Vincent M. Sugent
7768 Pleasant Lane
Ypsilanti, MI 48197
January 9, 2012

Karen Gorman
Deputy Chief, Disclosure Unit
U.S. Office of Special Counsel
1730 M Street, N.W., Suite 300
Washington, D. C. 20036-4505

Dear Karen,

Thanks again for your time, patience and effort in addressing safety issues and improprieties with Detroit Tower and the Agency. With the "improprieties with Detroit Tower" being said, myself and local air traffic management, John Whitehurst and Gary Ancinec, are in agreement with two of the three issues.

We are in agreement that the FWA SID lacks proper verbiage to allow the issuance of routing not included on said SID that would eliminate confusion for the pilots and unnecessary transmissions thus making the process safer.

We also believe and agree that the wind instruments are not operating properly due to improper site locations and the lack of updating the WME software as stated in the Meteorological Survey and Obstruction Analysis dated December 6, 2010.

The following is offered as a response to the Secretary of Transportation, the Office of Inspector General and the Agency's findings and arguments.

Allegation 1

FAA Order 7210.56C definition of an operational deviation is as follows,

"Operational Deviation: An occurrence attributable to an element of the air traffic system in which applicable separation minima as referenced in paragraph 5-1-1 a, Operational Error was maintained, but:

(1) Less than the applicable separation minima existed between an aircraft and adjacent airspace without prior approval; or

(2) An aircraft penetrated airspace that was delegated to another position of operation or another

facility without prior coordination and approval; or

(3) An aircraft penetrated airspace that was delegated to another position of operation or another facility at an altitude or route contrary to the altitude or route requested and approved in direct coordination or as specified in a letter of agreement (LOA), precoordination, or internal procedure; or

(4) An aircraft is either positioned and/or routed contrary to that which was coordinated individually or; as specified in a LOA/directive between positions of operation in either the same or a different facility"

The transition portion of the local Notice DTW N7110.156(2), (Attachment 1), states, *"To transition from a West flow to a South flow configuration, the last arrival for Runway 27L shall have landed and be clear of Runway 27L prior to a Runway 21R or 22L departure being cleared for takeoff and commencing takeoff roll".*

The OIG makes the following three statements in their findings portion:

"Ensure that the necessary coordination has been accomplished before you allow an aircraft under your control to enter another controller's area of jurisdiction."

"What constitutes "necessary coordination" is generally found in the specific requirements of FAA Order JO 7110.65. In some cases, however, the necessary coordination" is found in FAA Order 7210.56C, "Air Traffic Quality Assurance." Paragraph 5-1-1.d.(3) of this Order, for example, defines the coordination as "direct coordination or as specified in a [letter of agreement], pre-coordination, or internal procedure" involved in a specific aircraft operation. (Attachment 4) Such a letter of agreement exists between the Detroit Air Traffic Control Tower and the Detroit Terminal Radar Approach Control (TRACON) facility, and it imposes requirements on controllers in both facilities. The letter of agreement states that under certain specific conditions, Detroit Tower controllers will assign specific headings to aircraft departing DTW. If a Detroit Tower controller failed to assign the departure heading required by the letter of agreement to an aircraft, and if that aircraft subsequently entered Detroit TRACON jurisdiction without the TRACON controller knowing the heading was not assigned, an operational deviation, as defined by FAA Order 7210.56C, would have occurred."

"AOV officials have again reviewed the specifics of these events. Because there is no requirement to coordinate Runway 22L departures with the Detroit TRACON Runway 27L final approach controller, the AOV officials did not find that the manager's actions or inactions met the definition of an operational deviation as defined in 7210.56C. Therefore, since no operational deviation occurred, there is no evidence the Front Line Manager received preferential treatment."

There is no way feasible to comply with DTW 7110.156 without coordination with Detroit TRACON. Mr. Bartteit coordinated with Detroit TRACON to provide gaps on Runway 27R so as to be able to depart Runway 22L. When Mr. Bartteit did not request gaps on Runway 27L, given the above three statements, he committed an operational error. AOV should have heard the coordination in their re-review. All three of the OIG's paragraphs support my argument.

My statement, *"There is no doubt in my mind they should be ODs (operational deviations)"*, is accurate and references the voluminous operational deviations I submitted that violated local orders. My point was simply to show disparity. I even stated that. It baffles me as to why an OIG attorney cannot figure out what I was doing, the meaning of all the documents and then use my statement like a "Hey, look what he said, we got him!" quip.

In footnote one the OIG states, *"In our December 14, 2009, report, we stated that then-AOV Air Traffic Investigator Scott Proudfoot confirmed that the events of July 21, 2008, did not constitute operational errors or deviations. This conclusion should have been attributed to another AOV official."*

In an email exchange, Attachment 2, I was told that Mr. Proudfoot spoke to the OIG and that a correction was going to be sent to the OSC regarding his statement in the December report. The OIG even began to recall the exchange during the conversation. How and why does it go from recalling a conversation to another AOV official making the statement?

Allegation 2

In the report the OIG states, *"Consequently, we are unable to conclude that the ASOS and WME discrepancies have resulted in an "unsafe and untenable situation for controllers and the flying public."*

Attachment 3, Meteorological Survey and Obstruction Analysis Wind Measuring Equipment (WME) and Automated Surface Observing System (ASOS), states the following; *"A formal survey was conducted to locate a site to co-locate the ASOS and WME. A location near the AS0S Data Collection Package (DCP) near Runway 04R glide slope tower was selected for both systems. No significant obstructions to the prevailing wind in the area were noted. Both anemometers can be installed on 33-foot poles at this location.*

It is the recommendation of AJW-14A, with input from DTW Air Traffic, Tech Ops and the National Weather Service to proceed with the Needs Assessment Program (NAP) entry, initiated by DTW TechOps, to relocate the WME and ASOS wind equipment to the ASOS Data Collection Package (DCP) near Runway 04R glide slope tower. Refer to pages 11-13 for site details, map and photographs.

AJW-14A will begin the process of implementing the LLWAS-III wind gust algorithm, which has a 5 knot threshold, for wind gust information on the WME software. This is consistent with all other automated wind equipment in the NAS. DTW will be used as a keysite for implementation of this modification."

I absolutely believe that Mr. Turner's analysis and recommendations was spot on and the subsequent actions and conduct of the Agency are contemptible.

The DTW Problem Report Analysis, (Attachment 4) is a gem. This time around they state, *"After reviewing all the cases provided, it appears that both wind sensors were performing as designed."* The other odd thing is there are no names or signatures on the document. Mr. Turner put his name and signature on his report.

Funny how they use a chart showing winds from miles away to support that the ASOS from around the surrounding areas had no gusts in the hourly reports, METAR's. Then go on to state that the observer determined the gusts were invalid and removed them. How often is this happening? Why are we not being told that this is being done? Why was this not stated earlier? And if the wind sensors were performing as designed, how could this be happening? Oh yeah, birds. Birds are now one of the factors in inaccurate readings. See page seven of the DTW Problem Report Analysis. How does the observer see these birds at night or during inclement weather?

During an October 2011 telcon, the Agency stated that one of the wind incidents was caused by migrating birds that took off to feed when the sun rose. To my knowledge, not one governmental entity was near the wind equipment to observe to the trek.

They again bring up the wind socks. How can a weather observer see the wind socks at night or during inclement weather? When an accident or incident occurs the reasons are going to be birds, wind socks and augmentations?

Conspicuously missing from this report, the location of the ASOS and the surrounding buildings? There is not one comment made about siting in the DTW Problem Report Analysis. They spoke about it during the July 2011 the telcon, but did not put it into writing.

The biggest problem I have with the way the wind issue has been going the past few months is the deference and obeisance to outside entities instead of giving the controllers the proper tools to do their job in protecting the safety of the pilots and the flying public.

From day one the facility has been in agreement that there are issues with the wind instruments and the lack of confidence with not only both site locations, but the reliability as well.

There are numerous parts to the air traffic system. The flying public wants to go from point to point and pilots and air traffic exists to accomplish this. Equipment exists to give air traffic and pilots proper information to fulfill this. The solving of equipment issues or

the correcting of abhorrent decision making should not be put on tower personnel. Responsible entities need to correct the problems of the equipment they are responsible for.

The following is a quote for the unsigned "DTW Problem Report Analysis 2011":

"A closer look at the DTW METARs show no gusts reported in any hourly observation for the entire day. The DTW ASOS is augmented by a contract weather observer. The contract weather supervisor, Ed Burney, was contacted and confirmed that the contract weather observers have the ability to remove invalid wind gusts if they are perceived to be inaccurate utilizing other available wind sources (e.g., airport wind socks). If the peak winds on the ASOS, seen in the ATCT during the problem report, were not contained in the hourly METAR then the contract weather observer determined it was invalid and was removed."

We received Attachments 5 and 6 as a fix to our problem. The two main fixes are to have tower personnel change the wind in the observation and make the WME the primary wind source. To date neither has been instituted.

The tower should not be augmenting anything that has to do with the weather. The FLM's and the controllers are busy enough as it is working traffic and do not have time to watch the wind and determine what the prevailing winds should be. That is what the NWS is here for; to give us the proper information to do our jobs and that appears to be what they are already doing as stated in the author anonymous document.

I agreed with management in making the WME the primary wind source, but after further investigating, I found that the 7110.65, (Attachment 7), mandates the ASOS to be considered the primary source of wind direction and velocity.

Until the equipment is moved, put a ribbon display at the location of the weather observer and they can use the wind socks and WME display to augment the observation as necessary in doing their job. Again, they are currently doing this already.

We are in the separation of aircraft business, not the weather business. That is what the NWS is on the airport for. They need to do their jobs and if they are comfortable in the product that is being put out then their names need to be on and responsible for the information that is being disseminated.

Encumbrance should not be put on the tower.

During the July 2011 telcon, it was stated controllers were not to blame for the aircraft accident in Denver when a B737 slid off of the runway due to gusty winds. This is not true.

Attachment 8 is excerpts from the NTSB report covering that very incident. The following are included in the report:

2.3.1.2 ATC Recording and Dissemination of Wind Information

"the Denver ATCT local controller did not provide the accident pilots with any additional wind information"

"Therefore, the NTSB recommends that the FAA modify FAA Order 7110.65 to require air traffic controllers at airports with multiple sources of wind information to provide pilots with the maximum adverse wind component, including gusts, that the flight could encounter."

3. Conclusions

3.1 Findings

"14. If the Federal Aviation Administration had published the required letter to airmen describing the sensor locations, operational capabilities, and limitations of the low-level windshear alert system (LLWAS) at Denver International Airport and the accident pilots had been familiar with its content, they might have been more likely to request additional LLWAS sensor wind information when they saw the clouds moving swiftly across their departure path before they accepted their takeoff clearance and/or began their takeoff roll."

"16. If the accident pilots had received the most adverse available wind information (which was displayed as airport wind on the Denver International Airport air traffic control tower local controller's ribbon display terminal and indicated a 35-knot crosswind with 40-knot gusts), the captain would likely have decided to delay the departure or request a different runway because the resultant crosswind component exceeded Continental's 33-knot crosswind guidelines."

3.2 Probable Cause

"Contributing to the accident were the following factors: 1) an air traffic control system that did not require or facilitate the dissemination of key, available wind information to the air traffic controllers and pilots."

4. Recommendations

"Modify Federal Aviation Administration Order 7110.65 to require air traffic controllers at airports with multiple sources of wind information to provide pilots with the maximum wind component, including gusts, that the flight could encounter."

"that a letter to airmen has been published and is easily accessible describing the location and designation of the remote sensors, the capabilities and limitations of the system, and the availability of current LLWAS remote sensor wind information on the request of a pilot, in compliance with Federal Aviation Administration Order 7210.3."

"Require air traffic control towers to locally develop and implement written runway selection programs that proactively consider current and developing wind conditions and include clearly defined crosswind components, including wind gusts, when considering operational advantage with respect to runway selection."

Given the fact that not only when we issue low level wind shear alerts from that portion of the WME displays that are not encountered by pilots, we also have two entirely different wind readings derived from two different sources that routinely clash and unfortunately during inclement weather.

Detroit's dissimilar winds are often such polar opposites that different runway configurations could be used. So what maximum wind component should controllers issue at Detroit; the piece of equipment that is displaying the maximum wind direction and gusts for the current runway configuration or the piece of equipment that may not be displaying as strong a wind, but for another runway configuration and correct?

We are an accident waiting to happen, an aircraft sliding off of a runway or flying into an unexpected tailwind. For the OIG to state *"Consequently, we are unable to conclude that the ASOS and WME discrepancies have resulted in an "unsafe and untenable situation for controllers and the flying public."*, and the Agency and Secretary agreeing with such a statement is deplorable.

Relocate both pieces of wind equipment and install the LLWAS-III wind gust algorithm as Mr. Turner recommends.

Allegation 3

Attachment 9 is an email and document I received from the Agency concerning the FWA SID. I had no idea what Mr. Bazman was talking about.

The document clearly states that we are implementing a change to the FWA 4 departure and not a temporary revision that Mr. Bazman is talking about.

Unless I missed an email, I also have no idea what Mr. Bazman is talking about when he states that I need to review the wording before a NOTAM could be issued. During the telcon that generated the document, we all had the understanding that we were moving forward with the verbiage in the second Take-Off All Runways paragraph.

Binding officials review documents after a team that is put together for a specific task gives them a product. Collaboratively in this case Tim, Paul, Rich, I and etcetera did just that. As a matter of fact, if memory serves me correctly, some of those officials were involved in the last telcon, around October 2011, where we agreed to the verbiage. There was nothing for me to review because I was one of the ones who settled on the choice of words.

In this case, at the time, I was under the impression that Gary et al agreed with what we proposed and were moving forward. Again, there was nothing for me to review nor should there have been unless there was a change and even then it would have been looked over by us all.

As a FACREP, I would only review what a team proposed that I was not a part of, so in this case the union review was not necessary and I rarely did that anyway.

If this is the briefing that Bazman received from Tim, then there a serious disconnect.

Then I received an email in late December 2011, Attachment 10. The changes have yet to be implemented and there is still talk of temporary changes and test periods. This is not what I recalled from the last telcon. Mr. Bazman has been involved in some facet with this simple change of the SID for over six years and has failed miserably.

I sent the OIG a recording of just how confusing and unacceptable the issue can become when automation is not utilized. The recording was not even mentioned in the report.

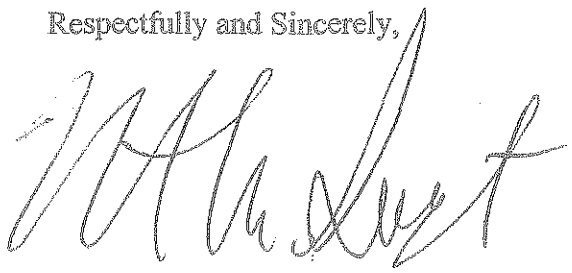
An interesting note of the email string begins on page five. Mr. Peter Trapp states he needs to provide the OIG with an update. The email was sent on December 20, 2011. The report was dated August 26, 2011 and was sent to the Special Counsel on September 23, 2011. The string contains numerous OIG references beginning September 7, 2011.

The OIG did not substantiate the FWA SID allegation. So why was there needed communication with the OIG after the August 26, 2011 report date?

I believe there are numerous issues with not only the safety findings of the report, but the investigation and conduct of AOV and the OIG. I cannot believe how the statement of Mr. Proudfoot was handled and how the controllers were treated, as if we were the ones who were under investigation during the OIG visit.

This entire situation is due to pitiful regional and national managerial performance and oversight and incompetent leadership due to a the lack of air traffic knowledge, experience and ability. I cannot believe this is still allowed to continue. I really do not know what more can be said.

Respectfully and Sincerely,



Vincent M. Sugent

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NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
DETROIT METRO ATCT

DTW N7110.156

Effective Date:
Immediately

Cancellation Date:
March 28, 2009

SUBJ: PROCEDURES FOR TRANSITIONING BETWEEN SOUTH AND WEST CONFIGURATIONS.

1. **Purpose of This Notice.** Establish defined transition procedures between South and West Flow configurations and cancel authorization to conduct Southwest Flow operations.

2. **Audience.** This notice applies to DTW Tower employees, and all associated support personnel.

3. **Where Can I Find This Notice?** This notice is available in all applicable DTW publications and the FAA Federal Directives Repository, **https://loa.faa.gov/**

4. **Cancellation.** This Notice cancels Notice DTW N7110.152, PROCEDURES FOR CONDUCTING SOUTHWEST FLOW.

5. **Explanation of Changes:** This Notice establishes defined transition procedures between South and West Flow configurations. It also cancels authorization to conduct Runways 21R/27L Dependent and 22L/27L Independent operations

6. **Procedures.**

a. Change Paragraph 6-9, page iv, Table of Contents of the DTW 7110.9 to read:

6-9. TRANSITION PROCEDURES BETWEEN SOUTH AND WEST FLOW CONFIGURATIONS.

b. Replace paragraph 6-9, RUNWAY'S 21R/27L OPERATIONS of the DTW N7110.9 with:

6-9. TRANSITION PROCEDURES BETWEEN SOUTH AND WEST FLOW CONFIGURATIONS.

a. Configuration transitions involving Runway 27L arrivals and Runways 21R/22L departures shall adhere to the following requirements:

(1) To transition from a South flow to West flow configuration, the last departure from Runways 21R or 22L shall have crossed the Runway 27L projected center line prior to the

Runway 27L arrival crossing the Runway 27L ILS Final Approach Fix or 5.3 nautical miles from the runway threshold.

(2) To transition from a West flow to South flow configuration, the last arrival for Runway 27L shall have landed and be clear of Runway 27L prior to a Runway 21R or 22L departure being cleared for takeoff and commencing takeoff roll.

Joseph Figliuolo III
Air Traffic Manager
Detroit Metro ATCT

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Vincent Sugent

From: [redacted]
To: "Vincent Sugent" <vinjamie@comcast.net>
Sent: Wednesday, October 06, 2010 9:25 PM
Subject: FW: DTW OIG Report

Hello Vin,

See the message below from Proudfoot.

