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March 31, 2010

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Dear Karen,

Thanks again for your time, patience and effort in addressing safety issues and improprieties at Detroit Tower. Each time I read the documents, I found more and more contradictions and misleading information not only within the documents, but from previous Southwest Flow documents.

The Background portion of the Report of Investigation, page 3, states, *"During the operation of the West Flow, the front line manager supervising the DTW Air Traffic Control Tower (DTW Tower) allowed three Boeing 747 jet aircraft to depart in a southerly direction from Runway 22L in between the Runway 27R and Runway 27L arrivals and departures"*. This is not entirely accurate. The transition portion of the local Notice DTW N7110.156(2) 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"*. Page 9 under the Findings header, states that, *"NWA Flight 1682 had not cleared Runway 27L prior to NWA Flight 11 commencing its takeoff roll on Runway 22L and Mesaba Airlines Flight 3055 had not cleared Runway 27L prior to NWA Flight 71 commencing its takeoff roll on Runway 22L"*. This is not departing in between RY 27L arrivals; these are direct violations of Notice DTW N7110.156 and FAA Order 7110.65 which covers intersecting flight paths. This begins a nonsensical offering attempting to justify the Agency's conduct and reasoning for their actions.

The following are quotes from the report of investigation. *"Because the runways where the July 21 violations occurred do not intersect or have intersecting flight paths, wake turbulence requirements do not apply, and there was no violation of FAA Order 7110.65." Because the runways involved in the July 21 Boeing 747 departures do not intersect or have intersecting flight paths, wake turbulence requirements do not apply, and there was no resultant violation of FAA Order 7110.65." " Given the configuration of DTW, however, Runway 22L and Runway 27L do not physically intersect nor do their flight paths intersect. Consequently, the events of July 21, 2008, did not violate FAA Order 7110.65 because Paragraphs 3-9-8 and 3-10-4 do not apply to Runway 22L departures and Runway 27L arrivals."*

The Synopsis section under the Background header, page 4 states, *"We were unable to substantiate by a preponderance of the evidence that FAA officials violated any law, rule, or regulation, or created a substantial and specific danger to aviation safety, in its reclassification of the three incidents of July 21, 2008, as non-occurrences rather than operational errors. However, we substantiated that a front line manager improperly directed controllers to depart three Boeing 747 jet aircraft in a manner contrary to DTW local policy. We also found six other violations of local policy; however, none of the events violated the national standard regarding minimum separation standards"*. In addition to these statements, the report also quotes paragraphs 3-9-8 and 3-10-4 of FAA Order 7110.65 concerning intersecting flight paths and wake turbulence.

Page 5 under Details, Allegation 1, Findings, states, *"DTW management officials issued Notice DTW N7110.156 in response to numerous concerns raised by controllers and FAA safety personnel (AOV and the Air Traffic Organization's Office of Safety Services (ATO-Safety) regarding the operation of the Southwest Flow configuration. When issued, the Notice imposed greater separation requirements than are required under FAA Order 7110.65; however a facility may issue any such additional requirements they believe necessary to ensure a level of safety even if such standards are higher than those required under the national standard. The minimum compliance standards are contained in the national standard, FAA Order 7110.65.*

Training records indicate that DTW's five front line managers reviewed DTW Notice N7110.156 between March 27 and April 13, and in turn, verbally briefed their controllers. Additionally, DTW Operations Manager Kevin Grammes, via an April 21, 2008, email, advised the facility's front line managers that the Notice should be used when departing heavy jets from Runway 22L. In the email, Mr. Grammes specifically advised that sufficient gaps should be provided for aircraft using Runway 27L so that the heavy jet has crossed the Runway 27L extended centerline before arriving aircraft have reached the Runway 27L final approach fix."

The above italicized excerpts from the report of investigation make absolutely no sense from a totality stand point. If the flight paths of RY 27L and RY 22L do not intersect, then why issue Notice DTW 7110.156 addressing the positions of RY 27L arrivals and RY 22L departures when transitioning. And further more; if the flight paths of RY 27L and RY 22L do not intersect and wake turbulence is not a factor, why would Mr. Grammes specifically address the extended centerline of RY 27L and a heavy departure off of RY 22L?

AOV, represented by Scott Proudfoot for this investigation, is one of the organizations who expressed concern over the Southwest Flow operation which lead to the implementation of Notice DTW 7110.156. (Mr. Proudfoot was also in the facility in March 2008 concerning the Southwest Flow) As stated above, Notice DTW 7110.156 imposed greater separation requirements contained in Order 7110.65 to ensure a certain level of safety. The Agency has gone from stating that RY 22L and RY 27L function independently and that flight paths do not intersect to addressing wake turbulence and the extended centerlines. If paragraphs 3-9-8 and 3-10-4 of Order 7110.65 never applied to

RY 22L and RY 27L, then why were "additional requirements" and "greater separation requirements" of the national standard necessary to ensure a certain level of safety? I find it very odd that the minimum compliance standards that they are adjusting address interesting flight paths which is contained in the "national standard" FAA Order 7110.65 while never mentioning paragraphs 3-9-8 and 3-10-4.

In the IG's Technical Investigative Report (OIG Case #08IHB33HOOl), on pages 15 and 16 from the OSC Files Dl-08-0591 and Dl-08-1696 the following is stated: *"Mr. Figliuolo, Mr. Grammes, and DTW's FLMs, however, all expressed a contrary opinion. They maintained that departures from Runway 22L could safely take off independently of the arrivals on Runway 27L. Notice DTW 7110.152, by providing controllers with guidance in the form of "Missed Approach and Go-around Requirements." Notice 7110.152 provided controllers with two alternate sets of instructions they should deliver whenever an aircraft executes a "balked landing on Runway 27L. Specifically, the notice instructed controllers to direct aircraft to take either: (1) "a climbing left," i.e., south, turn if there are no aircraft on or immediately airborne from Runway 21R or Runway 22L, or (2) "a climbing right," i.e., north, turn toward the center of the airport if there are departures on Runway 21R or Runway 22L."* Why the change of heart between this guidance and subsequent statements to include this report?

