Not Pose a Danger to Public Safety.

ASOS is more efficient in most respects than the human observers it replaced. Observations by ASOS are continually being taken electronically and disseminated in a much more timely and efficient manner. However, most people involved with the technology agree that when it comes to visibility and cloud/ceiling reports, the system is not always as reliable as a human observer. Some people, such as Mr. Ryan, think that this indicates ASOS represents an inherent degradation of service. Most others disagree. This is an issue that was debated for many years by the FAA, the NWS, DOD, the aviation community, and Congress with the result that some ASOS systems required augmentation, and others, such as Paso Robles, did not. Thus it was determined as a matter of FAA policy that ASOS at some locations (such as Paso Robles) performed within acceptable margins of error and did not constitute degradations of service even if they occasionally produced less than perfect visibility and/or ceiling reports.

The fundamental defect in Mr. Ryan's allegations in this matter is that they are based largely on old information. In late 1999 and early 2000 when the ASOS at Paso Robles was being tested, there were deficiencies. However, by June of 2000 Mr. Ryan was on leave and no longer working in the Oxnard office. My interview with him indicated that he had little or no first-hand knowledge of the repairs that were made to the system in late 2000, or of the results produced thereafter that formed the basis for commissioning in January 2001. He simply relied on—and asked OSC to rely on—reports generated a year before commissioning.⁸

⁸ Some of the other documents in this package which Mr. Ryan submitted predate even early 2000, *e.g.*, a November 16, 1999 inspection report of the Paso Robles ASOS by Mr. Ryan, and a December 15, 1998, site visit report by Mr. Lachacz of the NWS Western Region. However, Mr. Ryan did submit some e-mail traffic from January and February 2001, between Tim Kellett, the chief contract observer at Paso Robles, and Todd Morris at Oxnard and Kristine Nelson at the NWS Western Region (Tab 5). Mr. Kellett's remarks and allegations were very critical of the ASOS, and were later contradicted by NWS personnel and the airport manager in conversations with me. At the time these e-mails were sent, Mr. Kellett was about to lose his job as a result of the automation of the ASOS, and perhaps that fact influenced his remarks to some extent.

Another problem with Mr. Ryan's allegations is that, as indicated in his memoranda, he has a strong bias against ASOS in general, considering it inherently inferior to human observation systems. He is still fighting a battle that was fought and decided years ago; ASOS today is a fact of life. The level of service provided by ASOS is different than that provided by human observers. In some respects it is better, and in some respects not as good. But overall, the FAA has determined that, on the basis of a cost-benefit analysis, ASOS is generally the superior system for use at airports around the country.

At the time the Paso Robles ASOS was commissioned in January 2001, it had a 99.2% accuracy rate (exceeding the 95% standard), which it approximates to this day (Tab 11). This record demonstrates that the Paso Robles ASOS today certainly does not constitute "a substantial and specific danger to public safety" within the meaning of 5 U.S.C. § 1213. The current reliability of ASOS, moreover, is confirmed by a highly credible, on-site observer, Airport Manager Roger Oxborrow.

Mr. Oxborrow has occupied the post of Airport Manager at Paso Robles since 1986. He agrees that before late 2000 the system had not been maintained by the NWS up to its potential. However, since then, when maintenance responsibility was transferred from Hanford to Oxnard, reliability improved significantly. He states that the system has worked almost flawlessly since commissioning. The fact that maintenance support is about three hours away at Oxnard has not been a problem, as Mr. Ryan alleged. Mr. Oxborrow indicated that by the time he detects a problem, a technician from the NWS usually has already arrived to fix it. A three hour response time is not unusual for the NWS throughout the country, and thus response time does not seem to be an issue at Paso Robles.

I asked Mr. Oxborrow about the weather phenomena at Paso Robles described by Mr. Ryan. He agreed that fog banks occasionally roll in and cover part of the airport, or create a doughnut effect, and ASOS will not always pick this up. However, he claims this does not create much of a problem and that none of the users of the airport have complained about the ASOS at all over the last year.

In addition, the outage, or "crash", that Mr. Ryan mentioned which occurred in February 2001, has not recurred. Mr. Oxborrow, who is not an employee of the FAA or any other federal agency, is quite pleased with the performance of the ASOS, which he described as being very accurate and reliable. He told me that "it never misses a beat", and "I check with pilots regularly to verify the ceiling heights that it is giving and the pilots always tell me it is right on." Also, there have been no aviation accidents at the airport since the commissioning of the ASOS.

VII. Summary

The NWS did not violate the Weather Service Modernization Act in connection with the commissioning of the Paso Robles ASOS. On the contrary, that commissioning met all applicable NWS regulatory and statutory criteria. Furthermore, there has not been, and is not now, a degradation of service regarding the functioning of the Paso Robles ASOS. Maintenance by NWS of the Paso Robles ASOS has been and continues to be entirely adequate.

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USCS § 1201 note) provides that this section shall become effective 90 days after enactment.

CODE OF FEDERAL REGULATIONS

Office of Special Counsel—Filing of complaints and allegations, 5 CFR Part 1800.

Office of Special Counsel—Investigative authority of the Special Counsel, 5 CFR Part 1810.

Office of Special Counsel—Public Information, 5 CFR Part 1820.

Office of Special Counsel—Privacy, 5 CFR Part 1830.

Office of Special Counsel—Subpoenas, 5 CFR Part 1840.

INTERPRETIVE NOTES AND DECISIONS

Duties of Special Counsel are not equivalent to those of employees' advocate, rather, Special Counsel is to act as ombudsman responsible for investigating and prosecuting violations of Civil Service Reform Act. *Frazier v Merit Systems Protection Bd.* (1982) 217 US App DC 297, 672 F2d 150, 28 BNA FEP Cas 185, 109 BNA LRRM 2959, 28 CCH EPD ¶ 32495.

Merit Systems Protection Board and Special Counsel of MSPB are not precluded from issuing advisory opinion ruling upon applicability of Hatch Act provisions (5 USCS §§ 7324 et seq.) to hypothetical circumstances. *French v Devine* (1982, DC Dist Col) 547 F Supp 443.

§ 1213. Provisions relating to disclosures of violations of law, gross mismanagement, and certain other matters

(a) This section applies with respect to—

(1) any disclosure of information by an employee, former employee, or applicant for employment which the employee, former employee or applicant reasonably believes evidences—

(A) a violation of any law, rule, or regulation; or

(B) gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety;

if such disclosure is not specifically prohibited by law and if such information is not specifically required by Executive order to be kept secret in the interest of national defense or the conduct of foreign affairs; and

(2) any disclosure by an employee, former employee, or applicant for employment to the Special Counsel or to the Inspector General of an agency or another employee designated by the head of the agency to receive such disclosures of information which the employee, former employee, or applicant reasonably believes evidences—

(A) a violation of any law, rule, or regulation; or

(B) gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety.

(b) Whenever the Special Counsel receives information of a type described in subsection (a) of this section, the Special Counsel shall review such information and, within 15 days after receiving the information, determine whether there is a substantial likelihood that the information discloses a

violation of any law, rule, or regulation, or gross mismanagement, gross waste of funds, abuse of authority, or substantial and specific danger to public health and safety.

(c)(1) Subject to paragraph (2), if the Special Counsel makes a positive determination under subsection (b) of this section, the Special Counsel shall promptly transmit the information with respect to which the determination was made to the appropriate agency head and require that the agency head—

(A) conduct an investigation with respect to the information and any related matters transmitted by the Special Counsel to the agency head; and

(B) submit a written report setting forth the findings of the agency head within 60 days after the date on which the information is transmitted to the agency head or within any longer period of time agreed to in writing by the Special Counsel.

(2) The Special Counsel may require an agency head to conduct an investigation and submit a written report under paragraph (1) only if the information was transmitted to the Special Counsel by—

(A) an employee, former employee, or applicant for employment in the agency which the information concerns; or

(B) an employee who obtained the information in connection with the performance of the employee's duties and responsibilities.

(d) Any report required under subsection (c) shall be reviewed and signed by the head of the agency and shall include—

(1) a summary of the information with respect to which the investigation was initiated;

(2) a description of the conduct of the investigation;

(3) a summary of any evidence obtained from the investigation;

(4) a listing of any violation or apparent violation of any law, rule, or regulation; and

(5) a description of any action taken or planned as a result of the investigation, such as—

(A) changes in agency rules, regulations, or practices;

(B) the restoration of any aggrieved employee;

(C) disciplinary action against any employee; and

(D) referral to the Attorney General of any evidence of a criminal violation.

(e)(1) Any such report shall be submitted to the Special Counsel, and the Special Counsel shall transmit a copy to the complainant, except as provided under subsection (f) of this section. The complainant may submit comments to the Special Counsel on the agency report within 15 days of having received a copy of the report.

(2) Upon receipt of any report of the head of an agency required under subsection (c) of this section, the Special Counsel shall review the report and determine whether—

CIVIL SERVICE

5 USCS § 1213

(A) the findings of the head of the agency appear reasonable; and

(B) the report of the agency under subsection (c)(1) of this section contains the information required under subsection (d) of this section.

(3) The Special Counsel shall transmit any agency report received pursuant to subsection (c) of this section, any comments provided by the complainant pursuant to subsection (e)(1), and any appropriate comments or recommendations by the Special Counsel to the President, the congressional committees with jurisdiction over the agency which the disclosure involves, and the Comptroller General.

(4) Whenever the Special Counsel does not receive the report of the agency within the time prescribed in subsection (c)(2) of this section, the Special Counsel shall transmit a copy of the information which was transmitted to the agency head to the President, the congressional committees with jurisdiction over the agency which the disclosure involves, and the Comptroller General together with a statement noting the failure of the head of the agency to file the required report.

(f) In any case in which evidence of a criminal violation obtained by an agent in an investigation under subsection (c) of this section is referred to the Attorney General—

(1) the report shall not be transmitted to the complainant; and

(2) the agency shall notify the Office of Personnel Management and the Office of Management and Budget of the referral.

(g)(1) If the Special Counsel receives information of a type described in subsection (a) from an individual other than an individual described in subparagraph (A) or (B) of subsection (c)(2), the Special Counsel may transmit the information to the head of the agency which the information concerns. The head of such agency shall, within a reasonable time after the information is transmitted, inform the Special Counsel in writing of what action has been or is being taken and when such action shall be completed. The Special Counsel shall inform the individual of the report of the agency head. If the Special Counsel does not transmit the information to the head of the agency, the Special Counsel shall return any documents and other matter provided by the individual who made the disclosure.

(2) If the Special Counsel receives information of a type described in subsection (a) from an individual described in subparagraph (A) or (B) of subsection (c)(2), but does not make a positive determination under subsection (b), the Special Counsel may transmit the information to the head of the agency which the information concerns, except that the information may not be transmitted to the head of the agency without the consent of the individual. The head of such agency shall, within a reasonable time after the information is transmitted, inform the Special Counsel in writing of what action has been or is being taken and when such action will be completed. The Special Counsel shall inform the individual of the report of the agency head.

(3) If the Special Counsel does not transmit the information to the head of the agency under paragraph (2), the Special Counsel shall—

5 USCS § 1213

GOVERNMENT ORGANIZATION & EMPLOYEES

(A) return any documents and other matter provided by the individual who made the disclosure; and

(B) inform the individual of—

(i) the reasons why the disclosure may not be further acted on under this chapter; and

(ii) other offices available for receiving disclosures, should the individual wish to pursue the matter further.

(h) The identity of any individual who makes a disclosure described in subsection (a) may not be disclosed by the Special Counsel without such individual's consent unless the Special Counsel determines that the disclosure of the individual's identity is necessary because of an imminent danger to public health or safety or imminent violation of any criminal law.

(i) Except as specifically authorized under this section, the provisions of this section shall not be considered to authorize disclosure of any information by any agency or any person which is—

(1) specifically prohibited from disclosure by any other provision of law; or

(2) specifically required by Executive order to be kept secret in the interest of national defense or the conduct of foreign affairs.

(j) With respect to any disclosure of information described in subsection (a) which involves foreign intelligence or counterintelligence information, if the disclosure is specifically prohibited by law or by Executive order, the Special Counsel shall transmit such information to the National Security Advisor, the Permanent Select Committee on Intelligence of the House of Representatives, and the Select Committee on Intelligence of the Senate.

(Added April 10, 1989, P. L. 101-12, § 3(a)(13), 103 Stat. 21.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Effective date of section:

Act April 10, 1989, P. L. 101-12, § 11, 103 Stat. 35 (which appears as 5 USCS § 1201 note) provides that this section shall become effective 90 days after enactment.

CROSS REFERENCES

This section is referred to in 5 USCS §§ 1212, 1219.

INTERPRETIVE NOTES AND DECISIONS

1. Generally
2. Judicial review

Protection Bd. (1982) 220 US App DC 352, 681 F2d 867.

1. Generally

There are 2 routes by which whistle blowing controversies can reach Merit Systems Protection Board for review; appeal from adverse agency personnel action, which can only be brought by tenured employee, and petition for corrective action by Office of Special Counsel, only route open to nontenured employee. *Wren v Merit Systems*

2. Judicial review

Retaliation for whistle-blowing that does not amount as such to adverse action under 5 USCS § 7512 may constitute "prohibited personnel practice" under 5 USCS § 2302 over which Merit Systems Protection Board has jurisdiction only in context of corrective action proceeding brought by Office of Special Counsel under former 5 USCS

CIVIL SERVICE

§ 1206; removed employee's claims against agency are not subject to exhaustion requirement where agency unilaterally rescinded its removal action, depriving Merit Systems Protection Board of jurisdiction over case; it is inappropriate to require plaintiff to exhaust remedy of filing complaint with Office of Special Counsel before bringing suit in Federal District Court for violations of constitutional rights simply because act falls within definition of prohibited personnel practice. *Pope v Bond* (1985, DC Dist Col) 613 F Supp 708, motion gr, in part, motion den, in part (1986, DC Dist Col) 641 F Supp 489.

Federal employee's constitutional tort claim based on retaliation for his whistle-blowing activi-

ties will not be dismissed, where claim for transfer and demotion for whistle-blowing is not subject to Merit Systems Protection Board and judicial review under 5 USCS § 7512(E), but is accusation of "prohibited personnel practice" which is investigated by Office of Special Counsel under former 5 USCS § 1206(a)(1), because full panoply of due process procedures afforded administrative complainants making other claims for "adverse action" against their federal employment is not available to whistle-blowing complainant. *Moreno v Small Business Admin.* (1988, DC Minn) 681 F Supp 1370, revd on other grounds (1989, CA8 Minn) 877 F2d 715.

§ 1214. Investigation of prohibited personnel practices; corrective action

(a)(1)(A) The Special Counsel shall receive any allegation of a prohibited personnel practice and shall investigate the allegation to the extent necessary to determine whether there are reasonable grounds to believe that a prohibited personnel practice has occurred, exists, or is to be taken.

(B) Within 15 days after the date of receiving an allegation of a prohibited personnel practice under paragraph (1), the Special Counsel shall provide written notice to the person who made the allegation that—

(i) the allegation has been received by the Special Counsel; and

(ii) shall include the name of a person at the Office of Special Counsel who shall serve as a contact with the person making the allegation.

(C) Unless an investigation is terminated under paragraph (2), the Special Counsel shall—

(i) within 90 days after notice is provided under subparagraph (B), notify the person who made the allegation of the status of the investigation and any action taken by the Office of the Special Counsel since the filing of the allegation;

(ii) notify such person of the status of the investigation and any action taken by the Office of the Special Counsel since the last notice, at least every 60 days after notice is given under clause (i); and

(iii) notify such person of the status of the investigation and any action taken by the Special Counsel at such time as determined appropriate by the Special Counsel.

(2)(A) If the Special Counsel terminates any investigation under paragraph (1), the Special Counsel shall prepare and transmit to any person on whose allegation the investigation was initiated a written statement notifying the person of—

(i) the termination of the investigation;

(ii) a summary of relevant facts ascertained by the Special Counsel, including the facts that support, and the facts that do not support, the allegations of such person; and



UNITED STATES CODE SERVICE



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Issued in

April 2002

CUMULATIVE SUPPLEMENT
By The Publisher's Editorial Staff

COMMERCE

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5 USCS
Government Organization
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(Supplementing the 1994 Main Volume)



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M. BENDER/USCS02S
PAGE 14
V. 11

qualifications, character, loyalty, or suitability for any personnel action of any person described in paragraph (1)—

(A), (B) [Unchanged]

(As amended Oct. 29, 1994, P. L. 103-424, § 3(b), 108 Stat. 4362.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Amendments:

1994. Act Oct. 29, 1994 (effective on and after enactment, as provided by § 14 of such Act, which appears as a note to this section), in subsec. (g), in para. (1), substituted "disclose any information from or about" for "provide information concerning", and in para. (2), in the introductory matter, substituted "an evaluation of the work performance, ability, aptitude, general qualifications, character, loyalty, or suitability for any personnel action of any" for "a matter described in subparagraph (A) or (B) of section 2302(b)(2) in connection with a".

Other provisions:

Implementation of policy statement. Act Oct. 29, 1994, P. L. 103-424, § 12(a), 108 Stat. 4366 (effective on and after enactment, as provided by § 14 of such Act, which appears as 5 USCS § 1204 note), provides: "No later than 6 months after the date of enactment of this Act, the Special Counsel shall issue a policy statement regarding the implementation of the Whistleblower Protection Act of 1989 [Act April 10, 1989, P. L. 101-12; for full classification, consult USCS Tables volumes]. Such policy statement shall be made available to each person alleging a prohibited personnel practice described under section 2302(b)(8) of title 5, United States Code, and shall include detailed guidelines identifying specific categories of information that may (or may not) be communicated to agency officials for an investigative purpose, or for the purpose of obtaining corrective action under section 1214 of title 5, United States Code, or disciplinary action under section 1215 of such title, the circumstances under which such information is likely to be disclosed, and whether or not the consent of any person is required in advance of any such communication."

Annual survey of individuals seeking assistance. Act Oct. 29, 1994, P. L. 103-424, § 13, 108 Stat. 4367 (effective on and after enactment, as provided by § 14 of such Act, which appears as 5 USCS § 1204 note), provides:

"(a) In general. The Office of Special Counsel shall, after consulting with the Office of Policy and Evaluation of the Merit Systems Protection Board, conduct an annual survey of all individuals who contact the Office of Special Counsel for assistance. The survey shall—

"(1) determine if the individual seeking assistance was fully apprised of their rights;

"(2) determine whether the individual was successful either at the Office of Special Counsel or the Merit Systems Protection Board; and

"(3) determine if the individual, whether successful or not, was satisfied with the treatment received from the Office of Special Counsel.

"(b) Report. The results of the survey conducted under subsection (a) shall be published in the annual report of the Office of Special Counsel."

Effective date of Act Oct. 29, 1994. Act Oct. 29, 1994, P. L. 103-424, § 14, 108 Stat. 4368, provides: "The provisions of this Act and the amendments made by this Act [for full classification, consult USCS Tables volumes] shall be effective on and after the date of the enactment of this Act."

RESEARCH GUIDE

Federal Procedure:

16 Fed Proc L Ed, Government Officers and Employees §§ 40:535, 603, 637, 659.

§ 1213. Provisions relating to disclosures of violations of law, gross mismanagement, and certain other matters

(a)–(d) [Unchanged]

(e) (1), (2) [Unchanged]

(3) The Special Counsel shall transmit any agency report received pursuant to subsection (c) of this section, any comments provided by the complainant pursuant to subsection (e)(1), and any appropriate comments or recommendations by the Special Counsel to the President and the congressional committees with jurisdiction over the agency which the disclosure involves.

(4) Whenever the Special Counsel does not receive the report of the agency within the time prescribed in subsection (c)(2) of this section, the Special Counsel shall transmit a copy of the information which was transmitted to the agency head to the President and the congressional committees with jurisdiction over the agency which the disclosure involves together with a statement noting the failure of the head of the agency to file the required report.

(f)–(j) [Unchanged]

(As amended Oct. 19, 1996, P. L. 104-316, Title I, § 103(a), 110 Stat. 3828.)

HISTORY; ANCILLARY LAWS AND DIRECTIVES

Amendments:

1996. Act Oct. 19, 1996 (effective on enactment, as provided by § 101(e) of such Act, which

appears as 2 USCS § 130c note), in subsec. (e), in paras. (3) and (4), substituted "and" for a comma after "President" and deleted ", and the Comptroller General" following "involves".

RESEARCH GUIDE

Federal Procedure:

16 Fed Proc L Ed, Government Officers and Employees § 40:537.

INTERPRETIVE NOTES AND DECISIONS

2. Judicial review

Former county employee's § 1983 claims against county alleging violations of Freedom of Information Act, Privacy Act, and Whistleblower Act were prop-

erly dismissed because those statutes apply only to federal government. *Ortez v Washington County* (1996, CA9 Or) 88 F3d 804, 96 CDOS 5069, 96 Daily Journal DAR 8191, 71 BNA FEP Cas 584.

§ 1214. Investigation of prohibited personnel practices; corrective action

(a)(1) (A)-(C) [Unchanged]

(D) No later than 10 days before the Special Counsel terminates any investigation of a prohibited personnel practice, the Special Counsel shall provide a written status report to the person who made the allegation of the proposed findings of fact and legal conclusions. The person may submit written comments about the report to the Special Counsel. The Special Counsel shall not be required to provide a subsequent written status report under this subparagraph after the submission of such written comments.

(2)(A) If the Special Counsel terminates any investigation under paragraph (1), the Special Counsel shall prepare and transmit to any person on whose allegation the investigation was initiated a written statement notifying the person of—

(i) [Unchanged]

(ii) a summary of relevant facts ascertained by the Special Counsel, including the facts that support, and the facts that do not support, the allegations of such person;

(iii) the reasons for terminating the investigation; and

(iv) a response to any comments submitted under paragraph (1)(D).

(B) [Unchanged]

(3)-(5) [Unchanged]

(b) (1) [Unchanged]

(2)(A)(i) Except as provided under clause (ii), no later than 240 days after the date of receiving an allegation of a prohibited personnel practice under paragraph (1), the Special Counsel shall make a determination whether there are reasonable grounds to believe that a prohibited personnel practice has occurred, exists, or is to be taken.

(ii) If the Special Counsel is unable to make the required determination within the 240-day period specified under clause (i) and the person submitting the allegation of a prohibited personnel practice agrees to an extension of time, the determination shall be made within such additional period of time as shall be agreed upon between the Special Counsel and the person submitting the allegation.

(B) If, in connection with any investigation, the Special Counsel determines that there are reasonable grounds to believe that a prohibited personnel practice has occurred, exists, or is to be taken which requires corrective action, the Special Counsel shall report the determination together with any findings or recommendations to the Board, the agency involved and to the Office of Personnel Management, and may report such determination, findings and recommendations to the President. The Special Counsel may include in the report recommendations for corrective action to be taken.

(C) If, after a reasonable period of time, the agency does not act to correct the prohibited personnel practice, the Special Counsel may petition the Board for corrective action.

(D) If the Special Counsel finds, in consultation with the individual subject to the prohibited personnel practice, that the agency has acted to correct the prohibited personnel practice, the Special Counsel shall file such finding with the Board, together with any written comments which the individual may provide.

(E) A determination by the Special Counsel under this paragraph shall not be cited or referred to in any proceeding under this paragraph or any other administrative or judicial proceeding for any purpose, without the consent of the person submitting the allegation of a prohibited personnel practice.

(3), (4) [Unchanged]

(c)-(f) [Unchanged]

(g) If the Board orders corrective action under this section, such corrective action may include—
(1) that the individual be placed, as nearly as possible, in the position the individual would have been in had the prohibited personnel practice not occurred; and

2

Folder

From	Kaplan, Elaine
To/Owner	EXECSEC (Group)
Addressed To	Secy
Classification	Executive Secretariat
Subject	OSC File No. DI-01-1549 - Sensitive - not scanned
Keyword Summary	
Mail Type	Letter
Folder Types	B Priority - Agency Reply
Tracking ID	02-005833-
Folder ID	13819
Created By	Parker, Cathy 12/26/2002
Modified By	Parker, Cathy 12/26/2002
Date Sent	12/20/2002
Date Received	12/26/2002
Date Due	01/02/2003
Date Closed	

Attachments

Description	Type	Classification	Owner	Created Modified
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Assignments

Action	Requested Activity	Response Notes	Assigned To	Assigned By	Status	Work Sequence	Date Assigned	Date Due	Date Closed	Classification
Prepare Direct Response	pick up hard copy in 5516		GC (Group)	Parker, Cathy	Read		12/26/2002	01/02/2003		Executive Secretariat
FYI	pick up hard copy in 5516	Given to the Office of Counsel/Office of Investigations as IG Control #02-361 on 12/27/02.	IG (Group)	Parker, Cathy X: 3934	Closed		12/26/2002	01/01/2200	12/27/2002	Executive Secretariat
FYI	pick up hard copy in 5516		NOAA (Group)	Parker, Cathy	Closed		12/26/2002	01/01/2200	12/26/2002	Executive Secretariat
FYI			ESM (Group)	Parker, Cathy	Closed		12/26/2002	01/01/2200	12/30/2002	Executive Secretariat
FYI	pick up hard copy		ADMIN (Group)	Parker, Cathy	Closed		12/26/2002	01/01/2200	12/30/2002	Executive Secretariat
FYI			Schwien, Fred	Belechak, Cynthia	Active		12/30/2002	01/02/2003		Executive Secretariat

Folder

From	Kaplan, Elaine
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Folder Types	B Priority - Agency Reply
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Folder ID	13819
Created By	Parker, Cathy 12/26/2002
Modified By	Parker, Cathy 12/26/2002
Date Sent	12/20/2002
Date Received	12/26/2002
Date Due	01/02/2003
Date Closed	

Attachments

Description	Type	Classification	Owner	Created Modified
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Assignments

Action	Requested Activity	Response Notes	Assigned To	Assigned By	Status	Work Sequence	Date Assigned	Date Due	Date Closed	Classification
Prepare Direct Response	pick up hard copy in 5516		GC (Group)	Parker, Cathy	Active		12/26/2002	01/02/2003		Executive Secretariat
FYI	pick up hard copy in 5516		IG (Group)	Parker, Cathy	Active		12/26/2002	Never		Executive Secretariat
FYI	pick up hard copy in 5516		NOAA (Group)	Parker, Cathy	Active		12/26/2002	Never		Executive Secretariat

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U.S. OFFICE OF SPECIAL COUNSEL

1730 M Street, N.W., Suite 300
Washington, D.C. 20036-4505

www.osc.gov

The Special Counsel

December 20, 2002

The Honorable Donald L. Evans
Secretary
United States Department of Commerce
14th & Constitution Ave., NW
Washington, DC 20230

Re: OSC File No. DI-01-1549

Dear Mr. Secretary:

The U.S. Office of Special Counsel is authorized by law to receive disclosures of information from federal employees alleging violations of law, rule, or regulation, gross mismanagement, gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety. 5 U.S.C. § 1213(a) and (b). As Special Counsel, if I find, on the basis of the information disclosed, that there is a substantial likelihood that one of these conditions exists, I am required to advise the appropriate agency head of my findings, and the agency head is required to conduct an investigation of the allegations and prepare a report. 5 U.S.C. § 1213(c) and (g).

For the reasons set forth below, I have concluded that there is a substantial likelihood that information provided to the Office of Special Counsel by Mr. Gary Ryan, formerly an Automated Surface Observing System (ASOS) Commissioning Officer with the National Weather Service (NWS), discloses a violation of law, and a substantial and specific danger to public safety arising out of actions by employees at the NWS in Oxnard, California. Accordingly, I am referring this information to you for an investigation of the allegations described below and a report of your findings within 60 days of your receipt of this letter.

The Information Disclosed

As noted, Mr. Ryan, who has consented to the release of his name, provided the relevant information to the Office of Special Counsel.¹ Mr. Ryan was employed by NWS for over thirty years until he retired in 2001. He has extensive experience with both human and automated weather observation procedures and systems. In 1996, Mr. Ryan became a

¹ Mr. Ryan can be reached by mail at P.O. Box 23508, Ventura, CA, 20002, and by phone at (805) 218-5902.

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2002 DEC 23 AM 10:51

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The Honorable Donald L. Evans

Page 2

supervisor in the NWS Public Service Unit, Southern California regional office. In this position, he was responsible for commissioning approximately twenty-five ASOS units in Southern California. The only field office at which Mr. Ryan recommended against the commissioning of an ASOS to avoid a degradation in service was Paso Robles Municipal Airport (PRB), Paso Robles, California, a non-towered airport used by private air traffic and government entities, including the Army National Guard, the California Highway Patrol, and the California Division of Forestry.

Despite Mr. Ryan's recommendation, the ASOS unit was commissioned at PRB on January 18, 2001, and fully replaced the services of human weather observers on February 19, 2001. The contract with the five weather observers, who had provided coverage 7 days per week, 24 hours per day, was terminated shortly thereafter. Mr. Ryan alleges that automation of the PRB field office constituted a degradation of weather service and therefore violated the Weather Service Modernization Act of 1992. In addition, Mr. Ryan alleges that using ASOS as the sole means of weather observation at PRB constitutes a substantial and specific danger to public safety.

The background of Mr. Ryan's allegations is as follows:

In 1992, Congress passed the Weather Service Modernization Act which authorized the NWS to modernize its technical systems and restructure its field office organization. Weather Service Modernization Act of 1992, Pub. L. No. 102-567, 106 Stat. 4270 (codified as a note to 15 U.S.C. § 313). This effort included automating, or replacing human weather observers with automated equipment, certain field offices. However, the law prohibited the Secretary of Commerce from automating any field office unless the Secretary certified that such action would not result in any degradation of service. Id., at § 706(b). The Act defined "degradation of service" as:

Any decrease in or failure to maintain the quality and type of weather services provided by the National Weather Service to the public in a service area, including but not limited to a reduction in existing weather radar coverage at an elevation of 10,000 feet[.]” Id. § 702(4).

In certifying that no degradation of service would result from proposed changes, the Secretary was required to address specified concerns, including: the local weather and weather-related concerns; any change in services that would result from the certification; and operational evidence of modernized NWS operations. Id., at § 706(b).

As set forth below, Mr. Ryan alleges that automation of the PRB field office resulted in a degradation of service, thereby violating the Weather Service Modernization Act of 1992, and creating a substantial and specific danger to public safety for two primary reasons, both

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within the scope of Section 706(b) of the Act: (1) the ASOS at PRB was unreliable at the time it was commissioned; and (2) the weather in the Paso Robles area, especially the fog conditions, is too hazardous and rapidly changing to allow the ASOS to operate accurately without human monitors.

According to Mr. Ryan, the ASOS at PRB had a long and clearly documented history of unreliability at the time it was commissioned. He indicated that many discrepancies were observed when the ASOS unit was being tested at PRB and, as an example, provided records showing ASOS results compared to manual observations for the several months preceding, and immediately following, the date the ASOS was commissioned. These comparisons, which are attached as Attachment 1, reflect that the ASOS reported the presence of clouds when it was clear and indicated snow when no precipitation was occurring. Despite several repairs and upgrades to the equipment, the discrepancies persisted. This was contrasted with ASOS units in other field offices, such as San Luis Obispo, which provided consistently accurate readings. Nevertheless, Mr. Ryan further states that on June 5, 2000, he was ordered to stop the human weather observers from documenting comparisons between their observations and those made by the ASOS unit.

As part of his disclosure, Mr. Ryan identified the key discrepancies frequently observed between ASOS equipment and human weather observers, which include: (1) wind; (2) cloud height/ceiling; (3) visibility; (4) temperature/dew point; (5) hazardous weather/safety concerns; and (6) altimeter setting. A document prepared by Mr. Ryan summarizing these concerns is attached as Attachment 2.² These ASOS system flaws can result in dangerous conditions at airports, such as PRB, that are subject to rapidly changing conditions. PRB is located in a shallow coastal mountain valley where the weather conditions can go from completely clear to completely foggy within 15 minutes. The Paso Robles area fog morphology and dissipation patterns are extremely complex from a meteorological standpoint, with unusual 'doughnut holes' opening near the airport, accompanied by rapid changes in operational ceilings and visibilities. This is partially due to terrain irregularities within the Salinas Valley, and the significant elevation difference (more than 100 feet) between PRB and the Salinas River. Given this location, Mr. Ryan states that it is not possible for ASOS to adequately give notice of such rapidly changing weather conditions.

An additional factor that contributes to the danger of operating ASOS without human weather observers at PRB is that the nearest maintenance support for the equipment is located approximately three hours away. On February 22, 2001, shortly after the unit was

² The allegation that certain ASOS observations are often deficient was substantiated by a July 2001 investigation conducted by the Department of Transportation's (DOT) Office of the Inspector General pursuant to an inquiry from Senator Olympia Snowe. Copies of documents related to this inquiry are attached hereto as Attachment 3.

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commissioned, it crashed, leaving the airport without any weather observations for approximately 11 hours. During such outages, there is no source of weather observation because, unlike airports that have weather observers or commercial airline tenants, there are no persons employed at the airport to provide a consistent point of contact. PRB is the only major landing strip between San Jose and San Luis Obispo, a distance of approximately 185 miles. Accordingly, a prolonged outage resulting in no weather information could prove dangerous to public safety.

In summary, the concerns expressed by Mr. Ryan directly pertain to the criteria to be used in determining whether a degradation of service would result from automation of a field office. Based on the information presented, it appears that certification of the ASOS unit and automation of the PRB field office may have been improper under the Weather Service Modernization Act of 1992 and may pose a substantial and specific danger to public safety.

The Special Counsel's Findings

As noted above, if I find that there is a substantial likelihood that information disclosed to my Office reveals violations of law, rule or regulation or a gross waste of funds, I am required to send that information to the appropriate agency head for an investigation and report. 5 U.S.C. § 1213. Given Mr. Ryan's apparent expertise regarding the matters he has disclosed, the detail he has provided, and his firsthand knowledge of many of the incidents he has described, I have concluded that there is a substantial likelihood that he has disclosed a violation of law and a substantial and specific danger to public safety by the NWS.

Accordingly, I am referring this information to you for an investigation of the allegations described above and a report of your findings within 60 days of your receipt of this letter. By law, the report must be reviewed and signed by you personally. Should you decide to delegate authority to another official to review and sign the report, your delegation must be specifically stated. The requirements of the report are set forth at 5 U.S.C. § 1213(c) and (d). A summary of section 1213(d) is enclosed.

In the event it is not possible to report on the matter within the 60-day time limit, as the statute requires, you may request in writing an extension of time not to exceed 60 days. Please be advised that an extension of time will not be granted automatically, but only upon a showing of good cause. Accordingly, in the written request for an extension of time, please state specifically the reasons the additional time is needed.