[redacted]

From: scott.r.proudfoot@faa.gov [mailto:scott.r.proudfoot@faa.gov]
Sent: Tuesday, October 05, 2010 2:18 PM
To: [redacted]
Subject: DTW OIG Report

Please let Vinny know that I spoke with Brian Uryga today from the IG's office. He told me that the OIG is going to draft a response and send a correction to the OSC regarding my statement. The draft response will state that inaccurate information was in the first report and he will add the correct information. During the conversation, he began to recall the events and that Ferrante or AOV didn't agree with me on this. He again apologized. Thanks for your help and tell Vinny that I would never (on purpose) throw a brother under the bus. I would have told him if I changed my position. Again, he can call if he wants. Thanks [redacted].

Scott Proudfoot

[redacted]

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METEOROLOGICAL SURVEY AND OBSTRUCTION ANALYSIS
WIND MEASURING EQUIPMENT (WME) AND
AUTOMATED SURFACE OBSERVING SYSTEM (ASOS)

AIRPORT: Detroit Metropolitan Wayne County Airport, MI (DTW)

SYSTEMS: WME and ASOS

DATE: December 6, 2010

TO: Vaughn Yates, AJW-94

CC: Tina Sieberitz, Manager, Detroit Metro NAV/COM
Bernie Loudenslager, Manager, Weather Processors and Sensors Engineering Team (AJW-14A1

FROM: Christopher Turner, AJW-14A

BACKGROUND:

DTW Air Traffic personnel have reported problems between the Wind Measuring Equipment (WME) and the Automated Surface Observing System (ASOS) wind information. The primary problem has been a difference in wind gust information. A number of potential causes for the difference have been investigated. The first possibility was faulty equipment. The second potential difference in wind readings is sheltering of the anemometer by obstructions and buildings. Third is the difference in location on the airfield of each sensor and the height of the sensors. Sensors in different locations and at different heights (WME is 40 feet and ASOS is 33 feet) will detect winds and gusts at different times and intensity. Finally differences in the wind gust algorithm between WME and ASOS could lead to conflicting wind gust information. The current threshold for ASOS wind gust detection is 5 knots greater than the two minute average. The threshold for WME wind gust detection is 9 knots,or greater than the two minute average.

ANALYSIS:

A formal site visit was conducted on October 27, 2010 by AJW-14A with assistance and input from DTW Air Traffic, TechOps and the National Weather Service (NWS). Discussions with WME technicians indicate that the sensor has been replaced numerous times and is working properly and in compliance with FAA Order 6560.13C. AJW-14A performed a bench check of the spare anemometer to ensure proper performance and the TechOps technicians installed it.

A meteorological survey and obstruction analysis were performed at the existing WME and ASOS locations. There were no obstructions noted at the WME location that would adversely affect wind readings. There were a number of aircraft hangars to the east of the existing ASOS location that are likely causing sheltering. Given the height and location of these structures, the DTW ASOS is in violation of the ASOS Siting Order. See pages 4-10 for more details on the evaluation of the existing WME and ASOS locations.

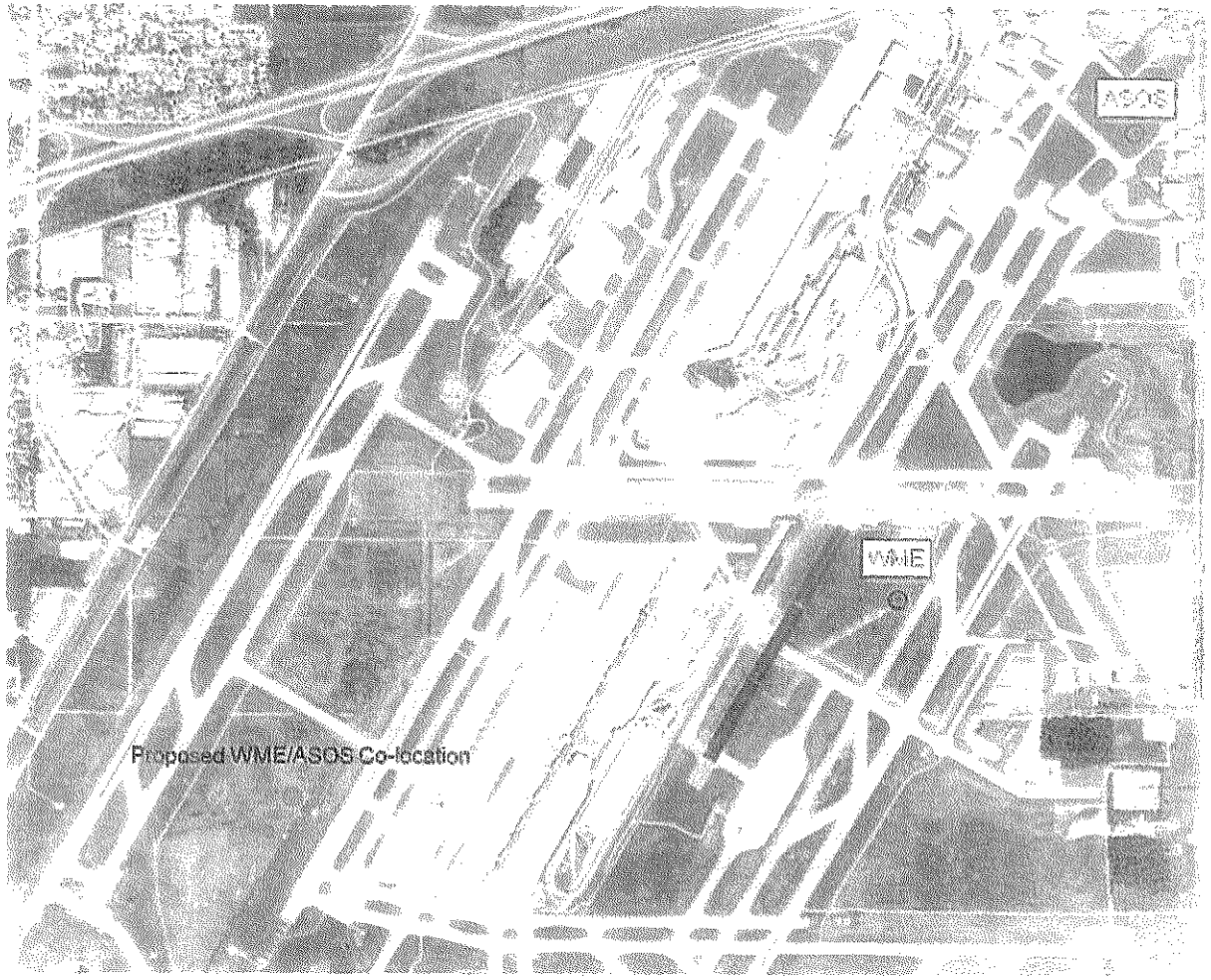
A formal survey was conducted to locate a site to co-locate the ASOS and WME. A location near the ASOS Data Collection Package (DCP) near Runway 04R glide slope tower was selected for both systems. No significant obstructions to the prevailing wind in the area were noted. Both anemometers can be installed on 33-foot poles at this location.

RECOMMENDATIONS:

It is the recommendation of AJW-14A, with input from DTW Air Traffic, Tech Ops and the National Weather Service to proceed with the Needs Assessment Program (NAP) entry, initiated by DTW TechOps, to relocate the WME and ASOS wind equipment to the ASOS Data Collection Package (DCP) near Runway 04R glide slope tower. Refer to pages 11 - 13 for site details, map and photographs.

AJW-14A will begin the process of implementing the LLWAS-III wind gust algorithm, which has a 5 knot threshold, for wind gust information on the WME software. This is consistent with all other automated wind equipment in the NAS. DTW will be used as a key site for implementation of this modification.

Christopher Turner, Weather Sensors Meteorologist



Existing and Proposed ASOS and WME Locations
Detroit Metropolitan Wayne County Airport, MI (DTW)

Location		
42° 13' 52.09" N	83° 19' 52.38" W	
☒ GPS Accuracy: ± 20 ft	☐ Estimated Method:	☐ Other
Physical Description:		

Condition of Equipment			
☐ Excellent	☒ Good	☐ Fair	☐ Poor
Comments:			

Anemometer Pole Height	
☒ Standard Height 10m (33ft)	☐ Other

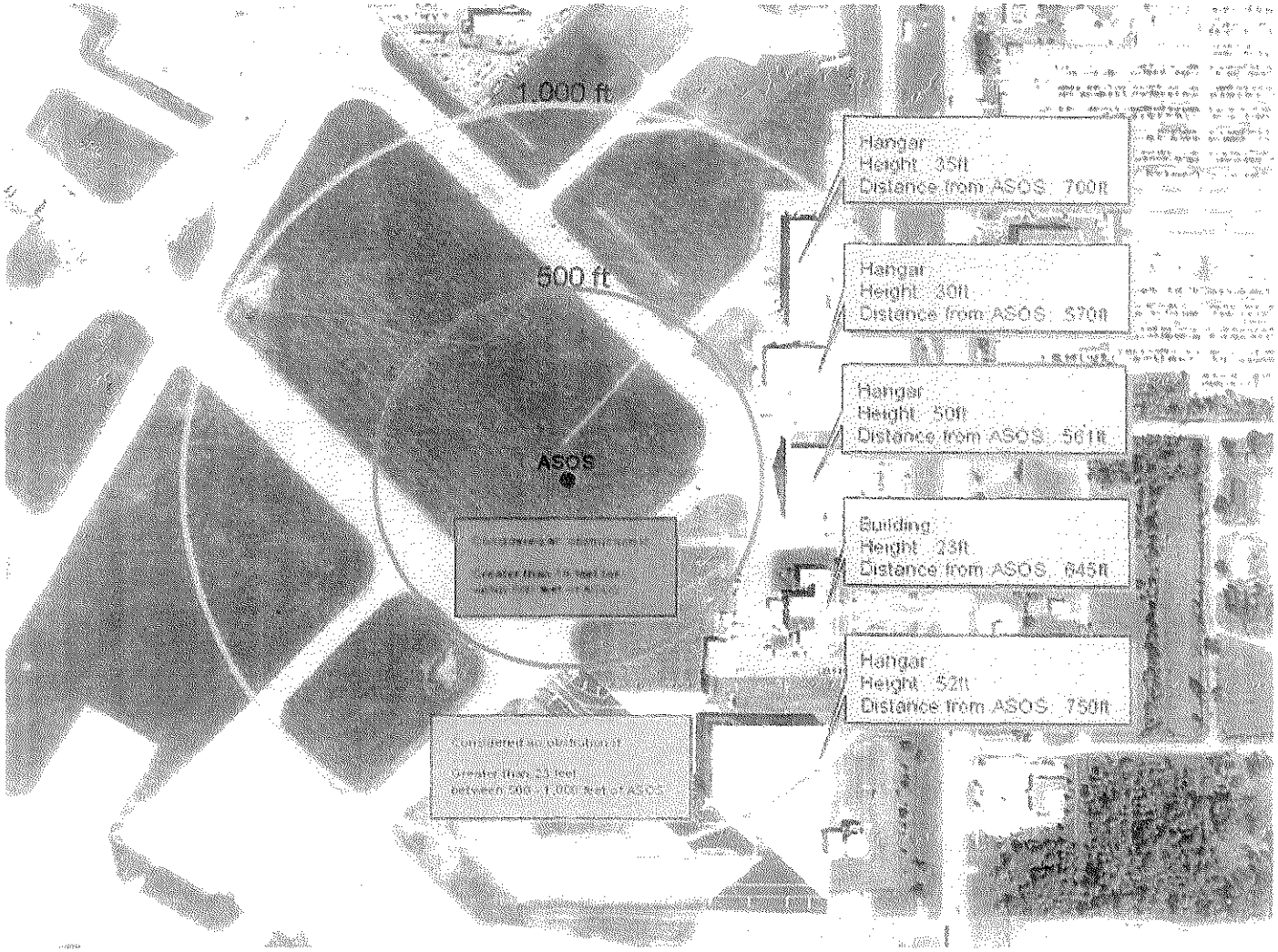
Terrain Features			
☒ Flat	☐ Rolling	☐ Steep Direction:	☐ Other
Comments:			

Obstructions

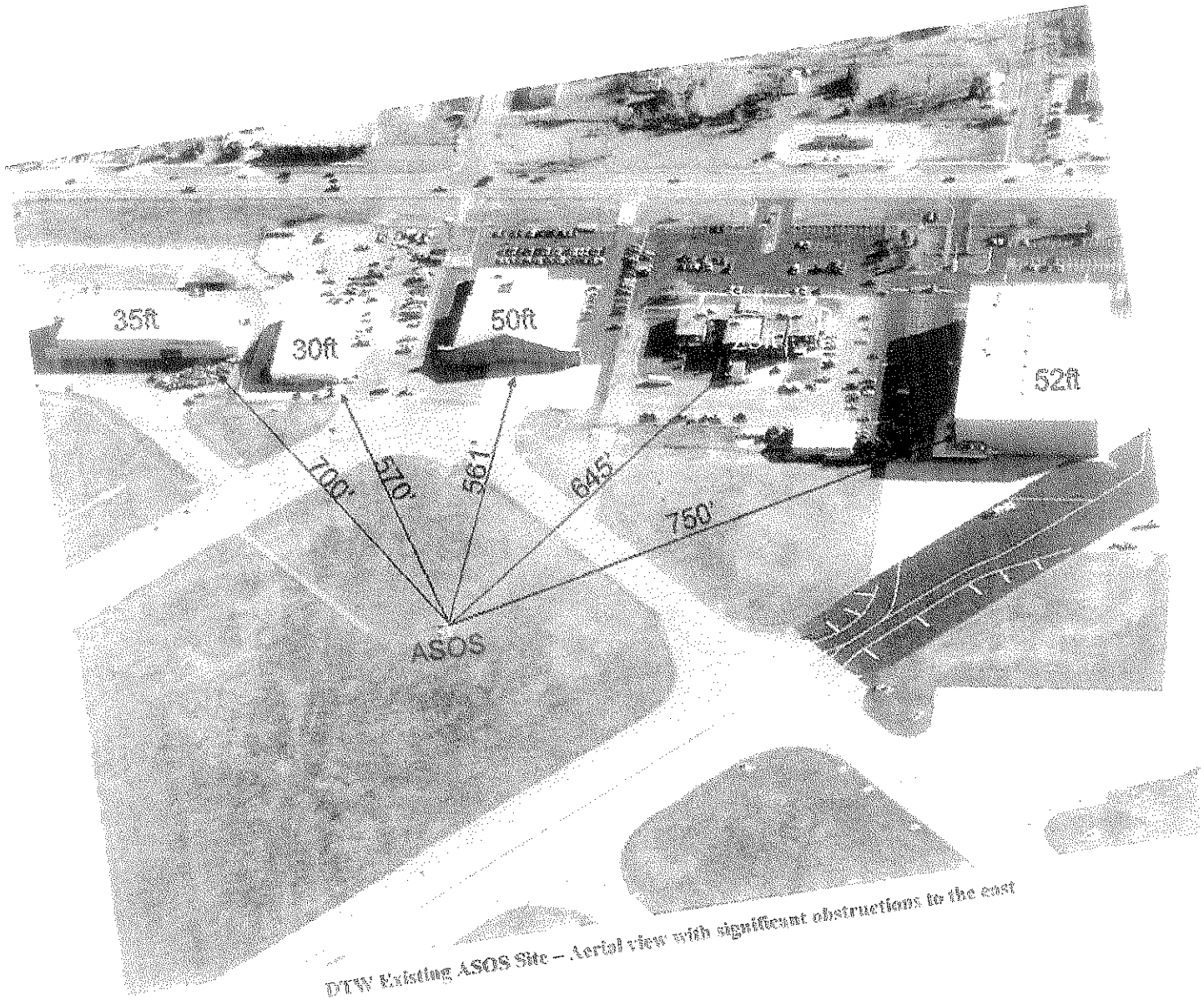
Hangar (38° to 51°magnetic):
Height: 35 feet. Width: 160 feet.
Distance: 700 feet.
Hangar (54° to 63°magnetic):
Height: 30 feet. Width: 180 feet.
Distance: 570 feet.
Hangar (77° to 98°magnetic):
Height: 50 feet. Width: 207 feet.
Distance: 561 feet.
Building (107° to 124°magnetic):
Height: 23 feet. Width: 192 feet.
Distance: 645 feet.
Hangar (131° to 156°magnetic):
Height: 52 feet. Width: 332 feet.
Distance: 750 feet.