In the IG's Technical Investigative Report (OIG Case #08IHB33HOOl), on page 13 from the OSC Files Dl-08-0591 and Dl-08-1696 the following is stated: *"....that ATO revise FAA Order 7110.65, Paragraphs 3-9-8 and 3-10-4, to allow an aircraft to depart "after ensuring that an arrival to a non-intersecting runway has not executed a balked landing."* Does this not corroborate what we have been saying and contradict what is stated in this report? This also supports our argument that a landing aircraft has a protected area beyond the runway end in the event of a "balked landing." It is unsafe and reckless to expect controllers, while conducting an intersecting flight path operation, to issue avoidance instructions after a go-around is executed instead of protecting prior to the situation unfolding. RY 27L arrival spacing should be given to ensure safety and wake turbulence requirements.

If RY 22L and RY 27L flight paths do not intersect, there are no wake turbulence issues between the two runways and the July 2008 were non-occurrences, why are we not conducting the Southwest Flow and only departing RY 22L? Why did the facility take administrative action against the supervisor's for his decision? For as flippant as the Agency is treating the deviation versus non-occurrence incidents, it seems kind of extreme to take administrative action for such a non-issue.

The following will cover the assigning of incidents as non-occurrences vice operational errors and/or deviations. The Agency's explanation and reasoning are beyond reproach. The information referenced will begin on page 7 and continue into page 11 of the report. The following are excerpts from those pages of the report.

"On August 1, 2008, Chuck Chamberlain, Acting Manager, Terminal Operations and Procedures, informed Mr. Ancinec that AOV official Joseph Mantello had concluded the

three incidents were a violation of DTW's standard operating procedures rather than operational errors. As a result, the DTW management officials considered the incidents violations of local Notice DTW N7110.156 and not operational errors or deviation."

"Ms. Strawbridge further advised that she and her staff were not aware of the specific procedure contained in local Notice DTW N7110.156 during their review of DTW's reclassification request. During our interview of Ms. Strawbridge, we showed her a copy of local Notice DTW N7110.156. She advised that the July 21, 2008, events would not constitute an operational error or deviation, because the departures had only violated local, not national standards. In order to be classified as an operational error or deviation, the event must be a violation of the national, not local, standard."

"Additionally, then AOV Air Traffic Investigator Scott Proudfoot, reviewed the radar replay tapes and confirmed that although the three alleged operational errors constituted a violation of local Notice DTW N7110.156, the departures did not constitute operational errors or deviations."

"Moreover, we learned that facilities are not required to report violations of local procedures to FAA headquarters or its regional service center when the facility reports operational errors or deviations. Ms. Strawbridge added, moreover, that she and her staff are only responsible for reviewing events for non-compliance with national standards which result in operational errors or deviations or unsafe conditions as defined in the national standards. She added there was no requirement on the national level to have reviewed the alleged violation consisting solely of a local procedure, even if it was reported to them. Therefore, we did not substantiate the allegation that FAA officials improperly reclassified the three alleged operational errors as non-occurrences."

These statements covering operational deviations and errors made by Ms. Strawbridge and Mr. Proudfoot are irresponsible, ridiculous and absurd. FAA Order 7210.56C, Air Traffic Quality Assurance clearly states in Chapter 2, Quality Assurance (QA) Programs, 2-1-2, Responsibilities, b. (7) Ensure that regional/facility OE/OD prevention plans provide the means for identification of non-compliance with national, regional, and local facility directives or standards; identify the cause(s) of the noncompliance; immediately rectify occurrences of noncompliance; and eliminate future non-compliance. This clearly states at a minimum regional intervention on all operational deviations and errors and as I can assure you that there is national notification of all operational errors and deviations. The individual who handles our issues regionally is Dorothy Davis.

Chapter 5, Air Traffic Operational Errors and Deviations, Investigation and Reporting, 5-1-1, Definitions excerpt is as follows:
b. Operational Deviation: An occurrence attributable to an element of the air traffic system in which applicable separation minima as referenced in paragraph 5-1-1a, Operational Error was maintained, but: (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; or e. Operational Error/Operational Deviation Steering Committee: As established by Memorandum of Understanding (MOU) to address national quality assurance issues contained within this order and other matters including, but not limited to, trend analysis, program effectiveness, compliance, and ongoing positive efforts. The committee meets as necessary to review and address quality assurance matters. The steering committee is comprised of two representatives from NATCA and two representatives from AAT-20.

Additionally in Chapter 5-1-16, Headquarters and Air Traffic Division Roles and Responsibilities, a. AAT-1 shall be responsible for establishing and maintaining an analytical and investigative element within the headquarters office of Air Traffic Evaluations and Investigations Staff, AAT-20, which shall: (1) Maintain a central source of OE/OD data. (2) Review all FAA Forms 7210-3, Final Operational Error/Deviation Report, for the purpose of identifying system wide deficiencies (e.g., human, equipment, and procedural) and based upon these reviews, initiate recommendations for corrective actions to reduce the occurrence of OE/ODs.

In the IG's Technical Investigative Report (OIG Case #08IHB33HOOI), Findings IV, "Exceptions to segregation guidance for jet and propeller aircraft created confusion and constituted a potential safety issue until May 2008", pages 24 and 25 from the OSC Files DI-08-0591 and DI-08-1696 the following is stated:

According to Mr. Sugent, when this type of error occurs, a jet may unknowingly enter a flight corridor already occupied by slower-moving propeller aircraft, thereby creating a dangerous situation. In fact, Mr. Sugent advised that, between approximately November 2007 and May 2008, controllers committed at least eight operational deviations,[22] which he believes can be attributed, at least in part, to the confusing nature of the separation guidance. Given the number of operational deviations that occurred, we agree with Mr. Sugent's contention that this matter constituted a safety issue.

[22] *An "operational deviation" occurs when an aircraft in airspace controlled by one air traffic controller encroaches upon, or flies into, airspace assigned to another controller without proper coordination.*

The above contradicts every statement by Ms. Strawbridge and Mr. Proudfoot over the reporting, tracking, and well every aspect of operational deviations that I have known for all of my 26 years as a controller. The explanations between the two investigations concerning deviations are even distorted. FAA Order 7210.56C clearly states what is classified as an operational deviation and that the national and regional offices are involved regardless of whether a national or local directive is violated. Contained in Attachment 1, I supplied chapter five and chapter two from the FAA Order 7210.56C. Additionally, in Attachment 1b is the previous definition of an operational deviation/error

and the lack of a definition of dependent/independent operation. Attachment 1c is just two of many operational deviations processed on a FAA, not local, form used to file said violations. Page one of each form shows that they are indeed deviations and page three shows in block 48 that a facility directive or LOA was violated. The above paragraph even admits deviations were being filed over our LOA between the tower and TRACON. Attachment 2 is the document put into the Read and Initial binder covering our wind issues. This is a mandatory briefing item and it was put into the "read during the shift" portion of the binder and not the "read before the shift" portion, which means it is *not* a mandatory read before you take a control position. This shows how DTW Support Manager, Ron Bazman, just does not understand the serious nature surrounding the wind instruments. Mr. Bazman states in the first sentence of the attachment that we are "occasionally" dealing with wind discrepancies. That is not accurate. Nor is Administrator Babbitt when he states, *"The equipment is functioning as designed; therefore, no additional funding has been requested."* The TDWR still does not display wind gusts.