After making the determinations required by 5 U.S.C. § 1213(e)(2), copies of the report, along with any comments on the report from the person making the disclosure and any comments or recommendations by me will be sent to the President and the appropriate oversight committees in the Senate and House of Representatives. 5 U.S.C. § 1213(e)(3).

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A copy of the report and any comments will be placed in a public file in accordance with 5 U.S.C. § 1219(a).

Please refer to our file number in any correspondence on this matter. If you need further information, please contact Catherine A. McMullen, Chief, Disclosure Unit, at (202) 653-6005. I am also available to you for any questions you may have.

~~XXXXXX~~

Sincerely,



Elaine Kaplan

Fact 202-653-5151

Enclosures

ATTACH
 (3)

ASOS OFFICIAL SITE REPRESENTATIVE LOG

ASOS LOCATION: PASO ROBLES, CA

SUPERVISOR: _____

DATE	TIME LST	DISPLAYED ASOS	OBSERVED MANUAL	# OF OBS	COMMENTS
12-1-89	0853 0953	- SN	NO SNOW	2	NO # ON OBS.
12-4		FEW095 FEW085	SKC		SAME error for several days
12-9- 12-13		Deper print -0.5	6.1		No \$ on observations Same error for several days
12-24	0650 0750 0850	6 HZ	25+ MILES	3	
1-9-2000	0350	SCT082 5 BR	1/2 OVC002 FG	1	
1-9	0850	1/4 M	1 1/2	1	
1-9	1136	OVC002	SCT002	1	
1-12	0750	(VIS) 10	2	1	
1-12 0951	1951	OVC060	SCT250	1	
1-16	1000 - 1300	SCT006	BKN006	3	
1-20	0750	10	5 DZ	3	
1-20	1553	FEW091 FEW024	FEW009 BKN025 OVC080	1	
1-27	0925	VV001 / 1 1/2	OVC003 / 1	2	
1-30	0853	VIS 4	20 +	1	

Also
 12-21-9
 12-22-

6

ASOS OFFICIAL SITE REPRESENTATIVE LOG

ASOS LOCATION: PASO ROBLES, CA

SUPERVISOR: _____

DATE	TIME LST	DISPLAYED ASOS	OBSERVED MANUAL	# OF OBS	COMMENTS	
2-17-00	0937 0953	(NS) 7 SM (NS) 10 SM	1 SM 2 SM	2		
3-3-00	0850	FEW005	SECT005 BKN035 OVC055	1	Clouds over sensor not detected.	
3-24 → 3-27	all day	Dew point	7°C too low	3 days	no # on obs. or entry in maint. log	
3-27	2250 2350	BKN016	CLEAR SKY	2		
* 3-26	0203	* finally appeared on ob. Tech ZZZ/RCD logged onto site, remotely tested and cleared err dewpoint errors. However,			1	
		Dew point temp was still incorrect!				
6-14-00	All day	ASOS detecting clouds @ sensor	SKY CLEAR	hundreds	Constant error for the past two years.	

see comment below

1

6

ASOS OFFICIAL SITE REPRESENTATIVE LOG

ASOS LOCATION: PASO ROBLES, CA

SUPERVISOR: _____

DATE	TIME LST	DISPLAYED ASOS	OBSERVED MANUAL	# OF OBS	COMMENTS
5/24/2000	ALL DAY	SCT095 or FEW 095	BKN250 to SKC	ALL DAY	
5-23-00	2153	FEW090	SKC		
5-23-00	2353	FEW085	SKC		
5-24-00	0920	OVC007	FEW008 OVC010		CIG CONFIRMED WITH BALLOON (VFR)
5-24-00	0950	OVC007	SCT010 OVC150		ASOS EVENTUALLY WENT VFR @ 1035 1 HOUR 15 MIN DELAYED
5-24-00	1240	TOTAL SYSTEM FAILURE - MISSING ALL DATA			
5-24-00	1253	No SKY CONDITION TRANSMITTE IN ASOS OBSERVATION			ACTUAL SKY CONDITION WAS FEW020 BKN200
5-26-00	1053	WIND 300/07	310/10 280 V 010		
5-25-00	1653 1753 1853	310/18/G25 320/18 No Gust 320/18/G21	300 17 G25 250 V 330 330 19 G26 260 V 010 330 15 G20 300 V 010		VARIABLE WINDS NOT REPORTED & GUSTY CONDITION MISSED ON ONE OB. THIS WAS THIS WAS A VERY WINDY DAY & THIS INFO VERY CRITICAL TO SAFE AIRCRAFT OPERATION
5-26-00	SAME ERRORS AS ABOVE IN MODERATE WINDS ALL DAY				
5-26-00	ALL DAY	FEW to SCT 075 to 095	CLR to FEW250	ALL DAY	
5-27-00	OFF & ON ALL DAY	FEW to SCT 085 to 095	CLR to FEW250	OFF & ON ALL DAY	
5-28-00 5-29-30-31	Same as last 2 days	Same as above	Same as Above	Same as above	
6-8	0605	5 - RA BR	1/2 - RA BR		

ASOS SAFETY CONCERNS:

A COMPARISON OF WEATHER OBSERVATION ELEMENTS TAKEN BY THE AUTOMATED SURFACE OBSERVATION SYSTEM (ASOS) VS. HUMAN OBSERVERS.

Surface wind, visibility, cloud height, and altimeter setting are the most critical weather elements which impact aviation safety at airport stations. The following information compares how human weather observers evaluate weather information with how automated weather stations (ASOS) perform the same task.

WIND:

Wind speed and direction are required for all official weather observations. Gusts, peak winds, wind shifts, and squalls are critical required reportable elements.

ASOS: Updates every minute, providing a wind speed and direction averaged within a two minute period. An F420 type anemometer is used. If the anemometer is **out of service** due to mechanical difficulty, **no wind** is reported by the ASOS. ASOS **cannot** add critical wind information reported by pilots, nor can it report downburst or other hazardous wind information occurring near---but not at---the ASOS sensor.

HUMAN OBSERVERS: At all times during hours of duty, observers can monitor wind data over a two-minute period, generally using an F420 type anemometer. If the anemometer is **out of service** due to mechanical difficulty, the observer is **required** to use alternate wind measuring equipment, or to estimate wind speed and direction based on published criteria. The human observer adds critical wind information reported by pilots or downburst or other hazardous wind information occurring near but not at the observation site.

CLOUD HEIGHTS/ SKY EVALUATION:

Cloud height information is important for aviation safety. The amount of sky covered by clouds (ceiling data) is critical.

ASOS: Laser beam ceilometer measures up to three layers of clouds within a 60-foot diameter beam---but only directly over the instrument. ASOS takes thirty minutes to evaluate cloud heights and sky coverage, weighing the latest ten minutes more heavily. ASOS cannot evaluate cloud types (thunderstorm clouds, for example) nor can it report clouds at a distance (obscuring mountains or other aviation hazards). ASOS sometimes fails to report clouds properly due to the nature of the 30-minute reporting algorithm. ASOS cannot evaluate tornadoes. **Ceiling equipment malfunction results in missing data report.**

CLOUD HEIGHTS/ SKY EVALUATION:

HUMAN OBSERVERS: Observers can use a variety of sources to calculate cloud heights, including ceilometers, clinometers and ceiling lights, pilot reports, adiabatic diagrams, ceiling balloons, topographic analysis, and experience. Cloud height and sky coverage are evaluated as needed, taking into account the entire celestial dome. Human observers can assess cloud types, and can report thunderstorms or fog banks at a distance. Humans must evaluate tornadoes, funnel clouds, waterspouts, and other emergency conditions. If ceiling measurement equipment malfunctions, human observers use backup measuring techniques. **Human observers always report sky condition.**

VISIBILITY:

The evaluation of airport area visibility is one of the most critical elements for aviation in the entire weather observation process. Visibility is defined as how far the **human eye** can see around the horizon. **Visibility evaluation is the Achilles heel of unmanned ASOS instrumentation.**

ASOS: **ASOS cannot measure field visibility.** Instead, it samples the visibility only at the site of the sensor---in an area roughly the size of a **football**---and reports that sample as the prevailing visibility for the entire airport. ASOS uses a ten-minute algorithm to evaluate these data. ASOS cannot report prevailing visibility, sector visibility, or variable visibility. ASOS cannot report fog banks or smoke in the vicinity of the sensor. ASOS cannot evaluate rapidly changing visibility conditions. ASOS is easily fooled by localized problems, e.g. aviation traffic or jet blast, agricultural activity, dust devils, dirty lenses, etc.

HUMAN OBSERVERS: Visibility is defined as how far the human eye can see around the horizon. The human eye can respond to and evaluate immediate changes in visibility fields. Human observers can report fog banks, smoke, and blowing dust and sand at specific distances from the point of observation.

TEMPERATURE/ DEWPOINT:

Temperature and dewpoint reports are required for the (NWS) preparation of official airport forecasts for aviation operations.

ASOS: Temperature is averaged over a five minute period, using an electronic resistor. Dewpoint is measured, in most cases, using a mirrored surface which frequently covers with ice, causing erroneous readings. If the ASOS sensors are inoperative, no temperature or dewpoint readings are reported.

ASOS SAFETY CONCERNS (Page 3)

TEMPERATURE/ DEWPOINT:

HUMAN OBSERVERS: Can report temperature at any instant (no averaging). Can always report dewpoint temperature. When primary temperature/dewpoint sensors are inoperative, human observers can use backup equipment as appropriate.

HAZARDOUS WEATHER/ SAFETY CONCERNS:

Hazardous weather is, by definition, dangerous to aviation and other interests. ASOS is severely limited in its ability to perform the function of reporting these elements. It is essential that on-site human observers monitor dangerous weather.

ASOS: **Cannot report** tornadoes, funnel clouds, microbursts, waterspouts, downdrafts, snow and ice depth, fog banks, aviation hazard obscurations. ASOS cannot report more than one precipitation type at a time, and cannot report hail, sleet or ice pellets.

ASOS **can report** thunder and lightning, freezing precipitation, precipitation amounts if equipped with appropriate sensors. **However, the reporting of these elements is frequently in error** when compared with actual field conditions.

HUMAN OBSERVERS: React immediately to dangerous weather conditions, reporting these elements to FAA, NWS, airport authority, and other emergency agencies.

ALTIMETER SETTING:

Accurate altimeter setting (barometric pressure data) is critical for aviation take-off and landing procedures.

ASOS: Uses two to three altimeter sensors to monitor altimeter setting on a continuous basis. When the correct inputs are logged into the system, ASOS does a superior job in evaluating altimeter setting.

HUMAN OBSERVERS: Report altimeter settings from a variety of official local sources.

ASOS SAFETY CONCERNS (Page 4)

OVERALL PERFORMANCE: Various government statistical studies (FAA, NWS, and AFOTEC) have demonstrated that ASOS produces weather observations of equal or *superior* quality when compared to human weather observations. These studies merely demonstrate that statistics can be manipulated to "prove" almost anything. Furthermore, these studies could be regarded more as ASOS infomercials, rather than scientifically valid research.

It is true that ASOS weather instrumentation, a standardized array of weather sensors, is the best atmospheric sampling tool that the United States government has ever employed for official use.

But it is also true that UNMANNED ASOS weather sites have the potential to produce inaccurate data in a way that is potentially hazardous to aviation interests.

Recognizing this fact, the FAA has continued on-site human monitoring of ASOS weather equipment at all major U.S. airports. However, there are many airports at which ASOS has replaced human observers---at which airports ASOS operates in an unmanned capacity. At these places, there is now significant a danger to aviation operations.

Gary Ryan
National Weather Service
Data Program Manager (retired)
January 29, 2002



**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

The Inspector General

Office of Inspector General
Washington, D.C. 20590

The Honorable Olympia J. Snowe
United States Senate
Washington, DC 20510-1903

Dear Senator Snowe:

As you requested, we conducted a limited review of the Federal Aviation Administration's (FAA) Automated Surface Observing System (ASOS). ASOS provides pilots with weather information and has replaced human weather observers at many small, rural airports. FAA has invested over \$230 million in ASOS for 569 sites since the effort began in 1993.

As agreed with your office, we focused our work on the status of ASOS, system performance, and planned improvements. Our concerns focus on ASOS visibility and ceiling observations, time allotted to make repairs, the need to replace system hardware and software, and the need to coordinate improvements among Federal agencies. We are forwarding a copy of this letter and our recommendation to the FAA Administrator.

Studies show that ASOS generally performs as well as the human weather observers the system replaced. The system updates every minute, but performance lags at airports where weather conditions can change rapidly and unexpectedly. Specifically, ASOS has difficulty providing accurate information in the transition period between visual and instrument flying conditions. However, there are improvements under consideration that could enhance ASOS performance. FAA needs to prioritize these improvements in a way that will best serve the flying public, set milestones for these improvements, and provide the resources needed for system enhancements.

In conducting our work, we visited Augusta State and Houlton International Airports and discussed ASOS performance with contract weather observers, airport managers, air taxi operators, and pilots. We also discussed ASOS with a wide range of user groups, namely the Aircraft Owners and Pilots Association, Experimental Aircraft

Association, National Business Aircraft Association, Air Transport Association, Cargo Airline Association, and Helicopter Association International.

ASOS is designed to provide pilots and other users information on airport weather conditions, which include temperature, dew point, wind direction and speed, altimeter setting, visibility, sky condition, and precipitation. We note that ASOS only provides a portion of the weather information a pilot must have before conducting a flight. The pilot's preflight weather briefing contains information such as adverse conditions, a recommendation whether the flight can be conducted visually, a synopsis of weather systems and air masses that might affect the flight, current weather conditions, forecast of enroute and destination weather, and wind speed and direction at altitude.

ASOS was intended to replace human weather observers as a "sole means" system at low activity airports and complement weather observers at all other airports. FAA's policy for providing weather observers at airports is predicated on activity, airport and airspace complexity, and instances of severe weather.

Pilots and air taxi operators we spoke with in Augusta told us they are generally satisfied with the performance of ASOS. However, they noted problems with ASOS visibility and ceiling observations and commented on the need to address them.

Previously, on behalf of Congressman Wu, we reviewed the ASOS in Astoria, Oregon. Weather observers at Astoria voiced complaints similar to those voiced by the observers in Houlton and Augusta. However, the U.S. Coast Guard aviation unit stationed at the Astoria airport felt the system performed well and was adequate for their needs. Astoria no longer has contract weather observers.

BACKGROUND

The ASOS program is a joint effort of FAA, the National Weather Service (NWS), and the Department of Defense (DoD). This system is the primary surface weather observing system in the United States, which supports aviation observation programs of FAA, NWS, and DoD. ASOS provides observations to the flying community that measure critical weather parameters, such as sky condition and visibility, at the aircraft touchdown zone on the runway. FAA has invested over \$230 million in ASOS at 569 sites since the effort began in 1993. ASOS funding is shown in the following table.

Agency	Total Sites	Commissioned Sites	Total Cost (in millions)
FAA	569	561	\$236
NWS	314	314	\$122
DoD	110	110	\$44
Total	993	985	\$402

Source: FAA & NWS ASOS Program Offices

The ASOS data are updated once each minute and transmitted directly to forecasters, air traffic controllers, and pilots. ASOS data are accessible through a variety of media such as video screen displays at the airport for the pilots to view weather information prior to their departure. Additionally, computer-generated voice messages are provided by ASOS for local FAA radio broadcast to pilots and for general aviation pilot use through a dial-in telephone number for each location. The normal pilot reception range of ASOS information is approximately a 25-mile radius from its location and up to a 10,000-foot altitude.

The array of sensors that makes up ASOS continuously samples and measures the environment. The automated system measures only the weather that passes through the sensors. The following table provides a general summary of the area around an ASOS site where the data provided by the sensors are considered valid.

Parameter	Radius in Miles Surrounding Sensor Site
Sky Conditions	3-5 miles
Visibility	2-3 miles
Precipitation	1-2 miles
Freezing Rain	2-3 miles
Temperature/Dew Point	5 miles
Wind	1-2 miles
Pressure	5 miles

Source: FAA ASOS Program Office

In contrast, human observers rely on their ability to see the entire atmosphere near an airport, horizon-to-horizon, to complete a weather observation. The observer's perception of weather also has a marked influence on the weather assessment. ASOS

is designed to create a representative observation through a set of standardized formulas based on weather passing through the sensors 24 hours a day.

OBSERVATIONS

ASOS has been the subject of considerable debate because it replaced human weather observers with automated systems at many locations in the United States. Studies conducted over the years have found that automated weather systems generally perform as well as the observers they replaced.

However, ASOS performance lags when weather conditions change rapidly with little warning. During rapidly changing conditions, the automated observations are known to lag slightly behind the actual weather as stated in the 1999 Air Force Operational Test and Evaluation Center (AFOTEC) Final Assessment Report on the Automated Surface Observing System. For instance, if visibility suddenly drops (in one minute) from 7 miles to 1 mile, ASOS needs to gather the data and perform the calculation in order to provide representative data. A total of 9 minutes may pass before ASOS will report the 1-mile visibility. When visibility rapidly improves, the ASOS generates a "special observation" while internally calculating the rise in visibility. In 10 to 12 minutes, the ASOS will report the improved visibility.

As required by the *Wendell H. Ford Aviation Investment and Reform Act for the 21st Century* (commonly referred to as AIR-21), FAA recently certified ASOS as a sufficiently reliable, accurate weather system. Notwithstanding this certification, there are a number of issues that require the agency's attention.

- First, the primary concerns with ASOS are that *visibility* and *ceiling* observations lag behind the true weather during rapidly changing severe weather conditions. These deficiencies were highlighted in FAA's 120-day Re-Assessment and the Air Force's evaluation of ASOS.¹ Over 2 years ago, the Air Force recommended that FAA investigate problems with visibility and ceiling observations. The modifications to correct these problems would focus primarily on software changes. However, FAA has not made sufficient progress on these issues and more work remains.
- Second, system outages, which are often associated with power outages and reduced service problems with the dew point sensor, raised concerns with airport managers and Fixed Base Operators (providers of aircraft fuel, maintenance, and other aircraft services at the airport) at Augusta and Houlton airports. The ASOS

¹ ASOS Operational Assessment (120-Day Re-Assessment) dated March 30, 1998, and the U.S. Air Force Operational Test and Evaluation Center Final Assessment of ASOS dated January 1999.

dew point sensor, which indicates the potential for fog in the area, requires considerable monitoring and repair.

NWS, who maintains ASOS units at over 900 sites, reported 98.5 percent availability of its systems in FAA's Eastern Region. Nevertheless, the Memorandum of Agreement between NWS and FAA allows NWS between 36 and 48 hours to fix the system at airports where ASOS is the sole provider of weather data. Airport officials we talked to noted that because FAA regulations require that an airport have a functioning weather reporting capability to conduct air carrier operations, air carrier operations stop during ASOS outages. To be proactive, pilots and airport officials felt that FAA should provide greater guidance for obtaining alternate weather sources in the event outages occur.

- Third, the ASOS central processing unit, the nerve center of the system, has reached its maximum capacity and must be replaced *before* any additional improvements are made to the system. FAA needs to follow through on plans to make improvements to the ASOS central processing unit over the next several years. It is unlikely that improvements can be made with respect to visibility and ceiling observations until the processing unit is replaced.
- Finally, coordination among FAA, DoD, and NWS regarding ASOS improvements is important. The problems we identified in our review need to be addressed because they will add value and address long-standing concerns about the system. FAA, DoD, and NWS need to coordinate budgets for program improvements and set expectations for the ASOS program.

FAA is contributing \$53 million to the joint product improvement program to upgrade the ASOS over and above the \$236 million it has already invested. The improvement program is slated for completion in 2009, but there is confusion about how it will be executed. We note that funding priorities have shifted from correcting shortfalls and bringing new capabilities on line to keeping the system operational. It is uncertain if the \$53 million identified thus far by FAA for improvements will be sufficient.

FAA needs to revisit and finalize its plans for improving ASOS (including addressing problems with ceiling and visibility observations), set realistic milestones for these improvements, and provide the needed resources that will ensure rapid deployment of these system enhancements. Once these decisions are made, FAA should clearly articulate its plans to the user groups that depend on ASOS. We discussed these issues with the FAA Weather and Flight Service Systems Integrated Product Team, and will forward a copy of this letter to Administrator Garvey.

If we may be of further assistance in this or any other matter, please contact me at (202) 366-1959, or my Acting Deputy, Todd J. Zinser, at (202) 366-6767.

Sincerely,

A handwritten signature in black ink, appearing to read "K. M. Mead". The signature is written in a cursive style with a large initial "K" and a long horizontal stroke.

Kenneth M. Mead
Inspector General

cc: FAA Administrator



Memorandum

U.S. Department of
Transportation

Office of the Secretary
Of Transportation

Office of Inspector General

Subject: ACTION: Observations on the Automated
Surface Observing System
AV-2001-073

Date: July 26, 2001

From: Alexis M. Stefani 
Assistant Inspector General for Auditing

Reply to
Attn of: JA-10:x60500

To: Federal Aviation Administrator

At the request of Senator Olympia J. Snowe, we conducted a limited review of the Federal Aviation Administration's (FAA) Automated Surface Observing System (ASOS) that focused on the status of the automated system, its performance, and planned improvements. ASOS provides pilots with weather information and has replaced human weather observers at many small, rural airports. FAA has invested over \$230 million in ASOS for 569 sites since the effort began in 1993. A copy of our letter to Senator Snowe is attached for your information and use. Our concerns focus on ASOS visibility and ceiling observations, time allotted to make repairs, the need to replace system hardware and software, and the need to coordinate improvements among Federal agencies. Based on this review, we are making a recommendation aimed at improving ASOS.

ASOS has been the subject of considerable debate because it replaced human weather observers with automated systems at many locations in the United States. However, studies conducted over the years have found that ASOS systems generally perform as well as the observers they replaced, and FAA recently certified ASOS as a sufficiently reliable, accurate weather system.

Additionally, the studies noted that ASOS performance lags when weather conditions change rapidly and unexpectedly. The system has difficulty providing accurate information in the transition period between visual and instrument flight rules. The primary concerns with ASOS focus on *visibility* and *ceiling* observations. These problems were highlighted by pilots we interviewed who rely on the system and in FAA and Air Force evaluations of ASOS. Correcting these problems will require changes to ASOS hardware and

software. Progress has been slow in making these improvements and more work remains.

FAA is contributing \$53 million to the joint product improvement program with the Department of Defense and National Weather Service to upgrade ASOS, over and above the \$236 million it has already invested. The improvement program is slated for completion in 2009, but confusion exists about how it will be executed. We note that funding priorities have shifted from correcting shortfalls and bringing new capabilities on line to keeping the system operational, and it is unclear if the \$53 million identified thus far by FAA for improvements will be sufficient. FAA needs a clear-cut roadmap for improving ASOS -- without it, concerns about the automated weather system will persist.

Therefore, we recommend that FAA revisit and finalize plans for improving ASOS (which include both hardware and software upgrades to improve ceiling and visibility observations), set realistic milestones for improvements, and provide the needed resources. These improvements need to be coordinated with the National Weather Service and the Department of Defense.

We discussed these issues with officials from the Weather and Flight Service Systems Integrated Product Team, and they concurred with our analysis. In accordance with Department of Transportation Order 8000.1C, we would appreciate receiving your response within 30 days. If you concur with our recommendation, please indicate the specific actions taken or planned and target dates for completion. If you do not concur, please provide your rationale. Furthermore, you may provide alternative courses of action that you believe would resolve the issues presented in this report.

We appreciate the courtesies and cooperation extended by your staff. If we can answer questions or provide additional information, please call me at (202) 366-1992, or David A. Dobbs, Deputy Assistant Inspector General for Aviation, at (202) 366-0500.

Attachment

OPTIONAL FORM 38 (7 80)

FAX TRANSMITTAL



U.S. Department of Transportation
Federal Aviation Administration

To: Katharine Aubrey From: A. Williams

Dept./Agency: OIG Phone #

Fax # 61426 Fax #

NSN 7540-01-517-7500 5099-101 GENERAL SERVICES ADMINISTRATION

dum

Subject: **INFORMATION:** Observations on the Automated Surface Observing System

Date: AUG 29 2001

From: Assistant Administrator for Financial Services/CFO

Reply to Attn. of:

To: Assistant Inspector General for Auditing

In response to your memorandum, dated July 26, we are providing the following response to your recommendation.

OIG Recommendation: The OIG recommends that the Federal Aviation Administration (FAA) revisit and finalize plans for improving Automated Surface Observing System (ASOS) (which includes both hardware and software upgrades to improve ceiling and visibility observations), set realistic milestones for improvements, and provide the needed resources. These improvements need to be coordinated with National Weather Service (NWS) and Department of Defense.

FAA Response: Concur. In September 2000, the FAA signed a Memorandum of Agreement with the NWS that outlined ASOS maintenance and specifically described the planned product improvements scheduled for ASOS implementation. This agreement set programmatic milestones, resources, and budgets for both FAA and NWS. Internally, the FAA rebaselined the ASOS program to include a cost and schedule profile for the improvement program. This new ASOS profile is documented in a signed Acquisition Program Baseline (APB) document dated August 1.

The APB, eight-year improvement program includes 5 funded hardware upgrades: processor upgrade, dewpoint sensor, ice-free wind sensor, enhanced precipitation identifier, and the ceilometer replacement. In addition, the improvement program includes funding for software algorithm development to improve visibility and ceiling observations.

If you have questions or need further information, please contact Anthony Williams, Budget Policy Division, ABU-100. He can be reached at (202) 267-9000.

John F. Hennigan, Jr.

Chris Bertram

CONCURRENCES
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→ TIM
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
1325 East-West Highway
Silver Spring, Maryland 20910-3283
THE DIRECTOR

JAN 21 2003

Ms. Joan Maginnis
Assistant General Counsel for
Finance and Litigation
1401 Constitution Avenue, NW
Washington, D.C. 20230

Dear Ms. Maginnis:

This is in response to your January 3, 2003 letter concerning the likelihood of violation of Public Law 102-567, the Weather Service Modernization Act, and substantial danger to public safety regarding the commissioning of the Automated Surface Observing System (ASOS) at the Paso Robles (PRB) Municipal Airport in California. The National Weather Service (NWS) has completed a review of the matter and is providing the attached findings for response to the U.S. Office of Special Counsel.

If you have any questions concerning the response or require additional information, please contact Mr. John McNulty, Office of Operational Systems Director, at 301-713-0165.

Sincerely,

John J. Kelly, Jr.

Enclosure

2003 FEB 12 PM 3:44

GENERAL LITIGATION
DIVISION, OGO



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THE ASSISTANT ADMINISTRATOR
FOR WEATHER SERVICES



Public Law 102-567, Weather Service Modernization Act

The Special Counsel's finding there is a substantial likelihood that the NWS commissioning of the Paso Robles (PRB) ASOS violated the law, namely Public Law 102-567, the Weather Service Modernization Act, is incorrect. This finding is premised on the Special Counsel's erroneous assumption this commissioning involved the automation of an NWS field office. However, the NWS did not have a field office at PRB. Rather, PRB is an airport which was supported by weather observations provided by an Federal Aviation Administration (FAA) contractor, not NWS, prior to ASOS commissioning.

Public Law 102-567, Section 706 provides: "The Secretary shall not close, consolidate, automate or relocate any *field office*, unless the Secretary has certified that such action will not result in any degradation of service." (emphasis added). Section 702 defines field office as "any National Weather Service Office or National Weather Forecast Office." There was no NWS field office located at PRB. Thus, the "no degradation of service standard" of Public Law 102-567 did not apply to the NWS' commissioning of the ASOS at PRB. This commissioning did not constitute the automation of an NWS field office. Public Law 102-567, in total, does not apply to the NWS' commissioning of the PRB ASOS.

Commissioning Criteria

An unattended ASOS meets all Federal Aviation Regulations for safe unrestricted flight operations. In 1996 the Government and the Aviation Industry established Aviation Service Level Standards to meet Industry efficiency concerns. The four service levels range from unattended ASOS (Level D) to fully augmented ASOS (Level A). PRB was designated a level D airport (stand alone ASOS) by the FAA through the application of ranking criteria published in the *Federal Register* (61 FR 32887) on June 25 1996. NWS, acting as the commissioning agent on behalf of FAA, employed the joint FAA/NWS ASOS commissioning criteria found in I.A.1 of Appendix A to 15 CFR part 946.

The Paso Robles site met all joint FAA/NWS commissioning criteria.

System Deficiencies

The system deficiencies encountered by Mr. Ryan's were corrected during the commissioning process and the site has since been operating at the same level of performance as other ASOSs. The PRB ASOS has a 99.2 percent system availability rate, which exceeds the 95 percent availability standard. The NWS believes the commissioning process was carried out in a professional manner in accordance with the joint FAA/NWS commissioning criteria and the Paso Robles ASOS is functioning properly.

4

Statement of Gary Ryan: The role of the Automated Surface Observing System (ASOS) in reporting Official Weather Observations for the National Weather Service and the Federal Aviation Administration.

I am a veteran weather observer, having worked as a meteorological technician for the United States Government since 1966. I have logged more than 150,000 weather observations during my career. During my employment with the National Weather Service I became a Weather Service Office manager, and finally, since 1996, served as data quality control manager for the Los Angeles Office.

From my work in the National Weather Service (NWS), I am expert in taking, recording, and managing weather data and data systems. I participated in the NWS modernization program, and in the field-testing and analysis for the **Automated Surface Observing System (ASOS)**, which has been in use by the Federal Aviation Administration (FAA) and the NWS since 1992. I have been an ASOS Commissioning Officer since 1996.

Under proper federal guidelines and within my authority as an ASOS Commissioning Officer, I made a routine inspection of the FAA weather station at Paso Robles CA Airport on May 9, 2000. In accordance with my responsibilities, including my concern for aviation safety at Paso Robles, I made a recommendation that the FAA should continue the Federal Weather Observation Contract at Paso Robles. That is, I felt that human observers must remain under contract at Paso Robles---after the commissioning of the ASOS there---to ensure the accuracy of aviation weather observations. Observers were needed to maintain weather observation quality as required by Public Law 102-567. That law states that automation of the NWS must not result in deterioration of services.

It was, and still is, my judgment that an unmanned ASOS at that Paso Robles Airport is unsafe for aviators. Therefore, on June 2, 2000, I wrote a letter explaining the reasons for my recommendation---through my supervisor---to persons and agencies concerned.

However, as a result of NWS/FAA Headquarters reaction to my recommendation, I was threatened and harassed within the workplace, and finally I was "voluntarily" retired effective May 15, 2001.

I would like to state several facts about ASOS for the record. These statements are based on (1) my long career as a United States Government certified weather observer, (2) my experience in working with ASOS data and serving as a Commissioning Officer for the ASOS program, and (3) my work as an author of several U.S. Government climate publications.

- While ASOS presents an excellent standardized array of instrumentation for sampling atmospheric conditions at a particular site, it simply cannot and does not function as well as a human observer in reporting specific critical individual weather elements.
- As a weather-reporting device, an unmanned ASOS at any airport is a potential hazard to aviation.
- In general, the more complex or the more severe the weather, the worse the job that ASOS does in reporting it.
- Where FAA ATC (tower) personnel are responsible for monitoring ASOS, that weather editing responsibility is correctly regarded as secondary to the more important job of controlling air traffic. The result of this dual responsibility is to lower the quality of weather observations at those airports, such as Burbank CA.
- Maintenance loads within the ASOS system are poorly targeted; large segments of the reporting network routinely break down, leaving forecasters and pilots alike without weather data for hours at a time. Response time limits set for maintenance personnel are impossible to attain.
- Weather data (climatology) has been marginalized by ASOS. The National Climatic Data Center has been sabotaged by poor---or missing---temperature and precipitation data from over 1,000 ASOS arrays across the United States. As an NWS employee, I was routinely required to "make up" these data when ASOS did not supply it.
- ASOS grossly distorts precipitation data, due to problems inherent with the design of tipping bucket rain gages. One example among many: During the past winter, the ASOS rain gage in Santa Maria CA underreported the seasonal rainfall by 40% (!)
- Weather observations in the United States, once among the best in the world, are now much lower in quality---due in large part to the proliferation of unmanned ASOS sites. Manual weather observations from Mexico are now superior in quality to unmanned weather observations within the United States.
- Gross ASOS errors---such as reporting snow in Phoenix in summertime---are routinely ignored. Less amusing errors, especially in aviation-critical elements such as visibility or cloud cover, occur with such common frequency that they are also glossed over.
- Federal regulations covering weather observations (FMH-1) were blatantly debased and simplified in the 1990's so that ASOS could conform to the rules. Many persons and agencies, including the FAA, had serious problems interpreting the new ASOS-friendly regulations.
- ASOS field testing (R&D) was rushed to such an extent that much of the early ASOS site data was missing or erroneous.

- ❑ Power blackouts routinely leave airports without weather reports. Many airports have no backup power to their ASOS. Power blackouts also ruin monthly climate data transmitted by ASOS.
- ❑ Where humans still take weather observations---for example, at Torrance and El Monte CA airports---those manual observations are clearly superior to those taken at nearby ASOS locations.
- ❑ ASOS contracts are awarded on a low-bid basis, without real oversight of contractor performance or weather data quality. Field inspections of contractor sites are rare and poorly done. Training for ASOS operators is almost uniformly poor or nonexistent.
- ❑ Because of huge personnel cutbacks at field offices and at the National Climatic Data Center, there is only a very superficial quality control of published ASOS weather data. ASOS data quantity is excellent---but data quality has been compromised.

The NWS and FAA rushed the ASOS program into the meteorological field during the past decade in order to accomplish a dubious modernization agenda that has included personnel cutbacks and office closures. ASOS has not proven cost effective. Even worse, weather and climate data accuracy has been worsening since the first ASOS was commissioned in 1992.

The result of the ASOS automation nationwide---and corresponding cutbacks in personnel structure---has been an awful deterioration in the quality of our national weather and climate database. There is nobody monitoring field data---nobody with the authority or power to make meaningful or appropriate changes where they are necessary. NWS and FAA employees know better than to make remarks in any way critical of ASOS or any other new automated weather system.

If the United States is serious about maintaining weather observation quality---and defending aviation safety---in accordance with Public Law 102-567, then it must not delay in instituting a program to restore human weather observers at ASOS sites around the country. If the United States is serious about accurately measuring national climate data, then it must not delay in placing many more human resources in the field to accomplish this task.

For the United States to pay lip service to weather data accuracy---while at the same time destroying it---is an awful slap in the face to those who have worked for technical accuracy in the field of meteorology over the past 150 years.