Remarks

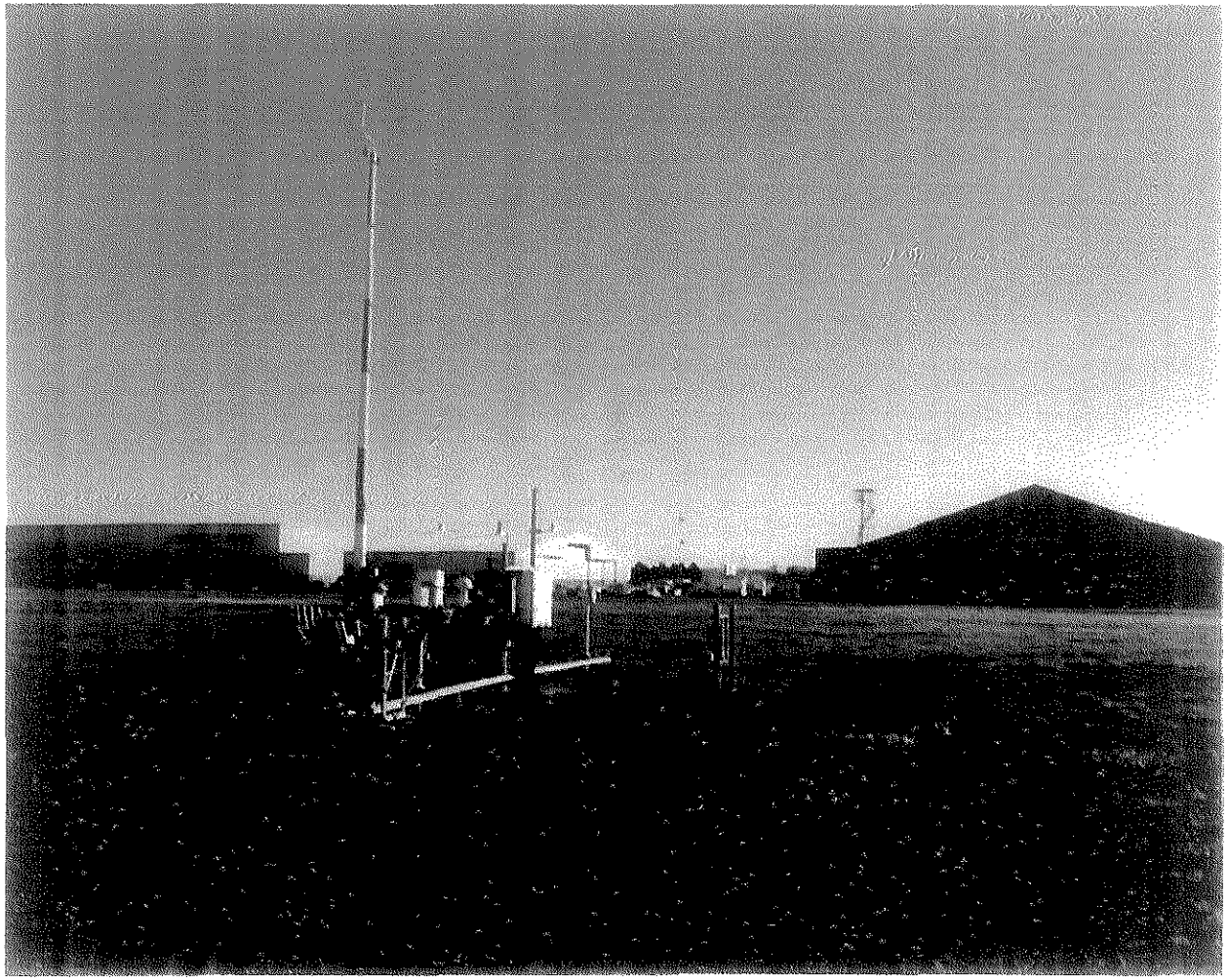
None



DTW Existing ASOS Site – Obstruction Analysis per ASOS Siting Guidelines (FCM-S4-1994)



DTW Existing ASOS Site – Aerial view with significant obstructions to the east



DTW Existing ASOS Site – View to the east

DTW EXISTING WME SITE

Location		
42° 13' 52.09" N	83° 19' 52.38" W	
☒ GPS Accuracy: ± 20 ft	☐ Estimated Method:	☐ Other
Physical Description:		

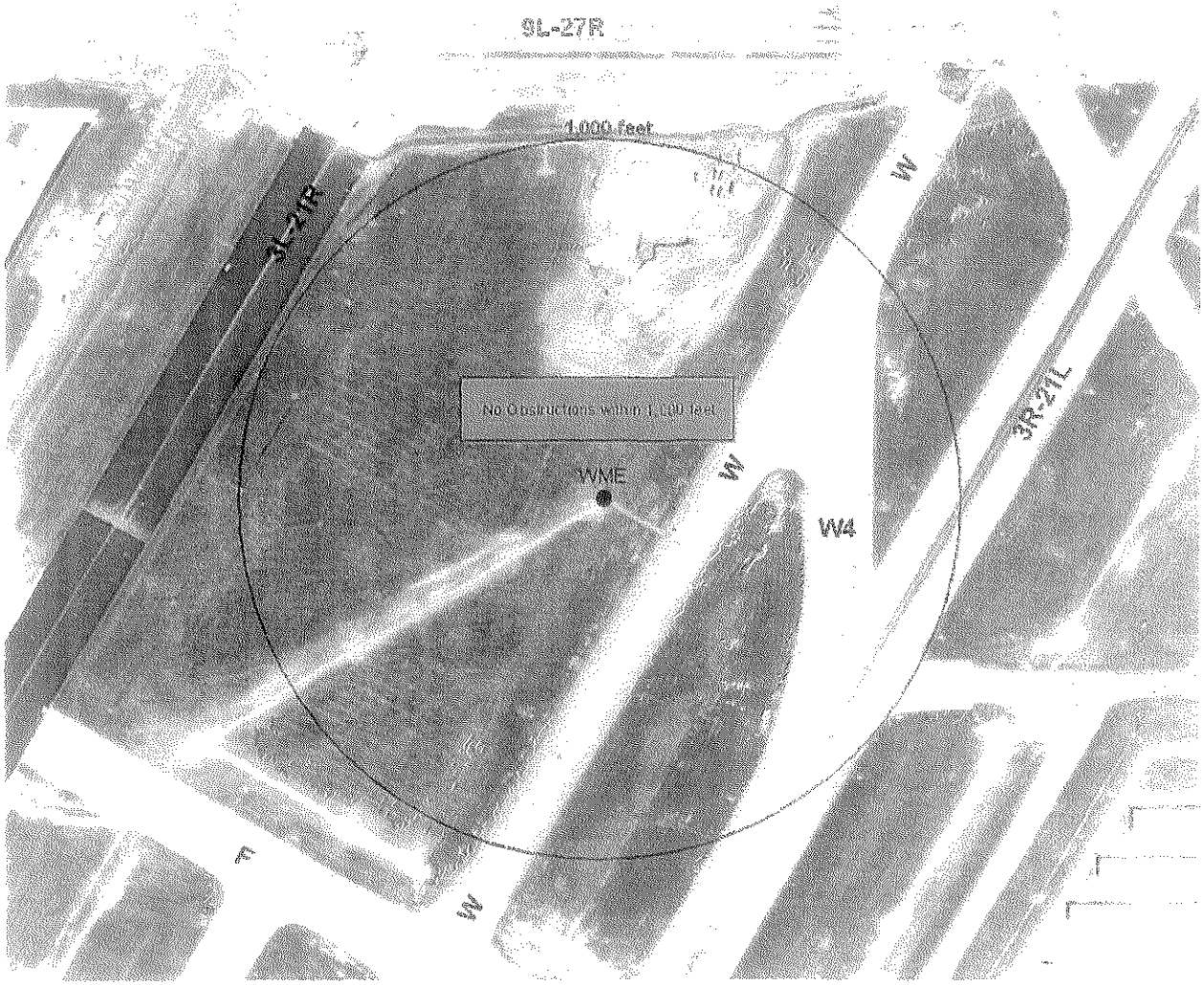
Condition of Equipment			
☐ Excellent	☒ Good	☐ Fair	☐ Poor
Comments:			

Anemometer Pole Height	
☐ Standard Height - 10m (33ft)	☒ Other: 40 feet

Terrain Features			
☒ Flat	☐ Rolling	☐ Steep Direction:	☐ Other
Comments:			

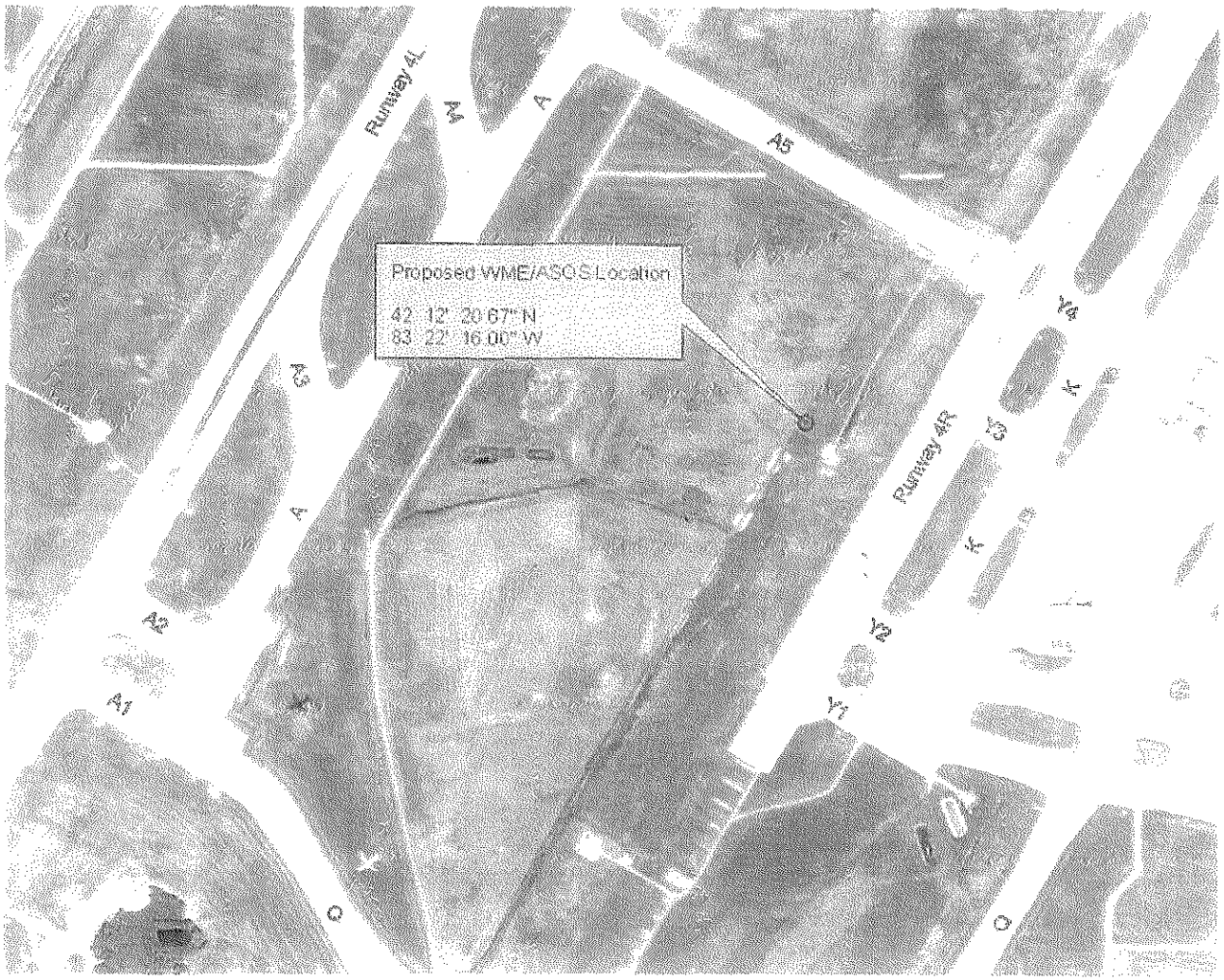
Obstructions
No Significant Obstructions

Remarks
None

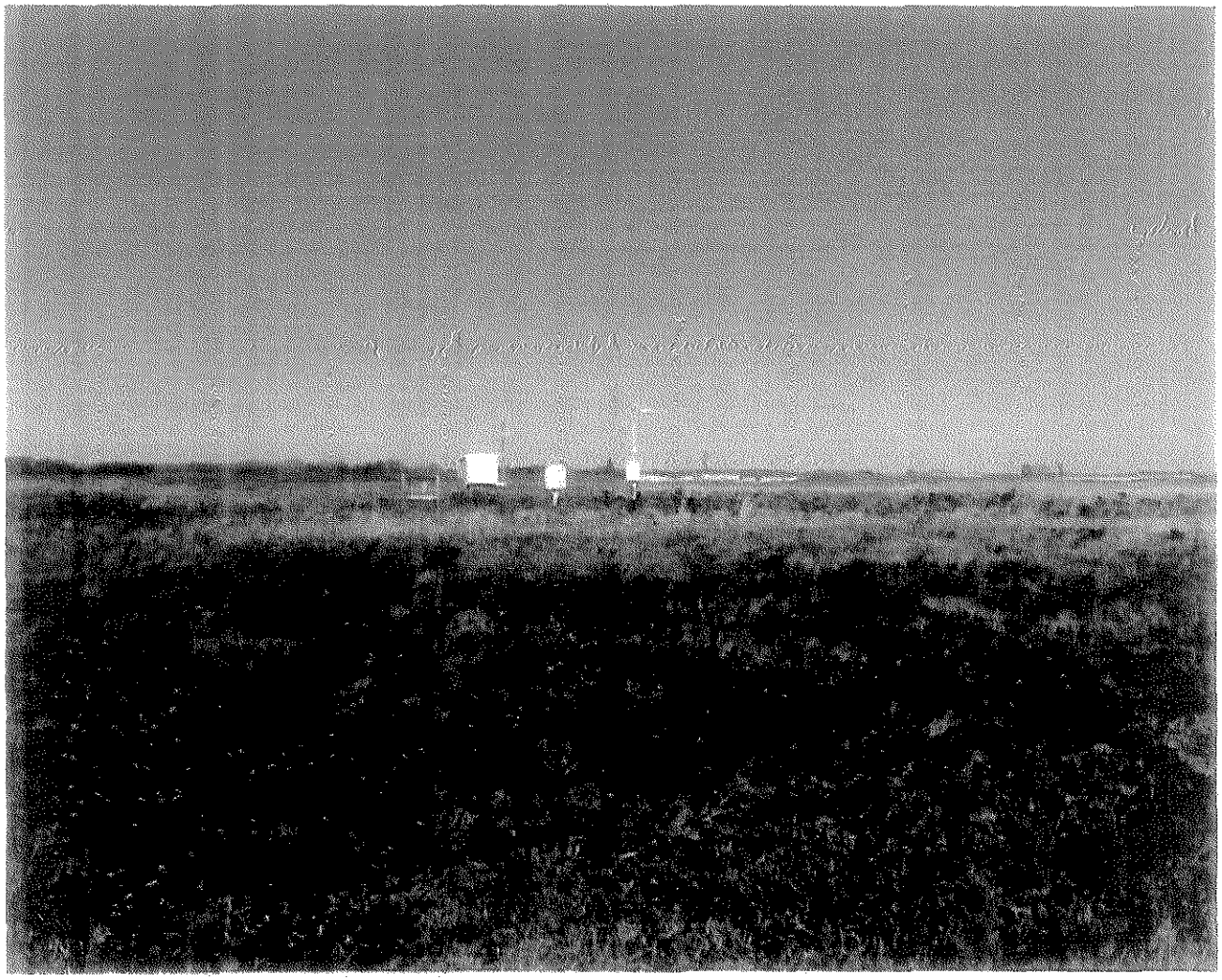


DTW Existing WME Site – Obstruction Analysis per FAA Order 6560.21A

Location		
42° 12' 20.67" N	83° 22' 16.00" W	
☒ GPS Accuracy: ± 20 ft	☐ Estimated Method:	☐ Other
Physical Description: Adjacent to Runway 4R glide slope tower. Site of existing ASOS DCP equipment		
Search Area Boundaries		
Contact siting meteorologist if this site cannot be utilized		
Properties		
☒ Airport	☐ Other Gov't	☐ Industrial ☐ Commercial
☐ Residential	☐ Other	
Contact:		
Power		
☐ Overhead	☒ Underground	☐ Unknown
☐ Other		
Comments: Power exists at the existing ASOS DCP		
Accessibility		
☐ Paved Roads	☐ Parking Lot	☒ Gravel Road
☒ Taxiway Runway	☐ Other	
Comments: Site is accessable via Taxiway A5 and gravel access road.		
Observed Soil Structure		
☒ Stable and Well Drained	☐ High Water Table	☐ Other
Terrain Features		
☒ Flat	☐ Rolling	☐ Steep Direction:
☐ Other		
Obstructions		
No significant obstructions		
Recommended Pole Height		
10 meters (33 feet)		
Remarks		
None		



DTW Proposed WME and ASOS Site



DTW Proposed WME and ASOS Site – View to the west

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Meteorological Analysis of Air Traffic Problem Reports issued for

Automated Surface Observing System (ASOS) and Wind Measuring Equipment (WME)

Detroit Metropolitan Wayne County Airport Detroit, MI (DTW)

July 18, 2011

Prepared By:

Department of Transportation
Federal Aviation Administration
National Airway Systems Engineering
AJW-14A

1. Introduction

For the past few years Air Traffic personnel at Detroit Metro Airport (DTW) have reported differences in wind readings between the Federal Aviation Administration's (FAA) Wind Measuring Equipment (WME) and the National Weather Service's (NWS) Automated Surface Observing System (ASOS). Through many discussions between the FAA and NWS, a number of possible reasons for the differences have been identified. Reasons for the differences include, but are not limited to, the distance between the WME and ASOS (approx 7,000 feet), differences in anemometer technology (ultrasonic vs mechanical), and different wind averaging techniques.

2. Analysis Methodology

DTW Air Traffic personnel prepared and forwarded problem reports on the two systems to the FAA Weather Processors and Sensors Engineering Team (AJW-14A). A meteorologist from AJW-14A gathered the problem reports and collected meteorological data to be used in the analysis.

3. Data Sources

AJW-14A utilized all possible meteorological data sources to piece together a picture of the atmospheric conditions at the time of the problem report. Sources used during the evaluation include: hourly surface observations (METAR), one-minute ASOS data, 10-second WME winds (via the Integrated Terminal Weather System [ITWS]), ITWS reflectivity data, and ITWS wind shear and microburst alerts (if applicable).

3.1 Hourly Surface Observations (METAR)

Hourly surface observations (METAR) contain meteorological variables, including the wind speed, direction and gusts obtained from ASOS. For the purpose of this analysis, they were obtained via various Internet sources for Detroit Metro Airport (DTW), as well as, other surrounding airports within a 30 mile radius. The hourly observation closest to the Problem Report time was utilized. Table 1 and Figure 1 include all airports used in the analysis and their location in reference to DTW.