Attachment 2b is an email exchange between me and management over my concerns with how the briefing was being handled. Gary agreed with me and had the briefing guide removed. My frustration also lies with the consistent nature of how poorly documents and briefings are handled within the facility. This is not an isolated incident.

Attachment 2c is two of many wind problem reports filed after the IG investigation was complete in March 2009. It has since been discovered that the ASOS wind displayed in the IDS-4, a computer informational display, is not certified for use. This is a problem due to the fact that the IDS-4 ASOS wind is not certified and the TDWR wind is known to be inaccurate and not reliable.

This entire report is pitiful and insufficient. The facts and actions do not match the statements and the statements do not match the facts and actions. This even applies to the information between the two OSC cases filed over the Southwest Flow. The variants shift from no intersecting flight paths to extended centerlines to no wake turbulence to sufficient gaps should be provided on RY 27L when a heavy is departing RY 22L. The Agency even goes as far as to state, "*When issued, the Notice*, (7110.156), *imposed greater separation requirements than are required under FAA Order 7110.65; however a facility may issue any such additional requirements they believe necessary to ensure a level of safety even if such standards are higher than those required under the national standard. The minimum compliance standards are contained in the national standard, FAA Order 7110.65.*"

Here are three quotes from the IG's report of investigation from OSC Files DI-08-0591 and DI-08-1696. *"We further determined that, for two months during this period, DTW Operations Manager Kevin Grammes knowingly allowed the non-compliant operation to occur. Due to the adverse safety implications, DTW applied interim corrective measures in October 2007, but ultimately discontinued the Southwest Flow in March 2008 because the corrective measures could not assure compliance with FAA Order 7110.65."*

"Because DTW management was notified of their non-compliance with FAA Order 7110.65 in August 2007, we found that, from August 2007 until October 2007, Mr. Grammes knowingly allowed the non-compliant operation of the Southwest Flow and failed to provide direction that ensured compliance with the Order."

"In response to our questions, Mr. Grammes told us it would be inefficient for DTW to increase spacing between aircraft, stating that if DTW increased the gap between aircraft arrivals from 4 to 6 miles to strictly comply with Paragraph 3-9-8, "it's not even advantageous for us to run this [configuration]."

Does this really sound like Notice DTW 7110.152 increased separation requirements of the 7110.65? They increased their pathetic standard, but it still has not achieved the safety requirements of the 7110.65. I cannot believe the statements made by Mr. Proudfoot and Ms. Strawbridge. This gives even more insight as to why this is happening not only here at Detroit, but around the country. All they had to do is review the facts and investigation findings from the first case to get an idea over what had taken place prior. This report should be embarrassing to them.

Thank you again for all of your time, effort and the opportunity to review, evaluate and comment on the report. If you any questions, do not hesitate to contact me.

Respectfully and sincerely,

Vincent M. Sugent

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U.S. Department
Of Transportation

Federal Aviation Administration

7210.56C Air Traffic Quality Assurance

Distribution: ZAT-721

August 15, 2002

Prepared by the Air Traffic Evaluations and Investigations Staff, AAT-20

CHAPTER 2. QUALITY ASSURANCE (QA) PROGRAMS

2-1-1. OVERVIEW

A critical component of any effective quality assurance program is problem prevention. This chapter provides a list of proactive quality assurance strategies. While it is by no means all-inclusive, it does provide some ideas that may be developed in individual quality assurance programs.

2-1-2. RESPONSIBILITIES

a. Manager, Air Traffic Evaluations and Investigations Staff, AAT-20, shall:

(1) Provide guidance and assistance to Regional Air Traffic Divisions to develop their QA Programs.

(2) Ensure all Air Traffic QA Programs are evaluated through the national evaluation process.

(3) Maintain, on file, each regional QA program, and provide an annual assessment of those programs to the Director of Air Traffic, AAT-1.

(4) Conduct Investigative Reviews of Air Traffic Services (IRATS) for facilities with high or increasing numbers of operational errors or incidents.

(5) With assistance from Regional Quality Assurance Staffs, identify and recognize air traffic facilities that:

(a) Have achieved 1,000,000 error free operations. Facilities achieving the significant milestone of 1,000,000 error free operations shall be presented with a Certificate from the Director of Air Traffic signifying their inclusion in the "None in a Million" Club.

(b) Have achieved significant reductions in OE/OD rates.

b. Regional Air Traffic Division (ATD) Managers shall:

(1) Develop a Regional QA Program.

(2) Identify which facilities within the region shall be required to develop a Facility QA Program.

(3) Provide a copy of all Regional and Facility Quality Assurance Orders and Operational Error/Operational Deviation (OE/OD) prevention plans to AAT-20.

(4) Annually review existing regional quality assurance orders and programs and, as necessary, develop new quality assurance orders or revise existing orders that address OE/OD prevention. In doing so, each ATD shall take into account past deficiencies identified by AAT-20. In addition, each ATD shall ensure that all facilities have an OE/OD prevention plan written, approved, and in effect. Each ATD shall also ensure that existing or revised QA orders are in compliance with this order.

Note:
Individual facility OE/OD prevention plans may be combined into a single HUB document.

(5) Ensure a "Back to Basics" approach is included in each OE/OD prevention plan. The objective of a back to basics approach is to reduce and prevent OE/ODs by emphasizing proper use of the basics of air traffic control. As a minimum, all facilities shall continually emphasize the use of standard phraseology, the need to ensure pilot read-backs are complete and correct, and the use of position relief checklists during position relief briefings. This back to basics approach can be implemented using a variety of methods such as weekly team briefings, staff meetings, increased dialog with the workforce during performance related discussions and by posting examples monthly on facility or QA bulletin boards.

(6) Ensure that facility OE/OD prevention plans include items pertinent to a particular facility. In developing OE/OD prevention plans, Air Traffic Managers (ATM) shall consider past deficiencies identified by AAT-20.

