



**U.S. Department
of Transportation**

Office of the Secretary
of Transportation

GENERAL COUNSEL

1200 New Jersey Avenue, SE
Washington, DC 20590

June 25, 2010

Karen P. Gorman, Esq.
Deputy Chief, Disclosure Unit
U.S. Office of Special Counsel
1730 M Street, NW, Suite 300
Washington, DC 20036-4505

Re: OSC File Nos. DI-08-3157 and DI-08-2777

Dear Ms. Gorman:

This is to follow up on your recent request for supplemental information in the above-referenced matter. Attached please find a June 24, 2010 memorandum from the Office of Inspector General, to whom the Secretary delegated the investigation. Please treat this memorandum as our supplemental report.

Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Debra J. Rosen".

Debra J. Rosen
Senior Attorney

Enclosure




U.S. Department of
Transportation
Office of the Secretary
of Transportation
Office of Inspector General

Memorandum

Subject: ACTION: OIG Investigation #I09Z000011SINV,
Re: Air Traffic Management at Detroit Wayne
County Metropolitan Airport
OSC File No. DI-08-3157 and DI-08-2777

Date: June 24, 2010

From: Robert A. Westbrook 
Acting Assistant Inspector General
for Special Investigations and Analysis, JI-3

Reply to
Attn. of: R. Engler

To: Judith S. Kaleta
Assistant General Counsel for General Law
Office of General Counsel

This memorandum/supplemental report follows up on an email to the Department from the U.S. Office of Special Counsel (OSC) dated June 8, 2010, requesting additional information from the Office of Inspector General's (OIG) investigation into aviation safety concerns at Detroit Wayne County International Airport's Air Traffic Control Tower. Specifically, OSC asked for clarification on the allegation surrounding discrepancies between the ASOS and the TDWR wind readings. We respectfully request that you forward this information to OSC.

OIG Response:

OIG contacted FAA pursuant to OSC's June 8 email. FAA responded that the ASOS and TDWR are operating properly and, thus, any difference in the measurements they provide does not constitute a safety threat. As stated previously in Administrator Babbitt's December 14, 2009 memorandum responding to our Report of Investigation, FAA again attributed any difference in measurements to the respective heights and locations of the ASOS and TDWR. Consequently, FAA's position on this issue has not changed since Administrator Babbitt's memorandum, which Secretary LaHood included in his January 14, 2010, response to OSC.

Nevertheless, FAA advised OIG of actions taken subsequent to the issuance of Secretary LaHood's response and our report. Specifically, FAA advised that Detroit has changed Paragraph 2-17 of its SOP to clearly define the purpose of each piece of equipment and issued a mandatory briefing item to the air traffic control staff explaining the differences between the ASOS and TDWR and their respective intended uses. A copy of the March 15, 2010, briefing item is attached to this memorandum. Additionally, FAA clarified that because both pieces of equipment are functioning safely and as designed, DTW's funding request to move the ASOS and lower the TDWR - which we referred to in our report as outstanding - was not approved and no additional funding will be requested.

If you have any questions or concerns, please contact me at (202) 366-1415, or Director of Special Investigations Ronald Engler at (202) 366-4189.

Mandatory Briefing Item

ASOS and TDWR Wind Measuring Equipment Differences

		O.I.	Date			O.I.	Date	
✓	DTW-7 Whitehurst, John	JW	JW	3/23				
✓	DTW-7.1 Ricks, Dan	OR	OR	3-26	DTW-7.4 Kruse, Don	KZ	KZ	3-19
✓	Berrien, Robert	AB	AB	3-20	Kubinski, Michael	BD	BD	3/19
✓	Desantis, Larry	DS	DS	3-20	Mueller, Paul	PJ	PJ	3/19
✓	Kasal, Brian	BK	BK	3-21	Ruehl, Dan	DR	DR	3/17
✓	Reinbold, Robert	RB	RB	3-22	Smith, Ryan	II	II	3/18
✓	Scanlon, Steve	SE	SE	3-29	Stewart, Jakeim	JS	JS	3/22
✓	Torres, Jaidy	JD	JD	03/29	Thomson, David	EZ	EZ	3/22
✓	Walker, Craig	CW	CW	3/19	Vaught, Anthony	TV	TV	3/22
					Wheatley, Richard	RW	RW	3/22
✓	DTW-7.2 Barttelt, Kevin	KB	KB	3-21				
✓	Campau, Bernard	CU	CU	3-21				
✓	Carlson, Ron	YR	YR	3/20/10	DTW-7.5 Yax, Brian	BY	BY	3/17/10
✓	Eby, John	EB	EB	3/17/10	Ardanowski, Dave	DX	DX	3/19
✓	Headley, Adam	AM	AM	3/18/10	Bird, Matt	MB	MB	4-8-10
✓	Holt, Matthew	MH	MH	3/21/10	Chatel, Greg	CL	CL	3-28
✓	Jones, Byron	BO	BO	3-21-10	Gault, Brian	BG	BG	3/21
✓	Kirby, Anthony	TK	TK	3-20	Haefner, Amelia	JJ	JJ	3/22
✓	Schrimsher, Steve	SS	SS	3-22	Haefner, Robert	RD	RD	-----
					Keener, Sean	SK	SK	3/22
					Klawender, Gary	CK	CK	3/19
					Mack, Regan	MZ	MZ	3/19
✓	DTW-7.3 Thompson, Angela	AT	AT	3/27/10				
✓	Demers, Brent	BT	BT	3-19				
✓	Ferguson, Richard	RF	RF	3-17				
✓	Kuhlmann, Kenneth	KX	KX	3-17				
✓	Pierce, Harold	HP	HP	3-20				
✓	Pytlak, Ron	RP	RP	3-17				
✓	Rodriguez, Richard	RZ	RZ	3-22-10	DTW-5 Grand, Earl	EG		
✓	Sugent, Vincent	VM	VM	3-24	Szelag, Jeff	TU		
✓	Summers, Justin	BS	BS	3-25				
					SYS-1			
					Fairbanks, Chris	CJ	CJ	3-22
					King, Greg	GG	GG	3-19
					Reed, Mike	MR		
	R & I back section				ATA's			
	DTW-10-017				Belue, Dirk	DB		
					Cid, Sal	SC		
	Updated 3/3/2010				Mendoza, Dan	DM		
					Sheridan, Rich	RS	RS	3/19
					Vasquez, Lupe	GV		