Airport	Location (Reference DTW)
Detroit Metropolitan Wayne County Airport (DTW)	
Willow Run Airport (YIP)	10mi West
Grosse Ile Municipal Airport (ONZ)	12mi Southeast
Custer Airport (TTF)	19mi South
Ann Arbor Municipal Airport (ARB)	20mi West
Coleman A. Young Municipal Airport (DET)	22mi Northeast
Oakland / Troy Airport (VLL)	24mi Northeast
Oakland County International Airport (PTK)	30mi North

Table 1 – Hourly Surface Observation (METAR) Locations

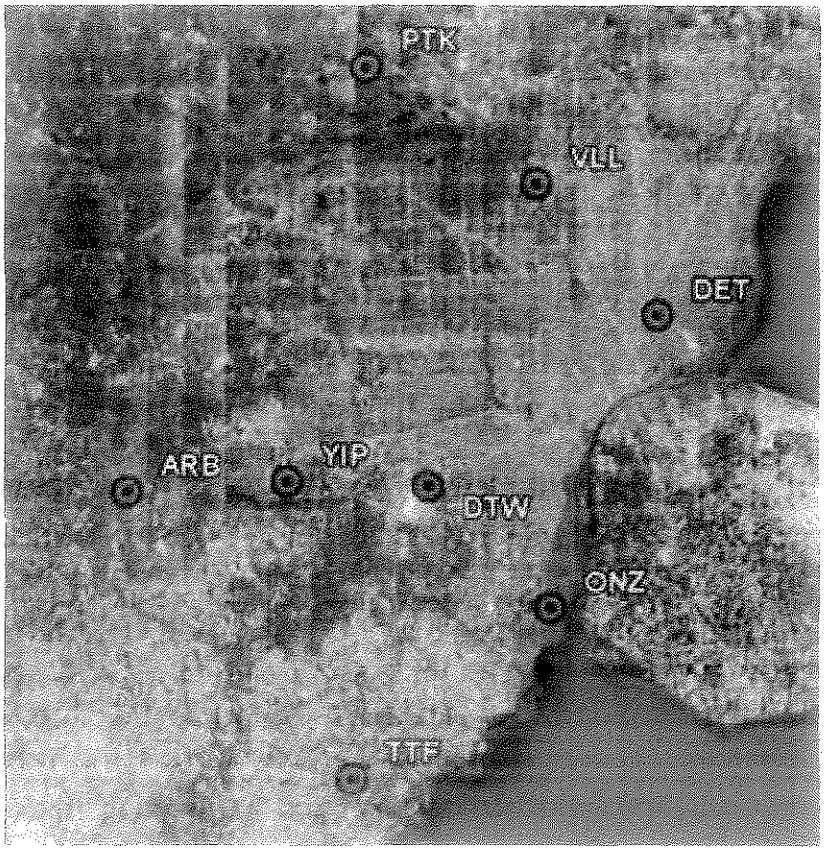


Figure 1 – Map of Hourly Surface Observations (METAR)

3.2 One-Minute ASOS Data

One-Minute ASOS data was obtained from the National Oceanic and Atmospheric Administration (NOAA) National Climatic Data Center (NCDC). Wind data is archived in the DSI-6405 file and is uploaded to the NCDC FTP server once a month. The data set includes the two minute average wind speed and direction and the max 3-second wind (gust). The data was available for DTW, YIP, ARB, DET, and PTK.

3.3 Wind Measuring Equipment (WME)

WME does not routinely archive at DTW, however the data is contained in archives from the Integrated Terminal Weather System (ITWS). Two-minute average winds, updated every 10 seconds were available during certain events highlighted in the problem reports. ITWS data is retained for 15 days. WME winds were utilized in analyzing some problem reports. A delay in receiving some of the trouble reports within the 15 day ITWS archive window did not allow for the use of WME data for analysis.

3.4 ITWS Reflectivity and wind shear / microburst reports

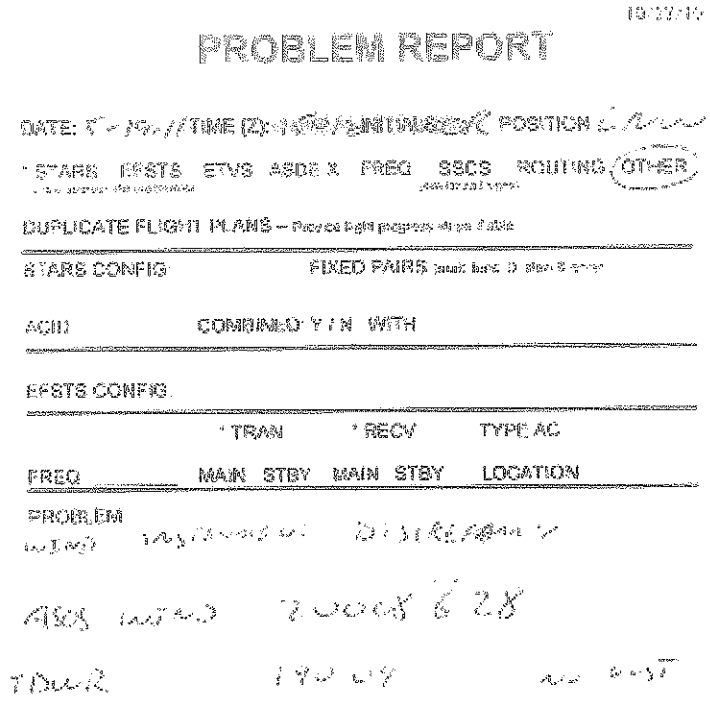
The 15-day ITWS archive contained reflectivity and wind shear reports. This data was used to help reconstruct the weather conditions occurring at DTW during the time of the trouble reports. Reports of wind shear and microbursts, and their relative position, helped validate wind readings at the ASOS and WME.

4. Problem Report Meteorological Analysis

Numerous problem reports were forwarded to AJW-14A for analysis between mid May 2011 and early July 2011. Many of the discrepancies documented in these reports were found to have similar causes. The following sections will provide examples of each.

4.1. May 19, 2011 (15:01 UTC) – Bird Interference

The problem report dated May 19, 2011 at 15:01 UTC (Figure 2) identified a discrepancy in the wind readings between the ASOS and WME, particularly the gust on ASOS and lack of gust on the WME. Note that the reference to "TDWR" winds in the problem report were assumed to be "WME" winds as the WME is the sole source of wind information for the Terminal Doppler Weather Radar (TDWR). There appears to be a misconception that the TDWR actually provides wind information. The TDWR only provides wind shear and microburst alerts.



PROBLEM REPORT

DATE: TIME (Z): POSITION

STARS EFSTS ETVS ASDE X FREQ SSCS ROUTING OTHER

DUPLICATE FLIGHT PLANS –

STARS CONFIG FIXED PAIRS

ACID COMBINED Y / N WITH

EFSTS CONFIG

	* TRAN		* RECV		TYPE AC
FREQ	MAIN	STBY	MAIN	STBY	LOCATION

PROBLEM

Figure 2 – Problem Report (May 19, 2011 – 15:01 UTC)

The winds reported on the ASOS were 200° at 08 knots with gusts to 28 knots. The winds reported on the WME were 190° at 09 knots with no gusts. A review of the hourly METARs from around the DTW area (Table 2 and Figure 3) show that the winds were generally light out of the south with a few sites reporting calm winds. None of the airports reported any gusts.

Airport	Time (UTC)	Direction	Speed (kts)	Gust (kts)
DTW	14:53	210	07	None
DET	14:53	Variable	03	None
YIP	14:53	180	06	None
ONZ	14:54	170	08	None
ARB	14:53	170	03	None
VLL	14:55	Calm	Calm	None
PTK	14:53	Calm	Calm	None
TTF	14:54	220	06	None

Table 2 – Hourly METAR Summary for May 19, 2011 (15:00 UTC)

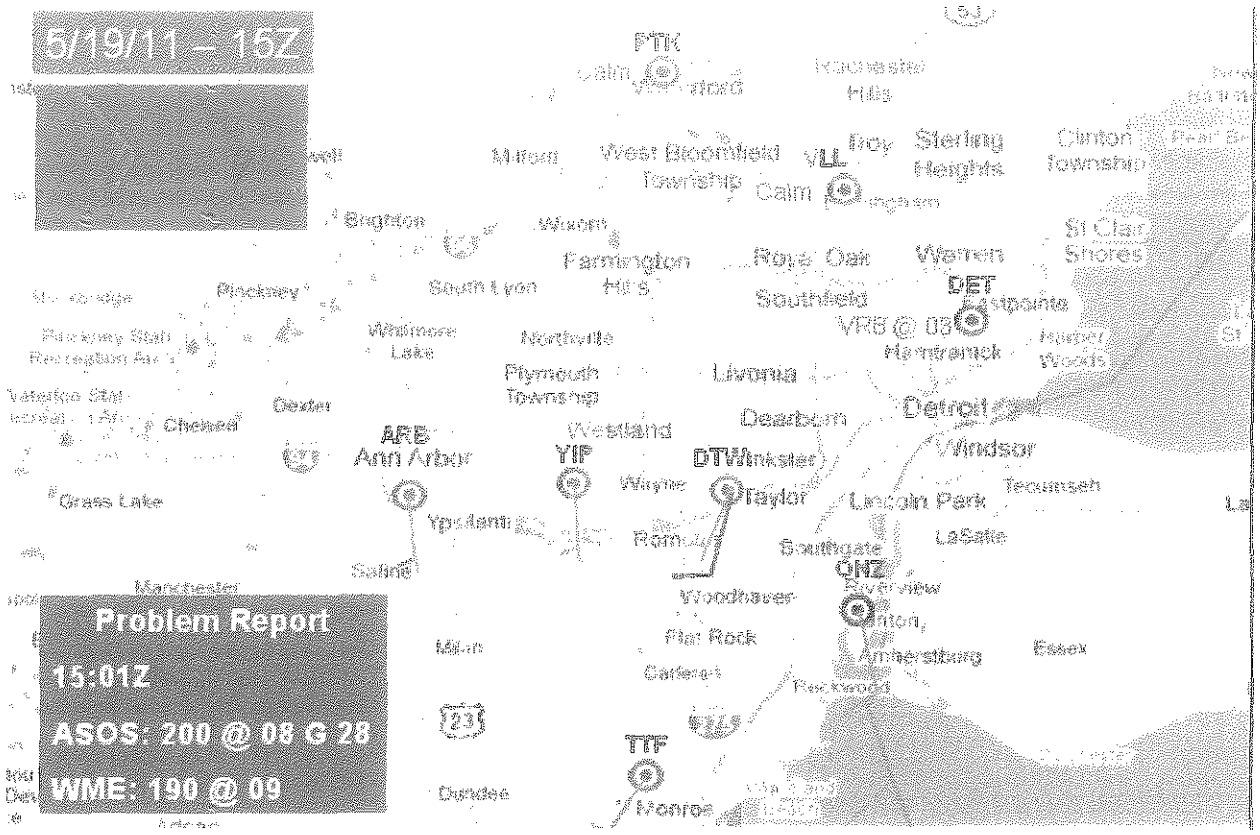


Figure 3 – Hourly METAR Summary for May 19, 2011 (15:00 UTC)

A closer look at the DTW METARs show no gusts reported in any hourly observation for the entire day. The DTW ASOS is augmented by a contract weather observer. The contract weather supervisor, Ed Burney, was contacted and confirmed that the contract weather observers have the ability to remove invalid wind gusts if they are perceived to be inaccurate utilizing other available wind sources (e.g., airport wind socks). If the peak winds on the ASOS, seen in the ATCT during the problem report, were not contained in the hourly METAR then the contract weather observer determined it was invalid and was removed.

To determine what caused the false wind gusts, the NWS in Detroit was contacted and they confirmed having seen bird interference with the ultrasonic anemometer used on the ASOS. These anomalies involve birds landing on the anemometers. The ultrasonic anemometers use sound waves transferred between three transducers to calculate wind speed and direction. When one or all of these paths are broken, say from a bird landing on the anemometer (Figure 4), the internal sensor firmware occasionally reports inaccurate wind speeds. The FAA uses the same style ultrasonic anemometers on a number of automated weather systems and has documented similar problems with birds. No gusts were falsely reported on the WME because the anemometer used is mechanical in nature and not affected by birds.

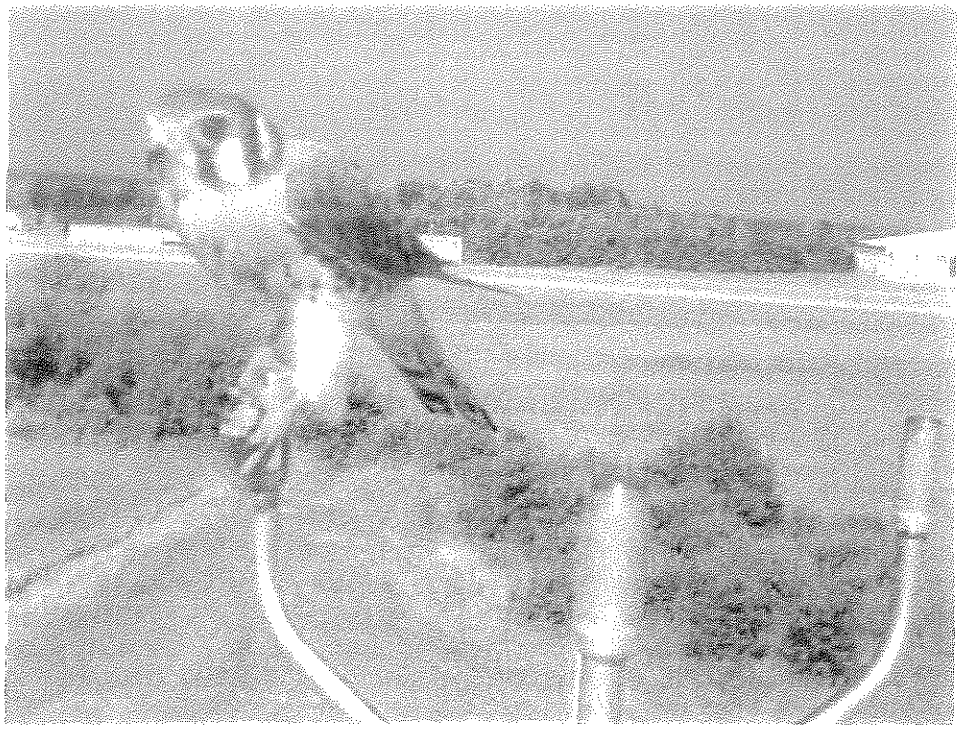


Figure 4 – Example of bird perching on ultrasonic anemometer transducer

It is the belief of the meteorologist investigating this problem report that the cause of the differences in wind readings between the WME and ASOS on May 19, 2011 at 15:01 UTC was bird activity on ASOS anemometer transducers.

Other problem reports that were determined to be a result of bird activity on ASOS anemometer transducers include: May 25, 2011 (11:19 UTC).

4.2 June 5, 2011 (22:00 UTC) – Light and Variable Winds

The problem report on June 5, 2001 at 22:00 approximate (Figure 5) documented a situation where the winds on the ASOS were 080° at 08 knots with no gusts and the winds on the WME were 160° at 05 knots with no gusts.

10-3738

PROBLEM REPORT

DATE 6/5/11 TIME (Z) 2122? (time?) INITIALS JT POSITION

STARS EFSTS ETVS ASDE-X FREQ SSCS ROUTING OTHER

DUPLICATE FLIGHT PLANS – Provide flight progress strips / data

STARS CONFIG: FIXED PAIRS

ACID COMBINED: Y / N WITH

EFSTS CONFIG:

	TRAN		RECV		TYPE AC
FREQ	MAIN	STBY	MAIN	STBY	LOCATION

PROBLEM:

WIND

TDWR/WME 100/5 E13

ASOS 080/8 FTS

(Time is est. I forgot to write it down. But they recorded/displayed the difference for about twenty-thirty minutes.)

ATTACH FLIGHT STRIP HERE WHEN APPLICABLE
(STARS – EFSTS – SSCS – ROUTING must be accompanied with a flight strip)

Figure 5 – Problem Report (June 5, 2011 – 22:00 UTC)

A review of the hourly METARs from around the DTW area (Table 3 and Figure 6) show that the wind speeds at all reporting stations were less than 10 knots with variable directions.