Gary Ryan
P O Box 23508
Ventura CA 93002
May 29, 2001

5

2001 JUL 13 PM 2:49



INFORMATION ABOUT FILING A WHISTLEBLOWER DISCLOSURE
WITH THE
OFFICE OF SPECIAL COUNSEL

IMPORTANT

Before filling out the following Disclosure of Information form, please read the following sections to determine if the Office of Special Counsel (OSC) may lack jurisdiction over you or your disclosure. We have listed only the most frequently occurring impediments to OSC jurisdiction; OSC may not have jurisdiction over you or your disclosure for reasons not listed here.

OSC WHISTLEBLOWER DISCLOSURE CHANNEL

The OSC Disclosure Unit serves as a secure channel that can be used to disclose —

- a violation of law, rule or regulation;
- gross mismanagement;
- a gross waste of funds;
- an abuse of authority, or
- a substantial and specific danger to public health or safety.

OSC does *not* have authority to investigate the disclosures that it receives. The law provides that OSC will (a) refer protected disclosures that establish a substantial likelihood of wrongdoing to the appropriate agency head, and (b) require the agency head to conduct an investigation, and submit a written report on the findings of the investigation to the Special Counsel.

If OSC finds no substantial likelihood that the information discloses one or more of the categories of wrongdoing, the Special Counsel must: (a) inform the whistleblower of the reasons why the disclosure may not be acted on further; (b) direct the whistleblower to other offices available for receiving disclosures; and (c) return any documents and other materials provided by the whistleblower.

(over)

VISIT [HTTP://WWW.OSC.GOV](http://www.osc.gov) FOR MORE INFORMATION ABOUT
OSC JURISDICTION AND DISCLOSURE PROCEDURES

Received
3/6/03

**INFORMATION ABOUT FILING A WHISTLEBLOWER DISCLOSURE
WITH THE
OFFICE OF SPECIAL COUNSEL (cont'd)**

OSC JURISDICTION

The Disclosure Unit has jurisdiction over federal employees, former federal employees, and applicants for federal employment. It is important to note that a disclosure must be related to an event that occurred in connection with the performance of an employee's duties and responsibilities. The Disclosure Unit has **no jurisdiction** over disclosures filed by:

- employees of the U.S. Postal Service and the Postal Rate Commission;
- members of the armed forces of the United States (i.e., non-civilian military employees);
- state employees operating under federal grants;
- employees of federal contractors; and
- employees paid through non-appropriated funds.

FIRST-HAND INFORMATION REQUIRED

In order to make a "substantial likelihood" finding (see *previous page*), OSC must be in possession of reliable, first-hand information. OSC cannot request an agency head to conduct an investigation based on an employee's (or applicant's) second-hand knowledge of agency wrongdoing. This includes information received from another person, such as when a fellow employee informs you that he/she witnessed some type of wrongdoing. (Anyone with first-hand knowledge of the allegations you want to report may file a disclosure in writing directly with OSC.) Similarly, speculation about the existence of misconduct does not provide OSC with a sufficient legal basis upon which to send a matter to the head of an agency. If you think that wrongdoing took place, but can provide nothing more than unsubstantiated assertions, OSC will not be able to go forward with the matter.

DE MINIMIS ALLEGATIONS

While an allegation might technically constitute a disclosure, OSC will not review or refer *de minimis* or trivial matters.

ANONYMOUS SOURCES

While OSC will protect the identity of persons who make disclosures, it will not consider anonymous disclosures. If a disclosure is filed by an anonymous source, the disclosure will be referred to the Office of Inspector General in the appropriate agency. OSC will take no further action.

MATTERS INVESTIGATED BY AN OFFICE OF INSPECTOR GENERAL

It is the general policy of OSC not to transmit allegations of wrongdoing to the head of the agency involved if the agency's Office of Inspector General has fully investigated, or is currently investigating, the same allegations.

DISCLOSURE OF INFORMATION

(Please print legibly or type and complete all pertinent items. Enter "N/A" (not applicable) or "Unknown" where appropriate.)

PART 1: BACKGROUND INFORMATION

1. Name of person seeking OSC action: Mr. (X) Ms. () Mrs. () Miss ()
GARY J. RYAN

2. Status:
Current Federal employee () Applicant for Federal employment ()
Former Federal employee (X) Other (please specify):

3. Contact information:
Home or mailing address: P.O. Box 23508
VENTURA CA 93002
Telephone number(s): (805) 218-5902 (Home)
() N/A (Office) Ext.
Fax number: () N/A
E-mail address: N/A

4. Current position, title, series, and grade:
N/A

5. Agency name: N/A

6. Agency address:
N/A

7. How did you first become aware that you could file a disclosure with OSC?
OSC brochure () OSC poster () OSC speaker () OSC Web site (X)
Agency personnel office () Union () Co-worker () News story ()
Other (please describe):
Date (approximate): JUNE 2001

8. If you are filing this complaint as a legal or other representative of the person making a disclosure, please supply the following information:

Name / title of filer: Mr. Ms. Mrs. Miss

N/A

9. Contact information:

Home or mailing address:

N/A

Telephone number(s):

() _____ (Home)
() _____ (Office) Ext. _____

Fax number:

() _____

E-mail address:

PART 2: DETAILS OF YOUR DISCLOSURE

1. I know about the information I am disclosing here based on (check all that apply):

I have personal and/or direct knowledge of events or records involved

Other employees have told me about events or records involved

Other source(s)

(please explain):

FEDERAL CONTRACTOR

2. Please identify the U.S. government department or agency involved in your disclosure:

DEPARTMENT OF COMMERCE

3. Please identify the organizational unit of the department or agency involved:

NOAA, NATIONAL WEATHER SERVICE FORECAST OFFICE

4. Address of the organizational unit:

520 N ELEVAR ST OXNARD CA 93030

5. Please identify the type of agency wrongdoing that you are alleging (check all that apply).
If you check "violation of law, rule, or regulation," please provide, if you can, the particular law, rule or regulation violated (by name, subject, and/or citation).

Violation of law, rule, or regulation (please specify):

PUBLIC LAW 102-567

Gross mismanagement Gross waste of funds Abuse of authority

Substantial and specific danger to public health

Substantial and specific danger to public safety

DISCLOSURE OF INFORMATION

Page 3

6. Please describe the agency wrongdoing that you are disclosing, indicating how the agency's actions fit within the type(s) of wrongdoing that you checked in item 5. (Be as specific as possible about dates, locations and the identities and positions of all persons named. Also, please attach any documents that might support your disclosure. Continue on a separate sheet of paper if you need more space.)

I would like to disclose a serious problem that exists at Paso Robles (CA) Airport in regard to the method that is used to take official federal weather observations at that airport. The **Automated Surface Observing System (ASOS)** is now taking weather observations at Paso Robles Airport --- without human interface --- in violation of Public Law 102-567. This situation represents a substantial and specific danger to public safety.

I am a veteran weather observer and pilot weather briefer, having worked for the National Weather Service (NWS) since 1970. During my career with the NWS, I took over 150,000 official weather observations, in accordance with Federal Meteorological Handbook No. 1, which is the basis for all legal federal weather observations in the United States. Since 1996, I served as Data Program Manager and ASOS Commissioning Officer at the NWS Los Angeles Forecast Office.

Under proper federal guidelines, in accordance with Weather Service Operations Manual Part B, and within my authority as ASOS Commissioning Officer, I made a routine inspection of the FAA contract weather station at Paso Robles CA Airport on May 9, 2000. In keeping with my responsibilities and my concern for aviation safety at Paso Robles, I drafted a recommendation, through my supervisor, stating that the FAA should continue the Federal Contract Weather Observing Station (FCWOS) at Paso Robles.

That is, I recommended that human weather observers remain under contract at Paso Robles Airport---after the commissioning of the ASOS automated equipment there---to ensure the accuracy of aviation weather observations. This type of arrangement, with human augmentation of ASOS, is standard practice at many other airports---for example, at Santa Barbara.

It was and is my view as ASOS Commissioning Officer for Paso Robles that human observers must be utilized at that airport to ensure no degradation of observation quality there. This is required by Public Law 102-567, which states that field automation of the NWS must not result in degradation of service. I had been specifically charged by the NWS Regional Director with upholding the provisions of that law.

I made my recommendation in full accordance with my responsibilities, on June 2, 2000, after my supervisor reviewed the draft. My supervisor was Todd R. Morris, Meteorologist in Charge of the Los Angeles Forecast Office.

Almost immediately, there was a strong negative reaction to my recommendation from within the organization. Todd R. Morris then refused to take credit or responsibility for the Paso Robles recommendation. Instead, from that point on, I was threatened and harassed by Supervisor Morris because of the Paso Robles letter.

The threat of my suspension or removal because of the Paso Robles recommendation was made by Supervisor Morris on June 6, 2000.

On June 7, 2000, Supervisor Morris had me removed from the operational schedule. On June 11, 2000, Supervisor Morris changed my job description, eliminating my supervisory (GWPAS) functions within the office. I entered on medical leave on June 14, 2000 due to extreme stress. Supervisor Morris placed me on non-pay status on October 2, 2000. Finally, I retired from government service on May 15, 2001, due to stress factors associated with threats and harassment at the workplace.

The Paso Robles Airport ASOS automated weather equipment should not have been commissioned without human observers on-site for two reasons: (1) The weather in the Paso Robles (Salinas Valley) area, especially the fog conditions, is too hazardous and rapidly changing to allow the ASOS to operate without human monitors. This situation was made known by pilots from the California Highway Patrol, and others who use Paso Robles Airport. (2) The specific ASOS at Paso Robles had a long and clearly documented history of unreliability.

Comparisons of real weather observations with ASOS observations at Paso Robles showed too many problems with the automation. On-site documentation proved that the ASOS equipment was not operating well. For example, the ASOS would frequently report clouds when it was clear all day. It had also logged snow when no precipitation was occurring. Nonetheless, I was ordered on June 5, 2000 to stop the contract observers from making any further comparison documentation with the ASOS equipment at Paso Robles. In other words, I was not permitted to perform my proper inspection role prior to commissioning the ASOS equipment at Paso Robles.

In my absence, the ASOS at Paso Robles was commissioned on January 18, 2001. A few days later, the Contract Weather Office at Paso Robles Airport was closed. One month later, on Monday morning, February 19, 2001 the Paso Robles ASOS experienced a total system crash, leaving the airport without legal weather observations for 18 hours, according to newspaper accounts.

It is my view that the Paso Robles Airport Federal Contract Weather Office must be re-established to ensure aviation safety at that facility and to comply with PL 102-567.

I am attaching several documents in support of my whistleblower claim. A summary of attachments appears on the next page.

LIST OF ATTACHMENTS.

1. The Paso Robles Letter of Recommendation, Dated June 2, 2000.
2. The Draft Letter of Recommendation, sent to Supervisor Morris for his approval on May 31, 2000.
3. Certification of my completion of ASOS Systems Manager Course, May 22, 1996.
4. FAA Report of the Paso Robles Airport public meeting on ASOS, May 21, 1997.
5. My appointment by NWS Headquarters re PL 102-567 dated September 22, 1997.
6. Paso Robles ASOS comparison logs December 1999 to June 2000, documenting numerous problems with the ASOS equipment at Paso Robles Airport.
7. Order from headquarters to stop making the comparison logs [No. 6, above] that documented problems with the Paso Robles ASOS equipment, dated June 5, 2000.
8. E-mail from Todd R. Morris changing my duties, dated Sunday June 11, 2000.
9. Inspection report at Paso Robles Airport, November 16, 1999, documenting the ASOS deficiency at that facility.
10. FCWOS report of my inspection at Paso Robles Airport (ASOS) on May 9, 2000, at which time ASOS problems were observed, documented and discussed with the weather station supervisor and airport manager.
11. E-mails concerning the crash of the ASOS at Paso Robles, February 20-21, 2001.
12. Newspaper article about the crash of the ASOS at Paso Robles, from the San Luis Obispo CA *Tribune*, February 22, 2001.
13. Letter to Hon. Lois Capps, U.S. Congress, dated 30 May 2001.

PART 3: OTHER ACTIONS YOU ARE TAKING ON YOUR DISCLOSURE

1. I have previously disclosed (or am disclosing) the violations alleged here to (complete all that apply):

() Inspector General of department / agency involved Date: ___/___/___

() Other office of department / agency involved Date: ___/___/___
(please specify): _____

() Department of Justice Date: ___/___/___

() Other Executive Branch / department / agency Date: ___/___/___
(please specify): _____

() General Accounting Office (GAO) Date: ___/___/___

() Congress or congressional committee ^{Members of Congress:} Date: 7/11/01
(please specify member or committee): RON PAUL
LOIS CAPPS 7 11 01

() Press / media (newspaper, television, other) Date: 7/11/01
(please specify): SAN LUIS OBISPO CA Tribune

2. If you disclosed the information reported here through any other channel described in question 1, above, what is the current status of the matter?

N/A

PART 4: CONSENT, CERTIFICATION, AND SIGNATURE

Do you consent to the disclosure of your name to others outside the Office of Special Counsel if it becomes necessary in taking further action on this matter?

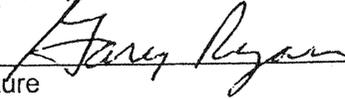
I consent to disclosure of my name:
Henry Pagan 7/10/01
Signature Date

I do not consent to disclosure of my name:

Signature Date

I certify that all of the statements made in this complaint (including any continuation pages) are true, complete, and correct to the best of my knowledge and belief. I understand that a false statement or concealment of a material fact is a criminal offense punishable by a fine of up to \$10,000, imprisonment for up to five years, or both. 18 U.S.C. § 1001.

Signature



Date

7/10/01

PART 5: PRIVACY ACT / PAPERWORK REDUCTION ACT STATEMENTS

Routine Uses. Limited disclosure of information from OSC files under its routine uses is necessary to fulfill OSC's investigative, prosecutorial and related responsibilities. OSC has published 17 routine uses for its files in the *Federal Register* (F.R.), 64 F.R. 63359 (November 19, 1999), and 65 F.R. 6436 (February 9, 2000). A copy of the routine uses is available from OSC on request. A summary of the routine uses appears below.

OSC may disclose information from its files in the following circumstances:

1. to disclose that an allegation of prohibited personnel practices or other prohibited activity has been filed;
2. to disclose information needed by the Office of Personnel Management (OPM) for inquiries involving civil service laws, rules or regulations or to obtain an advisory opinion;
3. to disclose information about allegations or complaints of discrimination to entities concerned with enforcement of anti-discrimination laws;
4. to the MSPB or the President, when seeking disciplinary action;
5. to the involved agency, the MSPB, OPM, or the President when OSC has reason to believe that a prohibited personnel practice occurred, exists or is to be taken;
6. to disclose information to Congress in OSC's annual report;
7. to disclose information to third parties (without identifying the complainant unless OSC has the complainant's consent) as needed to conduct an investigation; obtain an agency investigation and report on information disclosed to the OSC whistleblower disclosure channel; or to give notice of the status or outcome of the investigation;
8. to disclose information as needed to obtain information about hiring or retention of an employee; issuance of a security clearance; conduct of a security or suitability investigation; award of a contract; or issuance of a license, grant, or other benefit;

9. to the Office of Management and Budget (OMB) for certain legislative coordination and clearance purposes;
10. to provide information from an individual's record to a congressional office acting pursuant to the individual's request;
11. to furnish information to the National Archives and Records Administration for records management purposes;
12. to produce summary statistics and work force or other studies;
13. to provide information needed by the Department of Justice for certain litigation purposes;
14. to provide information needed by courts or adjudicative bodies for certain litigation purposes;
15. to disclose information to the MSPB as needed in special studies authorized by law;
16. for coordination with an agency's Office of Inspector General or comparable entity, to facilitate the coordination and conduct of investigations and review of allegations; and
17. to news media or the public in certain circumstances (except when the Special Counsel determines that disclosure in a particular case would be an unwarranted invasion of personal privacy).

Purposes, Burdens, and Other Information. An agency may not conduct or sponsor a collection of information, and persons may not be required to respond to a collection of information, unless it (a) has been approved by OMB, and (b) displays a currently valid OMB control number. The information in this form is collected pursuant to OSC's legal responsibility (at 5 U.S.C. § 1213) to receive disclosures from current or former federal employees, or applicants for federal employment, alleging possible wrongdoing by federal agencies. The information will be used by OSC to determine whether the facts establish that: (a) OSC has jurisdiction over the subject of the disclosure; (b) there is a substantial likelihood that the facts indicate a violation of law, rule, or regulation; gross mismanagement; a gross waste of funds; an abuse of authority; or a substantial and specific danger to public health or safety; and (c) referral for investigation by the agency involved, or other appropriate action is warranted. The reporting burden for this collection of information is estimated to be an average of one hour per response, including the time for reviewing instructions, searching existing data sources, gathering the data needed, and completing and reviewing the form.

Please send any comments about this burden estimate, and suggestions for reducing the burden, to the U.S. Office of Special Counsel, Planning and Advice Division, 1730 M Street N.W., Washington, D.C. 20036-4505. Use of this form to report disclosures of information is not mandatory. As indicated in part 4 of the form, filers may request that OSC maintain their name in confidence.

ATTACH

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE

Forecast Office
520 N. Elevar St.
Oxnard CA 93030
June 2, 2000

Roger Oxborrow, Manager
Paso Robles Airport
Paso Robles CA 93446

Dear Mr Oxborrow,

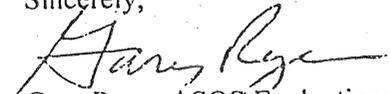
This is to advise you of our support for continuation of the Federal Contract Weather Observing Station (FCWOS) following the commissioning of the Automated Surface Observation System (ASOS) as Paso Robles Airport. This support is based on the concern of the Los Angeles/Oxnard Weather Forecast Office regarding unusual meteorological conditions which occur at Paso Robles Airport. These conditions present potential difficulties with official airport forecast (TAF) preparation and could negatively impact local air safety.

Unusually difficult weather observation parameters are presented at Paso Robles Airport when fog advects through the Salinas Valley from the northwest, or over Cuesta Pass from the south. FAA statistics indicate that low IFR conditions prevail at Paso Robles Airport on approximately 10% of all mornings on an annual basis. Marginal VFR conditions occur on almost 25% of all mornings! Paso Robles area fog morphology and dissipation are extremely complex from a meteorological standpoint, with unusual "doughnut holes" opening near the airport, accompanied by rapid changes in operational ceilings and visibilities. This is partially due to terrain irregularities within the Salinas Valley, and the significant elevation difference (more than 100 feet) between Paso Robles Airport and the Salinas River.

Our experience within the testing phase of the ASOS at Paso Robles Airport demonstrates conclusively that the erratic behavior of fog and stratus layers at this location is frequently beyond the evaluation capabilities of the current ASOS algorithms.

Paso Robles Airport is an important regional aviation center, one of only two such airports serving San Luis Obispo County. Because of its importance, Paso Robles Airport is issued a TAF 24 hours a day by forecasters at the National Weather Service Office in Oxnard. From the standpoint of accuracy of TAF preparation, and from the standpoint of aviation safety, our recommendation is that the FCWOS contract be extended at Paso Robles Airport following the commissioning of the ASOS at that facility.

Sincerely,


Gary Ryan, ASOS-Evaluations Officer
(805) 988-6626

cc: Todd Morris, Meteorologist-in-Charge
Kristine A. Nelson, NWS WRH
Ed Felipe, FAA Western-Pacific Region Headquarters



ATTACH

2



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE

Forecast Office
520 N. Elevar St.
Oxnard CA 93030
May 31, 2000

Roger Oxborrow, Manager
Paso Robles Airport
Paso Robles CA 93446

Dear Mr Oxborrow,

This is to advise you of our support for continuation of the Federal Contract Weather Observing Station (FCWOS) following the commissioning of the Automated Surface Observation System (ASOS) at Paso Robles Airport. This support is based on the Office regarding unusual conditions present potentially negatively impact local air:

Review for your comments

Unusually difficult weather advects through the Salinas statistics indicate that low IF mornings on an annual basis. Robles area fog morphology with unusual "doughnut hole" ceilings and visibilities. This significant elevation difference

*ER
Gary -*

*let's talk
rt*

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Sincerely,

Gary Ryan, ASOS Evaluations Officer
(805) 988-6626

cc: Todd Morris, Meteorologist-in-Charge
Kristine A. Nelson, NWS WRH
Ed Felipe, FAA Western-Pacific Region Headquarters



United States Department of Commerce

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL WEATHER SERVICE TRAINING CENTER

CERTIFICATE OF TRAINING

GARY J. RYAN

HAS SUCCESSFULLY COMPLETED

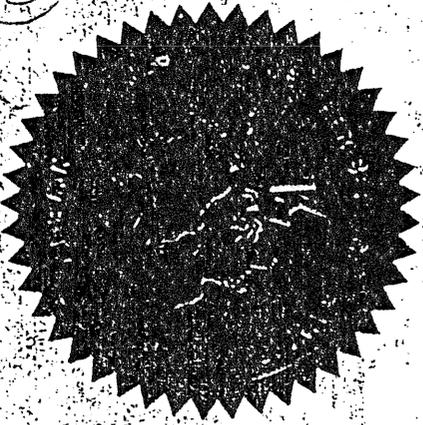
ASOS SYSTEM MANAGER'S COURSE

MAY 16 - 22, 1996

Annal K. Beckman
Senior Instructor

Gay W. Wilson
Director, NWSTC

Edo Anderson
Assistant Administrator for Weather Services



ATTACH
③

ATTACH -

(4)

Author: Joseph Lachacz at W-WR-LOX
Date: 12/15/1998 8:06 AM
Priority: Normal
TO: Gary Ryan
Subject: FYI PRB EVALUATION

Paso Robles
Evaluation
from FAA

ARW

120-Day Re-Assessment Plan

Site Visits

2.3.10 Paso Robles Municipal Airport, Paso Robles, CA

Background

A team visited the Paso Robles Municipal Airport (PRB) located in Paso Robles, CA, on May 21, 1997. PRB is a non-towered, Service Level D airport and weather observations are provided by an FAA contract. The Flight Service Station was closed on September, 1987. The ASOS at Paso Robles has been installed for over a year in a non-commissioned, test mode, and as of this date, has no projected commissioning date. The contract for weather observations will be canceled concurrent with the ASOS commissioning. Traffic activity in PRB is predominantly general aviation. At the time of the site visit, the ASOS was still reporting in the old SAO format without METAR software version 2.4. It was subsequently upgraded shortly after the site visit.

Five contract weather observers staff the facility seven days a week, 24 hours a day. The observers use lighted towers and mountains for visibility markers and a ceiling light for determining ceilings at night. The observers also turn the airport beacon on and off when the weather goes from instrument flight rules to visual flight rules and vice versa.

Data from the FAA Airport Master Record as of January 10, 1996 indicates that a total of 168 aircraft are based at the Paso Robles airport. Operations for the 12 months ending January 10, 1996 totaled 31,600 including 2,400 air taxi, 18,000 general aviation local, 10,000 general aviation transit, and 1,200 military.

PRB is located in the coastal range of mountains along the Central/North Central California coast. It is just south of the San Francisco Bay area and north of Santa Barbara; near San Louis Obispo and Monterey. Due to its proximity to the ocean, PRB is subject to frequent fog conditions. PRB is in a unique position in that it is not located adjacent to water, but in a shallow coastal mountain valley where fog may form and remain trapped for longer periods than in other areas. Major weather concerns for PRB would be reduced visibility in fog, occasional summer rain/thunderstorms, and occasional high winds blowing in from the ocean during the day and out at night. In extremely dry conditions, PRB is subject to the summer fires that

4
lague much of the central to southern coastal mountain communities.

Participants

Airport manager, Citizen Advisory Committee representative, two contract weather observers from Central Coast Weather, two California Highway Patrol pilots (Paso Robles), certified flight instructor, and FAA/NWS team.

Synopsis of User Comments

This section of the report is a record of the comments received during the meetings, interviews and discussions that took place during the site visits. It is intended to present a summary of the input from the users on a particular subject. These comments may include technical inaccuracies and user perceptions that do not reflect actual conditions.

The closure of the Flight Service Station in 1987 has created some level of animosity about service changes. There was strong negative sentiment over the closure of the Flight Service Station according to the airport manager.

He stated that -

"After having been promised 'equal or better service' by the FAA after the closure of the Flight Service Station, the loss of contract weather observers is viewed as yet another loss of services and jobs."

The ASOS is located mid field between runways in order to represent the airport. Some pilots stated that -

"We think the site may be a problem."

The airport manager stated -

"He does not want the ASOS moved to another location."

Further discussion revealed that the ASOS is actually located about one mile from the touchdown area of the primary runway. The touchdown area was not determined to be in an acceptable location due to local obstructions and terrain. Because there are no precision approaches to the airport, it was determined that this site location would better represent the airport weather.

The airport manager stated that -

"Paso Robles has approximately 35,000 operations annually including fixed wing and rotary. Users include the California Highway Patrol, forestry service, military (C130), medivac services, and recreational vendors, such as sky diving and balloons."

Paso Robles has visual flight rules weather conditions about 87% of the year.

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The California State Patrol pilots stated they-

"Worry about VFR (visual flight rules) arrivals when they are departing IFR (instrument flight rules) without a human observer on the field. IFR arrivals can create major fuel reserve concerns for them. The weather observer can confirm VFR when the ASOS states IFR."

A flight instructor stated -

"The ASOS is very helpful for his students' training and he likes it."

The airport manager stated -

"The area did not get rapidly changing weather and very seldom had thunderstorms. The area has unique climate conditions due to the mountains, including morning fog."

"The repair technician does not understand weather."

"The ASOS was great when it was working, but when problems came up, it would take 2-3 days to get it repaired. In fact, the system was down for 6-8 weeks at one point."

The NWS representative said that -

"The technician in this area has about 23 ASOS sites to maintain and he cannot keep up with all the sites, especially a site that is not commissioned."

The airport manager stated -

"When the technician does maintenance, no warning or notification is given to airport manager or the contract weather observer."

"He does not believe the ASOS is ready for commissioning due to unreliable system performance and maintenance problems."

"The contract weather observers do not communicate with the pilots."

The pilots and the contract weather observers stated -

"A very strong positive point for the ASOS is the communications dissemination via the ground-to-air transmitter and the long line. The UNICOM may or may not have anyone to answer when aircraft call in."

4 Both the airport manager and the contract weather observers stated that -

"The lack of communications training on the ASOS was a frustration, and the users are unclear about what 'test' means in the observations."

Other statements captured were -

"The ASOS has a positive capability, specifically for winds and pressure, and the pilots depend heavily on the ASOS wind and pressure data."

"The ASOS will not pick up smoke layers; (forest) fires in the surrounding areas sometimes send smoke layers over the airport."

"ASOS fails when the temperature is about 87 degrees."

The contract weather observers stated -

"The ASOS is slow to clear fog and sometimes carries an incorrect ceiling height for a long period of time."

"The dew points were often wrong, for example, 50 degrees on ASOS when they were recording 10-20 degrees.."

"We want the ability to input sector and prevailing visibility and partial obscurations. ASOS does not provide this data."

Information Provided

The team provided information on ASOS performance capabilities and the commissioning process. The thunderstorm/lightning detection information through the lightning data network was discussed.

Issues Identified

Maintenance issues appear to be the most prevalent problems at Paso Robles. Response times, extended system outages and poor communications between the airport manager and maintenance personnel were reported by system users. The loss of the contract weather observer positions and services was viewed as more evidence of the FAA's lack of commitment to the "equal to or better service" promise issued when the Flight Service Station was closed in September, 1987. The temperature/dew point sensor was identified as being frequently inaccurate.

ATTACH

5



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service Western Region
125 South State Street, Room 1210
Salt Lake City, Utah 84138-1102

September 22, 1997

MEMORANDUM FOR: Todd Morris, MIC
NWSFO Los Angeles

Thomas D. Potter

FROM: W/WR - Thomas D. Potter
Director, Western Region

SUBJECT: Liaison Officer Assignment

Gary Ryan, DAPM Los Angeles, is designated Liaison Officer for the Santa Maria WSO, California, effective upon Automation and Closure Certification. The Liaison Officer duties IAW Public Law 102-567 include:

"(1) provides timely information regarding the activities of the National Weather Service which may affect service to the community, including modernization and restructuring; and

(2) works with area weather service users, including persons associated with general aviation, civil defense, emergency preparedness, and the news media, with respect to the provision of timely weather warnings and forecasts."

This appointment, related to the Automation and Closure Certification, is for a minimum of two years.

cc: NWSFO Los Angeles - G. Ryan
W/WRx3 - G. Sampson
Wx21 - T. Beaver



ATTACH

6

ASOS OFFICIAL SITE REPRESENTATIVE LOG

ASOS LOCATION: PASO ROBLES, CA

SUPERVISOR: _____

DATE	TIME LST	DISPLAYED ASOS	OBSERVED MANUAL	# OF OBS	COMMENTS
12-1-89	0853 0953	- SN	NO SNOW	2	NO # ON OBS.
12-4		FEW095 FEW085	SKC		SAME error for several days
12-9- 12-13		Deer point -0.5	6.1		No \$ on observations Same error for several days
12-24	0650 0750 0850	6 HZ	25+ MILES	3	
1-9-2000	0350	SCT002 5 BR	1/2 OVC002 FG	1	
1-9	0850	1/4 M	1 1/2	1	
1-9	1136	OVC002	SCT002	1	
1-12	0750	(VIS) 10	2	1	
1-12 0951	1951	OVC060	SCT250	1	
1-16	1000- 1300	SCT006	BKN006	3	
1-20	0750	10	5 DZ	3	
1-20	1553	FEW001 FEW024	FEW009 BKN025 OVC080	1	
1-27	0925	VV001 / 1 1/2	OVC003 / 1	2	
1-30	0853	VIS 4	20+	1	

Also
12-21-
12-22-

6

ASOS OFFICIAL SITE REPRESENTATIVE LOG

ASOS LOCATION: PASO ROBLES, CA

SUPERVISOR: _____

DATE	TIME LST	DISPLAYED ASOS	OBSERVED MANUAL	# OF OBS	COMMENTS
2-17-00	0937 0953	(NS) 7 SM (VIS) 10 SM	1 SM 2 SM	2	
3-3-00	0850	FEW005	SETO05 BKN035 UVCS5	1	Clouds over sensor not detected.
3-24 → 3-27	all day	Dew point	7°C too low	3 days	no # on obs. or entry in maint. log
3-27	2250 2350	BKN016	CLEAR SKY	2	
3-26	0203	* finally appeared on obs. Tech ZZZ/RD logged onto site, remotely tested and cleared error dewpoint error. However,			
		Dew point point temp was <u>still</u> incorrect!			
6-14-00	All day	ASOS detecting clouds @ sensor	SKY CLEAR	hundreds	Constant error for the past two years.

see comment below

↓

ASOS OFFICIAL SITE REPRESENTATIVE LOG

ASOS LOCATION: PASO ROBLES, CA

SUPERVISOR: _____

DATE	TIME LST	DISPLAYED ASOS	OBSERVED MANUAL	# OF OBS	COMMENTS
5/22/2000	ALL DAY	SCT095 or FEW 095	BKN250 to SKC	ALL DAY	
5-23-00	2153	FEW090	SKC		
5-23-00	2353	FEW085	SKC		
5-24-00	0920	OVC007	FEW008 OVC010		CIG CONFIRMED WITH BALLOON (VFR)
5-24-00	0950	OVC007	SCT010 OVC150		ASOS EVENTUALLY WENT VFR @ 1035 1 HOUR 15 MIN DELAYED
5-24-00	1240	TOTAL SYSTEM FAILURE - MISSING ALL DATA			
5-24-00	1253	No SKY CONDITION TRANSMITTE IN ASOS OBSERVATION			ACTUAL SKY CONDITION WAS FEW020 BKN200
5-26-00	1053	WIND 300/07	310/10 280 V 010		
5-25-00	1653 1753 1853	310/18/G25 320/18 No Gust 320/18/G21	300 17 G25 250 V 330 330 19 G26 260 V 010 330 15 G20 300 V 010		VARIABLE WINDS NOT REPORTED & GUSTY CONDITION MISSED ON ONE OB. THIS WAS THIS WAS A VERY WINDY DAY & THIS INFO VERY CRITICAL TO SAFE AIRCRAFT OPERATION
5-26-00	SAME ERRORS AS ABOVE IN MODERATE WINDS ALL DAY				
5-26-00	ALL DAY	FEW to SCT 075 to 095	CLR to FEW250	ALL DAY	
5-27-00	OFF & ON ALL DAY	FEW to SCT 085 to 095	CLR to FEW250	OFF & ON ALL DAY	
5-28-00 5-29-30-31	Same as last 2 days	Same as above	Same as Above	Same as above	
6-8	0605	5 - RA BR	1/2 - RA BR		

MARCH 3 ^{Actual} 0850 ASOS ONLY REPORTING LOWEST ~~LOW~~ LAYER
(6) FEW @ 500 FT NO MENTION OF OBVIOUS HIGHER LEVELS
BKN 075 OCCURS THESE CLOUDS WERE ~~VISIBLE~~ OVER SENSORS
WIND 24, ~~25~~, 26, 27 DUE POINT IS NEG WITH FOG, (OFF BY $\pm 7^{\circ}\text{C}$)

March 27 2250 ASOS = BKN 016 ACTUAL = CLEAR SKY
2350

March 28 1554 ASOS SCT 080 ACTUAL ~~THE~~ HIGH CIRRUS @ 200,000

ATTACH

7

Author: Kristine A. Nelson at W-WR-WRH
Date: 6/5/2000 8:58 AM
Priority: Normal
TO: Gary Ryan at W-WR-LOX
Subject: Re: Paso Robles letter rescinded

Gary, one thing I forgot. Please have the CWO stop doing comparative observations.

-Kristine

Reply Separator

Subject: Paso Robles letter rescinded
Author: Gary Ryan at W-WR-LOX
Date: 6/2/00 3:58 PM

per attached file.

ATTACH

714 962 2336
ATTN CYNTHIA

8) Author: Todd Morris at WR-LOX
Date: 6/11/00 11:09 PM
Priority: Urgent
TO: Mail List - #Everyone, Vladimir Ryshko, Bruce Rockwell
Subject: Status of CPM at WFO LOX

Staff,

I have decided to make some changes to our plans for the CPM program. These changes have been discussed with all parties involved. Effective immediately, I am assigning the CPM program to Gary Ryan. He will be assisted by Stuart Seto as the backup.

Beginning with pay period 14 (7/2/00), Gary will divide his time between the DAPM duties and the CPM duties with approximately 2 public service shifts thrown in every month for good measure.

Harold Knocke from WRH will be here the week of 7/10/00 to provide Gary with the necessary training. Gary also will work with Stuart over the next few weeks to further familiarize himself with all the station locations.