(7) Ensure that regional/facility OE/OD prevention plans provide the means for identification of non-compliance with national, regional, and local facility directives or standards; identify the cause(s) of the non-compliance; immediately rectify occurrences of non-compliance; and eliminate future non-compliance.

(8) Provide trend analysis, statistical data, recommendations and other pertinent information to assist field facilities with their prevention efforts. Regional Quality Assurance Staffs shall also provide assistance and support to all terminal facilities to ensure that all national surface error prevention strategies have been implemented as required.

(9) Establish methods for early identification of facility operational trends in order to raise facility operational awareness. OE/OD rates per 100,000 operations will be tracked and distributed to heighten awareness of each facility's OE/OD trends.

(10) Ensure that towers include a comprehensive plan to prevent surface incidents, if one is not already contained in a separate facility Runway Incursion Prevention Plan.

c. Hub Managers/ATM's shall:

(1) Maintain a level of awareness and involvement in their facility's operations/programs so as to ensure their maximum quality and efficiency.

(2) Develop a Facility QA Program as directed by the ATD or Hub manager.

(3) Identify which facilities within their Hub shall be required to develop a Facility QA Program.

2-1-3. PROGRAM CONTENT

QA programs shall establish methods to identify and correct deficiencies and recognize successes in, as a minimum, the following four areas:

a. Operational Error and Operational Deviation (OE/OD) Prevention:

(1) From the following list, include, as a minimum, three actions to preclude OE/OD's from occurring:

(a) Hearback/Readback programs.

(b) Surface error prevention programs.

(c) Incentive/recognition programs.

(d) Employee of the Month/Quarter programs.

(e) List of good operating practices.

(f) Tape talks/Phraseology Improvement Programs.

(g) Supplemental, refresher or skill enhancement training and/or simulation training.

(h) Personal accounts of lessons learned.

(i) Periodic QA briefings in the facility covering trends, customer input, evaluations, etc.

(j) Aggressive resolution of problems identified by the Unsatisfactory Condition Report (UCR) program.

(k) Review of Monitor Alert Parameters (MAP).

(l) Incorporate previous OE scenarios into the training program.

(2) Regional QA Programs shall include procedures for the regular, periodic review of facilities' OE/OD trends. These procedures shall provide for appropriate investigation and reporting of observed trends.

b. Teamwork. From the following list, include as a minimum, two items that will instill teamwork within the air traffic control specialist (ATCS) workforce, administrative workforce, and between facilities, outside entities, etc.:

(1) Air Traffic Teamwork Enhancement (ATTE) training, internal and external teams.

(2) Teamwork incentive/recognition programs.

(3) Roles of different positions/jobs (facility-wide cross training).

(4) Supervisor/CIC skills course.

(5) Team meetings.

(6) Clearly communicated expectations.

c. Communications. From the following list, include as a minimum, four items to improve communications among all employees and create an atmosphere conducive to the sharing of information:

(1) Electronic Bulletin Board System or Internet/Intranet access to data.

(2) National Database - containing facility, regional and national QA data.

(a) http://aat20.faa.gov/

(3) Newsletter(s) - electronic editions where possible.

(4) QA seminars and conferences.

(5) System wide QA TELCONs.

(6) Team briefings on trends and issues.

(7) All hands meetings.

(8) SUPCOM

(9) Industry reports (e.g. National Transportation Safety Board (NTSB) reports, Aviation Safety Reporting System (ASRS), Air Line Pilots Association (ALPA), and Aircraft Owners and Pilots Association (AOPA) newsletters).

d. Customer Service/Feedback. From the following list, include as a minimum, four items to solicit employee and customer feedback (internal/external customers) regarding the quality of service provided by the facility and the organization's impact on other organizations, users, and individuals:

(1) Operation Raincheck/Operation Takeoff.

(2) Surveys of internal and external customers.

(3) Interaction with other organizations - NTSB, Flight Standards District Office (FSDO), Department of Defense (DOD).

(4) Employee evaluation of shift performance.

(5) All hands meetings.

(6) SUPCOM.

(7) Familiarization flights.

(8) Bargaining unit representatives.

(9) Contacts with user organizations (e.g. Fixed Base Operators, Flight Schools).

(10) Pilot safety seminars and airport management workgroups.

CHAPTER 5. AIR TRAFFIC OPERATIONAL ERRORS AND DEVIATIONS, INVESTIGATION AND REPORTING

5-1-1. DEFINITIONS

a. Operational Error: An occurrence attributable to an element of the air traffic system in which:

(1) Less than the applicable separation minima results between two or more aircraft, or between an aircraft and terrain or obstacles (e.g., operations below minimum vectoring altitude (MVA); equipment / personnel on runways), as required by FAA Order 7110.65 or other national directive; or

(2) An aircraft lands or departs on a runway closed to aircraft operations after receiving air traffic authorization.

(3) An aircraft lands or departs on a runway closed to aircraft operations, at an uncontrolled airport and it was determined that a NOTAM regarding the runway closure was not issued to the pilot as required.

b. Operational Deviation: An occurrence attributable to an element of the air traffic system in which applicable separation minima as referenced in paragraph 5-1-1a, 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), pre-coordination, 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; or

NOTE:
This does not apply to inter/intra-facility traffic management initiatives.

(5) An aircraft, vehicle, equipment, or personnel encroached upon a landing area that was delegated to another position of operation without prior coordination and approval.

c. Technical Violation: Operational errors that are classified as low severity and all operational deviations. Operational errors that cannot be reviewed by radar data or a playback tool will be initially classified as a low severity, if all indications are that at least 80% separation minima was maintained. See Chapter 6, Severity Index.

d. Operational Duties: Duties that require an employee to issue or relay an ATC clearance or instruction; make a control decision that will affect coordination; perform a strip marking function or update computer generated information that may be used by an AT controller to make a control decision; or supervise these duties.

e. Operational Error/Operational Deviation Steering Committee: As established by Memorandum of Understanding (MOU) to address national quality assurance issues contained within this order and other matters including, but not limited to, trend analysis, program effectiveness, compliance, and ongoing positive efforts. The committee meets as necessary to review and address quality assurance matters. The steering committee is comprised of two representatives from NATCA and two representatives from AAT-20.

f. Controlled Event: An operational error where the AT employee was aware of the impending conflict and takes corrective action to increase the separation.

g. Uncontrolled Event: An operational error where the AT employee was unaware of the conflict, takes no corrective action and/or became aware of the conflict but did not have enough time to effectively mitigate the loss of separation.

h. Severity Index: A method to determine the gravity, or degree that the separation standard was violated, for operational errors that occur in-flight.

i. OE Causal Factors: The Air Traffic Evaluations and Investigations Staff, AAT-20, in coordination with the Office of Aerospace Medicine's Human Resources Research Division, AAM-500, analyzes, FAA Form 7210-3, Final Operational Error/Deviation Reports to compile statistics and determine trends regarding the causal factors for OE/D's.