Airport	Time (UTC)	Direction	Speed (kts)	Gust (kts)
DTW	21:53	160	07	None
DET	21:53	080	08	None
YIP	21:53	310	06	None
ONZ	21:54	140	06	None
ARB	21:53	280	07	None
VLL	21:55	100	06	None
PTK	21:53	010	06	None
TTF	21:54	120	06	None

Table 3 – Hourly METAR Summary for June 5, 2011 (22:00 UTC)

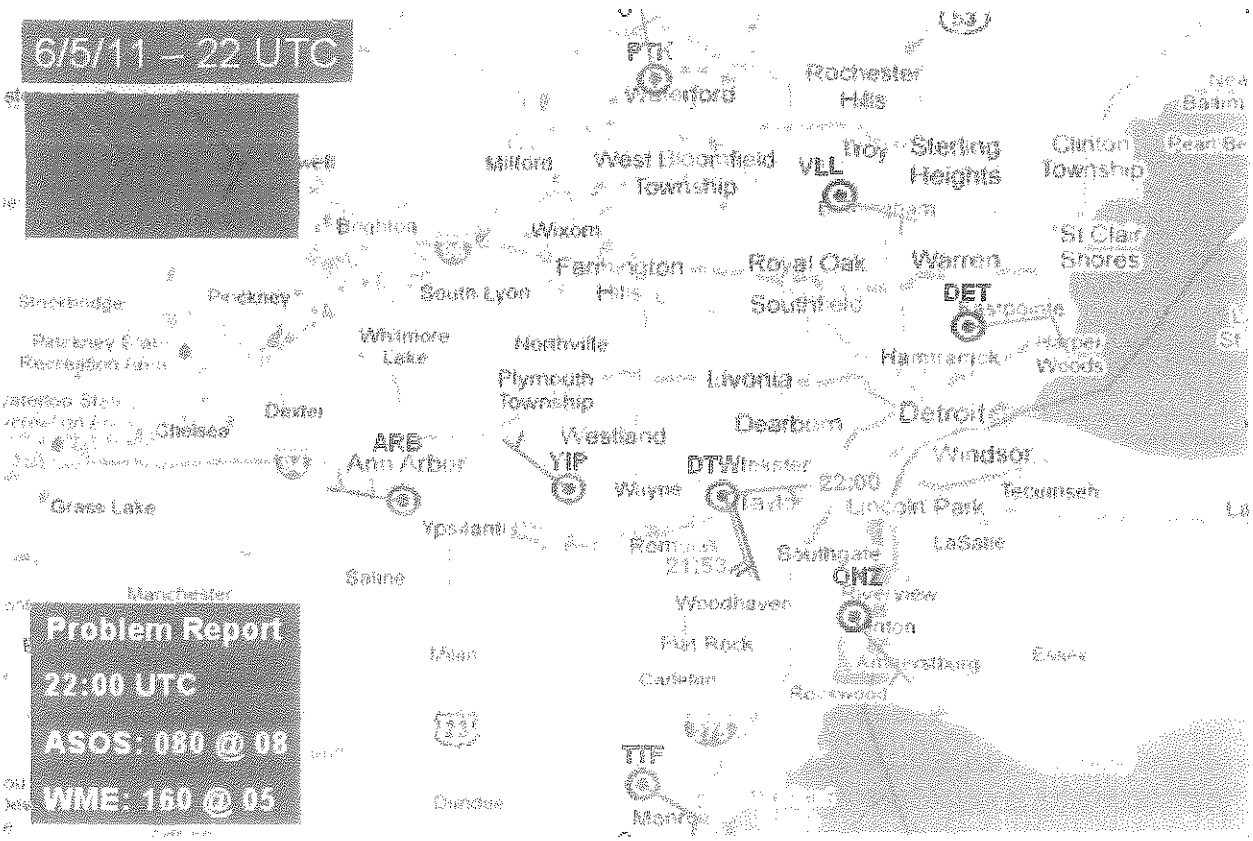


Figure 6 – Hourly METAR Summary for June 5, 2011 (22:00 UTC)

At 22:00 UTC high pressure was located over northern Michigan (Figure 7). There was a very weak atmospheric pressure gradient leading to light winds across the region. In addition to causing light wind speeds, a weak pressure gradient often leads to variable wind direction. When the pressure gradient is strong and the resultant wind speeds are high, the moving air has a higher momentum which tends to resists changes in direction. The wind direction therefore is governed by the pressure gradient and its orientation (synoptic scale flow). However, when the pressure gradient is weak and the wind speeds are light, small scale features, such as thermal eddies and temperature and density boundaries, play a direct role in determining the wind direction.

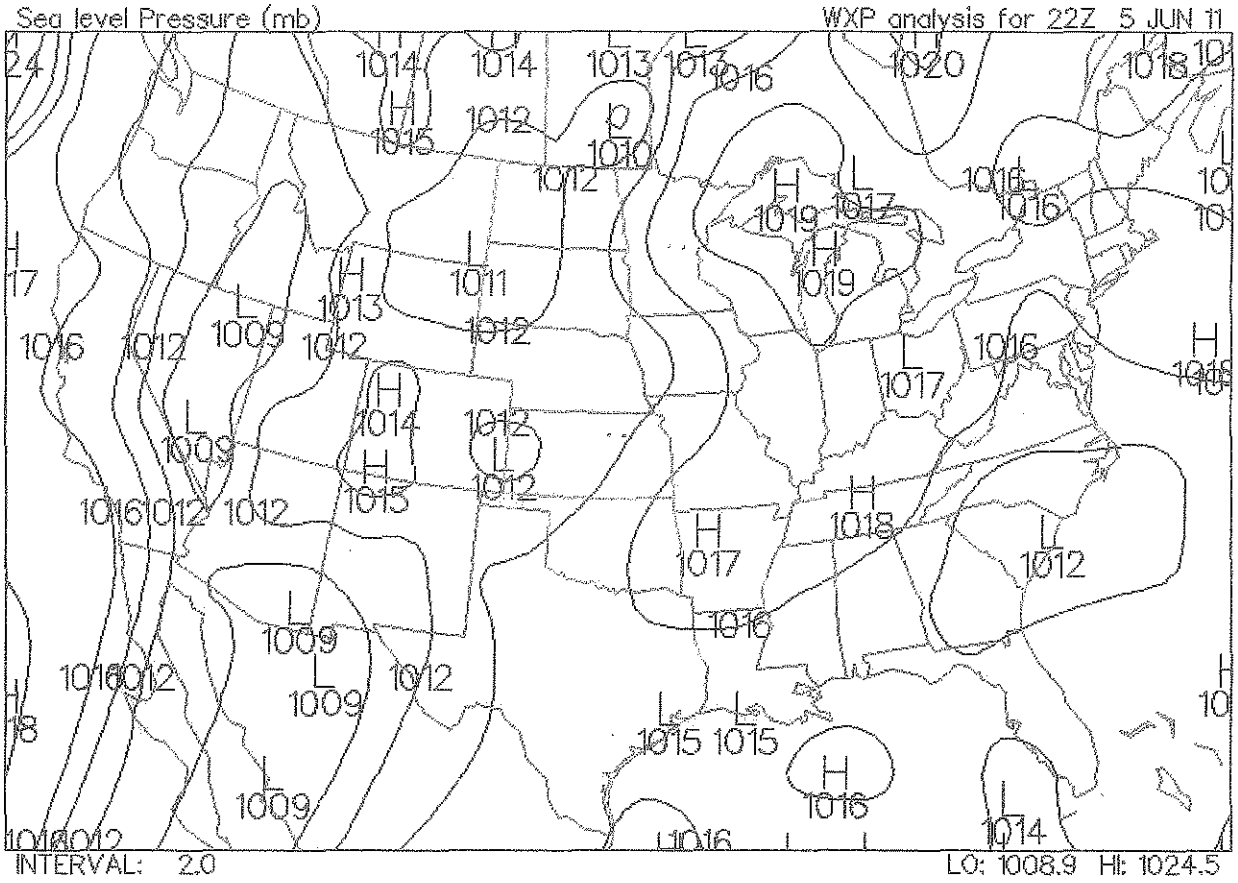


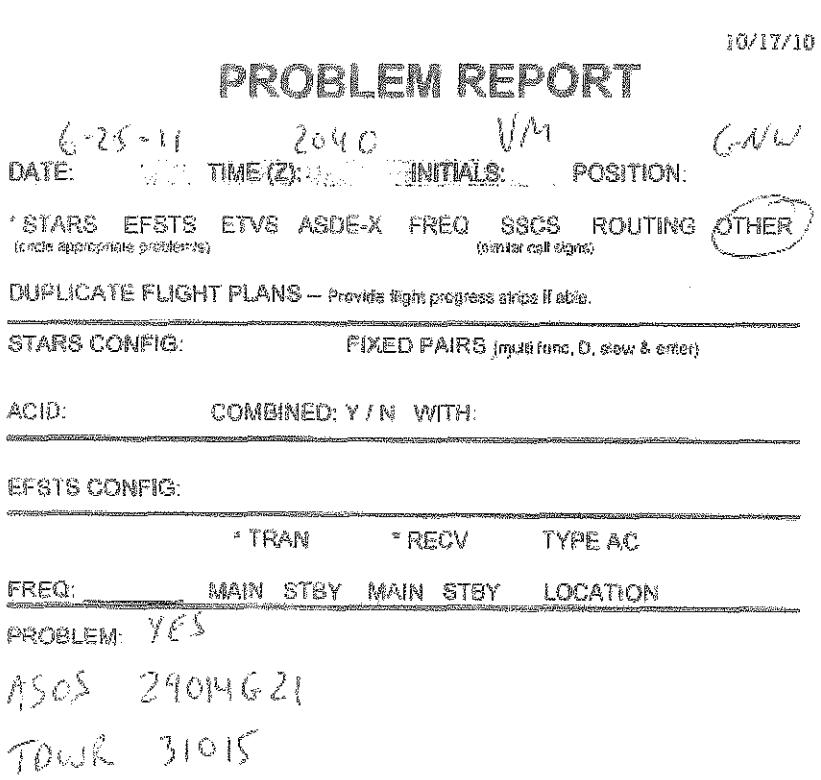
Figure 7 – Surface Pressure Map at 22:00 UTC on June 5, 2011

It is the belief of the meteorologist investigating this problem report that the cause of the differences in wind readings between the WME and ASOS on June 5, 2011 at 22:00 UTC was the fact that the winds were light and variable throughout the Detroit metropolitan area. Comparisons in wind direction between anemometers should only be made when the prevailing wind speed is at least 10 knots

Other problem reports that were determined to be a result of light and variable winds include: June 18, 2011 (15:53 UTC).

4.3. June 25, 2011 (20:40 UTC) – Close to 5 knot Threshold

The problem report on June 25, 2011 at 20:40 UTC discussed the differences between the WME and ASOS. Based on the report (Figure 8), it was assumed that the individual preparing the report was concerned with the wind gust on ASOS (290° @ 14kts G 21) and lack of gust on WME (310° @ 15kts).



10/17/10

PROBLEM REPORT

6-25-11 2040 VM GNW

DATE: TIME (Z): INITIALS: POSITION:

* STARS EFSTS ETVS ASDE-X FREQ SSCS ROUTING OTHER
(circle appropriate problem/s) (similar call signs)

DUPLICATE FLIGHT PLANS – Provide flight progress strips if able.

STARS CONFIG: FIXED PAIRS (multi func, D, slew & enter)

ACID: COMBINED: Y / N WITH:

EFSTS CONFIG:

	* TRAN		* RECV		TYPE AC
FREQ:	MAIN	STBY	MAIN	STBY	LOCATION

PROBLEM: YES

ASOS 29014G21

TOWR 31015

Figure 8 - Problem Report (June 25, 2011 – 20:40 UTC)

A look at the hourly METAR observations (Table 4 and Figure 9) indicate strong northwesterly winds at all locations. Most sites had sustained winds around 10 knots with some sites reporting gusts in excess of 15 knots. The gust threshold for both the ASOS and WME at DTW is 5 knots. That means that a gust will be reported if the peak wind observed is greater than the two minute average by 5 knots or more.

Airport	Time (UTC)	Direction	Speed (kts)	Gust (kts)
DTW	20:53	300	11	None
DET	20:53	320	07	None
YIP	20:53	300	12	18
ONZ	20:54	320	08	None
ARB	20:53	320	08	16
VLL	20:55	300	07	17
PTK	20:53	300	13	18
TTF	N/A	N/A	N/A	N/A

Table 4 – Hourly METAR Summary for June 25, 2011 (20:40 UTC)

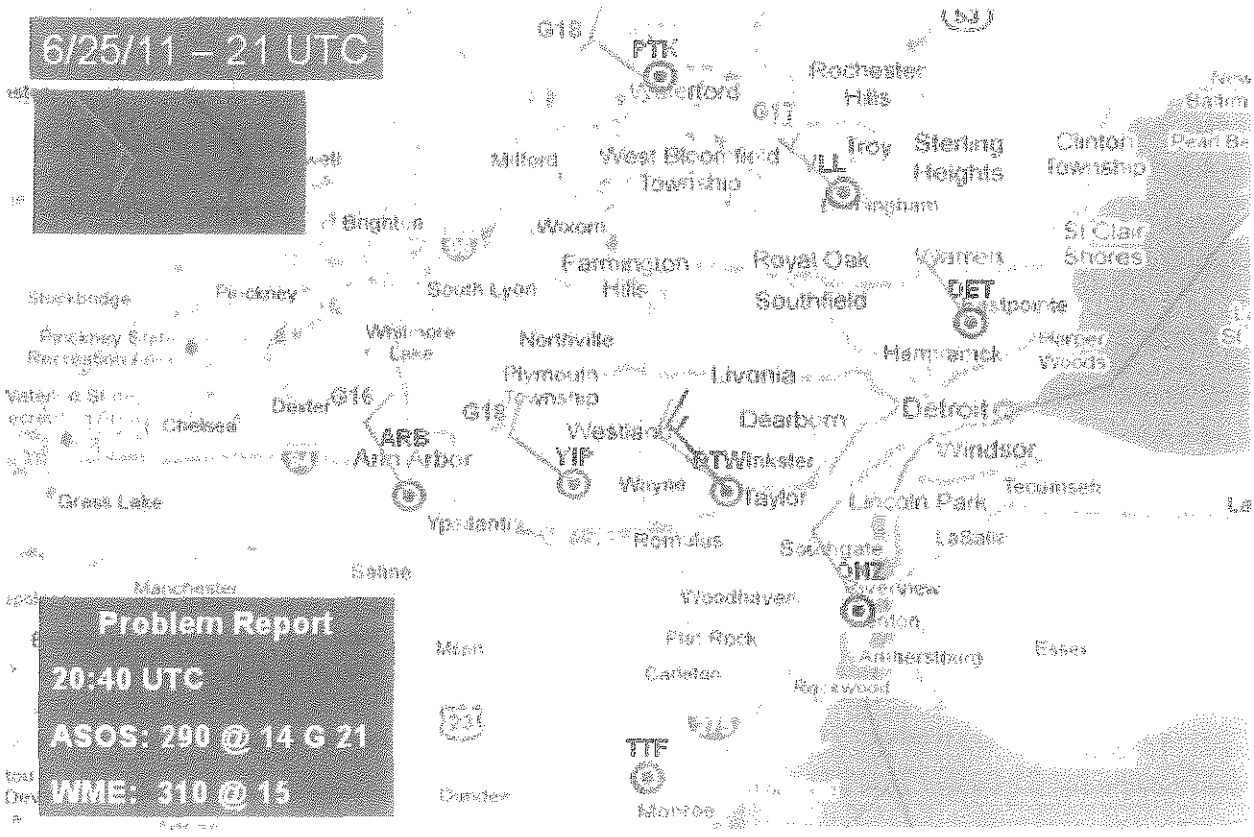


Figure 9 – Hourly METAR Summary for June 25, 2011 (20:40 UTC)

To explain why no gust was reported by the WME, the criteria for retaining a gust needs to be discussed. Once a gust is observed on the WME it will continue to be reported for 10 minutes,

unless the difference between the two minute average and gust decreases to less than 3 knots. In the case of June 25, 2011, the WME reported a wind of (320 @ 12 G 17) at 20:39 UTC. By the time of the trouble report 20:40 the two minute average speed had increased to 15 knots. Since the difference between the two minute average and gust was less than 3 knots the gust was not reported.

It should also be noted that during the hourly METAR observation taken 13 minutes after the trouble report, the DTW ASOS no longer carried the gust. Often with this type of situation, one system will report a gust and the other do not quite meet the 5 knot criteria for gust.

It is the belief of the meteorologist investigating this problem report that the cause of the differences in wind readings between the WME and ASOS on June 25, 2011 at 22:00 UTC was the fact that the wind speed and gusts on both systems were very close to the 5 knot threshold for wind gust reporting.

Other problem reports that were determined to be a result of wind gusts close to the 5 knot threshold include: June 25, 2011 (16:45 UTC) and June 13, 2011 (16:53 UTC).

4.4 July 3, 2011 (00:23 UTC) – Wind Shear / Microburst

Wind differences between the ASOS and WME were documented on July 3, 2011 at 00:23 UTC (Figure 10). It should be noted that the original problem report listed the date as July 2, however after reviewing the data archives it was July 2 (local time), however just past midnight (UTC) on July 3. The wind on the ASOS was observed to be 280° at 25 knots with gusts to 55 knots. The winds from the WME were reported as 290° at 6 knots. At first glance it appears that there appears to be a problem with one of the two pieces of equipment, however it turns out that both were extremely accurate and validated significant microbursts affecting the DTW aerodrome.

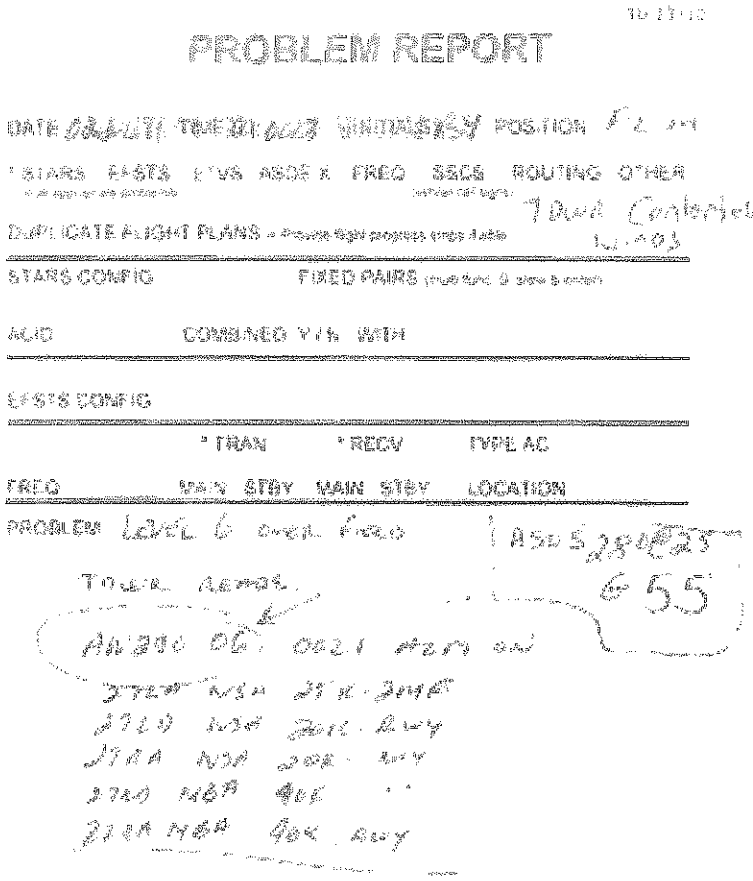


Figure 10 – Problem Report (July 3, 2011 – 00:23 UTC)

Prior to the problem report, a strong complex of thunderstorms was located to the northwest of DTW. Numerous microbursts detections were made by the ITWS. No alerts were valid for any runway at this time. By 00:01 UTC, the thunderstorm complex had slowly moved to the southeast and was now impacting the northwest portion of the airport (Figure 11). Microburst alerts of 45 knots were being issued for Runways 4L-22R, 4R-22L, and 9L-27R.