I will assume the responsibility of the GWPAS's for all public service personnel as well as coordinate the public service schedule with Andrew Rorke. Gary will still oversee that the public service SDM is kept up-to-date. Gary will need to provide Bonnie with the necessary HMT training per her upward mobility training plan but Dave Danielson will coordinate the completion and all other aspects of her plan. Gary also will need to provide Stuart with periodic updates to the CPM program if Stuart is to perform in a backup capacity.

The planning schedule has been modified to reflect this change in plans. A rotation has been developed which provides some stability, takes into account preferences as much as possible, and preserves all previously scheduled/approved AL. This rotation is not a fully approved rotation by ALL bargaining unit members and should be considered an emergency solution made by management to facilitate operations during our very lean summer period. Further changes are possible pending Bruce Rockwell's return and any restrictions he may have. I welcome any suggestions anyone may have regarding the rotation. Stay tuned on this issue.

My goal with this change is to bring some stability and efficiency to the CPM program as well as the public service schedule given our limited staffing. Also, this meets with the desires/preferences of the HMTs in the unit.

I want to emphasize that this change in CPM plans has no impact on our overall staffing plans in public service. We will maintain 4 HMTs + 1 Met Intern in a rotation supplemented with forecasters, hydrologist, and managers that insures 24/7 coverage.

If anyone has any questions on this issue, feel free to ask me.

trm

ATTACH

9

WS FORM B-33
(5-87)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION INSPECTION REPORT

SURFACE UPPER AIR RADAR

RATING
 EXCELLENT
 SATISFACTORY
 UNSATISFACTORY

TYPE OF VISIT
 COMPLETE INSPECTION
 FOLLOW - UP

STATION AND TYPE
Paso Robles CA LAWRS/FCWOS

PREPARED BY:
GARY RYAN *Gary Ryan*

TITLE
Data Program Manager (805) 988-

HOME STATION
NWSFO Los Angeles/Oxnard CA

DATE(S) OF VISIT
16 November 1999

INSTRUCTIONS - Summarize the results of the station inspection in narrative form and distribute as follows:

TYPE OF STATION		ORIGINAL TO :	ONE COPY EACH TO :
NWS Other	Regional headquarters Regional Headquarters	Station Supervisory Station	NWS Headquarters, ATTN: W/OSO141 NWS Headquarters, ATTN: W/OSO141

SUMMARY

POINT OF CONTACT: Tim Kellett, Manager
Central Coast Weather Associates
Box A-3, Paso Robles Airport
Paso Robles CA 93446

PHONE: (805) 239-8331
ELEVATION: 806.87 feet (MERC)
LAST INSPECTION: 22 Oct 98

I visited the Paso Robles CA FCWOS on 16 November 1999. Special thanks to Tim Kellett for his valuable assistance during this inspection. A complete review of meteorological equipment and weather observation parameters was accomplished.

Paso Robles FCWOS operates 24 hours a day. Central Coast Weather Associates (CCWA) is the contractor, and continues to impress as the most outstanding weather contractor in southern California. CCWA have always been willing to go beyond the contract requirements in providing a level of service which is reminiscent of the old FSS days. There is an ASOS in test mode at Paso Robles Airport, which has not shown the degree of consistency that one would like to see prior to commissioning.

Barometry was checked. The NWS Digi quartz standard reading was 29.993, compared to the ASI at 29.997. Correction to the ASI was -.004, an excellent difference. Mercury barometer comparisons were made and logged on MF1-13 as required.

NWS Standard Report (roster) was verified. One minor change: The date on Tim Kellett's certificate (48994) is incorrect. The printout should read 10/7/87, the correct date as printed on the certificate.

Some minor changes were made to the A-1/A-3 station documentation forms, which were forwarded to WRH for review. These changes have to do with the observation program times, and the ASOS status.

MF1-10C surface observation forms were reviewed. No changes were requested on the forms.

A new pressure computation wheel (WBAN 5-4-78) was requested by the station manager and will be furnished to the station as soon as possible.

To Whom It May Concern,

On May 9, 2000, at about 9am, Mr. Gary Ryan arrived at the weather observing site at the Paso Robles Airport. I recall discussing with Mr. Ryan the issue of a mercury barometer which was removed from the station, the future move of the observing site to a nearby building, and the issue of the Automated Surface Observing System (ASOS) and the removal of human weather observers.

I recall expressing my concerns regarding the ASOS being used as a 'stand-alone' system. I explained how the ASOS does not report rapidly changing weather conditions in a timely manner. The ASOS usually lags 20 to 30 minutes in its reports. In fact, this exact situation occurred during Mr. Ryan's visit on May 9, 2000. Initially, the airport was experiencing IFR conditions, I believe the ceiling was at 500 feet. This layer of clouds began to dissipate and within 5 minutes the sky was completely clear. However, the ASOS continued to report a ceiling at 500' for another 25 minutes. This rapid dissipation of low clouds, as well as the rapid formation of low clouds is very common at the Paso Robles airport. The fact that the ASOS cannot keep pace with these rapidly changing conditions, especially the formation of low clouds, poses a definite threat to aviation safety when the ASOS is operated in a 'stand-alone' mode.

I recall discussing with Mr. Ryan the fact that the weather conditions at Paso Robles are usually quite different from the conditions at the nearest reporting site at San Luis Obispo. The other closest reporting sites are over 100 miles away at Fresno and Salinas. Consequently, it is not possible to judge weather conditions or the accuracy of ASOS reports at Paso Robles based upon reports from neighboring stations.

I also expressed to Mr. Ryan my concern regarding inadequate maintenance of the ASOS. I pointed out to Mr. Ryan that the ASOS often reports cloud layers between 8000 and 9000 feet when no clouds are present. As of this date, the technicians have not been able to correct this problem. I told Mr. Ryan of instances when the reported ASOS dew-point temperature was incorrect by as much as 10 degrees Celsius with no error flags reported. The system frequently fails and the maintenance technicians are located 200 miles away and cover a territory from Los Angeles to Paso Robles. On some occasions, the technicians do not respond within the required 24 hour response time. Without weather observers to 'back-up' the ASOS when it is inoperative, the airport, pilots, and meteorologists would be without aviation weather

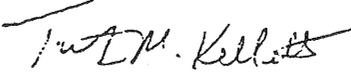
10

observations. This poses a clear and definite threat to aviation safety.

I also expressed to Mr. Ryan my concern that the ASOS is, and has been for 3 years, transmitting it's reports to pilots using a specific radio frequency. This creates an extremely hazardous situation because there is often conflicts between the ASOS report and the official weather report taken by the human observer. Because the ASOS report is not the official weather report for the airport and is not monitored in any way for accuracy, the dissemination of this data to pilots is dangerous and should not be occurring.

I expressed to Mr. Ryan that in my opinion, as someone who has been involved with aviation weather observations for over 20 years, the idea of a 'stand-alone' ASOS being used as the official weather reporting system at any airport is foolish and dangerous. I feel the problem is compounded at airports such as Paso Robles, which have no other FAA or NWS presence to monitor the ASOS and report maintenance problems.

I recall that at some point during Mr. Ryan's visit on May 9, 2000, I walked with him a few yards to Mr. Roger Oxborrow's office. I recall discussing the topics mentioned above with Mr. Ryan and Mr. Oxborrow. I recall that Mr. Ryan's visit lasted about 2 hours total and our discussion with Mr. Oxborrow lasted about 15 minutes.


Timothy Kellett

October 10, 2000

ATTACH

(11)

Subj: Re: Paso Robles ASOS Failure.. Aviation Safety Threatened
Date: 01-02-21 12:09:19 EST
From: kf6uxo@tcsn.net (tim)
To: d.Morris@noaa.gov (Todd Morris), jane.garvey@faa.gov (Jane Garvey), ccweather@email.com (Tim Kellett),
Kristine.A.Nelson@noaa.gov (Kristine A Nelson)
CC: Sjcappon@aol.com, greg.haas@mail.house.gov (Greg Haas), rogero@prcity.com (Roger Oxborrow), efelipe@faa.gov,
Glenn.Rasch@noaa.gov (Glenn Rasch)

Thank you, Mr. Morris, for correcting my error regarding the duration of the ASOS outage. Your explanation, however, raises several questions. You stated " the lack of data was, for two hours, thought to be a distribution problem since many ASOS sites were missing." Are you saying is that there were so many other ASOS observations missing, that your personnel could not determine that there was a problem specifically at Paso Robles? What does this say about the reliability of ASOS observations?

Why did the forecast office wait until 8 hours after the first missing observation to contact maintenance personnel, and then only after being notified of an outage by AOMC. And why did AOMC not notice the outage for 8 hours? I can guarantee that had human observers been present, the outage would not have gone unreported for 8 hours and there would have be no missing observations, and consequently no missing terminal forecasts or missing climatological summaries.

I wish a representative of the FAA would address the following: From what source did the aircraft using the Paso Robles Airport on the morning of the 19th obtain current weather information such as altimeter setting, wind data and ceiling data? I know for a fact that several aircraft used the airport that morning because they flew directly over my house in IFR or MVFR conditions with periods of heavy rain. (I live about a mile from the runway, under the traffic pattern). Were any of these aircraft carrying passengers for hire? Were they operating under instrument or visual flight rules? What type of weather briefing did they receive if there were no observations or terminal forecasts available? Why were no Notices to Airmen issued regarding the ASOS outage at Paso Robles?

This incident illustrates perfectly the problems that I and others have been warning about for the past year or so.

First, the ASOS at Paso Robles has serious technical/mechanical flaws. The CPU fails on a regular basis and each time this occurs the NWS claims it is an isolated incident.

Secondly, the quality control, monitoring, and maintenance of the stand alone ASOS system is inadequate at best. In this case the system was totally inoperative for over eight hours before maintenance personnel were notified. Then, maintenance personnel, realizing that they had a three to four-hour drive to Paso Robles, telephoned Mr. Oxborrow at home, on a holiday and requested that he respond to the airport to get the system back online. With all due respect to Mr. Oxborrow, he is not a certified ASOS technician and not responsible for servicing the system. What would happen if Mr. Oxborrow was not available to reset the system?

Thirdly, no plan or procedure exists to provide for backup observations in the event of a system failure or extended power outage.(California is experiencing electrical power shortages and several blackouts have already occurred.) The NWS claims that backup observations are the responsibility of Paso Robles airport personnel. Representatives of the airport claim that the FAA is responsible for providing weather observations. Consequently, no plan or procedure exists for providing backup observations.

It is my contention that contract weather observers should be reinstated immediately to augment the PRB ASOS at least until these problems are corrected.

I wish that someone in a leadership position at NWS Western Region Headquarters and someone representing Ms. Garvey's office would address these problems, rather than forcing your subordinates to deal with them.

Sincerely,
Timothy Kellett

----- Original Message -----
From: Todd Morris

(11)

To: tim ; Jane Garvey ; Tim Kellett ; Kristine A Nelson
Cc: Sjcappon@aol.com ; Greg Haas ; Roger Oxborrow ; efelipe@faa.gov ; Glenn Rasch
Sent: Tuesday, February 20, 2001 9:52 AM
Subject: Re: Paso Robles ASOS Failure.. Aviation Safety Threatened

All,

The truth of the matter is that the PRB ASOS failed sometime between 2 and 3 am on Monday, February 19th. The lack of data was, for two hours, thought to be a distribution problem since many ASOS sites were missing. We received a call from AOMC at 030 am indicating a priority 1 outage at PRB. Our ASOS tech was informed immediately and worked remotely with the airport manager, Roger Oxborrow, to reset the system and bring it back online. The PRB ASOS was back online before 1 pm on Monday, February 19th. The complete outage did not exceed 11 hours.

Now you know the rest of the story.

Todd Morris
Meteorologist in Charge
WFO Los Angeles/Oxnard
— Original Message —
From: tim
To: Jane Garvey ; Tim Kellett ; Kristine A Nelson
Cc: Sjcappon@aol.com ; Greg Haas ; Todd Morris ; Roger Oxborrow ; efelipe@faa.gov ; Glenn Rasch
Sent: Monday, February 19, 2001 11:03 AM
Subject: Paso Robles ASOS Failure.. Aviation Safety Threatened

Hello,

Paso Robles ASOS failed again this weekend. Is this another "isolated incident," Ms. Nelson?

Since the ASOS is not augmented... there have been NO observations or terminal forecasts for over 24 hours. The system is still out of service at this time.

What a sad commentary on the state of the FAA and NWS and their lack of concern for aviation safety.

I hate say 'I told you so',... but

It is only a matter of time before someone loses their life due to this ASOS failing.

Sincerely
Timothy Kellett

— Original Message —
From: "Kristine A Nelson" <Sent: Thursday, November 30, 2000 2:16 PM
Subject: [Fwd: [Fwd: Paso Robles ASOS crashes again]]

>

17

> 1) We believe the ASOS crash was an isolated incident. The system has been
 > running without
 > problems for a month and a half. All ASOSs are monitored 24 hours a
 > day,
 > 7
 > days
 > a week for outages. When an outage occurs, the local technician is
 notified and
 >

BLAH.... BLAH... BLAH.....

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<DIV> </DIV>
 <DIV> incident
 plus, perfectly the problems that I and others have been warning about for

He flew an air- so Robles after a weekend visit
 airport beach, drag- Friends said Schur, who owned
 behind him that a private investigation firm
 lashed. brought his son to Orange Coun-
 put he lost his life in- by almost every weekend.
 nen he fell out of the He reportedly dropped the Pa-
 Robles' crashing in- so Robles High School freshman
 Greek Vineyard out- off at about 6:30 p.m. and took off
 nosed right into the later from the private airstrip minutes
 Steve Harris, a cot- Neighbors later told investiga-
 ator with the San- tors they heard the engine stall in
 county Sheriff's De- Schur's Piper Malibu followed by
 the scene early an explosive sound.
 morning. He sus- Jurina waited in vain Tuesday
 vere head injuries night for her fiance to return to
 ear-old Corona Del- their shared Orange County
 who owned a home home.
 road, had flown up She started to worry about two
 county to bring his hours after Schur was scheduled
 1, K back to Pa- to take off

"He told me he was leaving at 4," she said. "He didn't call me. He always, always called me."
 Jurina called Schur's family members in Paso, who then called authorities.
 Searchers, though, were not able to find the downed plane until 3 a.m.
 A deep haze enveloped the single-engine plane after the crash, blinding the sheriff's deputies and California Highway Patrol helicopters searching for the wreckage.
 With the help of a faint electrical beacon from inside the plane, searchers finally found the accident site less than a 100 yards away from the vineyard's main building at Tablas Creek.
 John Graves, a longtime friend and fellow pilot, said Schur was an experienced pilot, with as many as 20,000 hours of flight time.
 Much of that time was in the Malibu, which he bought new over a decade ago.
 "He has more skills for handling an airplane than anyone I've ever met," Graves said.
 The wrecked plane lay facing toward the runway it had left half a mile away, and Graves speculated the position could indicate Schur had tried to turn back when his engine failed.
 "It's pretty obvious to me he was trying to get back to the airstrip," he said.
 Investigators at the scene were
 Please see CRASH, B2

THE TRIBUNE, SAN LUIS OBISPO, CA, THU 2.22.01

Airport weather instruments spark debate

AUTOMATED SYSTEM REPLACES OBSERVERS; AIR SAFETY IS AT ISSUE

PASO ROBLES

By Sally Cappon
 Special to The Tribune

Heavy rain in August. Snow last November.
 Neither happened here, but both non-events were reported as fact by National Weather Service instruments at the Paso Robles Municipal Airport.
 Until recently, human observers at the airport could correct such glitches from the weather service's Automated Surface

Observation System.

But without public notice and over the air-safety concerns of local officials and pilots, the NWS last month eliminated the observers and began relying on ASOS as the sole means of reporting current weather conditions. The move was done after several years of testing the system. Using the ASOS lets the weather service save money and provide pilots with consistent data because the ASOS systems are used at airports across the country.

For National Weather Service needs, said Roger Oxborrow, Paso Robles' airport manager and veteran pilot, the ASOS data are good enough. But for pilots in challenging, even dangerous, flying conditions, it's a different story.
 The ASOS has frequently stopped
 Please see ASOS, B3

Pilots had no data for 18 hours

By Sally Cappon
 Special to The Tribune

Exactly one month after it was commissioned as a stand-alone automated weather eye at the Paso Robles Municipal Airport, the Automated Surface Observation System failed Sunday night, leaving pilots with no weather data for 18 hours during a major winter storm.

The Paso Robles equipment was one of 30 ASOS systems from the Bay Area to Central California that went out, said Roger Oxborrow, manager of the city's airport. By late Monday morning, the
 Please see FAILURE, B3

SAN LUIS OBISPO

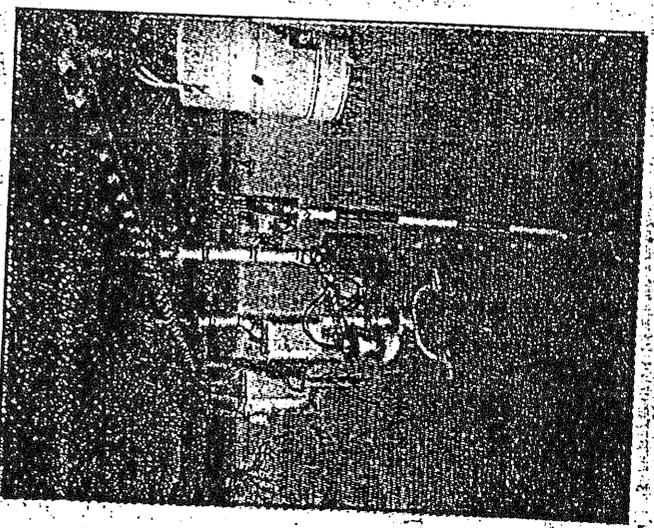
By David Sneed
 The Tribune

Over the objections of students and to the delight of homeowners, the City Council has approved the formation of a parking permit district in the Highland Drive area west of North Santa Rosa Street.

The unanimous approval of the district Tuesday sparked a lively debate about a problem the council agreed will only worsen in the coming years — college students moving into residential areas and reducing the quality of life of the other residents.

"If you can't enjoy your home, you have no quality of life," said Mayor Allen Settle.

The new law creates the College Highland Residential Parking District and forbids anyone from parking on the streets of the neighborhood with
 Please see PARKING, B2



TRIBUNE PHOTO BY JOE JOHNSTON
 The Automated Surface Observation System provides weather data at Paso.

ATTACH
 12

orking, said Oxborrow. "Some-
times it's off for 36 hours, and no-
body does anything about it."

A \$1 million jet coming in here
every morning, shooting an in-
stant approach, relies on weath-
er reports," he said. "It becomes crit-
ical in that kind of situation."

But ASOS program manager
Christine Nelson defended the sys-
tem, saying it's working well. Nel-
son said ASOS stations are moni-
tored 24 hours a day by the weath-
er service. When one goes down,
ground technicians are called "and
appropriate action is taken to trou-
bleshoot and fix the problem."

Both she and the Federal Avia-
tion Administration's David What-
ley suggested that if Paso Robles
needs ASOS backup, the
city, which operates the airport,
should pay for observers.

Oxborrow, however, says he will
commend the City Council fund
a human weather watcher if and
when Paso Robles gets full-time
line service.

Paso Robles is classified by the
FAA as a Class D airport, the low-
est level of service, based on num-
ber of landings, weather and public
safety, said Whatley. Larger air-
ports such as Santa Barbara have
around-the-clock observers to back
up ground personnel at San
Marino and San Luis Obispo air-
ports provide visual observations
during hours of operation, gener-
ally during the day.

The types of landings in Paso
Robles go beyond the occasional
weekend pilot, said Oxborrow, not-
ing the airport is home base for
California Highway Patrol planes
that fly from Monterey to Ventura
and is used by California Depart-
ment of Forestry firefighting
crews. Military aircraft bound for
Camp Roberts, Fort Hunter

Liggett and Camp San Luis Obispo
regularly use the airport, he said.
"We serve as air facility support for
three military bases. I've had as
many as eight C-130s."

Reinforcing the 24-hour observers
at Paso Robles means there will be
no overnight human observers
from Santa Barbara to San Jose, said
Tim Kellett of Central Coast Weath-
er Associates, the firm that provided
the backup service. "That's almost
400 miles. It is one of the busiest air
corridors in the nation."

Scanning the skies

The ASOS, a lineup of ground-
level instruments, automatically
transmits data on temperature,
dew point, barometric pressure,
wind, precipitation, visibility and
sky conditions to the FAA, pilots,
the weather service, the public and
the media. Designed to save man-
power, ASOS instruments have
been installed at airports through-
out the country in the last half
dozen years.

Last June, a National Weather
Service official recommended that
human observers be retained at
the Paso Robles airport due to er-
ratic fog conditions. Oxborrow
said that Gary Ryan, evaluations of-
ficer for the NWS, determined
"conclusively" from a study of test
data that fog at the airport "is fre-
quently beyond the evaluation ca-
pabilities" of the ASOS.

Ryan, whose study of the Paso
Robles climate was published by
the weather service in 1994, added
that the problems "could negative-
ly impact local air safety."

But Nelson, who works at the Na-
tional Weather Service's western re-
gional headquarters in Salt Lake
City, dismissed the concerns, calling
past problems "isolated incidents,"
and said some improvements to the
system were installed in early Janu-
ary. Those improvements included
software upgrades and power supply

modifications, said Todd Morris, the
meteorologist in charge of the NWS
office in Oxnard.

The false snow report last No-
vember, picked up as a joke by a
local radio station, was caused by
spider webs, Nelson said. "That
was a problem that was fixed" by
cleaning off the spider web.

Critics cite system shutdowns

Oxborrow and Kellett refuted
Nelson's statement that incidents
are isolated.

In an e-mail to FAA Administra-
tor Jane Garvey, Kellett said there
were "serious technical flaws and
maintenance problems" with the
Paso Robles ASOS, including 48
hours last October when the sys-
tem was totally out. The instru-
ments crashed or went inoperative
six times between July and No-
vember, he said. And just this
week, the system went down Sun-
day and did not return to service
until noon Monday.

Whatley replied to Kellett that
the FAA, weather service and Air
Force thoroughly evaluated ASOS
and consider it to be accurate and
reliable.

While the ASOS gets high
marks for its measurement of
some things such as barometric
pressure and wind, visibility is "the
Achilles heel of ASOS," said Ryan.
"It's a serious flaw."

The problem is in how the sys-
tem takes readings for visibility: A
laser beam is aimed straight up to
measure the overhead sky, and
two other beams go out horizon-
tally for readings along the ground.
Fog can cover half the airport but
not reach the ASOS instruments,
so the station will report conditions
as clear, said Kellett.

"The pilots are getting the infor-
mation from the FAA, the authori-
ty," said Kellett. "There should be
no question of its accuracy."

Pointing out numerous over-

rides made to ASOS readings by
airport observers when a recent
storm went through Santa Bar-
bara, Kellett said. "I don't think
it was ever meant to be a system
without human observers."

Oxborrow agreed. "The prob-
lem you run into is, there are cer-
tain times and climatic conditions
that the machine is not capable of
responding to," he said.

"We will very quickly go from a
solid overcast situation to clear.
The fog will burn off in 20 minutes.
By design of the ASOS equipment,
you've got to wait 35 minutes (for
a reported observation). I have
guys sitting on the ground seeing
it's clear and getting the overcast
(report). You're developing a lack
of confidence. They bad mouth it."

The airport, four miles northeast
of the city, is affected by different
fogs, he said. One comes from Sali-
nas. A marine layer spills over Cues-
ta Grade. When tule fog comes from
the Central Valley, "We'll be overcast
all day long like Bakersfield."

The airport also has "a tremen-
dous amount of squirrely winds," he
said, noting that one day all five wind
socks at different areas of the airport
indicated something different.

The Paso Robles airport is set for
a major upgrade late this spring
with \$2.2 million from the FAA for
resurfacing the main 6,000-foot-
long runway, Oxborrow said. The
airport was built in 1943 as the Es-
trella Army Air Field. It was ac-
quired by the city of Paso Robles in
1973. A large new terminal is under
construction with local funding.

With the area's burgeoning vine-
yard industry bringing in large cor-
porate jets, Oxborrow said, "I real-
ly think there is tremendous poten-
tial. We want to be prepared for it."

But a stand-alone ASOS remains
a worry. "I guarantee that I will not
put out bogus information for my
airport," said Oxborrow. "I will not
allow anything to compromise on
safety at the airport."

Failure

Paso Robles system was the only
one still out of operation, he said. It
finally began working again at
noon Monday.

During the outage, the airport
was unable to provide local weath-
er information to pilots, such as
wind speed and direction or alt-
itude readings as they attempted
to land. Human observers, who
previously backed up the Paso Robles
ASOS during its test stage, and

who continue to serve as backups
at larger airports, were eliminated
after the ASOS was officially put in-
to local service by the National
Weather Service Jan. 18.

The automated weather systems
are being put in at hundreds of
sites across the country, primari-
ly at airports.

Oxborrow was at his airport of-
fice Monday, the President's Day
holiday, because of the problem.
The first phone call he said he got
was from a pilot, who asked "Why
doesn't your machine work?"

At mid-morning, Oxborrow dis-

covered no instructions had yet
been issued nationally to trigger a
repair. The system was restored
about noon when Oxborrow, act-
ing on guidance from a Weather
Service technician, reset a button.

"You're dealing with a comput-
er," he said. "It's no different. If it
hiccups, you push the reset button,
and it's up and running. It's brand
new for us."

Tim Kellett, whose Central
Coast Weather Associates firm for-
merly provided human observers
at Paso Robles and continues to do
so at the Santa Barbara Municipal

Airport under a Federal Aviation
Administration contract, was
stronger in his assessment of the
glitch.

"It is only a matter of time before
someone loses his life due to this
ASOS failing," he wrote in an e-
mail Monday morning to FAA
head Jane Garvey and National
Weather Service officials. "What a
sad commentary on the state of
the FAA and NWS and their lack
of concern for aviation safety," said
Kellett, who has led an effort to re-
tain human observers at Paso Rob-
les.

Gary Ryan
P.O. Box 23508
Ventura CA 93002
30 May 2001

Hon. Lois Capps
United States Congress
1118 Longworth House Office Building
Washington D.C. 20515

Dear Mrs. Capps,

I am contributing sworn testimony to Congressman Ron Paul (R-Texas) in response to his request for hearings in the matter of the federal ASOS program. "ASOS" is the acronym for **Automated Surface Observing System**, an array of weather observation instruments that has been placed at over 1,000 locations---mostly airports---across the United States. An ASOS has recently been commissioned at Paso Robles Airport, in your district, which I believe poses a serious threat to aviation safety at that facility.

I am a veteran weather observer, having worked as a meteorological technician for the United States Government since 1966. I have logged more than 150,000 weather observations during my career. During my employment with the National Weather Service I became manager of the National Weather Service Office at Santa Maria Airport, and finally, since 1995, served as data quality control manager for the Los Angeles Office (in Oxnard).

From my work in the National Weather Service (NWS), I am expert in taking, recording, and managing weather data and data systems. I participated in the NWS modernization program, and in the field-testing and analysis for ASOS, which has been in use by the Federal Aviation Administration (FAA) and the NWS since 1992. I have been an ASOS Commissioning Officer since 1996.

Under proper federal guidelines and within my authority as an ASOS Commissioning Officer, I made a routine inspection of the FAA weather station at Paso Robles Airport on May 9, 2000. In accordance with my responsibilities, including my concern for aviation safety at Paso Robles, I made a recommendation that the FAA should continue the Federal Weather Observation Contract at Paso Robles. That is, I felt that human observers must remain under contract at Paso Robles---after the commissioning of the ASOS there---to ensure the accuracy of aviation weather observations. Observers were needed to maintain weather observation quality as required by Public Law 102-567. That law states that automation of the NWS must not result in deterioration of services.

It was, and still is, my judgment that an unmanned ASOS at that Paso Robles Airport is unsafe for aviators. Therefore, on June 2, 2000, I wrote a letter explaining the reasons for my recommendation---through my supervisor---to persons and agencies concerned.

However, as a result of NWS/FAA Headquarters reaction to my recommendation, I was threatened and harassed within the workplace, and finally I was "voluntarily" retired effective May 15, 2001.

I will state for the record that ASOS is an excellent array of weather monitoring instruments. The standardization of weather reporting instrumentation across the country is desirable and even necessary. However, that importance should not obscure the fact that stand-alone automation---even with a 99% accuracy rate---is not good enough to address aviation safety concerns at airports such as Paso Robles. The fact is that the ASOS visibility sensor is not capable of responding efficiently enough to warn pilots of rapidly changing and erratic fog conditions within the Salinas Valley---that is the crux of the matter.

The FAA must restore the manual (human) observation contract at Paso Robles Airport as soon as possible in the interest of aviation safety, lest the government bear full responsibility for the inevitable weather-related accident that will occur there.

I hope that you can assist in this effort.

Sincerely,

Gary Ryan

Catherine Zanga @ OSC
Washington, D.C.

1-18-02

Dear Catherine,

Thanks for your call this morning.

I'm attaching a copy of the
Santa Barbara News-Press dated 21 Aug 01,
which contained an article about my
problem at Paso Robles airport.

The newspaper wants to do a
follow-up story. I was also contacted
by Fox-News about the ASOS disclosure,
but have not responded to them as of
yet.

I appreciate your interest in this
case and you may call anytime in
that regard.

Gary Ryan

(805) 218-5902

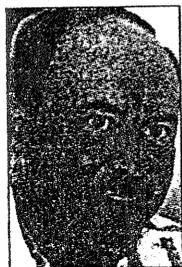
2002 JUN 23 PM 2:08

Storm Warning

Ex-federal official says equipment unsafe

By SALLY CAPPON
NEWS-PRESS CORRESPONDENT
e-mail: citydesk@newspress.com

A one-time head of the National Weather Service office in Santa Maria alleges he was demoted, threatened with termination and placed on unpaid leave after he wrote a letter revealing safety problems with weather equipment at a Central Coast airport.



NEWS-PRESS FILE

"From day one it was a safety issue. It still is," says Gary

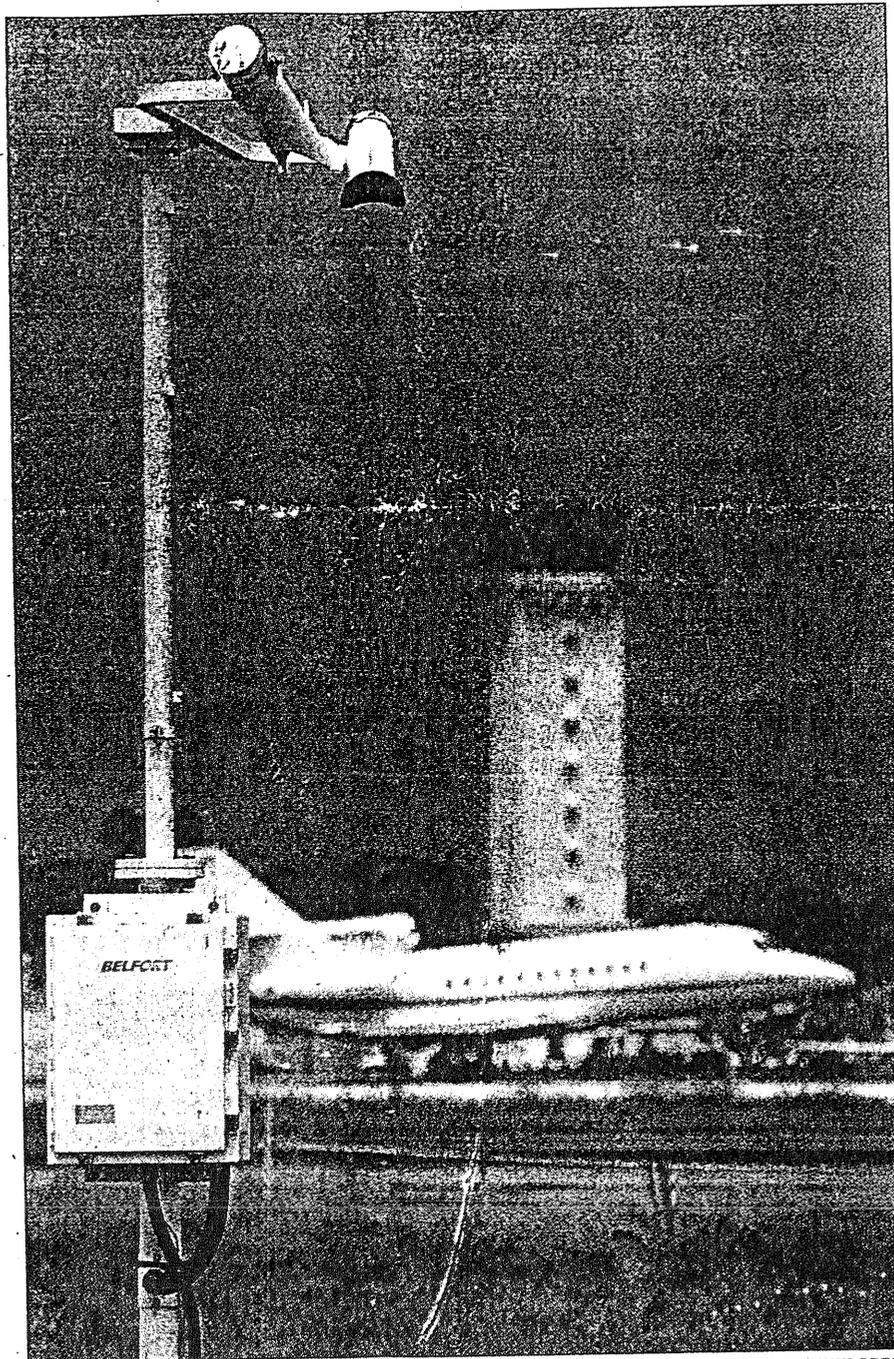
Ryan, a 30-year NWS employee, filed a whistleblower claim last month with the Office of Special Counsel in Washington, D.C. In a formal disclosure of information, he charged that the Automated Surface Observing System (ASOS) at the Paso Robles Municipal Airport is a danger to public safety. He recommended human observers to provide backup for the unmanned instruments.

If the Office of Special Counsel finds likelihood of wrongdoing, the disclosure is referred to the head of the Department of Commerce, who is required to conduct an investigation and write a report.

ASOS equipment has been installed at some 1,000 sites around the country, including the Santa Barbara Municipal Airport, during the past decade and has allegedly been linked to problems elsewhere, including the plane crash that killed John F. Kennedy Jr. in July 1999. The Santa Barbara airport ASOS is backed up by round-the-clock human observers, under FAA contract, who can correct inaccurate readings. At the Santa Maria Public Airport, tower personnel monitor ASOS readings in the tower is in operation.