Based on that analytical information and as a quality assurance initiative to further reduce the potential for OE/D's system-wide, AAT-20 has identified certain checklist items that, when rated as problematic during evaluations, indicate that the facility's potential for experiencing an OE/D is increased.

5-1-2. SUSPECTED EVENT

a. In order to maintain an effective Air Traffic System, it is imperative that we identify all deficiencies within our system and take appropriate corrective actions necessary to fix any associated problems. Operational errors and deviations are reported for just that reason, so those problems (either systemic or individual) can be corrected to enhance system integrity. The identification of operational errors and deviations without fear of reprisal is an absolute requirement and is the responsibility of all of us who work within our system.

b. Accordingly, it remains Air Traffic Policy that any employee who is aware of any occurrence that may be an operational error, deviation, or air traffic incident (as defined in paragraph 4-1-1, Definitions), immediately report the occurrence to any available supervisor, controller-in-charge (CIC) or management official.

c. Employees' shall verbally provide the preliminary information, of which they have knowledge, when requested by the supervisor, controller-in-charge (CIC) or management official to make an initial determination as to whether an investigation is warranted. This phase is meant only to determine the need of an investigation and is not investigatory. Therefore, Union representation is not required at this time.

5-1-3. INITIAL INVESTIGATIONS

The initial investigation is intended to be fact finding in nature. It has been designed to determine what occurred in the system, to ensure corrective action is initiated to maintain system integrity, and to report significant events to higher levels of management.

NOTE:
There are occasions when it is appropriate for higher levels of management to require further review of a suspected incident, and this further review may result in the discovery of an incident not previously identified.

The operations supervisor or the controller-in-charge when a supervisor is not available, with ATM concurrence, shall determine the validity of suspected OE/OD's and, if valid, shall ensure the following is accomplished:

NOTE:
Other facility personnel shall assist the operations supervisor and/or controller-in-charge in gathering data to conduct the initial investigation, whenever feasible.

a. When information indicates that an OE/OD may have occurred in another facility, promptly advise that facility's operational supervisor-in-charge.

b. Provide relief to any employee who appears to be involved in the incident from all operational duties as promptly as operational and staffing conditions permit. This action is intended to allow employees' an opportunity to review the voice recordings and prepare draft statements while the circumstances are fresh in their minds. The relief of an employee from operational duty also provides the employee the opportunity to participate in the preliminary investigation. Initial written statements should be completed prior to initial AAT-200 notification.

NOTE:
It may be necessary for involved employees' participating in suspected OE/OD investigations to remain in the facility beyond their scheduled shift in order to complete their statement, be interviewed, and participate in the initial investigation.

c. Gather flight progress strips, weather data, and other pertinent information. If another facility is involved, that facility shall provide the reporting facility's supervisor with all the pertinent data necessary for the timely completion of the preliminary report.

d. Review voice recordings; denote the difference in the system times and, as soon as feasible; prepare a cassette re-recording from the original to be used as a working tape.

e. Review available radar data; denote the difference in the system times, e.g., National Track Analysis Program (NTAP), or Continuous Data Recording (CDR) data, etc. See Appendix 1, Radar Data Processing.

f. Review appropriate computer data and denote the difference in the system times;

(1) Data Analysis Reduction Tool (DART).

(2) Airport Movement Area Safety System (AMASS).

(3) Tower Data Link Services (TDLS).

(4) Pre-departure Clearance (PDC).

(5) User Request Evaluation Tool (URET).

(6) Core Capability Limited Deployment (CCLD).

(7) Controller Pilot Data Link Communications (CPDLC) messages.

(8) Operational and Supportability Improvement System (OASIS) or Model 1.

EXAMPLE –
DART printouts will indicate a chronological sequence of textual CPDLC transactions. Individual CPDLC messages are stored in the Data Link Applications Processor (DLAP) temporary file as a binary encoded message and can be printed out in a text format for review.

NOTE:
Most of these new systems retain data on their individual hard drives, which are automatically deleted after 15 days. It is the ATM's responsibility to advise Airways Facilities, in a timely manner, so they may extract this data onto a storable/retainable electronic media. The pertinent data shall then be retained with the required incident file.

g. Conduct preliminary interviews with involved employees'. Efforts should be made to complete these interview(s) prior to the initial AAT-200 notification.

h. Notify the ATM of the OE/OD.

i. Ensure that FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation, is completed.

NOTE:
When writing the summary, be as clear and concise as possible using who, what, when, where, and how, to describe the entire events. Instructions for completing FAA Form 7210-2 are contained in Appendix 2 and shall include pertinent actions of the pilot(s) and air traffic control leading up to the event and any subsequent action.

j. Notify AAT-200 and the ATD through ROC/WOC by telephone within 3 hours from the time the occurrence is first reported or suspected with the following information/data:

NOTE:
The intent of the time limit is not to preclude a continuation of the preliminary investigation. However, it is intended to ensure that AAT-200 is aware of reported or suspected events within 3 hours of occurrence. If you are unable to meet the 3-hour requirement an extension shall be requested from AAT-200.

(1) A completed FAA Form 7210-2.

(2) En-route; a reduced copy of the NTAP with LST 5 text data shall be faxed to AAT-200.

(3) Terminal; a copy of the CDR plot with the associated separation data shall be faxed to AAT-200.

NOTE:
Once AAT-200 receives this official report of the OE, the AAT-200 specialist will issue a preliminary severity classification in accordance with Chapter 6, Severity Index for return to duty purposes.

k. If an employee is believed to be primary or contributory:

(1) For an operational error/deviation initially classified as low severity by AAT-200, the employee shall be returned to operational duty in accordance with paragraph 5-1-9b, Return to Operational Duty.

(a) In cases where AAT-200 cannot complete a preliminary severity classification within one hour of official notification to AAT-200, and initial indications are that at least 80% of the separation minima was maintained, the employee shall be returned to operational duty as stated above,

(b) In the event the classification later indicates a moderate or high severity, a controller may be required to complete skill enhancement training, if such training is appropriate.