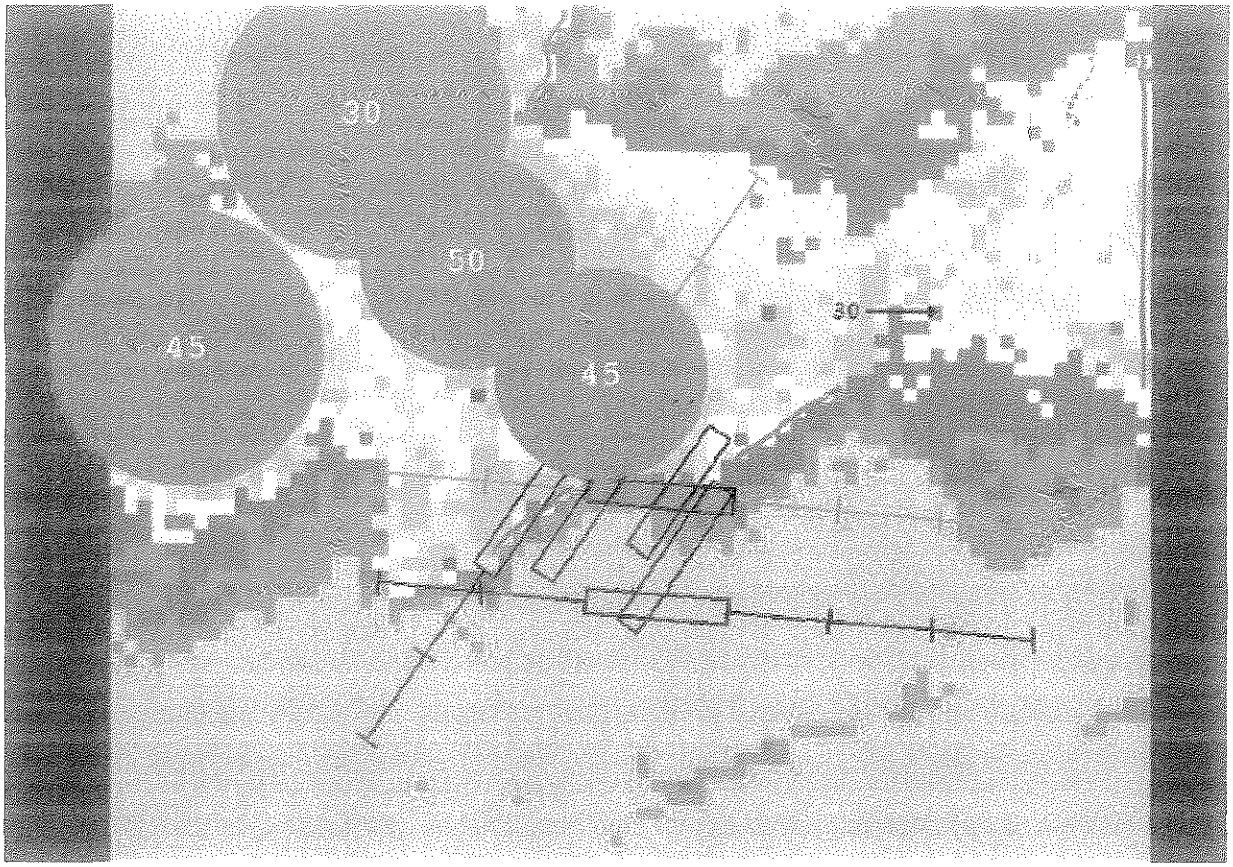


Figure 11 – ITWS Alerts on July 3, 2011 at 00:01 UTC

The three dimensional structure of a microburst (Figure 12) reveals a rapid decent of air near the center of the microburst. Upon reaching the ground the air spreads out and often produces very strong winds along the periphery of the microburst. Virtually all wind is along a vertical axis near the center of the microburst. Since an anemometer is designed to detect only horizontal winds, an anemometer directly under the microburst will report very little horizontal winds.

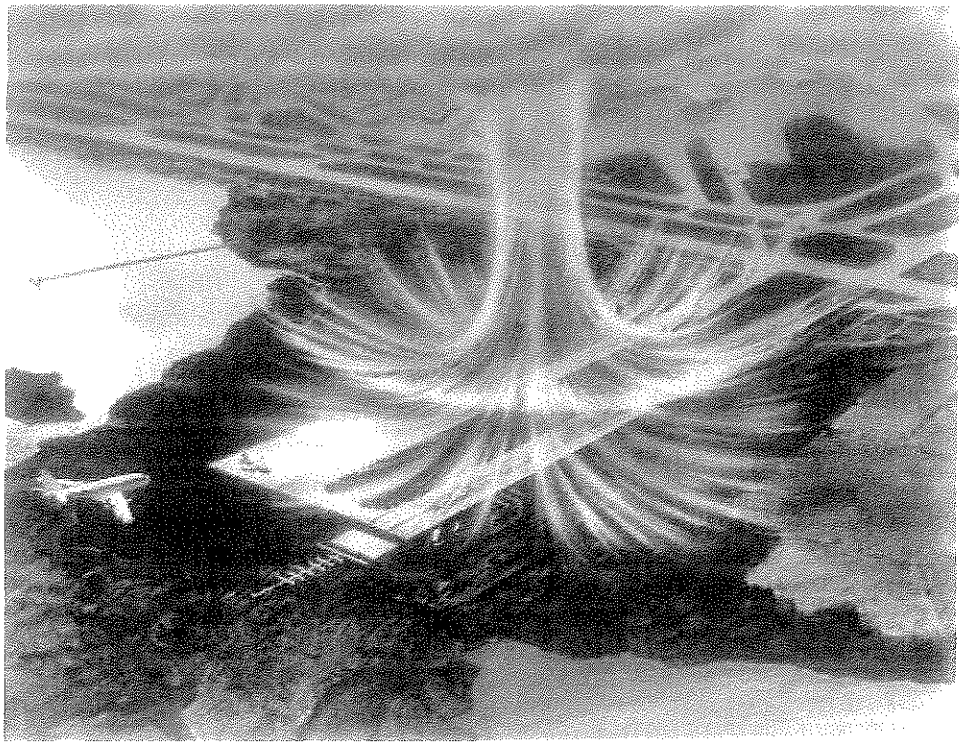


Figure 12 – Conceptual drawing of a microburst

The winds at 00:01 at both the WME and ASOS indicate that they are on the periphery of the microburst. Strong northwest microburst outflow winds are reported at both locations (Figure 13). The WME reported a wind of 310° at 25 knots with gusts to 34 knots and the ASOS reported a wind of 280° at 25 knots with gusts to 55 knots. At 00:01 a special (SPECI) METAR report was issued. This ASOS report appears to be the wind referenced in the problem report.

SPECI KDTW 030001Z 28025G55KT 1/2SM R04R/P6000FT +TSRA SCT050CB SCT085 BKN150 29/22 A2985 RMK AO2 PK WND 27055/0001 WSHFT 2344 RAB01 CONS LTGICCG W-NE TS W-NE MOV SE SHRA W-NE P0000 $

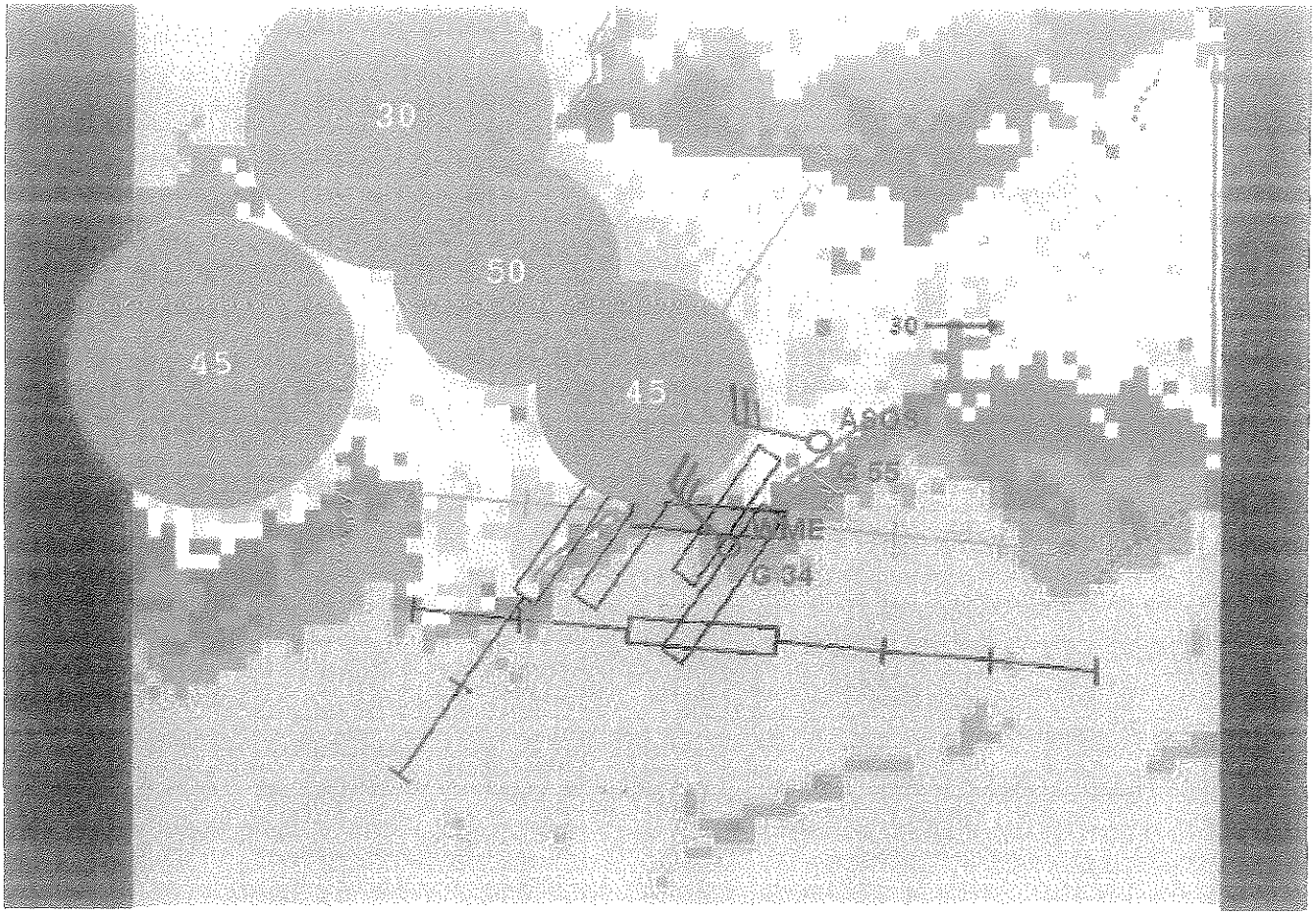


Figure 13 – ASOS and WME winds on July 3, 2011 at 00:01 UTC

By 00:23 UTC (time of the problem report), the microburst moved to the southeast and is now centered very close to the WME. Light winds were evident by the WME (290° at 6 knots) as it was located close to the center of the microburst. Two minutes later the WME winds are reported as calm, an indication that the microburst is directly on top of the WME. This is confirmed by the microburst shape and alerts generated by ITWS (Figure 14 and Figure 15). At the same time the ASOS is located on the northern periphery of the microburst and is experiences strong outflow winds. A strong southerly outflow was evident in the ASOS at 00:23 UTC (190° at 26 knots with gusts to 30) and is what should be expected with a microburst located to the south.

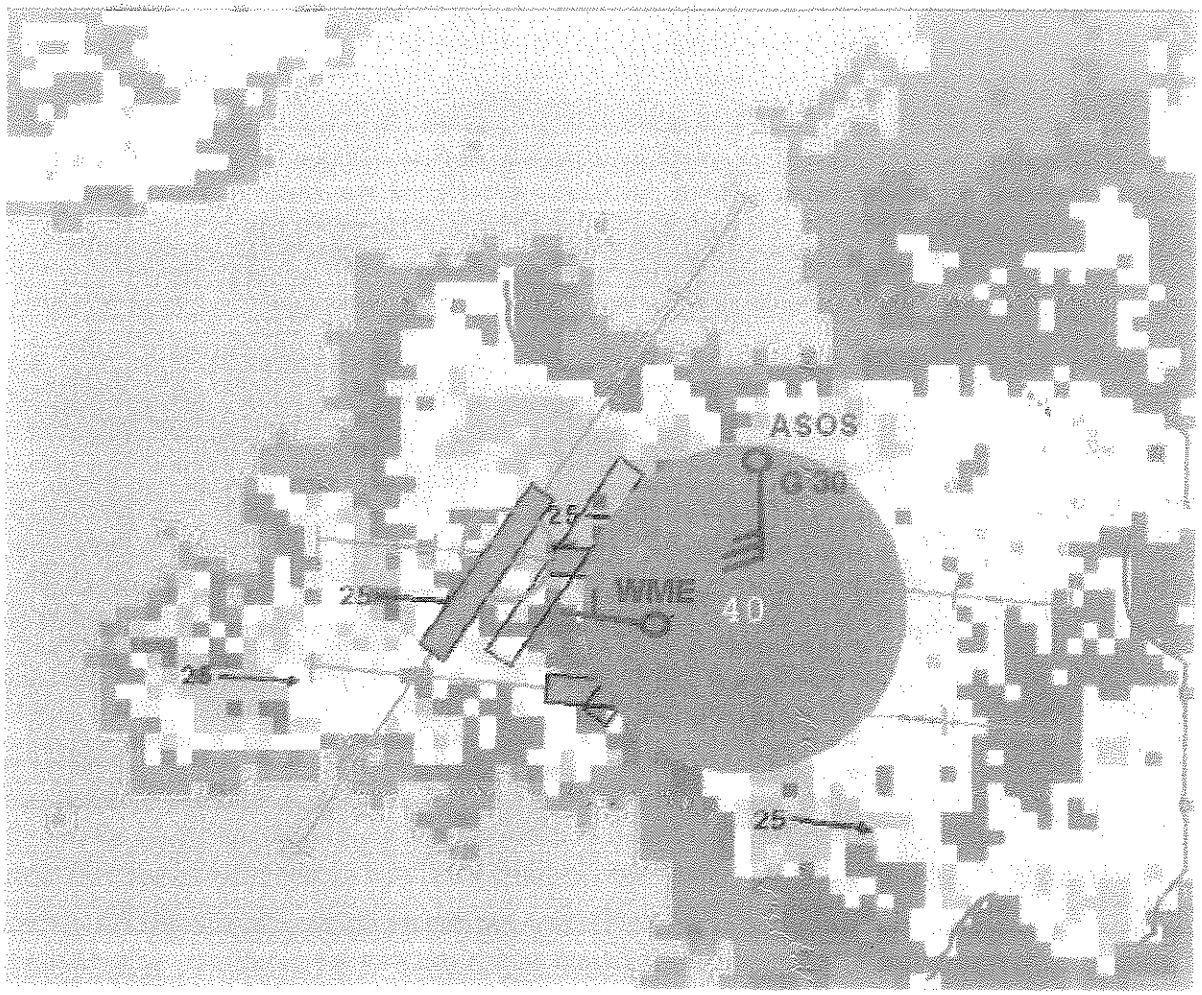


Figure 14 – ASOS and WME winds on July 3, 2011 at 00:23 UTC

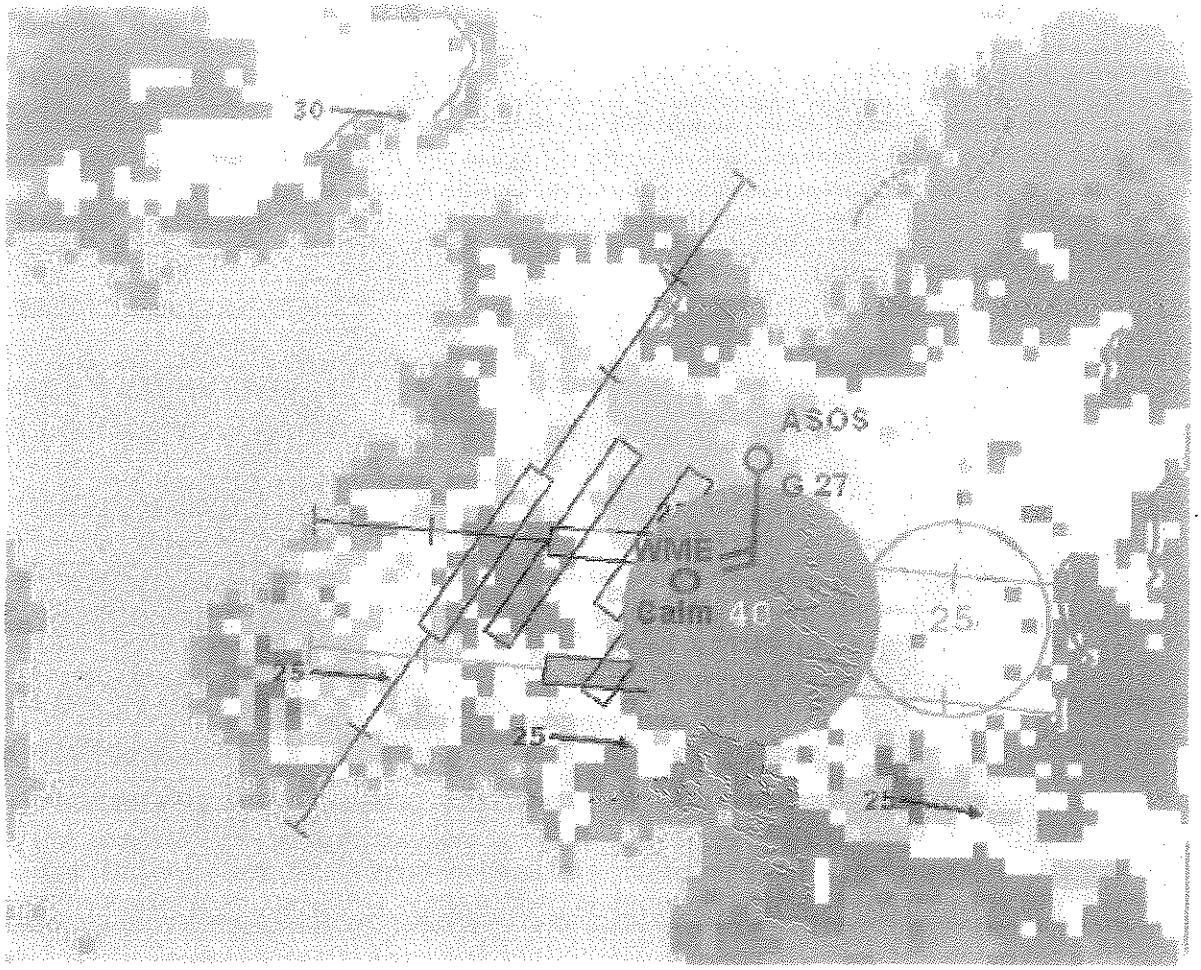


Figure 15 – ASOS and WME winds on July 3, 2011 at 00:25 UTC

In summary, strong outflow winds were observed at both the WME and ASOS as a strong microburst outflow approached DTW on July 3, 2011. At the time of the problem report the WME was near the center of the microburst with virtually calm winds. The ASOS on the northern periphery of the microburst detected strong southerly outflow winds. Both sensors appear to be providing accurate wind information at the time of the event and provided ground truth to validate the microbursts generated by ITWS.