Paso Robles, as a class D, or lowest-level airport based on landings and usage, does not qualify for back-up personnel.

Mr. Ryan spent 13 years at the Santa Maria weather office. After it closed in 1999, he became a



MIKE ELIASON / NEWS-PRESS

Automated Surface Observing System instruments, left, have been installed at 1,000 sites including Santa Barbara airport. The equipment monitors weather conditions. At Santa Barbara, human observers, under FAA contract, are able to correct inaccurate instrument readings. No accidents or close calls due to system errors have been reported at Santa Barbara.

office in Oxnard, which provides forecasts for much of Southern California. He was responsible for inspecting ASOS sites throughout the area, including those at Santa Barbara and Santa Maria.

In a June 2, 2000 letter to Paso Robles airport manager Roger Oxborrow, Mr. Ryan stated that the ASOS did not respond quickly to changing and erratic fog condi-

the observers who oversaw the equipment during a lengthy test period.

However, the observers were reassigned when the ASOS was quietly put in official stand-alone operation by the NWS last January. A month later, the equipment failed for several hours during a stormy holiday weekend so pilots were unable to get weather infor-

No accidents or close calls have been reported at Paso Robles or Santa Barbara County, due to the ASOS equipment.

However, Mr. Ryan is worried about the potential for accidents, since that particular ASOS has a history of unreliability.

According to written comparative logs between automated and

body of a 14-year-old boy... slayings. "We were very close friends; our kids loved his boy," she said. "The last time I talked to him was on... with the old curriculum. Mr. Bondaruk said he believed that's why Mr. Solys came to the class either... said.

Some pilots blame false readings in Kennedy crash

AIRPORT

Continued from Page A1

man observations in 1989-2000, snow was reported on a day when there was no snow (the WS later blamed spider webs). There also were conflicting wind and visibility readings.

Mr. Ryan is believed to be the first Weather Service official to publicly reveal a problem with the \$230 million ASOS program. Instruments automatically measure and report temperature, wind, visibility, ceiling, precipitation, barometric pressure and dew point.

In a separate potential problem for ASOS, Rep. Ron Paul (R-Texas) wrote a letter to Attorney General John Ashcroft in May, requesting an official investigation of ASOS, based on alleged evidence from a Texas observer that the automated equipment gave inaccurate reports and NWS personnel falsified records to cover errors.

According to the Texas federal contractor, faulty ASOS readings may have contributed to some airplane tragedies, including the death of New Jersey state Sen. Charles Yates, Mr. Paul wrote.

Some pilots blame inaccurate weather

information from the Martha's Vineyard ASOS as playing a role in the Kennedy crash. NBC medical correspondent Dr. Bob Arnot, flying the same route at the same time as the ill-fated Kennedy flight, said he received an all-clear for his flight from Federal Aviation Administration authorities but found he was unable to see Martha's Vineyard from the air. Dr. Arnot, an instrument-rated pilot, landed safely at Nantucket. His observations and data from area ASOS sites were cited in the National Transportation Safety Board report of the Kennedy crash.

Mr. Ryan said the NWS has become sensitive to negative comments about the ASOS over the past decade. Alleging increased "secrecy" by the agency in dealing with the public, he said some data from the automated system are "just plain wrong."

"All this is happening at a time when the measurement of global weather and climate data assumes great political importance," said Mr. Ryan, whose books on the climates of Santa Barbara, Los Angeles and Paso Robles have been published by the NWS.

He said ASOS was originally intended to replace human observers, but that concept was

scrapped after pilots and airport personnel complained about incorrect readings, particularly for ceilings and visibility.

Todd Morris, meteorologist in charge of the NWS office in Oxnard, said recently that ASOS "was never designed to replace human observers." Meteorologists also use radar and satellite data to make forecasts, he said.

Immediately after Mr. Ryan sent his letter, with copies to the NWS regional office in Salt Lake City, among others, he said he got a phone call at home from Kristine Nelson, ASOS program manager for the Western United States, ordering him to rescind the letter.

After doing so, he said he was told by Ms. Nelson to call everyone to whom copies were sent, telling them the letter was rescinded.

Mr. Ryan said she subsequently told him to have the Paso Robles observers stop making comparison logs.

Four days after writing the letter, Mr. Ryan said he was threatened with suspension or termination by Mr. Morris, who headed the Santa Maria weather office before Mr. Ryan.

The next week, Mr. Morris removed Mr. Ryan from his supervisory position and had the password to Mr. Ryan's computer changed. Mr.

Mr. Morris said he needed access to the computer to get Paso Robles weather information sought by NWS Regional Director Vickie Nadolski.

Mr. Morris said he also needed personnel files previously handled by Mr. Ryan.

As a result of the threats of termination and loss of his supervisory post and computer, Mr. Ryan said he went on sick leave due to severe stress. He was put on unpaid leave on Oct. 2 by Mr. Morris, who rejected several medical excuses from doctors as "inadequate" and "unacceptable."

The docked pay was restored by the NWS last January after Mr. Ryan hired an attorney. He retired from the NWS May 15.

Mr. Morris, who previously said Mr. Ryan should have obtained his approval before sending out the letter, last month declined comment on the termination and sick leave allegations.

"I think it's wrong for me to even speak about it," he said, adding, "It's not in my best interest."

Mr. Ryan has filed no action seeking any monetary damages.

"It's not for myself at all," he said. "It's to have justice served. From day one it was a safety issue. It still is."

Bob Ryan, NWS Regional Director

PHOTOGRAPHS BY AP/WIDEWORLD

Gary Ryan
P O Box 23508
Ventura CA 93002
29 January 2002

2002 FEB -4 PM 3:32

US Office of Special Counsel
ATTN: Catherine Zanga
1730 M Street NW, Suite 201
Washington, DC 20036-4505

Dear Catherine,

RE: File No. DI-01-1549

Here is the ASOS chart that you requested that I prepare. It outlines the differences in how human weather observers and the ASOS machinery create weather observations. I hope this helps in your investigation into this case

Please let me know if you would like to have any further information, or names of persons who can and would support my statements. I can provide you with a list of current and former weather observers, private and public meteorologists, and aviators who can verify this information and testify as to its accuracy.

Thanks for your assistance!


Gary Ryan

ASOS SAFETY CONCERNS:

A COMPARISON OF WEATHER OBSERVATION ELEMENTS TAKEN BY THE AUTOMATED SURFACE OBSERVATION SYSTEM (ASOS) VS. HUMAN OBSERVERS.

Surface wind, visibility, cloud height, and altimeter setting are the most critical weather elements which impact aviation safety at airport stations. The following information compares how human weather observers evaluate weather information with how automated weather stations (ASOS) perform the same task.

WIND:

Wind speed and direction are required for all official weather observations. Gusts, peak winds, wind shifts, and squalls are critical required reportable elements.

ASOS: Updates every minute, providing a wind speed and direction averaged within a two minute period. An F420 type anemometer is used. If the anemometer is **out of service** due to mechanical difficulty, **no wind** is reported by the ASOS. ASOS **cannot** add critical wind information reported by pilots, nor can it report downburst or other hazardous wind information occurring near---but not at---the ASOS sensor.

HUMAN OBSERVERS: At all times during hours of duty, observers can monitor wind data over a two-minute period, generally using an F420 type anemometer. If the anemometer is **out of service** due to mechanical difficulty, the observer is **required** to use alternate wind measuring equipment, or to estimate wind speed and direction based on published criteria. The human observer adds critical wind information reported by pilots or downburst or other hazardous wind information occurring near but not at the observation site.

CLOUD HEIGHTS/ SKY EVALUATION:

Cloud height information is important for aviation safety. The amount of sky covered by clouds (ceiling data) is critical.

ASOS: Laser beam ceilometer measures up to three layers of clouds within a 60-foot diameter beam---but only directly over the instrument. ASOS takes thirty minutes to evaluate cloud heights and sky coverage, weighing the latest ten minutes more heavily. ASOS cannot evaluate cloud types (thunderstorm clouds, for example) nor can it report clouds at a distance (obscuring mountains or other aviation hazards). ASOS sometimes fails to report clouds properly due to the nature of the 30-minute reporting algorithm. ASOS cannot evaluate tornadoes. **Ceiling equipment malfunction results in missing data report.**

CLOUD HEIGHTS/ SKY EVALUATION:

HUMAN OBSERVERS: Observers can use a variety of sources to calculate cloud heights, including ceilometers, clinometers and ceiling lights, pilot reports, adiabatic diagrams, ceiling balloons, topographic analysis, and experience. Cloud height and sky coverage are evaluated as needed, taking into account the entire celestial dome. Human observers can assess cloud types, and can report thunderstorms or fog banks at a distance. Humans must evaluate tornadoes, funnel clouds, waterspouts, and other emergency conditions. If ceiling measurement equipment malfunctions, human observers use backup measuring techniques. **Human observers always report sky condition.**

VISIBILITY:

The evaluation of airport area visibility is one of the most critical elements for aviation in the entire weather observation process. Visibility is defined as how far the **human eye** can see around the horizon. **Visibility evaluation is the Achilles heel of unmanned ASOS instrumentation.**

ASOS: **ASOS cannot measure field visibility.** Instead, it samples the visibility only at the site of the sensor---in an area roughly the size of a **football**---and reports that sample as the prevailing visibility for the entire airport. ASOS uses a ten-minute algorithm to evaluate these data. ASOS cannot report prevailing visibility, sector visibility, or variable visibility. ASOS cannot report fog banks or smoke in the vicinity of the sensor. ASOS cannot evaluate rapidly changing visibility conditions. ASOS is easily fooled by localized problems, e.g. aviation traffic or jet blast, agricultural activity, dust devils, dirty lenses, etc.

HUMAN OBSERVERS: Visibility is defined as how far the human eye can see around the horizon. The human eye can respond to and evaluate immediate changes in visibility fields. Human observers can report fog banks, smoke, and blowing dust and sand at specific distances from the point of observation.

TEMPERATURE/ DEWPOINT:

Temperature and dewpoint reports are required for the (NWS) preparation of official airport forecasts for aviation operations.

ASOS: Temperature is averaged over a five minute period, using an electronic resistor. Dewpoint is measured, in most cases, using a mirrored surface which frequently covers with ice, causing erroneous readings. If the ASOS sensors are inoperative, no temperature or dewpoint readings are reported.

ASOS SAFETY CONCERNS (Page 3)

TEMPERATURE/ DEWPOINT:

HUMAN OBSERVERS: Can report temperature at any instant (no averaging). Can always report dewpoint temperature. When primary temperature/dewpoint sensors are inoperative, human observers can use backup equipment as appropriate.

HAZARDOUS WEATHER/ SAFETY CONCERNS:

Hazardous weather is, by definition, dangerous to aviation and other interests. ASOS is severely limited in its ability to perform the function of reporting these elements. It is essential that on-site human observers monitor dangerous weather.

ASOS: **Cannot report** tornadoes, funnel clouds, microbursts, waterspouts, downdrafts, snow and ice depth, fog banks, aviation hazard obscurations. ASOS cannot report more than one precipitation type at a time, and cannot report hail, sleet or ice pellets.

ASOS **can report** thunder and lightning, freezing precipitation, precipitation amounts if equipped with appropriate sensors. **However, the reporting of these elements is frequently in error** when compared with actual field conditions.

HUMAN OBSERVERS: React immediately to dangerous weather conditions, reporting these elements to FAA, NWS, airport authority, and other emergency agencies.

ALTIMETER SETTING:

Accurate altimeter setting (barometric pressure data) is critical for aviation take-off and landing procedures.

ASOS: Uses two to three altimeter sensors to monitor altimeter setting on a continuous basis. When the correct inputs are logged into the system, ASOS does a superior job in evaluating altimeter setting.

HUMAN OBSERVERS: Report altimeter settings from a variety of official local sources.

ASOS SAFETY CONCERNS (Page 4)

OVERALL PERFORMANCE: Various government statistical studies (FAA, NWS, and AFOTEC) have demonstrated that ASOS produces weather observations of equal or *superior* quality when compared to human weather observations. These studies merely demonstrate that statistics can be manipulated to "prove" almost anything. Furthermore, these studies could be regarded more as ASOS infomercials, rather than scientifically valid research.

It is true that ASOS weather instrumentation, a standardized array of weather sensors, is the best atmospheric sampling tool that the United States government has ever employed for official use.

But it is also true that UNMANNED ASOS weather sites have the potential to produce inaccurate data in a way that is potentially hazardous to aviation interests.

Recognizing this fact, the FAA has continued on-site human monitoring of ASOS weather equipment at all major U.S. airports. However, there are many airports at which ASOS has replaced human observers---at which airports ASOS operates in an unmanned capacity. At these places, there is now significant a danger to aviation operations.

Gary Ryan
National Weather Service
Data Program Manager (retired)
January 29, 2002

6

“(2) describe specific activities, including research activities, data collection and data analysis requirements, predictive modeling, participation in international research efforts, demonstration of potential operational forecast applications, and education and training required to achieve such goals and priorities; and

“(3) set forth the role of each Federal agency and department to be involved in the United States Weather Research Program, identifying and addressing, as appropriate, relevant programs and activities of the Federal agencies and departments that would contribute to such Program.”.

Weather service modernization. Act Oct. 29, 1992, P. L. 102-567, Title VII, 106 Stat. 4303, provides:

“Sec. 701. Short title

“This title [this note] may be cited as the ‘Weather Service Modernization Act’.

“Sec. 702. Definitions

“For the purposes of this title [this note], the term—

“(1) ‘automate’ means to replace employees with automated weather service equipment;

“(2) ‘change operations at a field office’ means transfer service responsibility, commission weather observation systems, decommission a National Weather Service radar, change staffing levels significantly, or move a field office to a new location inside the local commuting and service area;

“(3) ‘Committee’ means the Modernization Transition Committee established by section 707;

“(4) ‘degradation of service’ means any decrease in or failure to maintain the quality and type of weather services provided by the National Weather Service to the public in a service area, including but not limited to a reduction in existing weather radar coverage at an elevation of 10,000 feet;

“(5) ‘field office’ means any National Weather Service Office or National Weather Service Forecast Office;

“(6) ‘Plan’ means the National Implementation Plan required under section 703;

“(7) ‘relocate’ means to transfer from one location to another location that is outside the local commuting or service area;

“(8) ‘Secretary’ means the Secretary of Commerce;

“(9) ‘service area’ means the geographical area for which a field office provides services or conducts observations, including but not limited to local forecasts, severe weather warnings, aviation support, radar coverage, and ground weather observations; and

“(10) ‘Strategic Plan’ means the 10-year strategic plan for the comprehensive modernization of the National Weather Service, required under section 407 of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1989 (15 U.S.C. 313 note).

“Sec. 703. National Implementation Plan

“(a) National Implementation Plan. As part of the budget justification documents submitted to Congress in support of the annual budget request

for the Department of Commerce, the Secretary shall include a National Implementation Plan for modernization of the National Weather Service for each fiscal year following fiscal year 1993 until such modernization is complete. The Plan shall set forth the actions, during the 2-year period beginning with the fiscal year for which the budget request is made, that will be necessary to accomplish the objectives described in the Strategic Plan, and shall include—

- “(1) detailed requirements for new technologies, facilities, staffing levels and positions, and funding, in accordance with the overall schedule for modernization;
 - “(2) notification of any proposed action to change operations at a field office and the intended date of such operational change;
 - “(3) identification of any field office that the Secretary intends to certify under section 706, including the intended date of such certification;
 - “(4) special measures to test, evaluate, and demonstrate key elements of the modernized National Weather Service operations prior to national implementation, including a multistation operational demonstration which tests the performance of the modernization in an integrated manner for a sustained period;
 - “(5) detailed plans and funding requirements for meteorological research to be accomplished under this title to assure that new techniques in forecasting will be developed to utilize the new technologies being implemented in the modernization; and
 - “(6) training and education programs to ensure that employees gain the necessary expertise to utilize the new technologies and to minimize employee displacement as a consequence of modernization.
- “(b) Transmittal to Committee. The Secretary shall transmit a copy of each annual Plan to the Committee.
- “(c) Consultation. In developing the Plan, the Secretary shall consult, as appropriate, with the Committee and public entities responsible for providing or utilizing weather services.
- “Sec. 704. Modernization criteria
- “(a) National Research Council review. The Secretary shall contract with the National Research Council for a review of the scientific and technical modernization criteria by which the Secretary proposes to certify action to close, consolidate, automate, or relocate a field office under section 706. In conducting such review, the National Research Council shall prepare and submit to the Secretary, no later than 9 months after the date of enactment of this Act, a report which—
- “(1) assesses requirements and procedures for commissioning new weather observation systems, decommissioning an outdated National Weather Service radar, and evaluating staffing needs for field offices in an affected service area;
 - “(2) assesses the statistical and analytical measures that should be made for a service area to form an adequate basis for determining that there will be no degradation of service; and
 - “(3) includes such other recommendations as the National Research Council determines are appropriate to ensure public safety.
- “(b) Criteria. No later than 12 months after the date of enactment of this Act, the Secretary, in consultation with the National Research Council and

the Committee and after notice and opportunity for public comment, shall publish in the Federal Register modernization criteria (including all requirements and procedures), based on the report required under this section, for—

“(1) commissioning new weather observation systems, decommissioning an outdated National Weather Service radar, and evaluating staffing needs for field offices in an affected service area; and

“(2) certifying action to close, consolidate, automate, or relocate a field office under section 706.

“Sec. 705. Changes in field office operations

“(a) Notification. The Secretary shall not change operations at a field office pursuant to implementation of the Strategic Plan unless the Secretary has provided the notification required by section 703.

“(b) Weather radar decommissioning. The Secretary shall not remove or permanently decommission any National Weather Service radar until the Secretary has prepared radar commissioning and decommissioning reports documenting that such action would be consistent with the modernization criteria established under section 704(b)(1). The commissioning report shall document that the radar system performs reliably, satisfactory maintenance support is in place, sufficient staff with adequate training are present to operate the system, technical coordination with weather service users has been completed, and the radar being commissioned satisfactorily supports field office operations. The decommissioning report shall document that the replacement radar has been commissioned, technical coordination with service users has been completed, and the radar being decommissioned is no longer needed to support field office operations.

“(c) Surface observing system commissioning. The Secretary may not commission an automated surface observing system located at an airport unless it is determined, in consultation with the Secretary of Transportation, that the weather services provided after commissioning will continue to be in full compliance with applicable flight aviation rules promulgated by the Federal Aviation Administration.

“Sec. 706. Restructuring field offices

“(a) Prohibition. The Secretary shall not close, before January 1, 1996, any field office pursuant to implementation of the Strategic Plan.

“(b) Certification. The Secretary shall not close, consolidate, automate, or relocate any field office, unless the Secretary has certified that such action will not result in any degradation of service. Such certification shall include—

“(1) a description of local weather characteristics and weather-related concerns which affect the weather services provided within the service area;

“(2) a detailed comparison of the services provided within the service area and the services to be provided after such action;

“(3) a description of any recent or expected modernization of National Weather Service operations which will enhance services in the service area;

“(4) an identification of any area within any State which would not receive coverage (at an elevation of 10,000 feet) by the next generation weather radar network;

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“(5) evidence, based upon operational demonstration of modernized National Weather Service operations, which was considered in reaching the conclusion that no degradation in service will result from such action; and

“(6) any report of the Committee submitted under section 707(c) that evaluates the proposed certification.

“(c) Public review. Each certification decision shall be preceded by—

“(1) publication in the Federal Register of a proposed certification; and

“(2) a 60-day period after such publication during which the public may provide comments to the Secretary on the proposed certification.

“(d) Final decision. If after consideration of the public comment received under subsection (c) the Secretary, in consultation with the Committee, decides to close, consolidate, automate, or relocate any such field office, the Secretary shall publish a final certification in the Federal Register and submit the certification to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

“(e) Special circumstances. The Secretary may not close or relocate any field office—

“(1) which is located at an airport, unless the Secretary, in consultation with the Secretary of Transportation and the Committee, first conducts an air safety appraisal, determines that such action will not result in degradation of service that affects aircraft safety, and includes such determination in the certification required under subsection (b); or

“(2) which is the only office in a State, unless the Secretary first evaluates the effect on weather services provided to in-State users, such as State agencies, civil defense officials, and local public safety offices, and includes in the certification required under subsection (b) the Secretary’s determination that a comparable level of weather services provided to such in-State users will remain.

“(f) Liaison officer. The Secretary may not close, consolidate, automate, or relocate a field office until arrangements have been made to maintain for a period of at least 2 years at least one person in the service area to act as a liaison officer who—

“(1) provides timely information regarding the activities of the National Weather Service which may affect service to the community, including modernization and restructuring; and

“(2) works with area weather service users, including persons associated with general aviation, civil defense, emergency preparedness, and the news media, with respect to the provision of timely weather warnings and forecasts.

“Sec. 707. Modernization Transition Committee

“(a) Establishment. There is established a committee of 12 members to be known as the Modernization Transition Committee.

“(b) Membership and terms. (1) The Committee shall consist of—

“(A) five members representing agencies and departments of the United States which are responsible for providing or using weather services, including but not limited to the National Weather Service, the Department of Defense, the Federal Aviation Administration, and the Federal Emergency Management Agency; and

“(B) seven members to be appointed by the Secretary from civil defense and public safety organizations, news media, any labor organization certified by the Federal Labor Relations Authority as an exclusive representative of weather service employees, meteorological experts, and private sector users of weather information such as pilots and farmers.

“(2) The terms of office of a member of the Committee shall be 3 years; except that, of the original membership, four shall serve a 5-year term, four shall serve a 4-year term, and four shall serve a 3-year term. No individual may serve for more than one additional 3-year term.

“(3) The Secretary shall designate a chairman of the Committee from among its members.

“(c) Duties. (1) The Committee may review any proposed certification under section 706 for which the Secretary has provided a notice of intent to certify in the Plan, and should review such a proposed certification if there is a significant possibility of degradation of service within the affected service area. Upon the request of the Committee, the Secretary shall make available to the Committee the supporting documents developed by the Secretary in connection with the proposed certification. The Committee may prepare and submit to the Secretary, prior to publication of the proposed certification, a report which evaluates the proposed certification on the basis of the modernization criteria and with respect to the requirement that there be no degradation of service.

“(2) The Committee shall advise the Congress and the Secretary on—

“(A) the implementation of the Strategic Plan, annual development of the Plan, and establishment and implementation of modernization criteria; and

“(B) matters of public safety and the provision of weather services which relate to the comprehensive modernization of the National Weather Service.

“(d) Pay and travel expenses. Members of the Committee who are not employees of the United States shall each be paid at a rate equal to the daily equivalent of the rate for GS-18 of the General Schedule under section 5332 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the actual performance of duties vested in the Committee. Members shall receive travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code.

“(e) Staff. The Secretary shall make available to the Committee such staff, information, and assistance as it may reasonably require to carry out its activities.

“(f) Termination. The Committee shall terminate on December 31, 1999.

“Sec. 708. Weather Service report

“(a) Report. The Secretary shall prepare a report on the proposed modernization of the National Weather Service and transmit the report, not later than 6 months after the date of enactment of this Act, to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

“(b) Contents. (1) The report required by subsection (a) shall identify the size of the geographic area of responsibility of each proposed Weather

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(a) shall identify the
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Forecast Office and shall include an explanation of the number and type of personnel required at each Weather Forecast Office. For each proposed Weather Forecast Office covering a geographic area greater than two times the average geographic area of responsibility of Weather Forecast Offices nationwide, the report shall detail the reasons for assigning those Weather Forecast Offices a geographic area which differs significantly from the national average.

“(2) The report shall list the number of next generation weather radars that will be associated with each Weather Forecast Office nationwide under the proposed modernization plan. If some Weather Forecast Offices will be associated with more than one such radar, the report shall explain the deviation from the National Weather Service’s stated policy of associating one such radar with one Weather Forecast Office, and shall analyze and compare any differences in the expected efficiency of those Weather Forecast Offices with Weather Forecast Offices that will be associated with only one such radar.

“(c) Consultation. In preparing portions of the report that address Weather Forecast Offices located in areas of the Nation that are uniquely dependent on general aviation as a means of transportation, the Secretary shall consult with local aviation groups. In the case of Alaska, such local groups shall include the Alaska Aviation Safety foundation, the Alaska Airmen’s Association, and the regional representatives of the Aircraft Owners and Pilots Association.

“Sec. 709. Repeals

“The National Aeronautics and Space Administration Authorization Act, Fiscal Year 1989 (15 U.S.C. 313 note), is amended by repealing—

“(1) subsections (b), (c), and (d) of section 407; and

“(2) section 408.”

CODE OF FEDERAL REGULATIONS

National Oceanic and Atmospheric Administration, Department of Commerce—Policies and procedures concerning use of the NOAA A space-based data collection systems, 15 CFR Part 911.

National Oceanic and Atmospheric Administration, Department of Commerce—Modernization of the National Weather Service, 15 CFR Part 946.

CROSS REFERENCES

Counterfeit weather forecasts, punishing the issue or publication of, 18 USCS § 2074.

Flood control, current information to aid, 33 USCS § 706.

Printing and distribution of reports of Secretary of Agriculture and of the Weather Bureau, 44 USCS §§ 1301, 1310.

RESEARCH GUIDE

Annotations:

Weather reports and records as evidence. 57 ALR3d 713.

INTERPRETIVE NOTES AND DECISIONS

From provisions of Act establishing Weather Bu- limit purpose for which Weather Bureau was estab-
reau, it is apparent that Congress intended thereby to lished to specified objectives relating to agriculture,

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mination or certification. If the applicant fails, within the 30-day period, to notify the applicant or applicant agency (if any), the Federal agency in the State in which the activity will be conducted, of its intent to conduct the activity, then the State has the right to review the activity for consistency. The waiver does not prevent the State intending to regulate the activity does not receive notice of the activity.

Content of a consistency determination or certification and agency response.

The Federal agency or applicant agency is required to prepare one determination or certification that will satisfy the requirements of all affected parties with approved management pro-

cesses. The agency responses shall follow the applicable requirements contained in subparts C, D, E and F of this

Mediation and informal negotiations.

The provisions contained in subparts of this part are available for resolution of disputes between affected parties of Federal agencies, and State agencies or applicant agencies. The provisions of this part are also encouraged as alternative means for resolving disputes. OCRM is available to assist the parties in resolving disputes.

§ 932-933 [RESERVED]

SUBCHAPTER C—REGULATIONS OF THE NATIONAL WEATHER SERVICE

PART 946—MODERNIZATION OF THE NATIONAL WEATHER SERVICE

- Sec.
- 946.1 Purpose.
- 946.2 Definitions.
- 946.3 Notification of change of operations and restructuring.
- 946.4 Menu of services.
- 946.5 Change in operations—commissioning and decommissioning.
- 946.6 Change in operations—transferring responsibility and moving field offices.
- 946.7 Preparation of proposed certification for restructuring.
- 946.8 Review of proposed certification for restructuring.
- 946.9 Certification of restructuring.
- 946.10 Liaison officer.

APPENDIX A TO PART 946—NATIONAL WEATHER SERVICE MODERNIZATION CRITERIA
APPENDIX B TO PART 946—AIRPORT TABLES

AUTHORITY: Title VII of Pub. L. 102-567, 106 Stat. 4303 15 U.S.C. 313 note

SOURCE: 58 FR 64091, Dec. 3, 1993, unless otherwise noted.

§ 946.1 Purpose.

(a) This part sets forth the procedures for certification by the Secretary of Commerce that the closure, consolidation, automation or relocation of any field office of the National Weather Service (NWS) pursuant to the implementation of the Strategic Plan for the Modernization of the NWS will not result in any degradation of weather services. Section 706 of Pub. L. 102-567 requires that no such field office be closed, consolidated, automated, or relocated until such certification is made. This part distinguishes these modernization activities which require certification from those changes in operations at a field office which do not require certification.

(b) This part, including specifically these sections which specify when certifications are required, is intended to promote confidence that public safety is being adequately considered during the modernization process. While some of the terms used in these regulations may be identical to those used by the Office of Personnel Management, the General Services Administration, or by

NOAA in personnel regulations, this part does not affect or supersede those regulations. In particular, a determination that the move of a field office is not a "relocation" for purposes of these regulations does not affect an employee's rights to relocation assistance, discontinued service retirement, severance pay, or grade and pay retention.

§ 946.2 Definitions.

Automate (or automation) means to replace employees performing surface observations at a field office with automated weather service observation equipment. For the purposes of this definition, an employee performing surface observations at a field office is replaced when that office, after installing such equipment, reduces or eliminates its responsibility for taking surface observations and removes the employee from that field office, or formally requests the employee to cease performing all observational responsibilities at that office. Automate does not include temporarily reducing the hours of operation during which a field office is responsible for surface observations or augmenting/backing up an ASOS when such reduction results from an unplanned decrease in staff.

Category 1 radar means an existing NWS radar which is to be replaced by a NEX-RAD on the same site or on an adjacent site from which the two radars cannot operate concurrently. A Category 1 radar must be dismantled when the existing tower prevents building a replacement NEX-RAD on the same site or operationally demonstrating and commissioning a replacement NEX-RAD on an adjacent site by physically blocking its beam. A Category 1 radar must be turned off when it prevents operationally demonstrating and commissioning a replacement NEX-RAD on an adjacent site by creating substantial electromagnetic interference.

Change operations at a field office means to transfer service responsibility, commission weather observation systems, decommission a NWS radar, move an entire field office to a new location inside the local commuting and service area, or significantly change the staffing level of a field office except where the staffing change constitutes a consolidation or automation or where there is an unplanned decrease in staff.

Close (or closure) means to remove all weather services, equipment, and personnel from a field office. It does not include a consolidation, automation, or relocation or a move of a field office to another location within the current local commuting and service area.

Commission means to officially charge a new observational technology (e.g., NEXRAD and ASOS) with responsibility for providing weather data within a defined service area or to charge a new weather office support system (e.g., AWIPS) with responsibility for supporting office operations.

Committee means the Modernization Transition Committee established by sec. 707 of Pub. L. 102-567.

Consolidate (or consolidation) means to remove some positions from a field office (without closing that office) after those responsibilities have been reduced or eliminated by the commissioning of one or more NEXRADs, the decommissioning of the radar operated by that office, if any, and the combination of that office's responsibilities with those of another field office. Consolidate does not include temporarily reducing the hours during which a field office is responsible for operating a radar when such reduction results from an unplanned decrease in staff.

Decommission (or permanently decommission) means to permanently withdraw existing official responsibility for providing weather data or weather office support from an existing technology which includes turning off the technology. It does not include temporarily withdrawing responsibility for providing radar data where this action results from:

- (1) System failure;
- (2) The need to dismantle a Category 1 radar to allow the construction of or the operational demonstration and

commissioning of a replacement NEXRAD; or

(3) The need to turn off a Category 1 radar to allow the operational demonstration and commissioning of a replacement NEXRAD.

Field office means a National Weather Service Office (WSO) or a National Weather Service Forecast Office (WSFO).

Inventory of services means all of those weather services from those listed on the menu of services that are provided to the public by a field office in its service area prior to a transition action.

Local Commuting Area means the population center (or two or more neighboring ones) served by an existing field office and includes those surrounding localities that can reasonably be considered part of this single area for transportation purposes. The Local Commuting Area for any field office located in a Metropolitan Area defined by the Office of Management and Budget for statistical purposes shall be the Metropolitan Statistical Area or Primary Metropolitan Statistical Area.

Menu of services means the basic weather services provided by NWS field offices as listed in §946.4.

National Implementation Plan means the plan submitted to Congress as part of the budget justification documents for Fiscal Year 1994 and for each subsequent fiscal year until the modernization is complete.

Regional Director means the Director of one of the six geographical regions of the NWS.

Relocate (or relocation) means to move an entire field office, including all personnel positions, equipment and service responsibility to a location outside the current local commuting or service area of that field office.

Responsible Meteorologist means an employee of the NWS in charge of the office that will be responsible for providing weather services to the area affected by a closure, consolidation, automation, or relocation of a field office.

Restructure means to close, consolidate, automate, or relocate a field office.

Secretary means the Secretary of Commerce or his or her delegate.

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Office means a National Weather Office (WSO) or a National Service Forecast Office

of services means all of other services from those list- e menu of services that are to the public by a field office vice area prior to a transition

mmuting Area means the pop- enter (or two or more neigh- es) served by an existing field l includes those surrounding that can reasonably be con- art of this single area for ation purposes. The Local ng Area for any field office lo- a Metropolitan Area defined ce of Management and Budg- tistical purposes shall be the tan Statistical Area or Pri- copolitan Statistical Area.

f services means the basic ices provided by NWS field listed in §946.4.

Implementation Plan means ublished to Congress as part ge- nification documents e and for each subse- al year until the moderniza- plete.

Director means the Director the six geographical regions S.

(or relocation) means to move field office, including all per- itions, equipment and serv- ibility to a location outside t local commuting or service t field office.

le Meteorologist means an of the NWS in charge of the ill be responsible for pro- ther services to the area af- a closure, consolidation, au- or relocation of a field of-

re means to close, consoli- nate, or relocate a field of-

means the Secretary of or his or her delegate.

Service area means the geographical area for which an existing field office provides weather services or conducts observations.

Strategic Plan means the 10 year strategic plan for the modernization of NWS which was submitted to the Congress by the Secretary on March 10, 1989.

Unplanned decrease in staff means a temporary reduction in the number of employees available for duty at a field office resulting from employee retirement, resignation, extended sick leave or emergency leave, or voluntary acceptance of training or of a position outside that field office.

Weather service means a service or product provided to a service area by a field office.

[58 FR 64091, Dec. 3, 1993, as amended at 59 FR 44314, Aug. 29, 1994]

§946.3 Notification of changes in operations and restructuring.

(a) Beginning with the Fiscal Year 1994 budget submission to Congress and until the modernization is complete, the NWS will submit to Congress annually a National Implementation Plan. The NWS may amend a Plan prior to the submission of the next Plan to include modifications provided that notification of any additional proposed changes in operations or identification of any additional proposed restructuring actions shall be provided to Congress at least 90 days prior to the date of the action.

(b) The NWS will neither change operations at, nor restructure, any field office after September 30, 1993, pursuant to the implementation of the Strategic Plan unless it has provided notification of the relevant action in the most current edition of the National Implementation Plan, or an amendment thereof, and has complied with all requirements of these regulations.

§946.4 Menu of services.