(2) For operational errors classified as moderate or high severity and if the employees' overall documented performance history warrants, he/she shall not be assigned to operational duties until the provisions of paragraph 5-1-9, Return to Operational Duty, are met.

l. If the preliminary investigation reveals that certain employees' first believed to be primary/contributory were not, they may be returned to duty without further action. If these employees' have knowledge of the events, obtain their views and recommendations.

m. If an operational supervisor, by virtue of performing supervisory duties, or a controller while performing CIC duties, is believed to be primary/contributory to a suspected OE/OD, that employee shall not be assigned supervisory/CIC duties until the provisions of paragraph 5-1-9, Return to Operational Duty, are met.

n. When the initial investigation results in a determination of a non-occurrence, retain for 45 days, all data used in the investigation process. For example, pilot/controller statements, record of conversations, original NTAP and CDR plot(s) in an approved electronic format, used in a determination of a non-occurrence, as well as any other pertinent data not otherwise required to be retained. *Facilities that determine the event was a non-occurrence based on a printed NTAP or CDR Plot (i.e. significant target jump) shall retain both the original paper printout and an electronic copy.*

5-1-4. MULTIPLE LOSSES OF SEPARATION DURING A SINGLE EVENT

a. During a single event where multiple losses of standard separation are reported/discovered, and are determined to be the result of employee actions or inaction, each instance of a loss of separation shall be reported individually by completing a separate FAA Form 7210-2 and FAA Form 7210-3. Each form should describe the individual loss of separation, including a reference, if necessary for clarity, to the other related incidents.

b. When a singular failure of a employee to ensure separation between two aircraft (or an aircraft and terrain) that subsequently creates a chain reaction of additional losses of separation between other pairs of aircraft or terrain, the multiple losses of separation shall be considered as a single event only for return to operational duty purposes, performance skill checks, and training actions/plans. If combined, these actions and/or documentation shall be based on the higher of severity classification assigned.

c. The individual separation losses may be combined as one event for the purposes of entries onto FAA Form 3120-1, Section VI.

5-1-5. INVESTIGATIVE PROCESS

a. Fact Finding. The investigation of an OE/OD must entail an in-depth inquiry into all causal factors. The following should be considered for a comprehensive investigation:

(1) Facility procedures.

(2) Facility training.

(3) Facility supervision.

(4) Equipment.

(5) Control environment.

(6) External factors.

(7) Controller action vs. inaction.

(8) Airspace configuration.

(9) Traffic flow/volume/initiatives.

(10) Pilot actions, including the consequence of any Traffic Alert and Collision Avoidance System (TCAS) event.

(11) Route of flight or taxi route, as appropriate.

(12) Weather.

(13) Position configuration.

(14) Coordination procedures.

(15) Airport environment:

(a) Runway markings.

(b) Ramp use.

(c) Areas of poor visibility (blind spots, fog).

(d) Runway configuration.

(e) Airport Congestion.

(f) Surface Conditions (rain, ice, snow)

(16) Human factors.

(17) Compare the system time of any pertinent equipment.

(18) Staffing levels and/or position assignments based on proficiency vs. complexity/volume.

(19) Radar Data (see Appendix 1, Radar Data Processing).

b. Interviews. Certain information, which is necessary to complete FAA Forms 7210-2 and 7210-3, must be obtained from the employees' involved. Since many employees' in the facility, e.g., controllers, air traffic assistants, and supervisors may be knowledgeable of, or a party to the incident, interviews with all possibly involved personnel shall be held. It is imperative that these interviews be conducted in an atmosphere of shared concern as to the events leading to and surrounding the incident. When an interview is conducted, the following shall apply:

(1) As appropriate the Interview Statement shall be read or given to an employee before conducting an interview (see Appendix 9, Interview Statement).

(2) An employee who is a member of a bargaining unit may elect to have a union representative present during the interview, in accordance with the applicable negotiated agreement.

(3) An employee who is interviewed shall be afforded the opportunity to submit written comments and recommendations to the ATM within 5-calendar days of the interview. The comments shall include the employees' name, position function, and location of employment. The employees' signature shall be affixed to the end of the statement and dated. Recommendations should concern corrective actions that can be undertaken to preclude a similar occurrence.

(4) Interviews shall be conducted by supervisory personnel, designated IIC's or the ATM. Investigative team members, other than the involved employees', may participate in the interviews.

(5) Every effort shall be made to conduct interviews during the employees' regularly assigned shift and within the employees' assigned facility.

c. Voice Recordings.

(1) Two certified cassette re-recordings, one marked "Original" and the other marked "Copy", shall be made from the original voice recording that shall include the time track, when available both tapes shall be retained in the OE/OD file. Certification and labeling of these cassettes shall be in accordance with FAA Order 8020.11. Include all communications for a period of 5 minutes before initial contact to 5 minutes after the last contact with each position involved in the OE/OD. When re-recordings are made from digital voice recording system (DVRS) equipment, this period will be from the call file immediately proceeding and immediately after the 5 minute before and after requirement.

(2) If the above period exceeds 30 minutes, the ATD manager may approve, for the specific OE/OD, limiting the recording to that period pertinent to the incident.

5-1-6. ATM RESPONSIBILITIES

a. The ATM of the facility whose personnel were responsible for the separation of the aircraft involved, regardless of where the OE/OD occurred, shall:

(1) Ensure that OE/OD investigations are conducted in accordance with any negotiated agreements between the FAA and pertinent labor organizations.

(2) When the Preliminary OE/OD Investigation Report indicates that another facility(s) is involved in the occurrence, as soon as feasible confer with other ATM(s) to determine the scope of the other facility's investigative effort and how long it will take. This includes gathering data and completing Parts I and II of FAA Form 7210-3, Final Operational Error/Deviation Report. If the reporting ATM and the other ATM cannot concur in any phase of their respective investigations, their differences shall be reported to the ATD for a resolution.

(3) Designate the Investigator-In-Charge (IIC). The IIC may be designated on a rotational or permanent basis. Supervisory personnel or facility staff shall perform the IIC function. If the only facility officer is the ATM, and there are no assigned supervisors, the ATM performs the IIC functions.

(4) Designate a team to assist the IIC in the investigation of each OE/OD. The ATM shall determine the size and composition of the team, but shall as a minimum afford:

(a) A Union designated representative reasonable opportunity to participate as a member of the investigative team.