Done By 3/31



Federal Aviation Administration

Memorandum

Date: 03/15/10

To: All Personnel

Ronald D. Bazman

From: Ronald D. Bazman, Support Manager, DTW ATCT

Prepared by: Ronald D. Bazman, 734-955-5050

Subject: ASOS and TDWR Wind Measuring Equipment Differences

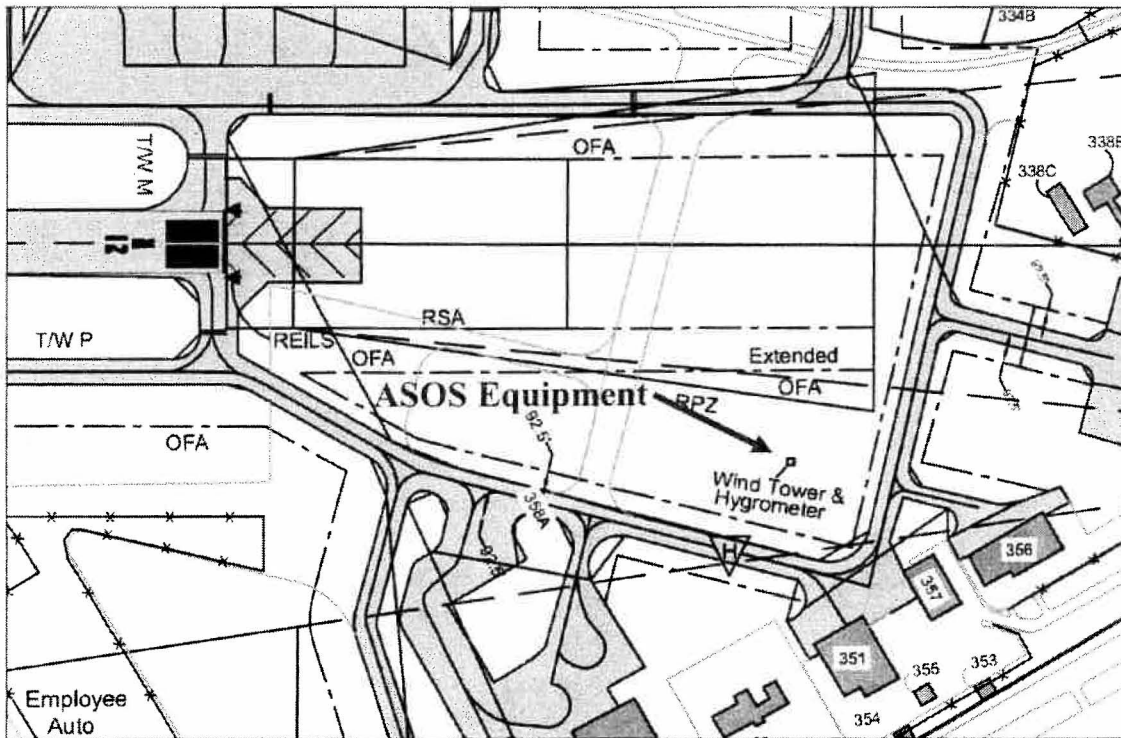
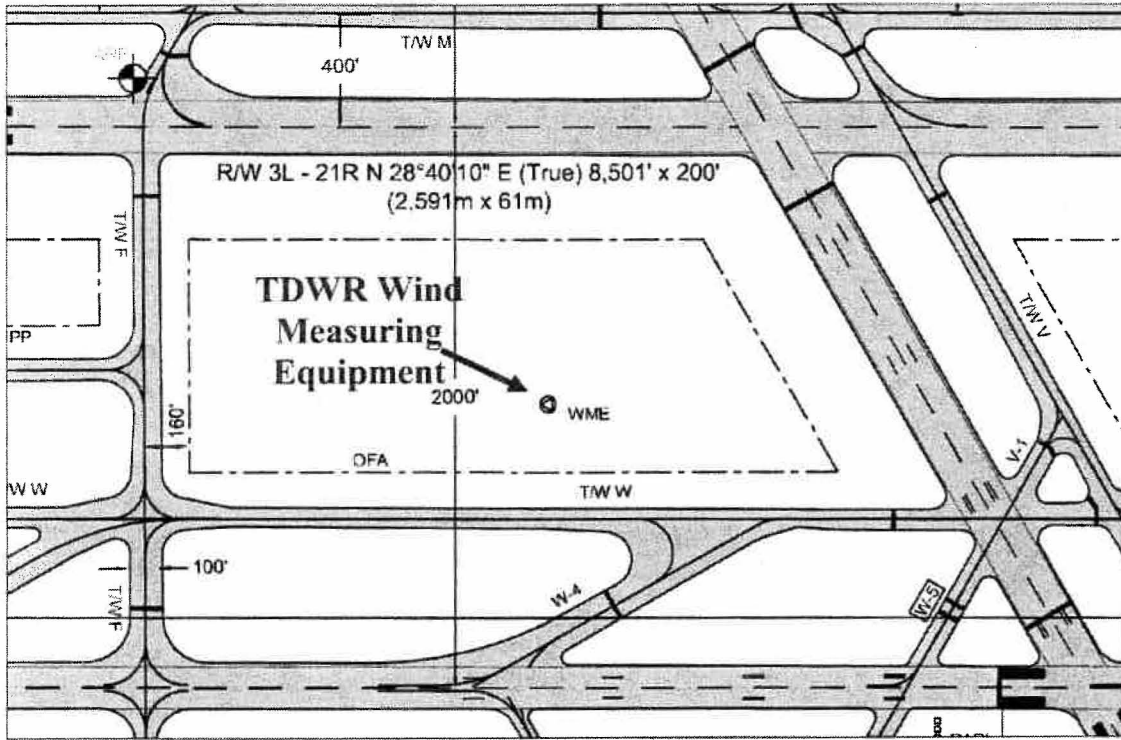
As we are still occasionally dealing with discrepancies between the Automated Surface Observing System (ASOS) and the Terminal Doppler Weather Radar (TDWR) Wind Measuring Equipment (WME), it was determined that controller/pilot interface may be enhanced by knowledge of capabilities and limitations between the two systems. The following information provides some basic information for consideration while disseminating wind information.

LOCATION OF SENSORS: As indicated on the following diagrams, sensors for each system are located a significant distance from each other. The ASOS wind sensor is located approximately 1000' northeast of the Runway 21R threshold and it is mounted on a thirty foot high pole. The TDWR WME is actually the former Low Level Wind Shear Alert System (LLWAS) center field wind sensor located on an eighty-five foot pole south of Runway 27R, and between Runway 21R and Taxiway Whiskey. The two sensors therefore are laterally located approximately 7000' apart and measure wind at a different height (85' AGL vs. 30' AGL).