The following are the basic weather services provided by NWS field offices:

- (a) Surface Observations
- (b) Upper Air Observations
- (c) Radar Observations
- (d) Public Forecasts, Statements, and Warnings

(e) Aviation Forecasts, Statements, and Warnings

(f) Marine Forecasts, Statements, and Warnings

(g) Hydrologic Forecasts and Warnings

(h) Fire Weather Forecasts and Warnings

(i) Agricultural Forecasts and Advisories

(j) NOAA Weather Radio Broadcasts

(k) Climatological Services

(l) Emergency Management Support

(m) Special Products and Service Programs

§946.5 Change in operations—commissioning and decommissioning.

(a) Before commissioning any new NEXRAD or ASOS weather observation system, the NWS shall prepare a **Commissioning Report** documenting that the system involved will perform to the Government's specifications; the system has been tested on site and performs reliably; satisfactory maintenance support is in place; sufficient staff with adequate training are available to operate the system; technical coordination with weather service users has been completed; and the system satisfactorily supports field office operations.

(b) The Report required by paragraph (a) of this section shall be based on the scientific and technical criteria set forth in the NWS' NEXRAD and ASOS Commissioning Plans, as appropriate, which criteria shall be published in the FEDERAL REGISTER as the final commissioning criteria in accordance with sec. 704(b)(1) of the Act. In the case of an ASOS commissioning, the Report shall also document that the NWS has consulted with the Federal Aviation Administration (FAA) and has determined that the weather services provided after commissioning will continue to be in full compliance with the applicable FAA flight aviation rules.

(c) Before decommissioning any NWS radar, the NWS shall prepare a Decommissioning Report documenting that all replacement radars needed to provide equal coverage have been commissioned; confirmation of services with users has been completed; and that the radar being decommissioned is no

longer needed to support field office operations. The Decommissioning Report shall be based on the scientific and technical criteria contained in the NWS' Radar Decommissioning Plan, which criteria shall be published in the FEDERAL REGISTER as the final decommissioning criteria in accordance with the requirements of sec. 704(b)(1) of the Act.

(d) If the final commissioning criteria significantly modify the criteria upon which the previous commissioning of a NEXRAD and/or ASOS were based, the NWS shall confirm that the relevant system conforms with the final criteria adopted. The NWS shall not decommission any NWS radar until the final criteria have been adopted.

§946.6 Change in operations—transferring responsibility and moving field offices.

(a) After providing any notification required by §946.3(b), NWS may change operations at a field office to implement the Strategic Plan, including:

(1) Transferring official responsibility for taking radar observations to a NEXRAD Weather Service Forecast Office (NWSFO) or a NEXRAD Weather Service Office (NWSO) that is being established as a future Weather Forecast Office following commissioning of the NEXRAD at the new office;

(2) Transferring official responsibility for taking observations from a Category 1 radar to a backup radar or radars prior to constructing and/or operating a replacement NEXRAD. Before transferring responsibility, the Responsible Meteorologist shall document that technical coordination with users has been completed and that the transition to the replacement NEXRAD can be completed expeditiously;

(3) Transferring its service responsibility for issuing watches, warnings, forecasts and other products to a NWSFO or NWSO;

(4) Significantly reducing its staffing level by transferring or reassigning personnel to support the service responsibilities transferred under paragraph (a)(3) of this section provided that the field office continues to assign the appropriate number of positions established by the NWS Operations Man-

ual to carry out its observation responsibilities; and

(5) Moving an entire field office to a location within the local commuting and service area of that office.

(b) A field office may not significantly reduce its staffing level assigned to support any observation responsibility, including those responsibilities transferred under paragraph (a)(2) of this section and those retained under paragraph (a)(4) of this section, until the Secretary has certified that the automation and/or consolidation will not degrade service in accordance with §946.7.

§946.7 Preparation of proposed certification for restructuring.

(a) Whenever it becomes appropriate to restructure a field office identified in the National Implementation Plan, but prior to taking such action, the Responsible Meteorologist shall make a determination that there will be no degradation of service based on the final criteria published in the FEDERAL REGISTER in accordance with sec. 704 of the Act and recommend a proposed certification. The proposed certification may address all related restructuring actions that occur as part of a coordinated step described in the National Implementation Plan.

(b) The proposed certification shall include:

(1) A description of local weather characteristics and weather-related concerns which affect the weather services provided within the service area;

(2) A detailed comparison of the inventory of services provided within the service area prior to such action and the services to be provided after such action;

(3) Any recent or expected modernization of NWS operations which will enhance services to the affected area;

(4) An identification of any area within any state which will not receive NEXRAD coverage at an elevation of 10,000 feet;

(5) Evidence based upon operational demonstration of modernized NWS operations which support a determination that no degradation in service will result;

its observation respon-
entire field office to a
within the local commuting
area of that office.

field office may not signifi-
cantly reduce its staffing level as-
support any observation res-
pon-ty, including those respon-
sibilities transferred under paragraph
his section and those retained
paragraph (a)(4) of this section,
Secretary has certified that
information and/or consolidation
degrade service in accordance
with § 946.5(a).

Preparation of proposed certifi- cation for restructuring.

Whenever it becomes appropriate
to restructure a field office identified
in the National Implementation Plan,
before taking such action, the Res-
ponsible Meteorologist shall make a
determination that there will be no
degradation of service based on the
criteria published in the FEDERAL
REGISTER in accordance with sec. 704
of the Act and recommend a proposed cer-
tification. The proposed certification
shall address all related restructuring
that occur as part of a coordi-
nation described in the National
Implementation Plan.

Proposed certification shall

describe the location of local weather
services and weather-related
activities which affect the weather serv-
ices provided within the service area;
provide a detailed comparison of the in-
formation of services provided within the
service area prior to such action and
the services to be provided after such

recent or expected mod-
ification of NWS operations which
degrade services to the affected

identification of any area
where coverage will not receive
adequate coverage at an elevation of

Evidence based upon operational
information of modernized NWS op-
erations which support a determina-
tion of no degradation in service will

(6) Any report of the Committee
issued under sec. 707(c) of the Act; and

(7) The Responsible Meteorologist's
determination that there will be no
degradation of service.

(c) If the restructuring proposed to be
certified involves the commissioning of
a NEXRAD, the Responsible Meteorolo-
gist shall also consider the following
evidence from operational demonstra-
tion of modernized operations in reach-
ing the conclusion that no degradation
of service will result:

(1) The Commissioning Report con-
taining the elements described in
§ 946.5(a);

(2) The Decommissioning Report con-
taining the elements described in
§ 946.5(c); and

(3) The Confirmation of Services Re-
port prepared by the NWS in accord-
ance with paragraph (e) of this section.

(d) If the restructuring proposed to
be certified involves the commis-
sioning of an ASOS unit, the Respon-
sible Meteorologist shall also consider
the following evidence from oper-
ational demonstration of modernized
operations in reaching the conclusion
that no degradation of service will re-
sult:

(1) The Commissioning Report con-
taining the elements described in
§ 946.5(a);

(2) The NWS Surface Observation
Modernization Report documenting
that manual observations being discon-
tinued are no longer needed to provide
mission field services; based on the
final scientific and technical criteria
(including all requirements and proce-
dures) published in the FEDERAL REG-
ISTER in accordance with section
704(b)(2) of the act; and

(3) The Confirmation of Services Re-
port prepared by the NWS in accord-
ance with paragraph (e) of this section.

(e) The Confirmation of Services Re-
port required by paragraphs (c) and (d)
of this section shall include a list of
those users who have been contacted
during the confirmation process, to
document that services have not been
degraded. These users shall include the
appropriate media and emergency man-
agers in the service area and the appro-
priate federal and state agencies in-
cluding specifically the FAA if the re-
structuring involves a field office lo-

cated at an airport and consultation
with the FAA has not been conducted
in accordance with § 946.5(b). This Re-
port shall be based on the scientific
and technical criteria set forth in the
Internal and External Communication
and Coordination Plan for the Mod-
ernization and Associated Restruc-
turing of the National Weather Serv-
ice, which criteria shall be included in
the final certification criteria pub-
lished in the FEDERAL REGISTER in ac-
cordance with sec. 704(b)(2) of the Act.

(f) If the restructuring proposed to be
certified involves the relocation of a
field office, the Responsible Meteorolo-
gist shall also consider the following
evidence in reaching the conclusion
that no degradation of service will re-
sult:

(1) Evidence based upon operational
demonstration during earlier mod-
ernization actions in which an entire
field office was moved from one loca-
tion to another including specifically
the impact of such moves on services;

(2) A checklist of all operational
tests and inspections that will be per-
formed at the new location to ensure
that the relocated equipment is fully
operational;

(3) A list of all users notified prior to
the relocation, and a list of the con-
tacts that will be made with the rel-
evant users to confirm operational sta-
tus after the relocation; and

(4) Comments received from notified
users and those received during the
public comment period.

§ 946.8 Review of proposed certifi- cation for restructuring.

The Responsible Meteorologist shall
transmit the proposed certification and
the accompanying documentation to
the Regional Director for review. The
Regional Director may amend or sup-
plement the documentation provided
subsequent readers can easily identify
his or her amendments or supplements.
If the Regional Director agrees with
the proposed certification, he or she
shall endorse the proposed certifi-
cation, and transmit it along with all
the accompanying documentation to
the Secretary. A copy of any proposed
certification shall be provided to the
Committee upon request of the Com-
mittee.

§946.9 Certification of restructuring.

(a) The Secretary shall publish each proposed certification in the FEDERAL REGISTER at least 60 days prior to certification. If, after consideration of the public comments received, the Secretary agrees that the proposed restructuring will not result in any degradation of service to the service area, he or she shall so certify by submitting a certification report to Congress. Upon transmittal of the certification by the secretary, NWS shall promptly publish the certification in the FEDERAL REGISTER stating where copies of the certification and the accompanying documents may be obtained.

(b) The Responsible Meteorologist may restructure only after the certification has been submitted to Congress.

(c) Any field office for which restructuring has been certified under this section shall also be subject to additional certification if that office is closed during stage 2 of the modernization. No field office will close before January 1, 1996.

§946.10 Liaison officer.

Prior to restructuring a field office, the Responsible Meteorologist shall designate at least one person in the affected service area to act as a liaison officer for at least a 2-year period whose duties shall be:

(a) Provide timely information regarding the activities of the NWS which may affect service to the community including specifically modernization and restructuring activities; and

(b) Work with area users, including persons associated with general aviation, civil defense, emergency preparedness, and the news media, with respect to the provision of timely weather warnings and forecasts.

APPENDIX A TO PART 946—NATIONAL WEATHER SERVICE MODERNIZATION CRITERIA

I. Modernization Criteria for Actions Not Requiring Certification

(A) *Commissioning of New Weather Observation Systems*

(1) Automated Surface Observation Systems (ASOS)

Purpose: Successful commissioning for full operational use requires a demonstration, by tests and other means, that the ASOS equipment, as installed in the field office, meets its technical requirements; that the prescribed operating, maintenance, and logistic support elements are in place; that operations have been properly staffed with trained personnel and that the equipment can be operated with all other installed mating elements of the modernized NWS system.

NOTE: It may be necessary to incorporate work-arounds to complete some of the items listed below in a timely and cost-effective manner. A work-around provides for an alternative method of meeting a commissioning criteria through the application of a pre-approved operational procedure implemented on a temporary basis, for example, by human augmentation of the observation for the occurrence of freezing rain, until such time as a freezing rain sensor has been accepted for operational use with ASOS. The ASOS Plan referenced below includes a process for recommending, approving, and documenting work arounds and requires that they be tracked as open items until they can be eliminated by implementation of the originally intended capability.

References: The criteria and evaluation elements for commissioning are set forth and further detailed in the NWS-Sponsored Automated Surface Observing System (ASOS) Site Component Commissioning Plan (the ASOS Plan), more specifically in Addendum I, Appendix D of the ASOS Site Component Commissioning Evaluation Package (the ASOS Package).

Criteria: a. ASOS Acceptance Test: The site component acceptance test, which includes objective tests to demonstrate that the ASOS, as installed at the given site, meets its technical specifications, has been successfully completed in accordance with item 1a, p. D-2 of Appendix D of the ASOS Package.

Commissioning Criteria for Actions Not
Requiring CertificationCommissioning of New Weather Observation
SystemsAutomated Surface Observation Systems
(ASOS)

Successful commissioning for full use requires a demonstration, by other means, that the ASOS equipment installed in the field office, meets all requirements; that the operating, maintenance, and logistic elements are in place; that operations have been properly staffed with personnel and that the equipment is integrated with all other installed material of the modernized NWS system.

It may be necessary to incorporate work-arounds to complete some of the items in a timely and cost-effective manner. A work-around provides for an alternative method of meeting a commissioning criterion through the application of a temporary procedure implemented on a temporary basis, for example, augmentation of the observation frequency of freezing rain, until a freezing rain sensor has been operationally used with ASOS. The referenced below includes a process for recommending, approving, and documenting work-arounds and requires that items be tracked as open items until they can be eliminated by implementation of the intended capability.

The criteria and evaluation elements for commissioning are set forth and detailed in the NWS-Sponsored Automated Surface Observing System (ASOS) Component Commissioning Plan (the more specifically in Addendum D of the ASOS Site Component Commissioning Evaluation Package (the ASOS Package)).

ASOS Acceptance Test: The site acceptance test, which includes tests to demonstrate that the equipment installed at the given site, meets its technical specifications, has been successfully completed in accordance with item 30 to D-32, of Appendix D of the ASOS Package.

b. **Sensor Siting:** Sensor sitings provide representative observations in accordance with Appendix C of the ASOS Package, Guidance for Evaluating Representativeness of ASOS Observations and item 1b, p. D-2 of Appendix D of the ASOS Package.

c. **Initialization Parameters:** Initialization parameters are in agreement with source information provided by the ASOS Program Office, in accordance with item 1c, pp. D-2 & D-3 of Appendix D of the ASOS Package.

d. **Sensor Performance Verification:** Sensor performance has been verified in accordance with the requirements stated in the ASOS Site Technical Manual and item 1d, p. D-3 of the ASOS Package.

e. **Field Modification Kits/Firmware Installed:** All critical field modification kits and firmware for the site as required by attachments 3a & b (pp. D-45 & D-46) or memorandum issued to the regions, have been installed on the ASOS in accordance with item 1e, p. D-4 of Appendix D of the ASOS Package.

f. **Operations and Maintenance Documentation:** A full set of operations and maintenance documentation is available in accordance with items 2a-h, pp. D-5 & D-6 of Appendix D of the ASOS Package.

g. **Notification of and Technical Coordination with Users:** All affected users have been notified of the initial date for ASOS operations and have received a technical coordination package in accordance with item 2i, pp. D-6 & D-7 of Appendix D of the ASOS Package.

h. **Availability of Trained Operations Personnel:** Adequate operations staff are available, training materials are available, and required training has been completed, per section 3.2.3.1 of the ASOS Plan, in accordance with items 3a-c, p. D-8 of Appendix D of the ASOS package.

i. **Maintenance Capability:** Proper maintenance personnel and support systems and arrangements are available in accordance with items 4a-e, pp. D-9 & D-10 of Appendix D of the ASOS Package.

j. **Performance of Site Interfaces:** The equipment can be operated in all of its required modes and in conjunction with all of its interfacing equipment per the detailed checklists of items 5a-b, pp. D-11 & D-19 of Appendix D of the ASOS Package.

k. **Support of Associated NWS Forecasting and Warning Services:** The equipment provides proper support of NWS forecasting and warning services and archiving, including operation of all specified automatic and manually augmented modes per the checklist, items 6a-e, pp. D-20 to D-29, of Appendix D of the ASOS Package.

l. **Service Backup Capabilities:** Personnel, equipment, and supporting services are available and capable of providing required backup readings and services in support of operations when primary equipment is inoperable in accordance with items 7a-g, pp. D-

30 to D-32, of Appendix D of the ASOS Package.

m. **Augmentation Capabilities:** Personnel are available and trained to provide augmentation of ASOS observations in accordance with augmentation procedures, items 8a-c, p. D-33 of Appendix D of the ASOS Package.

n. **Representativeness of Observations:** Observations are representative of the hydrometeorological conditions of the observing location as determined by a period of observation of at least 60 days prior to commissioning in accordance with Appendix C and item 6e, pp. D-27 to D-29 of Appendix D of the ASOS Package.

(2) WSR-88D Radar System

Purpose: Successful commissioning for full operational use requires a demonstration, by tests and other means, that the WSR-88D radar system, as installed in the field office, meets its technical requirements; that the prescribed operating, maintenance, and logistic support elements are in place; that operations have been properly staffed with trained personnel; and that the equipment can be operated with all other installed mating elements of the modernized NWS system.

NOTE: It may be necessary to incorporate work-arounds to complete some of the items listed below in a timely and cost-effective manner. A work-around provides for an alternative method of meeting a commissioning criterion through the application of a pre-approved operational procedure implemented on a temporary basis. The WSR-88D Plan referenced below includes a process for recommending, approving, and documenting work-arounds and requires that they be tracked as open items until they can be eliminated by implementation of the originally intended capability.

Reference: The criteria and evaluation elements for commissioning are set forth and further detailed in the NWS-Sponsored WSR-88D Site Component Commissioning Plan (the 88D Plan) and an Attachment to that Plan, called the WSR-88D Site Component Commissioning Evaluation Package (the WSR-88D Package).

Criteria: a. **WSR-88D Radar Acceptance Test:** The site component acceptance test, which includes objective tests to demonstrate that the WSR-88D radar, as installed at the given site, meets its technical specifications, has been successfully completed in accordance with items 1a-f, p. A-2 of Appendix A of the WSR-88D Package.

b. **Availability of Trained Operations and Maintenance Personnel:** Adequate operations and maintenance staffs are available, training materials are available, and required training has been completed in accordance with items 2a-h, pp. A-3 & A-4 of Appendix A of the WSR-88D Package.

c. **Satisfactory Operation of System Interfaces:** The system can be operated in all of its required modes and in conjunction with all of its interfacing equipment in accordance with items 3a-e, p. A-5 of Appendix A of the WSR-88D Package.

d. **Satisfactory Support of Associated NWS Forecasting and Warning Services:** The system provides proper support of NWS forecasting and warning services, including at least 96 percent availability of the radar coded message for a period of 30 consecutive days prior to commissioning in accordance with items 4a-kk, pp. A-6 to A-17 of Appendix A of the WSR-88D Package.

e. **Service Backup Capabilities:** Service backup capabilities function properly when the primary system is inoperable in accordance with items 5a-e, p. A-18 of Appendix A of the WSR-88D Package.

f. **Documentation for Operations and Maintenance:** A full set of operations and maintenance documentation is available in accordance with items 6a-n, pp. A-19 to A-25 of Appendix A of the WSR-88D Package.

g. **Spare Parts and Test Equipment:** A full complement of spare parts and test equipment is available on site in accordance with items 7a-e, p. A-26, of Appendix A of the WSR-88D Package.

(B) Decommissioning an Outdated NWS Radar

Purpose: Successful decommissioning of an old radar requires assurance that the existing radar is no longer needed to support delivery of services and products and local office operations.

References: The criteria and evaluation elements for decommissioning are set forth and further detailed in the NWS-Sponsored Network and Local Warning Radars (Including Adjunct Equipment) Site Component Decommissioning Plan (the Plan), more specifically in Appendix B to that Plan, called the Site Component Decommissioning Evaluating Package, and in Section 3.3 of the Internal and External Communication and Coordination Plan for the Modernization and Associated Restructuring of the Weather Service.

Criteria: a. **Replacing WSR-88D(s) Commissioning/User Service Confirmation:** The replacing WSR-88D(s) have been commissioned and user confirmation of services has been successfully completed, i.e., all valid user complaints related to actual system performance have been satisfactorily resolved, in accordance with items 1a-c, p. B-10 of Appendix B of the Plan.

b. **Operation Not Dependent on Existing Radar:** The outdated radar is not required for service coverage, in accordance with items 2a-c, p. B-11 of Appendix B of the Plan.

c. **Notification of Users:** Adequate notification of users has been provided, in accordance with items 3a-f, pp. B-12 & B-13 of Appendix B of the Plan.

d. **Disposal of Existing Radar:** Preparations for disposal of the old existing radar have been completed, in accordance with items 4a-d, pp. B-14 & B-15 of Appendix B of the Plan.

(C) Evaluating Staffing Needs for Field Offices in Affected Areas

References: The criteria and evaluation elements are set forth and further detailed in the ASOS and WSR-88D Evaluation Packages and in the Human Resources and Position Management Plan for the National Weather Service Modernization and Associated Restructuring (the Human Resources Plan).

Criteria: 1. **Availability of Trained Operations and Maintenance Personnel at a NEXRAD Weather Service Forecast Office or NEXRAD Weather Service Office:** Adequate operations and maintenance staffs are available to commission a WSR-88D, specifically criterion b. set forth in section I.A.2. of this Appendix which includes meeting the Stage 1 staffing levels set forth in chapter 3 of the Human Resources Plan.

2. **Availability of Trained Operations and Maintenance Personnel at any field office receiving an ASOS:** Adequate operations and maintenance staff are available to meet the requirements for commissioning an ASOS, specifically criteria h and i set forth in section I.A.1 of this Appendix.

II. CRITERIA FOR MODERNIZATION ACTIONS REQUIRING CERTIFICATION

(A) Modernization Criteria Common to all Types of Certifications (Except as Noted)

1. **Notification:** Advanced notification and the expected date of the proposed certification have been provided in the National Implementation Plan.

2. **Local Weather Characteristics and Weather Related Concerns:** A description of local weather characteristics and weather related concerns which affect the weather services provided to the affected service area is provided.

3. **Comparison of Services:** A comparison of services before and after the proposed action demonstrates that all services currently provided to the affected service area will continue to be provided with no degradation of services.

4. **Recent or Excepted Modernization of NWS Operations in the Affected Service Area:** A description of recent or expected modernization of NWS operations in the affected service area is provided.

5. **NEXRAD Network Coverage:** NEXRAD network coverage or gaps in coverage at 10,000 feet over the affected service area are identified.

of 1 Radar: Preparations
of t. existing radar have
ed, in accordance with items
1 & B-15 of Appendix B of the

Staffing Needs for Field Offices in Affected Areas

The criteria and evaluation ele-
ments set forth and further detailed in
the WSR-88D Evaluation Pack-
age, Human Resources and Posi-
tioning Plan for the National
Weather Service Modernization and Associ-
ated Restructuring (the Human Resources

Availability of Trained Oper-
ation and Maintenance Personnel at a
field office Service Forecast Office or
other Service Office: Adequate
operation and maintenance staffs are avail-
able through a WSR-88D, specifically
set forth in section I.A.2. of this
Appendix includes meeting the Stage 1
criteria set forth in chapter 3 of the
Modernization Plan.

Availability of Trained Operations and
Maintenance Personnel at any field office re-
location: Adequate operations and
maintenance staff are available to meet the
criteria for commissioning an ASOS,
set forth in section I.B. of this
Appendix.

CRITERIA FOR MODERNIZATION ACTIONS REQUIRING CERTIFICATION

Criteria Common to all
Modernization Actions
(Except as Noted)

1. Advanced notification and
approval of the proposed certifi-
cation provided in the National
Weather Service Modernization Plan.

2. Weather Characteristics and
Concerns: A description of
weather characteristics and weather re-
asons which affect the weather serv-
ice to the affected service area is

3. Comparison of Services: A comparison of
services before and after the proposed action
to ensure that all services currently pro-
vided in the affected service area will con-
tinue to be provided with no degradation of

4. Excepted Modernization of
Services in the Affected Service
Area: A description of recent or expected
changes in NWS operations in the af-
fected service area is provided.

5. Network Coverage: NEXRAD
coverage or gaps in coverage at
the affected service area are

6. Air Safety Appraisal (applies only to re-
location and closure of field offices at an air-
port): Verification that there will be no deg-
radation of service that affects aircraft safe-
ty has been made by conducting an air safety
appraisal in consultation with the Federal
Aviation Administration.

7. Evaluation of Services to In-state Users
(applies only to relocation and closure of the
only field office in a state): Verification that
there will be no degradation of weather serv-
ices provided to the state has been made by
evaluating the effect on weather services
provided to in-State users.

8. Liaison Officer: Arrangements have been
made to retain a Liaison Officer in the af-
fected service area for at least two years to
provide timely information regarding the ac-
tivities of the NWS which may affect service
to the community, including modernization
and restructuring; and to work with area
weather service users, including persons as-
sociated with general aviation, civil defense,
emergency preparedness, and the news
media, with respect to the provision of time-
ly weather warnings and forecasts.

9. Meteorologist-In-Charge's (MIC) Rec-
ommendation to Certify: The MIC of the fu-
ture WFO that will have responsibility for
the affected service area has recommended
certification in accordance with 15 CFR
946.7(a).

10. Regional Director's Certification: The
cognizant Regional Director has approved
the MIC's recommended certification of no
degradation of service to the affected service
area in accordance with 15 CFR 946.8.

(B) Modernization Criteria Unique to Consolidation Certifications

1. WSR-88D Commissioning: All necessary
WSR-88D radars have been successfully com-
missioned in accordance with the criteria set
forth in section I.A.2. of this Appendix.

2. User Confirmation of Services: All valid
user complaints related to actual system
performance have been satisfactorily re-
solved in accordance with section 3.3 of the
Internal and External Communication and
Coordination Plan for the Modernization and
Associated Restructuring of the National
Weather Service.

3. Decommissioning of Existing Radar: The
existing radar, if any, has been successfully
decommissioned in accordance with the cri-
teria set forth in section I.B. of this Appen-
dix.

(C) Modernization Criteria Unique to Relocation Certifications

1. Approval of Proposed Relocation Check-
list: The cognizant regional director has ap-
proved a proposed relocation checklist set-
ting forth the necessary elements in the re-
location process to assure that all affected
users will be given advanced notification of

the relocation, that delivery of NWS services
and products will not be interrupted during
the office relocation, and that the office to
be relocated will resume full operation at
the new facility expeditiously so as to mini-
mize the service backup period.

Specific Elements: a. Notification of and
Technical Coordination with Users: The pro-
posed relocation checklist provides for the
notification of and technical coordination
with all affected users.

b. Identification and Preparation of
Backup Sites: The proposed relocation
checklist identifies the necessary backup
sites and the steps necessary to prepare to
use backup sites to ensure service coverage
during the move and checkout period.

c. Start of Service Backup: The proposed
relocation checklist provides for invocation
of service backup by designated sites prior to
office relocation.

d. Systems, Furniture and Communica-
tions: The proposed relocation checklist
identifies the steps necessary to move all
systems and furniture to the new facility
and to install communications at the new fa-
cility.

e. Installation and Checkout: The proposed
relocation checklist identifies all steps to in-
stall and checkout systems and furniture
and to connect to communications at the
new facility.

f. Validation of Systems Operability and
Service Delivery: The proposed relocation
checklist provides for validation of system
operability and service delivery from the
new facility.

2. Publishing of the Proposed Relocation
Checklist and Evidence Form Completed
Moves: The proposed relocation checklist
and the evidence from other similar office
moves that have been completed, have been
published in the FEDERAL REGISTER for pub-
lic comment. The evidence from the other of-
fice moves indicates that they have been suc-
cessfully completed.

3. Resolution of Public Comments Re-
ceived: All responsive public comments re-
ceived from publication, in the FEDERAL
REGISTER, of the checklists and of the evi-
dence from completed moves are satisfac-
torily answered.

(D) Modernization Criteria Unique to Automation Certifications

1. Compliance with flight aviation rules
(applies on airports only): Consultation with
the Federal Aviation Administration (FAA)
has verified that the weather services pro-
vided after the commissioning of the rel-
evant ASOS unit(s) will be in full compliance
with applicable Federal Aviation Regula-
tions promulgated by the FAA.

2. ASOS Commissioning: The relevant
ASOS unit(s) have been successfully commis-
sioned in accordance with the criteria set
forth in section I.A.1 of Appendix A to the

Weather Service Modernization Regulations, 15 CFR part 946.

3. User Confirmation of Services: Any valid user complaints related to actual system performance received since commissioning of the ASOS have been satisfactorily resolved and the issues addressed in the MIC's recommendation for certification.

4. Aviation Observation Requirement: At sites subject to automation certification, all surface observations and reports required for aviation services can be generated by an ASOS augmented as necessary by non-NWS personnel.

a. The ASOS observation will be augmented/backed-up to the level specified in Appendix B as described in the Summary Chart of the FAA's Weather Observation Service Standards.

b. The transition checklist has been signed by the appropriate Region Systems Operations Division Chief (applies to service level A, B and C airports only).

c. Thunderstorm occurrence is reported in the ASOS observation through the use of a lightning sensor (applies to service level D airports only, excluding Homer, Alaska).

d. Freezing rain occurrence is reported in the ASOS observation through the use of a freezing rain sensor. Among service level D airports, this criterion is not applicable to Ely, Nevada and Lander, Wyoming.

5. Pilot Education and Outreach Completed: The Air Safety Foundation has conducted a pilot education and outreach effort to educate pilots on the use of automated observations and measure their understanding and acceptance of automated observing systems, and the MTC has had an opportunity to review the results of this effort (applies to service level D airports only).

6. General Surface Observation Requirement: The total observations available are adequate to support the required inventory of services to users in the affected area. All necessary hydrometeorological data and information are available through ASOS as augmented in accordance with this section, through those elements reported as supplementary data by the relevant Weather Forecast Office(s), or through other complementary sources. The adequacy of the total surface observation is addressed in the MTC's recommendation for certification.

Summary of FAA's Weather Observation Service Standards

"D" Level Service
Stand-Alone ASOS



"C" Level Service Add-Ons

- Backup basic service
- Augmentation of:
 - Thunderstorm occurrence
 - Tornado activity
 - Hail
 - Virga
 - Volcanic ash
 - Tower visibility



"B" Level Service Augmentation Add-Ons

- Long-line Runway Visual Range (RVR) at designated sites (may be instantaneous readout)
- Freezing drizzle
- Ice pellets
- Snow depth on ground
- Snow increasing rapidly remark
- Thunderstorm/lightning location remark
- Observed significant weather not at station



"A" Level Service Augmentation Add-Ons

- Either 10-minute long-line RVR or visibility increments down to 1/8, 1/16, and 0 miles
- Sector visibility
- Variable sky
- Cloud types
- Cloud layers above 12,000 feet
- Widespread dust, sand, and smoke obstructions
- Volcanic eruptions

(E) Modernization Criteria Unique to Closure Certifications

solidated, as defined in §946.2 of the basic modernization regulations, this action has been completed as evidenced by the approved

1. Consolidation Certification: If the field office proposed for closure has or will be con-

certification or can be completed as evidenced by all of the documentation that all of the requirements of sections II.A. and II.B of this Annex have been completed.

2. Automation Certification: If the field office proposed for closure has or will be automated, as defined in §946.2 of the basic modernization regulations, this action has been completed as evidenced by the approved certification or can be completed as evidenced by documentation that all of the requirements of sections II.A. and II.C. of this Annex has been completed.

3. Remaining Services and/or Observations: All remaining service and/or observational responsibilities, if applicable to the field office proposed for closure, have been transmitted as addressed in the MIC's recommendation for certification.

4. User Confirmation of Services: Any valid user complaints received related to provision of weather services have been satisfactorily resolved and the issues addressed in the MIC's recommendation for certification.

5. Warning and Forecast Verification: Warning and forecast verification statistics, produced in accordance with the Closure Certification Verification Plan, have been utilized in support of the MIC's recommendation for certification.

[59 FR 9923, Mar. 2, 1994 as amended at 61 FR 39865, July 31, 1996; 61 FR 53311, Oct. 11, 1996; 62 FR 38903, July 21, 1997]

APPENDIX B TO PART 946—AIRPORT TABLES

"A" Level Service Airports:

*Akron, OH	CAK
*Albany, NY	ALB
*Atlanta, GA	ATL
*Baltimore, MD	BWI
*Boston, MA	BOS
Charlotte, NC	CLT
*Chicago-O'Hare (AV), IL	ORD
Cincinnati, OH	CVG
Columbus, OH	CMH
*Dayton, OH	DAY
*Des Moines, IA	DSM
*Detroit, MI	DTW
*Fairbanks, AK	FAI
*Fresno, CA	FAT
*Greensboro, NC	GSO
*Hartford, CT	BDL
Indianapolis, IN	IND
*Kansas City, MO	MCI
*Lansing, MI	LAN
Las Vegas, NV	LAS
Los Angeles (AV), CA	LAX
*Louisville, KY	SDF
*Milwaukee, WI	MKE
*Minneapolis, MN	MSP
*Newark, NJ	EWR
*Oklahoma City, OK	OKC
Phoenix, AZ	PHX
*Portland, OR	PDX

*Providence, RI	PVD
*Raleigh, NC	RDU
*Richmond, VA	RIC
*Rochester, NY	ROC
*Rockford, IL	RFD
*San Antonio, TX	SAT
San Diego, CA	SAN
*San Francisco, CA	SFO
*Spokane, WA	GEG
*Syracuse, NY	SYR
Tallahassee, FL	TUL
Tulsa, OK	TUL

"B" Level Service Airports:

*Baton Rouge, LA	BTR
*Billings, MT	BIL
*Charleston, WV	CRW
*Chattanooga, TN	CHA
Colorado Springs, CO	COS
Daytona Beach, FL	DAB
El Paso, TX	ELP
Flint, MI	FNT
Fort Wayne, IN	FWA
Honolulu, HI	HNL
*Huntsville, AL	HSV
*Knoxville, TN	TYS
*Lincoln, NE	LNK
Lubbock, TX	LBB
*Madison, WI	MSN
*Moline, IL	MLI
*Montgomery, AL	MGM
*Muskegon, MI	MKG
*Norfolk, VA	ORF
Peoria, IL	PIA
*Savannah, GA	SAV
*South Bend, IN	SBN
Tucson, AZ	TUS
*West Palm Beach, FL	PBI
*Youngstown, OH	YNG

"C" Level Service Airports:

Abilene, TX	ABI
Allentown, PA	ABE
Asheville, NC	AVL
Athens, GA	AHN
Atlantic City, NJ	ACY
Augusta, GA	AGS
Austin, TX	AUS
Bakersfield, CA	BFL
Bridgeport, CT	BDR
Bristol, TN	TRI
Casper, WY	CPR
Columbia, MO	COU
Columbus, GA	CSG
Dubuque, IA	DBQ
Elkins, WV	EKN
Erie, PA	ERI
Eugene, OR	EUG
Evansville, IN	EVV
Fargo, ND	FAR
Fort Smith, AR	FSM
Grand Island, NE	GRI
Helena, MT	HLN
Huntington, WV	HTS
Huron, SD	HON
Kahului, HI	OGG
Key West, FL	EYW
Lewiston, ID	LWS
Lexington, KY	LEX

RI	PVD
CA	RDU
VA	RIC
NY	ROC
	RFD
TX	SAT
CA	SAN
CA	SFO
VA	GEG
NY	SYR
FL	TUL
	TUL
ce Airports:	
e, LA	BTR
	BIL
WV	CRW
TN	CHA
ings, CO	COS
ch, FL	DAB
	ELP
	FNT
N	FWA
	HNL
	HSV
	TYS
	LNK
	LBB
	MSN
	MLI
AL	MGM
	MKG
	ORF
	PIA
	SAV
N	SBN
	TUS
ach, FL	PBI
OH	YNG
Airports:	
	ABI
	ABE
	AVL
	AHN
	ACY
	AGS
	AUS
	BFL
	BDR
	TRI
	CPR
	COU
	CSG
	DBQ
	EKN
	ERI
	EUG
	EVV
	FAR
	FSM
	GRI
	HLN
	HTS
	HON
	OGG
	EYW
	LWS
	LEX

Lynchburg, VA	LYH
Macon, GA	MCN
Mansfield, OH	MFD
Meridian, MS	MEI
Olympia, WA	OLM
Port Arthur, TX	BPT
Portland, ME	PWM
Rapid City, SD	RAP
Redding, CA	RDD
Reno, NV	RNO
Roanoke, VA	ROA
Rochester, MN	RST
Salem, OR	SLE
Santa Maria, CA	SMX
Sioux City, IA	SUX
Springfield, IL	SPI
Stockton, CA	SCK
Toledo, OH	TOL
Waco, TX	ACT
Waterloo, IA	ALO
Wilkes-Barre, PA	AVP
Williamsport, PA	IPT
Wilmington, DE	ILG
Worcester, MA	ORH
Yakima, WA	YKM
"D" Level Service Airports:	
Alamosa, CO	ALS
Alpena, MI	APN

Astoria, OR	AST
Beckley, WV	BKW
Caribou, ME	CAR
Concordia, KS	CNK
Concord, NH	CON
Ely, NV	ELY
Havre, MT	HVR
Homer, AK	HOM
Houghton Lake, MI	HTL
International Falls, MN	INL
Kalispell, MT	FCA
Lander, WY	LND
Norfolk, NE	OFK
Sault Ste. Marie, MI	SSM
Scottsbluff, NE	BFF
Sheridan, WY	SHR
St. Cloud, MN	STC
Tupelo, MS	TUP
Valentine, NE	VTN
Victoria, TX	VCT
Wichita, Falls, TX	SPS
Williston, ND	ISN
Winnemucca, NV	WMC

* Long-line RVR designated site.