(b) Employees' believed to be primary/contributory to the event reasonable opportunity to participate in the investigative process, except during the interview of other employees'.

(5) Ensure FAA Form 7210-3 is completed. Instructions for completing FAA Form 7210-3 are contained in Appendix 4.

b. The ATM of any other involved facility shall be responsible for providing the reporting facility with information and assistance as required. This may require an investigation on the same scale as the reporting facility, in which case the ATM shall have the same responsibilities as defined under paragraph 5-1-3, Initial Investigations. The ATM of any other involved facility shall also be responsible for retaining all pertinent original data until notified of release by AAT-20.

c. The IIC is responsible for conducting a complete investigation and shall be the final authority for the findings and recommendations to be submitted to the ATM. In addition the IIC shall:

(1) Ensure that all pertinent data has been collected and documented in Part I of FAA Form 7210-3 and distributed to the ATM.

(2) When other facilities are involved, ascertain the scope of their investigation and coordinate the exchange of data and assistance as required.

(3) Assign duties to team members.

(4) Ensure that interviews conducted are done in accordance with paragraph 5-1-5b, Interviews.

d. The IIC Investigative Team shall:

(1) Assist the IIC by performing and completing all assigned tasks.

(2) Remain under the supervision and jurisdiction of the IIC until relieved by the IIC or ATM.

5-1-7. RECLASSIFICATION

a. After preliminary notification procedures are completed, a review of the data may indicate a reclassification of the incident to one of the following:

(1) Pilot deviation.

(2) Military facility deviation.

(3) From an operational deviation to an operational error.

(4) From an operational error to an operational deviation.

(5) No occurrence.

b. If a reclassification is determined to be appropriate, the ATM shall:

(1) Complete FAA Form 7210-5, Operational Error/Deviation Reclassification Report.

NOTE:
If a reclassification is from an operational deviation to an operational error or from an operational error to an operational deviation, then reclassify the original incident to a "No Occurrence" and indicate in the supporting documentation the new OE/OD report number.

(2) Forward FAA Form 7210-5, Operational Error/Deviation Reclassification Report along with the rationale and all necessary supporting documentation, including voice tapes and radar data, to the ATD for review.

c. The ATD shall conduct an initial review of all requests for reclassification. Those they believe have merit shall be reviewed jointly between the ATD and AAT-200. Should the ATD and AAT-200 not agree with the resolution of any request, AAT-20 is the authority to make a final determination. Once AAT-200 verbal approval is obtained, the ATD shall submit FAA Form 7210-5, Operational Error/Deviation Reclassification Report, for all reclassification requests to AAT-20.

d. Facilities shall retain all original forms and supporting investigative data for a period of 2 1/2 years.

5-1-8. PERFORMANCE BASED ACTIONS

a. Performance based action of surface errors, MVA/Obstruction errors, and oceanic/non-radar errors shall be handled in accordance with paragraph 5-1-9c, Return to Operational Duty.

b. When radar data **does not exist** and all indications are that *less* than 80% of the separation minima was maintained, performance based action shall be handled in accordance with paragraph 5-1-9c, Return to Operational Duty.

c. When radar data **does not exist** and all indications are that *at least* 80% of the separation minima was maintained, performance based action shall be handled in accordance with paragraph 5-1-9b, Return to Operational Duty.

d. No controller will be decertified or required to complete remedial training for any operational error(s) classified as a low severity and/or any operational deviation(s). However, skill enhancement training may be administered in accordance with paragraph 5-1-12, Skill Enhancement Training, for errors classified as low severity and are uncontrolled.

e. The number and types of error(s) shall not be the sole determining factor for performance-based actions. Performance based actions shall be based on overall documented performance history.

f. The revocation or suspension of control tower operator certificate and facility ratings shall not be used for addressing performance deficiencies.

g. Decertification shall not be based solely on involvement in the OE but rather the employee's overall performance history. Operational position decertification and remedial training shall only be used in cases where an employees' documented performance history warrants such action. The employees' supervisor, with ATM concurrence, determines whether to decertify. Decertification may be on one, multiple, or all positions as appropriate for the documented performance deficiencies.

EXAMPLE –
The employee has been determined to be primary in two operational errors within the last 2 1/2 years. The employees' first-line supervisor has had three documented performance discussions (including a TTD) within the past year outlining needed performance improvement with a training plan.

(1) Determine the appropriate actions and training necessary to return the employee fully to duty in consideration of performance deficiencies identified in the above review.

(2) If the decision is not to decertify then skill enhancement training may be administered in accordance with paragraph 5-1-12, Skill Enhancement Training.

(3) If the decision is made to decertify the employee the following actions and training, as a minimum, shall be taken:

(a) A corrective action/recertification plan shall be developed in accordance with FAA Order 3120.4.

(b) This plan shall include, as a minimum, remedial training, which addresses all identified performance issues.

(c) Prior to communicating the above determinations and plans to the employee, the supervisor shall brief the ATM on the issues associated with the OE and obtain the ATM's concurrence for the action plans developed.

(d) Accomplish recertification in accordance with FAA Order 3120.4 for the position(s) that the employee has been decertified.

(e) Upon satisfactory completion of the performance skill check, the employee shall be returned to duty; or

(f) If the employee fails to successfully complete the performance skill check, then the employee shall remain decertified and the provisions of FAA Order 3120.4 applied.

h. When either an operations supervisor (OS) or a controller while performing supervisory/CIC duties, is identified as primary/contributory to an OE/OD, operations CIC duties shall be suspended. Approval from the ATD shall be required before an OS/CIC is authorized to resume supervisory/CIC duties.

5-1-9. RETURN TO OPERATIONAL DUTY

a. The ATM shall remain involved in the post error process, in consultation with the ATD, including a review of the supervisors' determinations made under this paragraph to ensure complete and consistent handling of all incidents.

b. For all operational errors initially classified as a low severity and/or all operational deviations:

(1) The employee(s) determined to be primary/contributory to the error/deviation shall be returned to operational duties as soon as the preliminary investigation activities are completed.

(2) No post OE/OD performance skill check will be completed on any operational position associated with this return to duty, nor will a 30-day follow-up performance skill check be conducted relating to this error/deviation.