It is the belief of the meteorologist investigating this problem report that the cause of the differences in wind readings between the WME and ASOS on July 3, 2011 at 00:23 UTC was microburst activity in the area. Both the WME and ASOS appeared to be working properly and accurately measured winds associated with an ongoing microburst centered on the east side of the DTW airfield.

Other problem reports that were determined to be a result of wind shear / microbursts include: May 29, 2011 (22:50 UTC, 22:52 UTC, and 23:44) and June 22, 2011 (20:06 UTC).

5. Summary

DTW Air Traffic personnel have documented differences in the wind readings between the ASOS and WME. Many explanations have been provided for the differences. The cases described in this document back up many of the explanations provided, from differences in location to differences in wind sensor technology.

After reviewing all the cases provided, it appears that both wind sensors were performing as designed. In some cases, particularly July 3, 2011, they were able to provide ground truth to an ongoing microburst event occurring over DTW. While the differences at first glance may have appeared to represent glaring evidence of a problem between the two pieces of wind equipment, their differences in location allowed them to measure wind speed and direction from two difference locations within a hazardous microburst.

It is virtually impossible to provide accurate wind information for all approach corridors at an airport the size of DTW from a single wind sensor, particularly during times of rapidly changing weather. There has been discussion regarding the co-location of the WME and ASOS at DTW. While this co-location may help to reduce some of the differences seen between the two systems, there will still be differences in wind readings. Co-located systems, measuring winds during an active microburst, such as that on July 3, 2011, would not have been able to provide accurate wind measurements for all runway thresholds.

Federal Aviation Administration

Memorandum

Date: August 30, 2011

To:

From: DTW/D21 Air Traffic Manager

Subject: Official Wind

Currently, according the DTW SOP, the official wind source is the ASOS. There have been many instances where the primary and secondary sources of wind information do not agree by a large amount. We continue to work this issue along with the Office of the Inspector General. As one of the steps towards resolving this problem, we are going to change the primary wind source to the centerfield wind monitor of the LLWAS system, the WME.

This change is being made for the following reasons.

a. The ASOS is partially sheltered by nearby buildings. This especially affects the sensor when the winds are out of the east. The WME is not sheltered.

b. The WME is generally considered to be more accurate. While both the ASOS and WME use a 2 minute average to compute the wind, the WME updates every 10 seconds and the ASOS updates once per minute. The ASOS uses an ultrasonic device to measure wind and is known to be susceptible to errors caused by birds flapping their wings nearby.

c. Of the 30 Core Airports, only 4 (including DTW) use the ASOS as their primary source of wind information. Portland, San Diego, and Seattle use ASOS as their official wind because they have no other equipment available.

We will still pursue the relocation of the ASOS sensor and WME to a common location. In the meantime, we will disconnect the ASOS wind feed to the tower. It can be reconnected quickly in the event of a WME outage.

We will need to manually input the WME wind into the weather sequence on the ATIS.

It appears that we will be getting new ribbon displays for the tower. This will make it easier to see the wind information.

This change will go into effect on 9/5. A change to the SOP will be forthcoming. The Service Area is working on a plan to deal with the requirement for crosschecking wind sources contained in the latest update to the 7210.3.

Please see me with any questions and thanks for your patience.

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
DETROIT METRO ATCT

D21 N7110.xxx
DTW N7110.xxx

Effective Date:
August xx, 2011

Cancellation Date:
August xx, 2012

SUBJ: Primary Wind Source

1. **Purpose of This Notice.** The purpose of this notice is to amend Order DTW 7110.9B and D21 7110.9D by establishing the Wind Measuring Equipment (WME) as the primary wind source.

2. **Audience.** This notice applies to DTW Tower employees and all associated support personnel.

3. **Where Can I Find This Notice?** This notice is available in all applicable DTW publications and the FAA Federal Directives Repository, https://loa.faa.gov/ .

4. **Explanation of Changes.** The Wind Measuring Equipment (WME) is designated as the primary wind source for operational purposes at DTW ATCT. WME is a source of wind input to the Terminal Doppler Weather Radar (TDWR). TDWR shall be the official primary, wind shear and microburst source for operational purposes.

In the event the WME is not available, the ASOS shall become the official wind source for operational purposes.

Equipment Readout Locations:

- Tower WME - displayed on the top line of the TDWR Ribbon Displays.
- TRACON WME – 2 displays at the Feeder Positions and 2 displays at the Final Positions
- ASOS – displayed on various pages of the IDS4 system as a direct feed from the ASOS.

5. **PROCEDURE.** DTW7110.9B: Change paragraph 2-17 Primary Wind Source to read:

The WME is the primary wind source for operational purposes at DTW ATCT. The Terminal Doppler Weather Radar (TDWR) shall be the official primary, wind shear and microburst source for operational purposes. In the event the WME is not available, the ASOS shall become the official wind source for operational purposes.

D21 7110.9D: Change paragraph 2-1 RESPONSIBILITY b. & c. to read:

b. The Wind Measuring Equipment (WME) is designated as the primary source for wind information at D21.

c. The Terminal Doppler Weather Radar (TDWR) is designated as the source for wind shear and microburst information. In the event the WME is not available, the ASOS shall be the official wind source.

Gary Ancinec
Air Traffic Manager
Detroit Metro ATCT

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2-9-3. CONTENT

Include the following in ATIS broadcast as appropriate:

a. Airport/facility name, phonetic letter code, time of weather sequence (UTC). Weather information consisting of wind direction and velocity, visibility, obstructions to vision, present weather, sky condition, temperature, dew point, altimeter, a density altitude advisory when appropriate and other pertinent remarks included in the official weather observation. Wind direction, velocity, and altimeter shall be reported from certified direct reading instruments. Temperature and dew point should be reported from certified direct reading sensors when available. Always include weather observation remarks of lightning, cumulonimbus, and towering cumulus clouds.

NOTE-
ASOS/AWOS is to be considered the primary source of wind direction, velocity, and altimeter data for weather observation purposes at those locations that are so equipped. The ASOS Operator Interface Device (OID) displays the magnetic wind as "MAG WND" in the auxiliary data location in the lower left-hand portion of the screen. Other OID displayed winds are true and are not to be used for operational purposes.

was recorded by LLWAS sensor #2, was also displayed on the local controller's RBDT, and it indicated wind from the west at 34 knots.

There was no requirement for ATC personnel to provide wind information from other sources, nor were there established criteria for controllers to follow in providing alternate wind information. As a result, because DEN's system dictated only that the local controller provide departing pilots with departure wind information from preassigned sensors, the DEN ATCT local controller did not provide the accident pilots with any additional wind information. The NTSB concludes that although the DEN ATCT local controller followed established practices when he provided the accident pilots with the runway 34R departure end wind information with their takeoff clearance, he did not (nor was he clearly required to) provide information about the most adverse crosswind conditions that were displayed on his RBDT; therefore, the pilots were not aware of the high winds that they would encounter during the takeoff roll. Therefore, the NTSB recommends that the FAA modify FAA Order 7110.65 to require air traffic controllers at airports with multiple sources of wind information to provide pilots with the maximum adverse wind component, including gusts, that the flight could encounter.

During its investigation of this accident, the NTSB noted that FAA Order 7210.3 requires LLWAS-equipped airports to publish a letter to airmen, explaining, at a minimum, the following: the location and designation of the remote sensors; the capabilities and limitations of the system; and the availability of current LLWAS remote sensor wind information, allowing pilots to have access to possibly useful information regarding available sources of airport wind information. However, the FAA was not able to produce evidence that a DEN LLWAS-related letter to airmen was published, and no such letter for DEN (or other LLWAS-equipped airports) was easily publically available. The NTSB concludes that if the FAA had published the required letter to airmen describing the sensor locations, operational capabilities, and limitations of the LLWAS at DEN and the accident pilots had been familiar with its content, they might have been more likely to request additional LLWAS sensor wind information when they saw the clouds moving swiftly across their departure path before they accepted their takeoff clearance and/or began their takeoff roll. Therefore, the NTSB recommends that the FAA review the required documentation for all LLWAS-equipped ATCTs to ensure that a letter to airmen has been published and is easily accessible describing the location and designation of the remote sensors, the capabilities and limitations of the system, and the availability of current LLWAS remote sensor wind information on the request of a pilot, in compliance with FAA Order 7210.3.

2.3.2 Use of Runway 34R for Departure

2.3.2.1 Pilot Acceptance of Runway 34R for Departure

During preflight preparations, the captain asked the DEN ramp controller which runway to expect, and the controller advised him to expect runway 34R. When the pilots subsequently contacted the DEN ATCT ground controller for taxi clearance, the controller advised them to taxi to runway 34R, and the pilots acknowledged that clearance. At the time, with the pilots having obtained the departure ATIS winds (from the west at 11 knots), the minimal resultant crosswind component on runway 34Rwould not have prompted the pilots to question the safety of a departure on that runway.

11. The captain's initiation of a rejected takeoff was delayed by about 2 to 4 seconds because he was occupied with the nosewheel steering tiller and right control wheel input, both of which were ineffective and inappropriate for steering the airplane.

12. If air traffic control personnel and pilots operating at airports located downwind of mountainous terrain had sufficient airport-specific information regarding the localized and transient nature of strong and gusty winds associated with mountain wave and downslope conditions, they would be able to make more informed runway selection decisions.

13. Although the Denver International Airport air traffic control tower local controller followed established practices when he provided the accident pilots with the runway 34R departure end wind information with their takeoff clearance, he did not (nor was he clearly required to) provide information about the most adverse crosswind conditions that were displayed on his ribbon display terminal; therefore, the pilots were not aware of the high winds that they would encounter during the takeoff roll.

14. If the Federal Aviation Administration had published the required letter to airmen describing the sensor locations, operational capabilities, and limitations of the low-level windshear alert system (LLWAS) at Denver International Airport and the accident pilots had been familiar with its content, they might have been more likely to request additional LLWAS sensor wind information when they saw the clouds moving swiftly across their departure path before they accepted their takeoff clearance and/or began their takeoff roll.

15. Although the departure wind information the captain received with the takeoff clearance from the Denver International Airport (DEN) air traffic control tower (ATCT) local controller indicated that the winds were out of 270° at 27 knots (which resulted in a stronger-than-expected 26.6-knot crosswind component), the reported winds did not exceed Continental's maximum crosswind guidance of 33 knots, and the captain could reasonably conclude that the winds, as reported by DEN ATCT, did not exceed either his or the airplane's crosswind capabilities.

16. If the accident pilots had received the most adverse available wind information (which was displayed as airport wind on the Denver International Airport air traffic control tower local controller's ribbon display terminal and indicated a 35-knot crosswind with 40-knot gusts), the captain would likely have decided to delay the departure or request a different runway because the resultant crosswind component exceeded Continental's 33-knot crosswind guidelines.

17. None of Denver International Airport's noise abatement procedures affected the accident airplane's departure runway assignment because the 737-500 was not considered a noise-critical airplane.

18. Currently, the Denver International Airport air traffic control tower runway selection policy does not clearly account for crosswind components when selecting a runway configuration.

19. Because Continental's simulator training did not replicate the ground-level disturbances and gusting crosswinds that often occur at or near the runway surface, and it is unlikely that the accident captain had previously encountered gusting surface crosswinds like those he encountered the night of the accident, the captain was not adequately prepared to respond to the changes in heading encountered during this takeoff.

20. Because there are no standards for the development of enhanced crosswind guidelines for transport-category airplanes, Boeing did not adequately consider the dynamic handling qualities of the Boeing 737 during takeoff or landing in strong and gusty crosswinds; it is likely that the enhanced crosswind guidelines developed by other manufacturers are similarly deficient.

21. Operational flight data from U.S. airlines regarding high crosswind component encounters could help the Federal Aviation Administration develop additional strategies for reducing the risk of crosswind-related runway excursions.

22. The accident pilots' injuries would have likely been lessened or eliminated if their seats had been designed to meet the crashworthiness requirements of 14 Code of Federal Regulations 25.562, to which other airplane seats are designed.

23. A flight attendant jumpseat that is weakened due to undetected metal fatigue could fail under lower-than-expected crash loads and injure a cabin crewmember who might subsequently be needed to perform critical safety duties, such as evacuating passengers.

24. The adhesive-only fastening method used for the latch plate in the aft galley of the accident airplane and similarly equipped airplane galleys was not adequate for securing galley drawers or other items of mass because it can fail over time and/or with exposure to the elements.

3.2 Probable Cause

The National Transportation Safety Board determines that the probable cause of this accident was the captain's cessation of right rudder input, which was needed to maintain directional control of the airplane, about 4 seconds before the excursion, when the airplane encountered a strong and gusty crosswind that exceeded the captain's training and experience.

Contributing to the accident were the following factors: 1) an air traffic control system that did not require or facilitate the dissemination of key, available wind information to the air traffic controllers and pilots; and 2) inadequate crosswind training in the airline industry due to deficient simulator wind gust modeling.

4. Recommendations

As a result of this investigation, the National Transportation Safety Board makes the following recommendations to the Federal Aviation Administration:

Conduct research into and document the effects of mountain wave and downslope conditions at airports, such as Denver International Airport, that are located downwind of mountainous terrain (including, for example, airports in or near Colorado Springs, Colorado; Anchorage, Alaska; Salt Lake City, Utah; and Reno, Nevada), identify potential mountain-wave-related hazards to ground operations at those airports, and disseminate the results to pilots and airport air traffic control personnel to allow for more informed runway selection decisions. (A-10-105)

Archive all low-level windshear alert system (LLWAS) data obtained from Denver International Airport and other airports that experience similar wind conditions and make those data available for additional research and the potential future development of an improved LLWAS algorithm for crosswind and gusty wind alerts on air traffic control tower ribbon display terminals. (A-10-106)

Modify Federal Aviation Administration Order 7110.65 to require air traffic controllers at airports with multiple sources of wind information to provide pilots with the maximum wind component, including gusts, that the flight could encounter. (A-10-107)

Review the required documentation for all low-level windshear alert system (LLWAS)-equipped air traffic control towers to ensure that a letter to airmen has been published and is easily accessible describing the location and designation of the remote sensors, the capabilities and limitations of the system, and the availability of current LLWAS remote sensor wind information on the request of a pilot, in compliance with Federal Aviation Administration Order 7210.3. (A-10-108)

Require air traffic control towers to locally develop and implement written runway selection programs that proactively consider current and developing wind conditions and include clearly defined crosswind components, including wind gusts, when considering operational advantage with respect to runway selection. (A-10-109)

Gather data on surface winds at a sample of major U.S. airports (including Denver International Airport) when high wind conditions and significant gusts are present and use these data to develop realistic, gusty crosswind profiles for use in pilot simulator training programs. (A-10-110)

Require 14 *Code of Federal Regulations* Part 121, 135, and 91K operators to incorporate the realistic, gusty crosswind profiles developed as a result of Safety Recommendation A-10-110 into their pilot simulator training programs. (A-10-111)

Vincent Sugent

From: <Ronald.D.Bazman@faa.gov>
To: <Ronald.Wood@faa.gov>
Cc: <vinjamie@comcast.net>; <lewis.m.bird@faa.gov>; <John.Whitehurst@faa.gov>
Sent: Monday, November 14, 2011 1:27 PM
Subject: FWA 4 test

Ron,

My briefing regarding the temporary revisions to the FWA 4 from Tim Funari when I started working D21 issues was that you and Vince Sugent needed to review the wording and then we could get the NOTAM issued. Please advise if you have had the time to review it and what your comments are. If you have not had the time, could you please give us an idea of when this could be taken care of?

Thanks in advance,

BAZ

Ronald D. Bazman
Support Manager
Detroit Metro Tower (DTW)
734-784-2167 (Office)
810-923-1306 (Cell)

Federal Aviation Administration

Memorandum

Date: September 9, 2011

To: Joseph Figliuolo III, District Manager, Motown District
Glen Martin, Air Traffic Manager (A), Cleveland Air Route Traffic Control Center

From: Gary Ancinec, Air Traffic Manager (Acting), Detroit Metro Airport Traffic Control Tower / Terminal Radar Approach Control

Prepared by: Timothy M. Funari, Support Manager (Acting), Detroit Terminal Radar Approach Control, 734-784-2166

Subject: Safety Risk Management Decision Memorandum for a Change to Detroit Metro Airport Fort Wayne Four Departure, Departure Route Description.