[62 FR 38905, July 21, 1997]

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The FAA will approve or disapprove the application, in whole or in part, no later than September 6, 1996.

The following is a brief overview of the impose and use application number AWP-96-03-C-00-ACV.

Level of proposed PFC: \$3.00.

Proposed charge effective date: October 15, 1996.

Proposed charge expiration date: December 31, 1998.

Total estimated PFC revenue: \$525,258.00.

Brief description of the proposed impose and use projects: Arcata-Eureka Airport—Miscellaneous Improvements (Taxiway System Rehabilitation, Emergency Generator Installation (Terminal Building & Fire Hall), Safety Area Improvements and Regrading, Terminal Apron Drainage Improvements), Emergency Storm Drain Repair, Clear Zone—Runway Protection Zone (RPZ) Land Purchase, Security Gate—Turn Style (one way, Rohnerville Airport—RPZ Property Purchase.

Impose only project: Future Property Purchase Reserve Account at Arcata-Eureka Airport.

Class or classes of air carriers which the public agency has requested not be required to collect PFCs: None.

Any person may inspect the application in person at the FAA office listed above under **FOR FURTHER INFORMATION CONTACT** and at the FAA Regional Airports Division located at: Federal Aviation Administration, Airports Division, 15000 Aviation Blvd., Lawndale, CA 90261.

In addition, any person may, upon request, inspect the application, notice and other documents germane to the application in person at the County of Humboldt.

Issued in Hawthorne, California, on June 14, 1996.

Ellsworth Chan,

Acting Manager, Airports Division, Western-Pacific Region.

[FR Doc. 96-16110 Filed 6-24-96; 8:45 am]

BILLING CODE 4910-13-M

Weather Observation Service Standards

AGENCY: Federal Aviation Administration (FAA) DOT.

ACTION: Notice of policy statement.

SUMMARY: The American people have demanded a smaller, more efficient government; toward that end, the resources of the National Airspace System must be streamlined and service provided in a safe yet economical way. In November 1994, senior management officials from the Federal Aviation

Administration (FAA) and the National Weather Service (NWS) met with executives from fourteen national aviation associations concerning surface aviation observation services. They reached an agreement that the government would work with industry to define various support levels for surface observations.

In addition, in March 1995, and in accordance with the Office of Management and Budget (OMB) policy, the FAA began the process to assume responsibility for aviation surface weather observations beginning in FY 1996. As the NWS automates field offices and reallocates their personnel under this plan, the FAA will undertake accountability for observations at many NWS ASOS sites. The NWS has begun transitioning these ASOS sites to the FAA as the ASOSs are commissioned and has solicited public comment (61 FR 19595; May 2, 1996). The FAA also expanded by more than two hundred, the sites to receive ASOSs, thus enhancing safety at sites without weather observations. All of these activities prompted the FAA to take aggressive action in addressing surface aviation observation requirements and do it within modest resource gains.

As a result, a government/industry team has worked for a year and a half to comprehensively reassess the requirements for surface observations at the nation's airports. That work has resulted in agreement on a set of service standards as well as the FAA and NWS Automated Surface Observing System (ASOS) sites to which the standards will apply. This notice outlines the four kinds of service, explains the method used to determine which airports receive which type of service, and contains a listing of the airports and the service categories in which they fall. The FAA, NWS and Industry representatives believe the service standards approach supports the best allocation of scarce resources.

FOR FURTHER INFORMATION CONTACT: Ragena Aarnio, Aviation Policy and Industry Relations Branch, 400 7th St SW, Plaza 200, Washington, DC 20590; telephone (202) 336-4474.

SUPPLEMENTARY INFORMATION: The term *Service Standards* refers to four levels of detail in the weather observation at sites where there is a commissioned ASOS. The first category, known as Service Level D, is completely automated service, at which the ASOS observation will constitute the entire observation, i.e., no additional weather information is added by a human weather observer. A partial list of the airports that fit in this category are provided at the end of

this Notice. Some of these airports currently have contract weather observers providing the service. Many other sites (60-80) will be expanded to include automated systems; they are currently under review. Information on specific additional sites is available upon request.

The second category, tower-augmented service, also known as Service Level C, encompasses approximately two hundred and fifty airports. At this level, a human observer adds additional information to the automated observation. Augmentation includes the following parameters: thunderstorms, tornadoes, hail, virga, volcanic ash, and tower visibility. In addition, in the event of an ASOS malfunction or the ASOS reporting unrepresentative data, the human observer may insert the correct value or more representative information into the observation. This is referred to as *backup*.

Backup consists of inserting the following parameters where available: wind, visibility, precipitation/obstruction to vision type, cloud height, sky cover, temperature, dewpoint and altimeter setting. This level of service would be provided at all towered airports during hours of operation. During hours that the tower is closed, the ASOS will provide observations without backup or augmentation. These airports are listed as tower-augmented (Service Level C) airports at the end of this notice. Although this category is listed as *tower-augmented*, the service may be provided by Flight Service Stations at selected sites.

At 135 airports, adding more detail to the weather observation was considered optimum. These airports were divided into two categories, major aviation hubs and high traffic volume airports with average or worse weather, referred to as Service Level A airports; and the remaining group of airports that are smaller hubs or special airports in other ways, that have worse than average bad weather operations for thunderstorms and/or freezing/frozen precipitation, and/or that are remote airports, referred to as Service Level B airports.

Service Level B airports will receive augmentation and backup (C-level service) plus long-line Runway Visual Range (RVR), which may be an instantaneous readout. If observed, the following elements will be added to the observation: freezing drizzle versus freezing rain, ice pellets, snow depth and snow increasing rapidly remarks, thunderstorm/lightning location remarks and observed significant weather not at the station remarks. At selected airports in this category, during

hours of low traffic volume, the service may revert to Service Level C, tower-augmented service, or Service Level D, automated service.

Service Level A airports will receive, in addition to the services described above, 10 minute long-line RVR or additional visibility increments of $\frac{1}{8}$, $\frac{1}{16}$ and 0. If observed, the following elements will be added to the observation: sector visibility, variable sky condition, cloud layers above 12,000 feet and cloud types, widespread dust, sand and other obscurations and volcanic eruptions.

At selected sites, Flight Service Stations may do the support at Level A, B, or C airports. In lieu of a contract of NWS observer at a Level A, B or C airport, a non-government entity, such as a Fixed Base Operator or commercial aviation operator may agree to provide augmentation or backup to the ASOS observation, at no cost to the government. On a case-by-case basis, arrangements can be made to install an operator interface device, provide training materials, and determine a payment schedule for any recurring costs associated with the activity.

More detailed information on Service Standard procedures, including augmentation and backup, is contained in FAA Order 7900.5A. This document is available upon request.

Implementation Schedule

The date for implementation of Service Standards for each airport will be based upon a number of factors, including NWS transition dates, ASOS commissioning dates and the FAA budget. Sufficient budget for implementing Service Levels has been requested for FY 97. However, FAA budget resources are insufficient in FY 96 to fully fund observations at the A and B Service Levels at all sites designated for those Service Standards. For Level 5 towered sites, the FAA has already allocated funds for Service Level A support to begin immediately upon commissioning of ASOS; those sites are identified by an asterisk in the list at this end of this Notice.

The implementation date will be included in a Notice to Airmen and/or in the Airport/Facility Directory when transition is imminent. Information on the schedule for specific sites is available on request.

Ranking Process

The criteria used to rank the airports were based on (1) occurrence of significant weather weighted by traffic counts; (2) distance to the nearest suitable alternate airport; and (3) critical airport characteristics. These criteria

produced a score for each airport which determined their level of service. Seventy-eight ASOS sites have the greatest augmentation needs and will receive expanded service (Level A); fifty-seven to receive enhanced service (Level B); two hundred and fifty to receive tower augmentation (Level C); and another nearly four hundred to receive automated service (Level D). The composite scores assigned were solely based on weighted objective criteria designed to capture critical airport characteristics as follows.

Bad Weather Operations Score

This score is calculated by (1) adding the percentage of times that the airport is impacted by thunderstorms, freezing and/or frozen precipitation (including freezing rain, freezing drizzle, snow, snow pellets, snow squalls, snow showers, ice pellets, ice pellet showers, ice crystals), and visibility less than or equal to .5 mile and multiplying that percentage sum times total operations at that airport; (2) multiplying the percentage of time the airport experiences visibility less than or equal to 3 miles times the number of all operations and then multiplying that figure by .5; (3) summing the figures from steps 1-2 above; and (4) setting the resultant figures to a linear scale ranging from 0 to 18. The total score range was set at 0 to 18 to coincide with the combined total score range of the airport characteristics and the alternate airport criteria as described in the next two paragraphs. The traffic count data utilized is FY 1994.

For sites that did not have any weather information available, an alternate method was devised to compute weather scores. Each airport which had a composite score of 2 or more, even without weather data, was assigned weather information (surrogate weather) from the nearest airport with similar weather. This step was omitted for airports with a non-weather composite score of less than 2 because adding even a high weather score to such sites would not cause them to need expanded service. A list of these airports and the surrogate weather utilized for them is available upon request.

Score for Distance to Nearest Suitable Alternate Airport

This score gives credit for airports for which the nearest suitable alternate is a greater distance away. Where available, these alternates were selected from an Air Transport Association-provided list of actual alternates utilized for certain airports. Otherwise, an automated approach was used to determine these

alternates based on the following requirements

- The alternate site must have some observation capabilities. It must be an FAA or NWS ASOS site; an FAA or NWS contract weather observer observation site; a Federal or Non-Federal Automated Weather Observing Site (AWOS) site; or a Supplementary Aviation Weather Reporting Site (SAWRS) station.

- If the destination airport has a Terminal Airdrome Forecast (TAF) issued, the alternate site must have a TAF issued also.

- If the destination airport is a Part 139 airport, the alternate site must be a Part 139 airport also.

The scoring was done using Table 1.

TABLE 1.—Nearest Suitable Alternate Airport Score

Miles to the nearest alternate airport	Score
0-75	0
76-125	1
126-175	2
176-225	3
226-275	4
276 miles or greater	5

Airport Characteristics Score

This score is given based on the applicability of the scores in Table 2. The tower levels are those established as 3/11/96.

TABLE 2.—Airport Characteristics Score

Characteristics	Score
Tower Level	0-5
Special Airport	0, 1
Hub Airport	0, 2
National Airspace Reporting System (NPRS) Airport	0, 1
Terminal Doppler Weather Radar (TDWR) Airport	0, 1
CAT II/III Qualified	0-2
Long-Line RVR	0, 1

Ranking

The scores from the three areas described above were then added together and each airport was assigned a composite score and ranked accordingly. Information on the process of determining the exact boundaries between service levels, as well as scores for individual airports, are available upon request.

This following list includes the service level categories and the airports that fall into each category. The airports in each service level category are listed by state and the city where the airport is located. The airport's three letter location identifier is also included. For

Level 5 towered sites, the FAA has already allocated funds for Service Level A support to begin immediately upon commissioning of ASOS; those sites are identified by an asterisk in the list below.

SERVICE LEVEL A

AK	.....	Anchorage	.....	ANC
AK	.....	Bethel	.....	BET
AK	.....	Fairbanks	.....	FAI
AK	.....	Juneau	.....	JNU
AZ	.....	Phoenix	.....	PHX*
CA	.....	Fresno	.....	FAT
CA	.....	Long Beach	.....	LGB
CA	.....	Los Angeles	.....	LAX*
CA	.....	Oakland	.....	OAK
CA	.....	Ontario	.....	ONT
CA	.....	San Diego	.....	SAN
CA	.....	San Francisco	.....	SFO*
CA	.....	Santa Ana	.....	SNA
CA	.....	Van Nuys	.....	VNY
CO	.....	Denver	.....	APA
CO	.....	Denver	.....	DEN*
CT	.....	Windsor Locks	.....	BDL
DC	.....	Washington	.....	DCA*
DC	.....	Washington	.....	IAD*
FL	.....	Jacksonville	.....	JAX
FL	.....	Miami	.....	MIA*
FL	.....	Orlando	.....	MCO*
FL	.....	Tallahassee	.....	TLH
FL	.....	Tampa	.....	TPA*
GA	.....	Atlanta	.....	ATL*
IA	.....	Des Moines	.....	DSM
IL	.....	Chicago	.....	MDW
IL	.....	Chicago	.....	ORD*
IL	.....	Rockford	.....	RFD
IN	.....	Indianapolis	.....	IND
KS	.....	Wichita	.....	ICT
KY	.....	Louisville	.....	SDF
KY/OH	.....	Covington/Cincinnati	.....	CVG*
LA	.....	New Orleans	.....	MSY
MA	.....	Boston	.....	BOS*
MD	.....	Baltimore	.....	BWI
MI	.....	Detroit	.....	DTW*
MI	.....	Grand Rapids	.....	GRR
MI	.....	Lansing	.....	LAN
MI	.....	Pontiac	.....	PTK
MN	.....	Minneapolis	.....	MSP
MO	.....	Kansas City	.....	MCI
MO	.....	St Louis	.....	STL*
NC	.....	Charlotte	.....	CLT*
NC	.....	Greensboro	.....	GSO
NC	.....	Raleigh/Durham	.....	RDU
NJ	.....	Newark	.....	EWR*
NM	.....	Albuquerque	.....	ABQ
NV	.....	Las Vegas	.....	LAS
NY	.....	Albany	.....	ALB
NY	.....	Buffalo	.....	BUF
NY	.....	New York	.....	JFK*
NY	.....	New York	.....	LGA*
NY	.....	Rochester	.....	ROC
NY	.....	Syracuse	.....	SYR
OH	.....	Akron	.....	CAK
OH	.....	Cleveland	.....	CLE
OH	.....	Columbus	.....	CMH
OH	.....	Dayton	.....	DAY
OK	.....	Oklahoma City	.....	OKC
OK	.....	Tulsa	.....	TUL
OR	.....	Portland	.....	PDX
PA	.....	Philadelphia	.....	PHL*
PA	.....	Pittsburgh	.....	PIT*
RI	.....	Providence	.....	PVD
TN	.....	Memphis	.....	MEM

TN	.....	Nashville	.....	BNA
TX	.....	Dallas	.....	DAL
TX	.....	Dallas-Forth Worth	.....	DFW*
TX	.....	Houston	.....	HOU
TX	.....	Houston	.....	IAH
TX	.....	San Antonio	.....	SAT
UT	.....	Salt Lake City	.....	SLC
VA	.....	Richmond	.....	RIC
WA	.....	Seattle	.....	BFI
WA	.....	Seattle	.....	SEA
WA	.....	Spokane	.....	GEG
WI	.....	Milwaukee	.....	MKE

SERVICE LEVEL B

AK	.....	Deadhorse	.....	SCC
AK	.....	King Salmon	.....	AKN
AK	.....	Kodiak	.....	ADQ
AK	.....	Nome	.....	OME
AL	.....	Huntsville	.....	HSV
AL	.....	Montgomery	.....	MGM
AR	.....	Little Rock	.....	LIT
AZ	.....	Grand Canyon	.....	GCN
AZ	.....	Tucson	.....	TUS
CA	.....	Sacramento	.....	SMF
CA	.....	San Jose	.....	SJC
CA	.....	Santa Barbara	.....	SBA
CO	.....	Colorado Springs	.....	COS
FL	.....	Daytona Beach	.....	DAB
FL	.....	Fort Lauderdale	.....	FLL
FL	.....	West Palm Beach	.....	PBI
GA	.....	Savannah	.....	SAV
HI	.....	Honolulu	.....	HNL
IL	.....	Champaign/Urbana/	.....	CMI
IL	.....	Moline	.....	MLI
IL	.....	Peoria	.....	PIA
IN	.....	Fort Wayne	.....	FWA
IN	.....	Lafayette	.....	LAF
IN	.....	South Bend	.....	SBN
LA	.....	Baton Rouge	.....	BTR
LA	.....	Shreveport	.....	SHV
ME	.....	Bangor	.....	BGR
MI	.....	Flint	.....	FNT
MI	.....	Kalamazoo	.....	AZO
MI	.....	Muskegon	.....	MKG
MI	.....	Saginaw	.....	MBS
MI	.....	Traverse City	.....	TVC
MN	.....	Minneapolis	.....	FCM
MN	.....	Minneapolis	.....	MIC
MS	.....	Jackson	.....	JAN
MT	.....	Billings	.....	BIL
ND	.....	Grand Forks	.....	GFK
NE	.....	Lincoln	.....	LNK
NE	.....	Omaha	.....	OMA
NJ	.....	Teterboro	.....	TEB
NY	.....	Islip	.....	ISP
NY	.....	White Plains	.....	HPN
OH	.....	Youngstown/Warren	.....	YNG
PA	.....	Pittsburgh	.....	AGC
PR	.....	San Juan	.....	SJU
SC	.....	Charleston	.....	CHS
SC	.....	Columbia	.....	CAE
TN	.....	Chattanooga	.....	CHA
TN	.....	Knoxville	.....	TYS
TX	.....	Corpus Christi	.....	CRP
TX	.....	El Paso	.....	ELP
TX	.....	Lubbock	.....	LBB
TX	.....	Midland	.....	MAF
VA	.....	Norfolk	.....	ORF
VT	.....	Burlington	.....	BTV
WI	.....	Madison	.....	MSN
WV	.....	Charleston	.....	CRW

TOWER-AUGMENTED SERVICE (SERVICE LEVEL C)
TOWER-AUGMENTED SERVICE (SERVICE LEVEL C)

AK	.....	Anchorage	.....	MRI
AK	.....	Kenai	.....	ENA

AL	.....	Birmingham	.....	BHM
AL	.....	Dothan	.....	DHN
AL	.....	Mobile	.....	BFM
AL	.....	Mobile	.....	MOB
AL	.....	Tuscaloosa	.....	TCE
AR	.....	Fayetteville	.....	FYV
AR	.....	Fort Smith	.....	FSM
AR	.....	Pine Bluff	.....	PBF
AR	.....	Texarkana	.....	TXK
AZ	.....	Flagstaff	.....	FLG
AZ	.....	Phoenix	.....	DVT
AZ	.....	Prescott	.....	PRC
AZ	.....	Scottsdale	.....	SDL
CA	.....	Bakersfield	.....	BFL
CA	.....	Burbank	.....	BUR
CA	.....	Carlsbad	.....	CRQ
CA	.....	Chino	.....	CNO
CA	.....	Concord	.....	CCR
CA	.....	Fullerton	.....	FUL
CA	.....	Hawthorne	.....	HRH
CA	.....	Hayward	.....	HWY
CA	.....	Livermore	.....	LVK
CA	.....	Modesto	.....	MOD
CA	.....	Monterey	.....	MRY
CA	.....	Napa	.....	APC
CA	.....	Oxnard	.....	OXR
CA	.....	Palm Springs	.....	PSP
CA	.....	Palmdale	.....	PMD
CA	.....	Redding	.....	RDD
CA	.....	Riverside	.....	RAL
CA	.....	Sacramento	.....	SAC
CA	.....	Salinas	.....	SNS
CA	.....	San Diego	.....	MYF
CA	.....	San Diego	.....	SDM
CA	.....	San Luis Obispo	.....	SBP
CA	.....	Santa Maria	.....	SMX
CA	.....	Santa Monica	.....	SMO
CA	.....	Santa Rosa	.....	STS
CA	.....	South Lake Tahoe	.....	TVL
CA	.....	Stockton	.....	SCK
CO	.....	Aspen	.....	ASE
CO	.....	Grand Junction	.....	GJT
CO	.....	Pueblo	.....	PUB
CT	.....	Bridgeport	.....	BDR
CT	.....	Danbury	.....	DXR
CT	.....	Groton/New London	.....	GON
CT	.....	Hartford	.....	HFD
CT	.....	New Haven	.....	HVN
DE	.....	Wilmington	.....	ILG
FL	.....	Fort Lauderdale	.....	FXE
FL	.....	Fort Myers	.....	FMY
FL	.....	Fort Myers	.....	RSW
FL	.....	Fort Pierce	.....	FPR
FL	.....	Gainesville	.....	GNV
FL	.....	Hollywood	.....	HWO
FL	.....	Jacksonville	.....	CRG
FL	.....	Key West	.....	EYW
FL	.....	Melbourne	.....	MLB
FL	.....	Miami	.....	OPF
FL	.....	Miami	.....	TMB
FL	.....	Orlando	.....	ORL
FL	.....	Panama City	.....	PFN
FL	.....	Pensacola	.....	PNS
FL	.....	Pompano Beach	.....	PMP
FL	.....	Sarasota/Bradenton/	.....	SRQ
FL	.....	St Petersburg	.....	SPG
FL	.....	St Petersburg/Clearwater	.....	PIE
FL	.....	Vero Beach	.....	VRB
GA	.....	Albany	.....	ABY
GA	.....	Athens	.....	AHN
GA	.....	Atlanta	.....	FTY
GA	.....	Atlanta	.....	PDK
GA	.....	Augusta	.....	AGS

GA	Columbus	CSC	NC	Wilmington	ILM	VA	Lynchburg	LYH
GA	Macon	MCN	NC	Winston Salem	INT	VA	Newport News	PHF
HI	Hilo	ITO	ND	Bismarck	BIS	VA	Roanoke	ROA
HI	Kahului	OGG	ND	Fargo	FAR	VI	Charlotte Amalie	STT
HI	Kailua/Kona	KOA	ND	Minot	MOT	VI	Christiansted	STX
HI	Lihue	LIH	NE	Grand Island	GRI	WA	Everett	PAE
IA	Cedar Rapids	CID	NH	Lebanon	LEB	WA	Moses Lake	MWH
IA	Dubuque	DBQ	NH	Manchester	MHT	WA	Olympia	OLM
IA	Sioux City	SUX	NH	Atlantic City	ACY	WA	Pasco	PSC
IA	Waterloo	ALO	NJ	Caldwell	CDW	WA	Renton	RNT
ID	Boise	BOI	NJ	Morristown	MMU	WA	Spokane	SFF
ID	Idaho Falls	IDA	NJ	Trenton	TTN	WA	Tacoma	TIW
ID	Lewiston	LWS	NM	Roswell	ROW	WA	Walla Walla	ALW
ID	Pocatello	PIH	NM	Santa Fe	SAF	WA	Yakima	YKM
ID	Twin Falls	TWF	NV	Reno	RNO	WI	Green Bay	GRB
IL	Cahokia/St Louis	CPS	NY	Binghamton	BGM	WI	Kenosha	ENW
IL	Carbondale/	MDH	NY	Elmira	ELM	WI	La Crosse	LSE
	Murphysboro.		NY	Farmingdale	FRG	WI	Oshkosh	OSH
IL	Chicago/Aurora	ARR	NY	Niagara Falls	IAG	WV	Clarksburg	CKB
IL	Chicago/West	DPA	NY	Poughkeepsie	POU	WV	Huntington	HTS
	Chicago/		NY	Utica	UCA	WV	Morgantown	MGW
IL	Chicago/Wheeling/	PWK	OH	Cincinnati	LUK	WV	Wheeling	HLG
IL	Decatur	DEC	OH	Cleveland	BKL	WY	Casper	CPR
IL	Springfield	SPI	OH	Columbus	OSU	WY	Cheyenne	CYS
IN	Bloomington	BMG	OH	Mansfield	MFD			
IN	Evansville	EVV	OH	Toledo	TOL			
IN	Muncie	MIE	OK	Clinton	CSM			
IN	Terre Haute	HUF	OK	Lawton	LAW	AK	Anchorage	LHD
KS	Hutchinson	HUT	OK	Oklahoma City	PWA	AK	Annette	ANN
KS	Olathe	OJC	OK	Tulsa	RVS	AK	Barrow	BRW
KS	Salina	SLN	OR	Eugene	EUG	AK	Bettles	BTT
KS	Topeka	FOE	OR	Klamath Falls	LMT	AK	Cold Bay	CDB
KS	Topeka	TOP	OR	Medford	MFR	AK	Cordova	CDV
KY	Lexington	LEX	OR	Pendleton	PDT	AK	Delta Junction/Ft	BIG
KY	Louisville	LOU	OR	Portland	HIO		Greely.	
LA	Alexandria	ESF	OR	Portland	TTD	AK	Gulkana	GKN
LA	Lafayette	LFT	OR	Salem	SLE	AK	Homer	HOM
LA	Lake Charles	LCH	PA	Allentown	ABE	AK	Iliamna	ILI
LA	Monroe	MLU	PA	Erie	ERI	AK	Ketchikan	KTN
LA	New Iberia	ARA	PA	Harrisburg	CXY	AK	Kotzebue	OTZ
LA	New Orleans	NEW	PA	Harrisburg	MDT	AK	McGrath	MCG
LA	Shreveport	DTN	PA	Lancaster	LNS	AK	Nenana	ENN
MA	Bedford	BED	PA	Philadelphia	PNE	AK	Northway	ORT
MA	Beverly	BVY	PA	Reading	RDG	AK	Palmer	PAQ
MA	Hyannis	HYA	PA	Wilkes-Barre/Scranton.	AVP	AK	Sitka	SIT
MA	Lawrence	LWM				AK	St Paul Island	SNP
MA	Nantucket	ACK	PA	Williamsport	IPT	AK	Talkeetna	TKA
MA	New Bedford	EWB	SC	Florence	FLO	AK	Tanana	TAL
MA	Norwood	OWD	SC	Greenville	GMU	AK	Yakutat	YAK
MA	Westfield	BAF	SC	Greer	GSP	AL	Anniston	ANB
MA	Worcester	ORH	SC	North Myrtle Beach	CRE	AL	Muscle Shoals	MSL
MD	Hagerstown	HGR	SD	Aberdeen	ABR	AR	El Dorado	ELD
ME	Portland	PWM	SD	Rapid City	RAP	AR	Harrison	HRO
MI	Ann Arbor	ARB	SD	Sioux Falls	FSD	AR	Hot Springs	HOT
MI	Battle Creek	BTL	TN	Bristol/Johnson/Kingsport.	TRI	AR	Jonesboro	JBR
MI	Detroit	DET				AZ	Kingman	IGM
MI	Detroit	YIP				AZ	Page	PGA
MN	Duluth	DLH	TX	Abilene	ABI	AZ	Winslow	INW
MN	Rochester	RST	TX	Amarillo	AMA	CA	Arcata/Eureka	ACV
MN	St Paul	STP	TX	Austin	AUS	CA	Bishop	BIH
MO	Columbia	COU	TX	Beaumont/Port Arthur.	BPT	CA	Blythe	BLH
MO	Joplin	JLN	TX	Brownsville	BRO	CA	Daggett	DAG
MO	Kansas City	MKC	TX	College Station	CLL	CA	Emigrant Gap	BLU
MO	Springfield	SGF	TX	Dallas	RBD	CA	Imperial	IPL
MO	St Joseph	STJ	TX	Fort Worth	AFW	CA	Marysville	MYV
MO	St Louis	SUS	TX	Fort Worth	FTW	CA	Merced	MCE
MS	Greenville	GLH	TX	Harlingen	HRL	CA	Paso Robles	PRB
MS	Gulfport	GPT	TX	Houston	DWH	CA	Red Bluff	RBL
MS	Jackson	HKS	TX	Longview	GGG	CO	Akron	AKO
MS	Meridian	MEI	TX	McAllen	MFE	CO	Alamosa	ALS
MT	Great Falls	GTF	TX	San Angelo	SJT	CO	La Junta	LHX
MT	Helena	HLN	TX	San Antonio	SSF	CO	Limon	LIC
MT	Missoula	MSO	TX	Tyler	TYR	FL	Crestview	CEW
NC	Asheville	AVL	TX	Waco	ACT	GA	Alma	AMG
NC	Fayetteville	FAY	UT	Ogden	OGD	GA	Brunswick	SSI
NC	Hickory	HKY	VA	Charlottesville	CHO	IA	Burlington	BRL
						IA	Mason City	MCW

AUTOMATED SERVICE (SERVICE LEVEL D)

AK	Anchorage	LHD
AK	Annette	ANN
AK	Barrow	BRW
AK	Bettles	BTT
AK	Cold Bay	CDB
AK	Cordova	CDV
AK	Delta Junction/Ft Greely.	BIG
AK	Gulkana	GKN
AK	Homer	HOM
AK	Iliamna	ILI
AK	Ketchikan	KTN
AK	Kotzebue	OTZ
AK	McGrath	MCG
AK	Nenana	ENN
AK	Northway	ORT
AK	Palmer	PAQ
AK	Sitka	SIT
AK	St Paul Island	SNP
AK	Talkeetna	TKA
AK	Tanana	TAL
AK	Yakutat	YAK
AL	Anniston	ANB
AL	Muscle Shoals	MSL
AR	El Dorado	ELD
AR	Harrison	HRO
AR	Hot Springs	HOT
AR	Jonesboro	JBR
AZ	Kingman	IGM
AZ	Page	PGA
AZ	Winslow	INW
CA	Arcata/Eureka	ACV
CA	Bishop	BIH
CA	Blythe	BLH
CA	Daggett	DAG
CA	Emigrant Gap	BLU
CA	Imperial	IPL
CA	Marysville	MYV
CA	Merced	MCE
CA	Paso Robles	PRB
CA	Red Bluff	RBL
CO	Akron	AKO
CO	Alamosa	ALS
CO	La Junta	LHX
CO	Limon	LIC
FL	Crestview	CEW
GA	Alma	AMG
GA	Brunswick	SSI
IA	Burlington	BRL
IA	Mason City	MCW

IA	Ottumwa	OTM	OH	Zanesville	ZZV
ID	Burley	BYI	OK	Gage	GAG
IN	Valparaiso	VPZ	OK	Hobart	HBR
KS	Chanute	CNU	OK	Mc Alester	MLC
KS	Concordia	CNK	OK	Ponca City	PNC
KS	Dodge City	DDC	OR	Astoria	AST
KS	Emporia	EMP	OR	Baker City	BKF
KS	Garden City	GCK	OR	Burns	BNO
KS	Goodland	GLD	OR	The Dalles	DLS
KS	Hill City	HLC	PA	Altoona	AOO
KS	Manhattan	MHK	PA	Johnstown	JST
KS	Russell	RSL	SC	Anderson	AND
KY	Bowling Green	BWG	SD	Huron	HON
KY	Jackson	JKL	SD	Pierre	PIR
KY	London	LOZ	SD	Watertown	ATY
KY	Paducah	PAH	TN	Crossville	CSV
MD	Salisbury	SBY	TN	Jackson	MKL
ME	Augusta	AUG	TX	Alice	ALI
ME	Caribou	CAR	TX	Childress	CDS
ME	Houlton	HUL	TX	Cotulla	COT
MI	Alpena	APN	TX	Dalhart	DHT
MI	Hancock	CMX	TX	Del Rio	DRT
MI	Houghton Lake	HTL	TX	Galveston	GLS
MI	Pellston	PLN	TX	Lufkin	LFK
MN	Alexandria	AXN	TX	Mineral Wells	MWL
MN	Hibbing	HIB	TX	Victoria	VCT
MN	International Falls	INL	TX	Wichita Falls	SPS
MN	Redwood Falls	RWF	TX	Wink	INK
MN	St Cloud	STC	UT	Bryce Canyon	BCE
MO	Cape Girardeau	CGI	UT	Cedar City	CDC
MO	Rolla/Vichy	VIH	UT	Milford	MLF
MO	St Charles	3SZ	VA	Danville	DAN
MS	McComb	MCB	VA	Wallops	WAL
MS	Tupelo	TUP	VT	Barre/Montpelier	MPV
MT	Bozeman	BZN	WA	Ephrata	EPH
MT	Butte	BTM	WA	Hoquiam	HQM
MT	Glasgow	GGW	WA	Quillayute	UIL
MT	Havre	HVR	WI	Lone Rock	LNR
MT	Kalispell	FCA	WI	Wausau	AUW
MT	Livingston	LVM	WV	Beckley	BKW
MT	Miles City	MLS	WV	Bluefield	BLF
NC	Elizabeth City	ECG	WV	Elkins	EKN
NC	Hatteras	HSE	WV	Martinsburg	MRB
NC	New Bern	EWN	WY	Laramie	LAR
NC	Rocky Mount	RWI	WY	Riverton	RIW
ND	Dickinson	DIK	WY	Sheridan	SHR
ND	Jamestown	JMS	WY	Worland	WRL
ND	Williston	ISN			
NE	Alliance	AIA			
NE	Chadron	CDR			
NE	McCook	MCK			
NE	Norfolk	OFK			
NE	North Platte	LBF			
NE	Scottsbluff	BFF			
NE	Sidney	SNY			
NE	Valentine	VTN			
NH	Concord	CON			
NJ	Millville	MIV			
NM	Carlsbad	CNM			
NM	Clayton	CAO			
NM	Deming	DMN			
NM	Gallup	GUP			
NM	Las Vegas	LVS			
NM	Truth Or Con-sequences.	TCS			
NM	Tucumcari	TCC			
NV	Ely	ELY			
NV	Lovelock	LOL			
NV	Mercury	DRA			
NV	Tonopah	TPH			
NV	Winnemucca	WMC			
NY	Glens Falls	GFL			
NY	Massena	MSS			
NY	Monticello	MSV			
NY	Watertown	ART			
OH	Akron	AKR			

Administration (NHTSA) of a petition for a decision that a 1983 Yamaha RD 350 that was not originally manufactured to comply with all applicable Federal motor vehicle safety standards is eligible for importation into the United States because (1) it is substantially similar to a vehicle that was originally manufactured for importation into and sale in the United States and that was certified by its manufacturer as complying with the safety standards, and (2) it is capable of being readily altered to conform to the standards.