WIND GUSTS: In a manual (weather observer) reporting method for wind gusts, a gust is reported when an observer sees rapid fluctuations in sensor wind speed indications with a variation of 10 knots or more between peaks and lulls during the 10-minutes before the observation. The reported gust is taken from the maximum "instantaneous" wind speed observed during this period. This differs significantly from the automated algorithms used by both ASOS and TDWR systems. Basically, the ASOS also relies on a 10-minute observation period and calculates a 2-minute average wind speed and direction. Gust information is calculated every 5 seconds from the greatest 5-second average wind speed during the past minute. The WME also sends a 2-minute average wind speed and direction measurement to the TDWR, and gust values are inputted to a special peak value holding circuit. This circuit filters the data and then gathers the results every 7 seconds. The resulting data is then compared for gust values. In both the ASOS and WME, wind values must exceed 9 knots for the systems to recognize them as gusts. If you would like the complete

explanation of how ASOS/TDWR WME gusts are calculated, I have included the appropriate sections from each manual in the General Read and Initial Binder.

As noted in an Office of Inspector Generals draft report, the disagreement between the ASOS and the TDWR WME was largely resolved when the WME sensor was replaced on March 12, 2009. However, DTW TechOps has advised that they are still requesting funding to support the lowering of the MWE to match the ASOS equipment.






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