National Airspace System (NAS) Change:

Detroit Metro Airport Traffic Control Tower (ATCT), Detroit Terminal Radar Approach Control (D21) and Cleveland Air Route Traffic Control Center (ZOB) are implementing a change to the Detroit Metro Airport (DTW) FORT WAYNE FOUR DEPARTURE.

The current wording is (proposed deletions in red):

TAKE-OFF ALL RUNWAYS: [redacted] When the ATC assigned altitude is at or above 5,000', cross DXO 10 DME Arc at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Expect clearance to altitude / filed flight level ten (10) minutes after departure.

The proposed wording is (additions in blue):

TAKE-OFF ALL RUNWAYS: [redacted] When the ATC assigned altitude is at or above 5,000', cross DXO 10 DME Arc at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Expect clearance to filed altitude / flight level ten (10) minutes after departure.

These local changes will provide for the expeditious movement of aircraft as well as providing an efficient work environment through an increased use of automated clearance delivery procedures by DTW ATCT.

Rationale for not Requiring Further Safety Risk Management (SRM) Analysis:

The desired wording is that of similar Departure Procedures (DP), specifically that of the Detroit / Willow Run MOONN and ROSEWOOD DPs: in place since June 2006 without incident.

In accordance with the Safety Management System Manual, Version 2.1, the evaluation indicated no further safety analysis is required for this change. As stated previously, a Safety Risk Management (SRM) review was conducted with representatives from all involved parties: the Panel was unable to identify any hazards as a result of this change.

The following individuals were involved in the development of these processes:

Air Traffic Terminal:

John Whitehurst, Operations Manager, DTW
Vincent Sugent, Certified Professional Controller, DTW
Jeff Blow, Certified Professional Controller, D21
Richard Sheridan, Air Traffic Assistant, D21
Ronald Wood, Support Manager, ZOB
Rick Norris, Certified Professional Controller, ZOB

We, the undersigned, assure that the change described above does not introduce any new safety risk into the NAS.

SRM Process Reviewed by:

Dennis E. Hinton — 9-9-2011
Safety Risk Management Specialist, AJV-C11 — Date
Central Service Area, Quality Control Group

Document Reviewed by:

John Whitehurst — 9/14/11
Operations Manager (Acting) — Date
Detroit Metro ATCT

Ronald Wood — Date
Support Manager
Cleveland Air Route Traffic Control Center

Approved By:

Gary Ancinec
Air Traffic Manager
Detroit TRACON / DTW ATCT

9/9/11
Date

Attachment(s): Fort Wayne Four Departure
Moonn Three Departure
Rosewood Three Departure

10

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Vincent Sugent

From: <Ronald.D.Bazman@faa.gov>
To: <John.Whitehurst@faa.gov>; <Gary.F.Ancinec@faa.gov>; <jblow@natca.net>; <lewis.m.bird@faa.gov>; <Ronald.Wood@faa.gov>; <vinjamie@comcast.net>
Cc: <Susan.Ruddy@faa.gov>
Sent: Tuesday, January 03, 2012 1:27 PM
Subject: Fw: SIDs for DTW - question for Susan

Gents,

It looks as if we are good to go on the temporary change to the FWA 4 if the wording below looks good. Please verify with an email (preferably "Reply to All" and I will then coordinate with Larry Strout (below) through the CSA.

Thanks,

BAZ

Ronald D. Bazman
Support Manager
Detroit Metro Tower (DTW)
734-784-2167 (Office)
810-923-1306 (Cell)

----- Forwarded by Ronald D Bazman/AGL/FAA on 01/03/2012 01:12 PM -----

From: Larry H Strout/AMC/FAA
AJV-353, Central Terminal Proc & Charting Tm
To: Ronald D Bazman/AGL/FAA@FAA
Cc: Susan Ruddy/ASW/FAA@FAA, Jose A Alfonso/AMC/FAA@FAA, Steven M Barnett/AMC/FAA@FAA
Date: 12/29/2011 08:24 AM
Subject: Re: Fw: SIDs for DTW - question for Susan

Ron,

Your account of the situation below is accurate. We do have the NOTAMs prepared and are ready to send them when advised by you. If indeed the test period is successful and you all want to implement the note on the existing SIDs we will work with you to get that accomplished it the most efficient manner.

Please let me know if you have any questions and advise if you want to move forward with issuing the NOTAMs.

Regards,

Larry Strout
Central Products Team, Manager, AJV-353
6500 S. MacArthur Blvd. ANF-1 – Building 5, Rm 104
Oklahoma City, OK 73169
Office: 405-954-5070
Visit AeroNav Products Here

From: Ronald D Bazman/AGL/FAA
TCL-DTW, Detroit Metro ATCT, MI

To: Larry H Strout/AMC/FAA@FAA

Cc: Susan Ruddy/ASW/FAA@FAA

Date: 12/23/2011 09:18 AM

Subject: Fw: SIDs for DTW - question for Susan

Mr. Strout,

I believe I was briefed by the former acting Detroit TRACON Support Manager, Tim Funari, that we were working a routing issue involving the FWA 4 SID out of DTW. The issue stems from the Midwest Airspace redesign back around 2005 and it involves aircraft departing the Detroit area going to CVG and CMH. As I understand it, our original effort was very broad in scope and involved redesigning all DTW SIDs. That idea was dismissed by Cleveland ARTCC. We then tried to narrow the scope by redesigning the FWA SID, and that was again dismissed. Finally, there was a tentative agreement to change one of the notes on the SID, and that was going to be accomplished by a NOTAM so we could verify that it solved the issue. I believe either the NOTAM office or your office initially agreed to do such a change on a temporary basis, but after further consideration, did not concur with the proposal. As this was also an issue involving the DOT IG and the Office of Specials Counsel, additional consideration was given to the previous arrangement.

Could you please verify that Terminal Procedures and Charting Services has again agreed to issue a NOTAM for a temporary/permanent change to the FWA 4 SID? As I understand it, we will test this for 30 days and if it looks good, the general agreement with the NOTAM folks and Terminal Procedures and Charting is that it will be made permanent. If the process described is verified by you or your representative, I would then like to verify with ZOB and our facility that the following wording works and the NOTAM test period is acceptable. The information that I have from Jose Alfonso through Tim Funari is as follows. Thanks in advance for your time and consideration. If we need to discuss this in more detail, I am available to meet any scheduling need you may have.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Tim,

Below is the preliminary draft for your NOTAM request. Please review and advise if you concur.

FDC 0?/NNN KDTW FMT SID null, FORT WAYNE FOUR DEPARTURE

TAKE-OFF ALL RUNWAYS: CLIMB VIA ASSIGNED HEADING FOR RADAR VECTORS TO JOIN ASSIGNED ROUTE. WHEN THE ATC ASSIGNED ALTITUDE IS AT OR ABOVE 5,000 FEET, CROSS DXO 10 DME ARC AT OR ABOVE 5,000 FEET FOR NOISE ABATEMENT. IF UNABLE TO COMPLY, ADVISE ATC PRIOR TO DEPARTURE. EXPECT CLEARANCE TO FILED ALTITUDE / FLIGHT LEVEL TEN (10) MINUTES AFTER DEPARTURE.

Thank You,

Jose Alfonso
Central Products Team, Team Lead

6500 South MacArthur Blvd. ANF-1 – Building 5, Room 104
Oklahoma City, OK 73169
Office: 405-954-6378

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Ronald D. Bazman
Support Manager
Detroit Metro Tower (DTW)
734-784-2167 (Office)
810-923-1306 (Cell)

----- Forwarded by Ronald D Bazman/AGL/FAA on 12/23/2011 09:10 AM -----

From: Susan Ruddy/ASW/FAA
AJV-C21, Airspace & Procedures North Team

To: Larry H Strout/AMC/FAA@FAA

Cc: Herman C Rogers/AMC/FAA@FAA, Jose A Alfonso/AMC/FAA@FAA, Ronald D Bazman/AGL/FAA@FAA

Date: 12/22/2011 03:04 PM

Subject: Re: Fw: SIDs for DTW - question for Susan

Ron - see Larry's note below. I think you are out next week. Could you ask your question via email and let Larry answer if he has time?

Thank you.

Susan D. Ruddy
Operations Support Specialist
FAA, ATO Central Service Center, Operations Support Group
Airspace and Procedures North Team, AJV-C21
817-321-7717 Office
817-321-7744 FAX

Link to Central Service Center Website

Feedback to Central Service Center: 9-ATO-CSC/ASW/FAA

From: Larry H Strout/AMC/FAA
AJV-353, Central Terminal Proc & Charting Tm

To: Susan Ruddy/ASW/FAA@FAA

Cc: Ronald D Bazman/AGL/FAA@FAA, Jose A Alfonso/AMC/FAA@FAA, Herman C Rogers/AMC/FAA@FAA

Date: 12/22/2011 01:49 PM

Subject: Re: Fw: SIDs for DTW - question for Susan

Susan,

Yes, we also worked this issue a time back. Since it has been awhile since we worked the project I need to refresh my memory on the specifics, but to the best of my recollection we are ready to go with the NOTAMs, however we had a time limit we would allow them to remain on the wire.

Can we get together Dec 27, if you schedule it I will clear my calendar.

Regards,

Larry Strout
Central Products Team, Manager, AJV-353
6500 S. MacArthur Blvd. ANF-1 – Building 5, Rm 104
Oklahoma City, OK 73169
Office: 405-954-5070
Visit AeroNav Products Here

From:	Susan Ruddy/ASW/FAA AJV-C21, Airspace & Procedures North Team
To:	Larry H Strout/AMC/FAA@FAA
Cc:	Ronald D Bazman/AGL/FAA@FAA
Date:	12/22/2011 11:23 AM
Subject:	Fw: SIDs for DTW - question for Susan

Larry,

I have another question from DTW on a separate issue. The background and history are below - it involves the "test" NOTAM that Detroit wants for the Fort Wayne SID. Are you involved in this? The Detroit Support Manager thought you might be familiar and asked if we can have a short telcon with you to discuss. He took over the project from the previous acting manager and he is trying to ensure everyone has the same understanding about next steps. If you aren't involved in this one, please point me in the right direction. If yes, please let me know when you might have a few minutes for a phone call.

I like to listen for my edification, but if it's easier to call him directly, that would be fine: Ron Bazman, 734-784-2167. He can let me know if he hears from you.

Thank you!

Susan D. Ruddy
Operations Support Specialist

FAA, ATO Central Service Center, Operations Support Group
Airspace and Procedures North Team, AJV-C21
817-321-7717 Office
817-321-7744 FAX

Link to Central Service Center Website

Feedback to Central Service Center: 9-ATO-CSC/ASW/FAA

----- Forwarded by Susan Ruddy/ASW/FAA on 12/22/2011 11:17 AM -----

From:	Peter CTR Trapp/AWA/CNTR/FAA AJS-0, Office of Safety
To:	Susan Ruddy/ASW/FAA@FAA
Cc:	Jeff Camara/AWA/FAA@FAA, Brett Faulkner/AWA/FAA@FAA
Date:	12/20/2011 06:46 AM
Subject:	Fw: SIDs for DTW - question for Susan

Susan -

Can you help provide some insight as to the change in SIDs from DTW to the south (Ohio airports) and beyond? See the emails below, and maybe you have some knowledge or awareness.

I need to provide the OIG an update this month, so maybe I need to go to John Whitehurst and Gary Ancinec?

Respectfully,

Peter Trapp
(202) 493-5000 - office
(703) 965-9791 - cell

----- Forwarded by Peter CTR Trapp/AWA/CNTR/FAA on 12/20/2011 07:40 AM -----

From:	Brad W Rush/AMC/FAA AJV-3, Aeronautical Products
To:	Peter CTR Trapp/AWA/CNTR/FAA@FAA
Date:	12/12/2011 01:44 PM
Subject:	Re: SIDs for DTW

Peter;

We have the draft NOTAMs changing the text on the departure procedures and are awaiting local Air Traffic to advise us to issue. They have yet to give us the go ahead. The POC at DTW is Tim Funari at TCL-D21.

Brad W. Rush
Quality Assurance and Regulatory Support, Manager
6500 South MacArthur Blvd – Bldg 5, Room 103A
Oklahoma City, OK 73169
Office: 405-954-0188
Visit AeroNav Products Here

From: Peter CTR Trapp/AWA/CNTR/FAA
AJS-0, Office of Safety
To: Brad W Rush/AMC/FAA@FAA
Date: 12/09/2011 12:04 PM
Subject: Re: SIDs for DTW

Brad -

It is time to provide the OIG an update on the DTW standard-instrument-departure (SID) activities we are taking in response the complaint we responded to earlier this year.

Would you please request an updated status from the appropriate office so that I receive something by Dec. 19th? This will allow me to prepare an update to the OIG and get it approved through the COO and AAE.

Respectfully,

Peter Trapp
(202) 493-5000 - office
(703) 965-9791 - cell

From: Brad W Rush/AMC/FAA
AJV-3, Aeronautical Products
To: Peter CTR Trapp/AWA/CNTR/FAA@FAA
Date: 09/07/2011 04:11 PM
Subject: Re: Question Regarding OIG

Looks fine.

Brad W. Rush
Regulatory Support and Coordination, Manager
6500 South MacArthur Blvd – Bldg 5, Room 103A

Oklahoma City, OK 73169
Office: 405-954-0188
Visit AeroNav Products Here

From: Peter CTR Trapp/AWA/CNTR/FAA
AJS-0, Office of Safety
To: Brad W Rush/AMC/FAA@FAA
Date: 09/07/2011 03:00 PM
Subject: Re: Question Regarding OIG

Brad -

Perfect response . . . . this helps me exactly as I needed to finish this DRAFT . . . .

"We feel that there are both safety and efficiency benefits to publishing standard instrument departures (SID) to airport locations that are frequent destinations. Our airspace and procedures specialists are just beginning the steps necessary to implement changes. It will take several months to complete the processes covered by our existing policy, FAA Order 8260.43, "Flight Procedures Management Program," and to bring about a published change in a SID that has been flight-checked."

Do you need to see more of my response?

Respectfully,

Peter Trapp
(202) 493-5000 - office
(703) 965-9791 - cell

From: Brad W Rush/AMC/FAA
AJV-3, Aeronautical Products
To: Peter CTR Trapp/AWA/CNTR/FAA@FAA
Date: 09/07/2011 03:56 PM
Subject: Re: Question Regarding OIG

I heard about this change they wanted to make some time earlier this year. I agree, it falls into a priority 7. I really can't tell you how long that might take. In a lot of cases, the OSG and RAPT, in coordination with our team here, will request a specific chart date based on our resources and workload for that particular chart cycle. We have to have all the information to do the procedure amendment work and schedule flight inspection (if necessary) and have the procedure in Washington ready for publication at least 2 months before it actually gets charted. Flight

inspection requires at least 45 days, so you're looking at a minimum of 5 - 6 months before this can be accomplished.

Brad W. Rush
Regulatory Support and Coordination, Manager
6500 South MacArthur Blvd – Bldg 5, Room 103A
Oklahoma City, OK 73169
Office: 405-954-0188
Visit AeroNav Products Here

From:	Peter CTR Trapp/AWA/CNTR/FAA
	AJS-0, Office of Safety
To:	Brad W Rush/AMC/FAA@FAA
Date:	09/07/2011 02:37 PM
Subject:	Re: Question Regarding OIG

Brad -

Thank you very much for the policy that govern published procedures and changes to them . . . . any knowledge of the DTW situation?

If I read the policy correctly, this change at DTW is a Priority 7?

That being the case, how long do Priority 7 changes take in the Central Service Area? (months is fine)

Respectfully,

Peter Trapp
(202) 493-5000 - office
(703) 965-9791 - cell

From:	Brad W Rush/AMC/FAA
	AJV-3, Aeronautical Products
To:	Peter CTR Trapp/AWA/CNTR/FAA@FAA
Date:	09/07/2011 03:31 PM
Subject:	Re: Question Regarding OIG

Peter;

This is the correct procedure for establishing a change to an instrument flight procedure. The process is documented in FAA Order 8260.43A. I've attached a copy, it's not that big. However, please note some of the organizations have changed descriptions since this was written and is being reviewed at the present time for an amendment.

[attachment "8260.43A.pdf" deleted by Peter CTR Trapp/AWA/CNTR/FAA]

Brad W. Rush
Regulatory Support and Coordination, Manager
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Oklahoma City, OK 73169
Office: 405-954-0188
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From:	Peter CTR Trapp/AWA/CNTR/FAA
	AJS-0, Office of Safety
To:	Brad W Rush/AMC/FAA@FAA
Date:	09/07/2011 01:48 PM
Subject:	Question Regarding OIG

Brad -

I am trying to respond to a report from the Office of Inspector General (OIG). The OIG report contains the following:

DTW has created "test language" amending the "Fort Wayne Four Departure" SID that could be issued to departures to CVG. The language is currently under review by DTW officials and, if approved, DTW controllers will issue the amended SID to pilots during a test period. If the test proves successful, the proposed changes will be submitted to and reviewed by the Operations Support Group, as well as the Regional Airspace and Procedures Team (RAPT). The RAPT, which is comprised of interested stakeholders within the region, such as officials from other facilities whose airspace would be affected, must review changes to published air traffic procedures such as SIDs. If both the Operations Support Group and RAPT agree upon the amended SID, then **FAA Aeronautical Products will officially amend the SID(s), conduct a flight check(s) to ensure the SID(s) does not conflict with existing departure requirements such as ground obstacles, and publish the final procedure.**

Can you confirm that your office is aware of this action at DTW and does the above text accurately describe the activities necessary to actually make a SID change(s) at DTW?

Please call if you have questions and I would prefer that you NOT call anyone at DTW just yet -- what I have is an early response from the OIG, and I am trying to validate the process and schedule before we submit our official response to the OIG.

Thank you in advance.

Respectfully,

Peter Trapp
(202) 493-5000 - office
(703) 965-9791 - cell