DATE: The closing date for comments on the petition is July 25, 1996.

ADDRESSES: Comments should refer to the docket number and notice number, and be submitted to: Docket Section, Room 5109, National Highway Traffic Safety Administration, 400 Seventh St., SW, Washington, DC 20590. [Docket hours are from 9:30 am to 4 pm]

FOR FURTHER INFORMATION CONTACT: George Entwistle, Office of Vehicle Safety Compliance, NHTSA (202-366-5306).

SUPPLEMENTARY INFORMATION

Background

Under 49 U.S.C. 30141(a)(1)(A) (formerly section 108(c)(3)(A)(i)(I) of the National Traffic and Motor Vehicle Safety Act (the act)), a motor vehicle that was not originally manufactured to conform to all applicable Federal motor vehicle safety standards shall be refused admission into the United States unless NHTSA has decided that the motor vehicle is substantially similar to a motor vehicle originally manufactured for importation into and sale in the United States, certified under 49 U.S.C. 30115 (formerly section 114 of the act), and of the same model year as the model of the motor vehicle to be compared, and is capable of being readily altered to conform to all applicable Federal motor vehicle safety standards.

Petitions for eligibility decisions may be submitted by either manufacturers or importers who have registered with NHTSA pursuant to 49 CFR Part 592. As specified in 49 CFR 593.7, NHTSA publishes notice in the Federal Register of each petition that it receives, and affords interested persons an opportunity to comment on the petition. At the close of the comment period, NHTSA decides, on the basis of the petition and any comments that it has received, whether the vehicle is eligible for importation. The agency then publishes this decision in the Federal Register.

Dated: June 19, 1996.
 Neil R. Planzer,
 Program Director for Air Traffic Plans and Requirements.
 [FR Doc. 96-16046 Filed 6-24-96; 8:45 am]
 BILLING CODE 4910-13-M

National Highway Traffic Safety Administration

[Docket No. 96-058; Notice 1]

Notice of Receipt of Petition for Decision That Nonconforming 1983 Yamaha RD 350 Motorcycles Are Eligible for Importation

AGENCY: National Highway Traffic Safety Administration, DOT.

ACTION: Notice of receipt of petition for decision that nonconforming 1983 Yamaha RD 350 motorcycles are eligible for importation.

SUMMARY: This notice announces receipt by the National Highway Traffic Safety

9

**ASOS Site Component Commissioning Evaluation Package
For NWS Use**

July 1996

Site ID (SID): PRB

Sponsorship: FAA

**Location Name: Paso Robles Municipal Airport
Paso Robles, California**

Associated Future WFO: LOX

NWS Region: Western

Approving Official: RD

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Office of Systems Operations

Attachment 4

NWS ASOS SITE COMPONENT COMMISSIONING REPORT FORM (RD APPROVAL)

1. Site ID (SID):

 KPRB

2. Location (Name, State, NWS Region):

 Paso Robles, California, NWS Westen Region

3. No. ASOS Displays: OIDs_0 VDUs_0 ACE_0 Other

4. ASOS Site Component Configuration:

TOWERED
HOURS OF OPERATION : No Tower .

OBSERVING STAFF
HOURS OF OPERATION : No observers

OTHER [Service Level "D"]

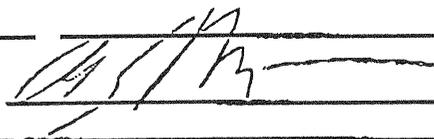
5. Operational Requirements:

Software Version [2.6]
Backup Sensors [na]
Met. Disc. Sensors [na]
Freezing Rain [na]
GTA Radio [X]
 Freq. 132.175
Digital ATIS [na]
Backup [na]
Augmentation [na]
RVR [na]

6. Start of Evaluation (Date): 10 Oct 00 Completion of Evaluation (Date): 10 Jan 01

7. Evaluation Official (Name, Title, Phone Number): Andrew S. Rorke, Senior Forecaster, 805-988-6615

8. Evaluation Official Signature:



Date: 12 JAN 01

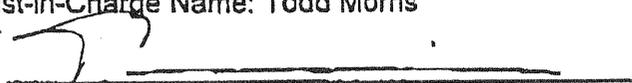
RECOMMENDATION FOR COMMISSIONING

We, the undersigned, recommend this ASOS Site Component be commissioned for official use.

Meteorologist-in-Charge

9. Meteorologist-in-Charge Name: Todd Morris

10. Signature:



Date: 1-12-01

Property of the
NWS OSO
Technical Reference
Library
Date: MAY - 7 2001

NWS ASOS SITE COMPONENT COMMISSIONING REPORT (cont.)

APPROVAL OF COMMISSIONING

As Director, NWS Western Region, I approve the commissioning of this ASOS Site Component for official use.

11. Regional Director: Vickie Nadolski

12. Signature: James B. Campbell Date: 1/18/01

IMPLEMENTATION OF COMMISSIONING APPROVAL

As NWS MAR Commissioning Manager, I verify that this Site Component was commissioned on the date indicated below.

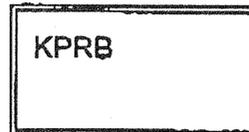
13. NWS MAR Commissioning Manager Name: Joseph F. Andrews

14. NWS MAR Commissioning Manager Signature: Joseph F. Andrews

15. Date of Signature: 5/4/01

16. Date of Site Component Commissioning: 01/18/01

Enter SID:



Attachment 2

NWS ASOS SITE COMPONENT COMMISSIONING CHECKLIST

Station ID (SID): KPRB Location Name/State: Paso Robles, California

S=Satisfactory, N/A=Not-Applicable, W/#=Work-Around Number (1,2,3...).

Document significant Not-Applicable Ratings and all Work-Arounds under Remarks.

EVALUATION ELEMENT	S	N/A	W/#
1. ON-SITE ACCEPTANCE/SENSOR SITING/INITIALIZATION			
1a. On-site Acceptance	X		
1b. Sensor Siting	X		
1c. Initialization Parameters	X		
1d. Sensor Performance Verification	X		
1e. Field Modification Kits Installed	X		
2. ADEQUATE OPERATIONAL AND MAINTENANCE DOCUMENTATION			
2a. Operator Documentation		X	
2b. User Documentation		X	
2c. NWS Surface Observation Handbook		X	
2d. Maintenance Manuals	X		
2e. Maintenance Phone Number	X		
2f. A-1 and A-3 Forms	X		
2g. Dial-in Phone Numbers	X		
2h. Station Duty Manual		X	
2i. User Notification/Technical Coordination		X	
3. ADEQUATE AVAILABILITY OF PROPERLY TRAINED OPERATIONS PERSONNEL			
3a. Operator Training Materials		X	
3b. Operator Familiarization Training		X	
3c. Operator Proficiency Training		X	
3d. Forecaster Familiarization	X		
4. ADEQUATE MAINTENANCE CAPABILITY			
4a. Support Arrangements	X		
4b. Maintenance Capability	X		
4c. Maintenance Access/Information	X		
4d. Physical Security	X		
4e. Safety	X		

KPRB

NWS ASOS SITE COMPONENT COMMISSIONING CHECKLIST			
Station ID (SID): <u>KPRB</u> Location Name/State: <u>Paso Robles, California</u>			
EVALUATION ELEMENT	S	N/A	W/#
5. SATISFACTORY PERFORMANCE OF SITE INTERFACES			
5a1. Operator Interface Device (OID)		X	
5a2. Video Display Unit (VDU)		X	
5a3. Tower Interface Complete		X	
5a4. Observer Notification Device (OND)		X	
5a5. Printer		X	
5b1. ACU Port #1: AFOS/AWIPS Phone (dial-out to AFOS)		X	
5b2. ACU Port #2: AFOS/AWIPS Hardwire		X	
5b3. ACU Ports #8a, #8b: Telephone Dial-in Access	X		
5b4. ACU Port #5b: Computer Synthesized Voice	X		
5b5. ACU Port #6: FAA ADAS/GS-200 Interface	X		
5b6. GTA Radio or ATIS Interface	X		
6. SATISFACTORY SUPPORT OF ASSOCIATED NWS FORECASTING AND WARNING SERVICES			
6a. 1-MINUTE Display and Messages	X		
6b. T/TP/TS/TEST/TESTS Messages	X		
6c. SHEF Messages	X		
6d. Summary Data	X		
6e. Representative Observations	X		
7. PROPER FUNCTIONING OF SERVICE BACKUP CAPABILITIES			
7a. Backup Procedures		X	
7b. Backup Equipment		X	
7c. Backup Personnel Resources		X	
7d. Backup Observer Proficiency		X	
7e. Backup Communications		X	
7f. Terminating SAWRS Agreement.		X	
7g. Unstaffed Site Quality Control Responsibilities	X		
8. PROPER FUNCTIONING OF AUGMENTATION CAPABILITIES			
8a. Augmentation Procedures		X	
8b. Augmentation Personnel Resources		X	
8c. Augmentation Observer Proficiency		X	

REMARKS: Check ___ if additional remarks are entered on continuation pages.

Note 5a1 and 5a2: The OID and VDU will be deconfigured prior to commissioning, then will be removed after commissioning.

Note 5a5: The printer will be removed after commissioning.

Attachment 3a

FIELD MODIFICATION KITS REQUIRED FOR COMMISSIONING

REQ. REQ'D	NO. OF MODS	DESCRIPTION	FUNCTION	REPAIRED ON ASOS
ALL SITES	SITE TECH. MANUAL	HINGE PLATES	INSTALLS HINGE PLATES FOR VISIBILITY AND PRESENT WEATHER SENSORS TO MAKE MAINTENANCE PRACTICAL	YES
ALL CLASS I SITES	3	SETRA THRESHOLD DETECTOR	INSTALLS DETECTOR THAT RESETS PRESSURE SENSOR FOR A/C UNDER VOLTAGE CONDITION	N/A
ALL SITES	6	DCP CEILOMETER CIRCUIT BREAKER REPLACEMENT	REPLACES 6 AMP BREAKER WITH 10 AMP BREAKER. THE NEAR 6 AMPS NORMAL CURRENT CAUSES UNNECESSARY TRIPPING OF 6 AMP CIRCUIT BREAKER	YES
ALL FREEZING RAIN SITES	19	MOD II WIND BOTTLES	"F-420" SHAPE REDUCES PROBABILITY OF WATER INTRUSION	YES
NON-FREEZING RAIN SITES	036	MOD I WIND BOTTLES	INSTALLS WIND BOTTLES WITH IMPROVED BEARINGS AND RESISTANCE TO ICING	N/A
SNOW PACK SITES	24	CEILOMETER SNOW RADIATION SHIELD	PREVENTS FALSE HARDWARE ALARMS DUE TO HEATING BY SUNLIGHT REFLECTED FROM SNOW PACK	N/A
ALL SITES	27	HYGROTHERMOMETER - RECONNECT AUTOBALANCE	AUTOBALANCE COMPENSATES FOR DIRTY MIRROR TO EXTEND MAINTENANCE CYCLE	YES

REQUIRED	POD NOTE NO	DESCRIPTION	FUNCTION	INSTALLED ON SGS
ALL SITES	121	HYGROTHERMOMETER RETROFIT (EITHER R1063-20 OR 1088-20)	BRINGS H083 TO OPERATIONAL CONFIGURATION	YES (H083)

SITE NAME	SITE NO.	DESCRIPTION	FUNCTION	INSTALLATION SITES
REMOVAL OF THESE ITEMS EXPECTED IN EARLY 1996				
FREEZING RAIN SITES	34	FREEZING RAIN SENSOR INSTALLATION	INSTALLS THE IMPROVED FREEZING RAIN SENSOR	N/A
ALL SITES	25	HEATED TIPPING BUCKET MODIFICATIONS	IMPLEMENTS THE FUNNEL EXTENSION, REED SWITCH, AND POLYETHYLENE STOPS	YES

Attachment 3b

SID: _KPRB LOCATION NAME, STATE: Paso Robles, California

INSTALLED FIRMWARE VERSIONS

	INSTALLED VERSION	REMARKS
ACU MEMORY	2.6	
ACU CPU PSOS	1.81	
VOICE	4.0	
DCP CPU PSOS	1.90	
WIND	4.0	
CEILOMETER	2.46	
VISIBILITY	4.0	
LEDWI	3.64	

FAA ASOS SITE COMPONENT COMMISSIONING REPORT FORM

1. Location Identifier: KPRB

(Per FAA Handbook 7350)

2. Location (Name, State, FAA Region):

Paso Robles, CA
Western Pacific Region (AWP)

3. Airport Name: Paso Robles Municipal

4. ASOS Site/Tower Staffing:

FAA Staffed Towered
Contractor Staffed Untowered
Unstaffed FSS
Other SL-D See note 4

5. Operational Requirements:

Augmentation for Operationally
Critical Remarks
Backup
ATIS
Digital ATIS
ALDARS
ADAS
GTA

6. Start of Evaluation (Date): 8/15/00 Completion of Evaluation (Date): 10/16/00

7. Air Traffic Manager (Name, Title, Phone Number) (Applicable only to staffed sites):

N/A N/A N/A

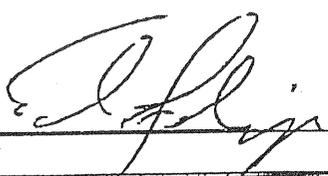
8. Air Traffic Manager Signature: N/A Date: N/A

RECOMMENDATION FOR COMMISSIONING

I recommend this ASOS Site Component be commissioned for official use.

FAA RAPM/(TOR)

9. Name: Ed Felipe

10. Signature: 

Date: 10/16/00

Attachment 2

FAA ASOS SITE COMPONENT COMMISSIONING CHECKLIST			
Location Identifier: <u>KPRB</u> (Per FAA Handbook 7350)			
Location Name/State: <u>Paso Robles, CA</u>			
Airport Name: <u>Paso Robles Municipal</u>			
S=Satisfactory, N/A=Not-Applicable, W/#=Work-Around Number (1,2,3...).			
Document significant Not-Applicable Ratings and all Work-Arounds under Remarks.			
EVALUATION ELEMENT	S	N/A	W/#
1. USER NOTIFICATION			
1a. Local User Notification	X		
1b. NFDC Notification	X		
1c. Plans for NOTAM Issuance in place	X		
1d. User Documentation Provided to Airport	X		
2. AVAILABILITY OF TRAINED OPERATIONS PERSONNEL			
2a. Operator Training Materials		X	
2b. Operator Familiarization Training		X	
2c. Operator Proficiency Demonstrated		X	
2d. Station Duty Manual		X	
3. COMMUNICATIONS			
3a. ADAS/GS-200/SATCOM Operational at Site	X		
3b. ATIS Interface		X	
3c. ALDARS Interface.	X		
4. PROPER FUNCTIONING OF AUGMENTATION CAPABILITIES			
4a. Augmentation Procedures		X	
4b. Augmentation Personnel Resources		X	
4c. Augmentation Observer Proficiency		X	
5. PROPER FUNCTIONING OF BACKUP CAPABILITIES			
5a. Backup Procedures		X	
5b. Backup Equipment		X	
5c. Backup Personnel Resources		X	
5d. Backup Observer Proficiency		X	
5e. Backup Communications		X	

REMARKS: Check X if additional remarks are entered on continuation pages.

**FAA ASOS SITE COMPONENT COMMISSIONING FORM
CONTINUATION SHEET**

Location Identifier: KPRB

Location: Paso Robles, CA

Airport Name: Paso Robles Municipal

Note 4: The Contract Weather Observers will be terminated approximately 1 - 2 weeks after the ASOS commissioning.

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE

Forecast Office
520 N. Elevar St.
Oxnard CA 93030
June 2, 2000

Roger Oxborrow, Manager
Paso Robles Airport
Paso Robles CA 93446

Dear Mr Oxborrow,

This is to advise you of our support for continuation of the Federal Contract Weather Observing Station (FCWOS) following the commissioning of the Automated Surface Observation System (ASOS) at Paso Robles Airport. This support is based on the concern of the Los Angeles/Oxnard Weather Forecast Office regarding unusual meteorological conditions which occur at Paso Robles Airport. These conditions present potential difficulties with official airport forecast (TAF) preparation and could negatively impact local air safety.

Unusually difficult weather observation parameters are presented at Paso Robles Airport when fog advects through the Salinas Valley from the northwest, or over Cuesta Pass from the south. FAA statistics indicate that low IFR conditions prevail at Paso Robles Airport on approximately 10% of all mornings on an annual basis. Marginal VFR conditions occur on almost 25% of all mornings! Paso Robles area fog morphology and dissipation are extremely complex from a meteorological standpoint, with unusual "doughnut holes" opening near the airport, accompanied by rapid changes in operational ceilings and visibilities. This is partially due to terrain irregularities within the Salinas Valley, and the significant elevation difference (more than 100 feet) between Paso Robles Airport and the Salinas River.

Our experience within the testing phase of the ASOS at Paso Robles Airport demonstrates conclusively that the erratic behavior of fog and stratus layers at this location is frequently beyond the evaluation capabilities of the current ASOS algorithms.

Paso Robles Airport is an important regional aviation center, one of only two such airports serving San Luis Obispo County. Because of its importance, Paso Robles Airport is issued a TAF 24 hours a day by forecasters at the National Weather Service Office in Oxnard. From the standpoint of accuracy of TAF preparation, and from the standpoint of aviation safety, our recommendation is that the FCWOS contract be extended at Paso Robles Airport following the commissioning of the ASOS at that facility.

Sincerely,

Gary Ryan, ASOS Evaluations Officer
(805) 988-6626

cc: Todd Morris, Meteorologist-in-Charge
Kristine A. Nelson, NWS WRH
Ed Felipe, FAA Western-Pacific Region Headquarters





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE

Forecast Office
520 N. Elevar St.
Oxnard CA 93030
June 2, 2000

Roger Oxborrow, Manager
Paso Robles Airport
Paso Robles CA 93446

Re: Letter sent to your office earlier today.

Dear Mr Oxborrow,

I am rescinding the letter that I sent you earlier today on the subject of continuation of the FCWOS observations at Paso Robles Airport.

The letter did not receive proper review by my supervisors. The opinions expressed within the letter do not necessarily represent the views of the National Weather Service.

The concerns I expressed in that letter, which was written under my authority as Evaluations Officer of the Paso Robles Airport ASOS, will be addressed by subsequent communications through the appropriate headquarters personnel.

I regret any inconvenience that my earlier message may have caused.

Sincerely,

[signed]

Gary Ryan, ASOS Evaluations Officer
(805) 988-6626

cc: Todd Morris, Meteorologist-in-Charge
Kristine A. Nelson, NWS WRH
Ed Felipe, FAA Western-Pacific Region Headquarters



11



David Murray
<david.murray@noaa.gov>
ov>

To: tconner1@doc.gov, Al Wissman <Al.Wissman@noaa.gov>
cc: Joseph Facundo <Joseph.Facundo@noaa.gov>
Subject: Paso Robles ASOS Information

03/06/2003 10:17 AM

Mr. Conner:

I am responding for Joe Facundo regarding the availability and accuracy rates for the Paso Robles ASOS site. The availability is the percentage at which the system is working within operating specs.

The following table is the Monthly System Availability for Paso Robles for the last year (2002):

Jan 02	- 99.3
Feb 02	- 100
March 02	- 100
April 02	- 98.9
May 02	- 100
June 02	- 99.2
July 02	- 95.9
August 02	- 100
Sept 02	- 99.9
Oct 02	- 100
Nov 02	- 100
Dec 02	- 99.8
Jan 03	- 97.2

Average for the year 99.2%

Each sensor on the ASOS has its own accuracy requirement. The availability is generated by the sensors meeting their accuracy requirements. If you need detailed accuracy requirements for each of the sensor, please provide me your fax number and I will forward that information to you.

If you have any questions, feel free to contact me at 301-713-0436 x150.

Thanks,
David Murray

--

David Murray
Executive Officer
Office of Operational Systems
National Weather Service
David.Murray@noaa.gov
301-713-0436 x150
301-713-3236 (fax)

Ms Elaine Kaplan,
Special Counsel
United States Office of Special Counsel
1730 M Street NW, Suite 300
Washington DC 20036-4505

25 April 2003

Re: OSC File No. DI-01-1549 (ASOS at Paso Robles Airport)

Dear Ms Kaplan,

I am pleased with the efforts of the Office of Special Counsel on behalf of my disclosure of information dated 10 July 2001. I believe that OSC acted correctly, courageously and without prejudice in its conclusion that "there is a substantial likelihood that [I have] disclosed a violation of law and a substantial and specific danger to public safety by the [National Weather Service]."

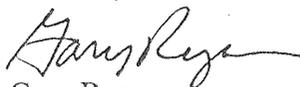
In my original report to OSC, I provided numerous data and background information to document deficiencies and hazards inherent in the unwise commissioning of the unmanned automated weather station (ASOS) at Paso Robles CA. The information I provided OSC was sufficient for your office to order the Department of Commerce to conduct an internal investigation into the Paso Robles Airport matter.

I have been provided with a copy of the 12-page Department of Commerce internal investigation report, presented to you by Mr M T Conner, and dated 24 March 2003. Upon reading this report, I was saddened and disappointed by the one-sided tone of the document. Moreover, I was appalled by the factual distortion and illogical conclusions contained therein.

Therefore, I would like to take my lawful opportunity, pursuant to 5 USC § 1213 (e) (1), to rebut the Commerce report. Attached to this letter, please find my response to the Department of Commerce.

I would greatly appreciate your further consideration of the Paso Robles Airport matter.

Sincerely,

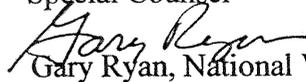


Gary Ryan
P O Box 1679
Ojai, CA 93024
(805) 646-5205

27 April 2003

MEMORANDUM FOR: Ms Elaine Kaplan
Special Counsel

FROM:


Gary Ryan, National Weather Service
ASOS Commissioning Officer, Retired

SUBJECT:

Comments pursuant to Internal Investigation
US Department of Commerce, dated 24 March 2003

I am submitting this memorandum in response to comments and material provided to you in the Department of Commerce Internal Investigation Report of 24 March 2003. The Commerce report was made to address issues in OSC File No. DI-01-1549. I believe that the Commerce Internal Investigative Report (COMMIIR) was seriously flawed in its factual basis and therefore unsubstantiated in its conclusions.

¶First Point: Both COMMIIR and NWS Director Kelly (COMMIIR, Tab 3) state that Public Law 102-567 relating to degradation of weather services does not apply at Paso Robles Airport because the NWS did not have a field office at Paso Robles and did not operate the weather program there. These statements are not consistent with the truth. The surface weather observation program at Paso Robles Airport had indeed been under the funding and responsibility of the NWS.

After World War II, the Weather Service operated a weather office at Paso Robles Airport until c. 1951, when the FAA set up a flight service station (FSS) there. FSS personnel took weather observations at Paso Robles to October 1987, but NWS continued to own and maintain the weather equipment, as well as provide quality control inspections at Paso Robles through the years 1951-1987.

In October 1987, the FAA closed the FSS at Paso Robles. Therefore, in October 1987--- recognizing its responsibility for weather observations at Paso Robles and to continue an unbroken climate record---NWS established a field office at Paso Robles. Officially, this was a National Weather Service Contract Weather Office (NWS CWO).

The NWS CWO was in place in 1992, operating 24/7, at Paso Robles Airport at the time Congress passed Public Law 102-567 relating to NWS field operations. The NWS continued to operate its fully-staffed, fulltime weather office at Paso Robles until October 1995.

In October 1995, with plans afoot to place an (unmanned) ASOS at Paso Robles Airport, the NWS transferred responsibility for weather observations to the FAA. Congressional PL 102-567, which prohibits closing or degradation of services at NWS offices effective in 1992, was clearly violated in this action by NWS.

The NWS transferred its responsibility for weather observations at Paso Robles to the FAA in October 1995, *well after 1992*, in preparation for an (unmanned) ASOS commissioning. Clearly, NWS did not maintain its responsibility at Paso Robles after PL 102-567 was passed by Congress. NWS actions at Paso Robles appear to be devious.

NWS did have responsibility to maintain its service levels at Paso Robles Airport under PL 102-567. This is the crux of the matter---the bottom line.

Either the author of COMMIIR and NWS Director Kelly (Tab 3) failed to research the contract history of the Paso Robles weather facility and its status as an NWS Office (after World War II), or they chose to ignore the facts of the matter. Based on a preponderance of evidence, I would suggest that they failed to adequately research the matter.

¶**Second Point:** Both COMMIIR and Director Kelly state that the FAA assigned Paso Robles Category D (unmanned ASOS) status. This is true, but it misses the point. I have argued that the FAA assigned service level "Category D" (unmanned ASOS) incorrectly. It was this message that I was trying to address in my original inspection report dated 2 June 2000. Paso Robles Airport should have been granted an exemption to the "unmanned" status based on an adjusted "Bad Weather Operations Score".

There is frequently, especially in the summer, thick fog either blanketing or surrounding Paso Robles Airport. The FAA statistics used for ASOS commissioning purposes did not adequately reflect the strange reality of Paso Robles fog swirls. The presence of these dangerous fog anomalies at Paso Robles Airport is the reason why an unmanned ASOS there is a clear and present public danger. We have a long history of documentation on the erratic behavior of fog in the Salinas Valley (including Paso Robles) of California. I myself authored a study of Paso Robles climate in 1995, highlighting the impact of fog.

¶**Third Point:** Both COMMIIR and Director Kelly state emphatically that the (admitted) problems that I outlined with Paso Robles Airport ASOS were corrected before commissioning. The ASOS system deficiencies---which were obvious to all persons in the spring and summer of 2000---were definitely NOT CORRECTED in my absence during the fall of 2000, when the Paso Robles ASOS was in its final test phase. I received numerous reports of faulty data from Paso Robles (from several sources, including observers at NWSFO Oxnard, observers at Paso Robles Airport, and the television station at San Luis Obispo---whose complaints to NWSFO Oxnard were routinely ignored until they stopped complaining.) Moreover, the official record indicates that there was a complete system crash in November 2000 (during the final commissioning test phase) which was dismissed by NWS Western Region Headquarters as an "isolated incident". In any event, the system crashed badly in February 2001, one month *after* commissioning. This fact was reported in newspaper headlines in San Luis Obispo, CA. So how good was the system, really? Was weather observation service degraded with the commissioning of the unmanned ASOS? One would have to be a moron to think not.

In fact, even if the ASOS system were working at 100% of reportage accuracy---which it is not, even according to official figures---it would still represent a degradation of service and a serious hazard to aircraft, based on the meteorological situation peculiar to Paso Robles Airport. This fact was the crux of my recommendation of 2 June 2000.

At this point, I would like to respond to the COMMIIR directly.

On Pages 4-5, COMMIIR outlines the method of its investigation. The interview list is heavily skewed in favor of high level bureaucrats within the NWS. The party line result that COMMIIR produced was inevitable.

On Page 7, COMMIIR reports that the ASOS recommendation letter I had written and dated June 2, 2000 (Tab 10) "apparently had not been approved by Mr. Ryan's manager, Todd Morris..." I would like to clear the record on this matter. The fact is that Mr Morris **had** reviewed my recommendation and chose not to discuss the matter with me. The inference that I needed some sort of approval to send a letter to recommend a course of action is not valid. In fact, I did not need approval from my immediate supervisor.

The recommendation for continuing the human observer contract at Paso Robles (along with commissioning the ASOS) was the result of an inspection I had made at Paso Robles Airport on 9 May 2000. This report was consistent with my duties as ASOS commissioning officer. As an inspection report, the letter was mailed by me under authority of Weather Service Operations Manual B (13ff, 61). The letter was similar to a type I had made many times before, without any complaint. There is no requirement for Form B-33 Inspection Reports to be approved by my immediate supervisor---although I routinely *did* provide Mr Morris with copies for his comments and for his files. Inspection forms (recommendations included) are sent to NWS and FAA Headquarters, and to the station inspected. That's exactly what I did in this case.

My actions in making the Paso Robles report are characterized on COMMIIR page 7 as "premature, unauthorized and ... contrary to official NWS and FAA policy."

I would like to point out that I was making a proposal in my official and appointed position as ASOS commissioning officer. I was doing my assigned job---I was not setting policy---and the agencies were certainly capable of over-ruling my suggestions.

On COMMIIR Page 8, it is stated that "repairs were made" to the ASOS at Paso Robles beginning in August 2000 and "these malfunctions ceased". Further, a final evaluation was begun on 10 October 2000 until 10 January 2001. But a letter from Tim Kellett (Paso Robles weather observer) dated 10 October 2001 (Attachment 10, OSC File) states that serious problems were still occurring with the ASOS at Paso Robles at that date. Further, the system experienced a total crash in November 2000. This was brushed off by Kristine Nelson (NWS Headquarters) as an "isolated incident". Obviously, the malfunctions had not ceased.

COMMIIR further states that ASOS comparison logs (human observations vs. ASOS observations to compare the validity of the ASOS observations) for this testing period had been “lost”. The fact of the matter is that NWS Regional Headquarters (Kristine Nelson) had sent a memo to me on June 5 (Attachment 7, OSC File) ordering that comparison logs at Paso Robles be discontinued. The effect of this order was to take away the best tool we had for analysis of ASOS accuracy. *NWS clearly did not want to know what it did not want to know.* No “paper trail” would be found at Paso Robles after 5 June 2000. The testing of the ASOS at Paso Robles had thus itself been compromised.

Anyway, COMMIIR states that the “availability and accuracy rates for the [Paso Robles] ASOS from January 2002 through January 2003...averaged a little over 99%.” This sounds very reassuring. Question: How would you like to drive a car in which the brakes worked “a little over 99%” of the time? For aviation safety, as in automotive safety, we need 100% availability and accuracy. That’s why the FAA places human observers at key airports and at airports with hazardous weather. Paso Robles Airport manifests such qualifying hazardous weather and thus deserves human observers.

Moreover, in July 2002, during the height of the fog season, the availability rate for ASOS observations at Paso Robles was a low 95.9%. Human observers would have had a 100% availability rate, and their visibility reports would have been far superior. This appears to be a serious degradation of service, even accepting the government’s own figures.

On COMMIIR page 9, the author argues that there was “no NWS field office at Paso Robles” and therefore no NWS violation of PL 102-567. *I have already shown that this Commerce statement is simply not true.* Paso Robles Airport was an active and fully staffed NWS field office at the time Congress passed the Weather Service Modernization Act. The Congressional action clearly prohibited the action which NWS subsequently took. In presenting factual material, the National Weather Service and the Department of Commerce should research its own records more carefully.

On COMMIIR page 10, the author states that “most people involved with the technology agree that when it comes to visibility and cloud/ceiling reports, the system is not always ~~as~~ reliable as a human observer.” Thus, Commerce admits that the unmanned ASOS at Paso Robles Airport is not as reliable as the NWS CWO humans. Is this *degradation*?

COMMIIR page 10 asserts that “the fundamental defect in Mr. Ryan’s allegations in this matter is that they are based largely on old information.” Further, “my interview with him indicated that he had little or no first-hand knowledge of the repairs that were made to the system in late 2000, or of the results produced...” I shall ignore the question of what “indications” I might have given the interviewer about my lack of knowledge. Contrary to the COMMIIR assertions, I continued to receive disparaging reports about

Paso Robles ASOS from human observers at Paso Robles, observers at NWSFO Oxnard, and media persons: The reports all agreed that ASOS continued to have serious problems at Paso Robles through the testing period.

COMMIIR then asserts (Page 10) that Mr Kellett (Paso Robles supervising observer) was “very critical” of ASOS, but dismisses Mr Kellett’s remarks because they were contradicted by NWS personnel and the (Paso Robles) airport manager. But Mr Kellett was at the scene, comparing his live observations to the ASOS computer screen in front of him. NWS personnel did not take weather observations on site. The Paso Robles airport manager is not a certified weather observer, nor is he an ASOS operator. Moreover, I will state for the record that Mr Kellett is one of most reliable and factual weather observers I have known in my 30 year NWS career.

In fact, COMMIIR relies heavily on the Paso Robles airport manager. On page 11, COMMIIR repeats a statement from the airport manager that the [ASOS] system “has worked almost flawlessly since commissioning” and “it never misses a beat”. Indeed! The system crashed during a rainstorm in February 2001. It has consistently mishandled temperature and dew point data ever since commissioning. And the 95.9% government rating in July 2002? What about reports of fog banks and partial obscurations (that ASOS is not capable of making)?

Again, the airport manager is not a certified weather observer. Nor is he an ASOS technician. He is hardly the man to be making statements “for the record” regarding whether or not ASOS is working correctly. Nor is he a disinterested observer: I note with interest that the airport manager recently (June 2001) received a large grant for improvements from the FAA.

COMMIIR concludes the body of its report with a curious sentence: “Also, there have been no aviation accidents at the airport since the commissioning of the ASOS.” Most high school debaters will recognize the fallacious argument here: The non-occurrence of an event is neither an indicator for future events, nor an explanation for past events.

That there haven’t been any aviation accidents at Paso Robles Airport to this date we should thank God, not ASOS or NWS.

SUMMARY

The National Weather Service operated a fully-staffed, 24-hour, field weather office at Paso Robles Airport CA in 1992 when Congress passed PL 102-567. The NWS violated provisions of that law by commissioning an unmanned ASOS to take inferior weather observations at Paso Robles---after transferring authority for weather observations at Paso Robles to the FAA in October 1995.