(3) The employees' supervisor or designee shall complete the following as soon as feasible after the employee has returned to operational duty:

(a) Conduct an in-depth review with the employee of the their role. This review shall include as a minimum:

1. The events leading up to and surrounding the incident.

2. The procedure or the separation standard involved.

3. Available computer, radar data and voice recording of the incident via SATORI/RAPTOR playback.

4. The training record, including all applicable technical training discussions (TTD's).

c. For all operational errors initially classified as moderate, or high severity, as well as all surface, MVA/Obstruction, oceanic/non-radar errors or at those facilities where radar data is not available and *less* than 80% of the separation minima was maintained:

(1) Employee(s) determined to be primary/contributory to an operational error and if the employees' performance warrants, shall not be assigned to operational duties until the employees' supervisor or designee shall take the following action:

(a) Conduct an in-depth review of the employees' role in the OE. This review shall include as a minimum:

1. The events leading up to and surrounding the incident.

2. The employees' statement.

3. The procedure or the separation standard involved.

4. Available computer, radar data and voice recording of the incident via SATORI/RAPTOR playback.

5. The training record, including all applicable technical training discussions (TTD's).

6. Verification of currency on the position of operation.

7. Employee involvement in previous OE/ODs during the past 2 1/2 years.

(b) Conduct performance based action in accordance with paragraph 5-1-8g, Performance Based Action.

(c) Conduct performance skill check(s) for those positions on which the employee(s) will be allowed to return to operational duty while training is being provided. This skill check may be accomplished on individual or multiple positions at the discretion of the ATM. If the employee fails to successfully complete the performance skill check, then the employee shall be decertified and the provisions of FAA Order 3120.4 applied.

EXAMPLE-
If an employee was removed from operational duties on the radar departure position, but is to be returned to duty in the tower cab while completing some skill enhancement training for the departure position, a performance skill check(s) would be required in the tower cab function, so as not to unduly delay the return to duty.

(d) As soon as possible after the employee has returned to operational duty, the employees' supervisor or designee shall conduct a performance discussion to include:

1. The results and recommendations from the IIC/investigative team and/or the facility OE review board.

2. Any deficiencies in the employees' performance identified during the investigation of the OE.

5-1-10. WHEN THE AIR TRAFFIC MANAGER IS INVOLVED

If the employee involved in the OE/OD is the ATM, the ATD manager may waive the requirements in paragraph 5-1-9, Return to Operational Duty, temporarily. This waiver shall not exceed 2 weeks, pending the arrival of an ATD designee. Upon arrival, the ATD designee shall serve as the employees' certifying official for the purpose of complying with paragraph 5-1-9, Return to Operational Duty, and 5-1-11, Follow-up Performance Skill Check.

5-1-11. FOLLOW-UP PERFORMANCE SKILL CHECK

The employees' first line supervisor or designee of an employee found to be primary/contributory to an OE of moderate or high severity, as well as all surface errors, MVA/Obstruction errors, and oceanic/non-radar errors shall conduct, as a minimum, a follow-up performance skill check of the employee, within 30 days from the date of return to operational duty. The skill check shall be conducted on a position in the control function involved in the OE. The subsequent technical training discussion (TTD) shall review all training that was administered as a result of the OE and shall be documented in accordance paragraph 3-1-4, Documentation.

NOTE:

There is no performance skill check or 30-day follow-up performance skill check required with any operational error classified as a low severity or operational deviation.

5-1-12. SKILL ENHANCEMENT TRAINING

a. Skill enhancement training is designed to increase the proficiency of a specialist in a skill on a position on which the specialist is certified. Based on the circumstances unique to a specific error, skill enhancement training need not always be accomplished prior to an employee continuing operational duties. Skill enhancement training shall be based upon the factors identified during the investigation of the operational error.

b. For employees' identified as either primary or contributory to an operational error classified as low severity, skill enhancement training may be appropriate only if the operational error has been classified as uncontrolled.

c. Based on the employee(s) performance skill enhancement training may be required for employees' identified as either primary or contributory to an operational error classified as moderate or high severity.

5-1-13. FINAL REPORTS

The ATM shall:

a. Analyze the data submitted by the IIC in Part I of the FAA Form 7210-3 to determine:

(1) The classification of the occurrence; i.e., operational error, operational deviation, pilot deviation, or no occurrence. If it is determined that an OE/OD can be reclassified, the ATM shall request that the incident be reclassified in accordance with paragraph 5-1-7, Reclassification.

(2) The categorization of the OE/OD; i.e., ATCS, manager/supervisor/other personnel, procedural, equipment, or any combination thereof.

(3) The causal factors of the OE/OD.

(4) The recommendations and corrective actions to be taken to prevent a recurrence of the OE/OD.

b. Provide copies of Part I and Part II to each employee involved and the Principal Union Representative, before completing Part II, Item 69, Facility Manager's Recommendations and Corrective Actions. Employees' may submit comments or recommendations in writing to the ATM within 5-calendar days of receipt. The comments shall include the employees' name, position function, and location of employment, signature and date. Recommendations should concern corrective actions that can be undertaken to preclude a similar occurrence. The ATM shall consider these comments in his/her deliberations before completing Facility Manager's Recommendations and Corrective Actions and shall append the employees' comments to Part II.

c. Complete Part II of the FAA Form 7210-3 and submit two copies of Parts I and II and all attachments (including employee and union statements) to the ATD, and one copy each to other ATMs and ATDs as required, within 30 administrative workdays of the date the occurrence was reported.

d. When an employee(s) of another facility is involved in an OE/OD, ensure that the employees' supervisor, through that facility ATM, is provided sufficient documentation to determine the appropriate corrective action.

e. Provide involved employee(s) with a copy of the complete report after receipt of Part III from the ATD.

f. Retain the original report in the facility files.

g. Establish a method of follow-up to evaluate the effectiveness of the local recommendations/actions that result from the investigation.

5-1-14. ENTRIES IN TRAINING AND PROFICIENCY RECORD (FAA FORM 3120-1)

When an employees' performance has been determined to contribute to an OE/OD, the following shall be entered into the employees' FAA Form 3120-1:

a. The causal factors as determined by the ATM shall be fully transcribed and endorsed by the employees' first-line supervisor on a separate page in Section VI. This page shall be used for any further reference to the OE/OD and shall indicate the facility's name, the OE/OD report number, and the removal date for the page.

b. Any associated training, remedial and/or skill enhancement shall be logged, in accordance with FAA Order 3120.4, without reference to the OE/OD.

c. Any associated position performance skill checks, including all follow-up performance skill checks (e.g., 30-day) shall be logged in accordance with FAA Order 3120.4, without reference to the OE.

d. Any associated recertification shall be logged, in accordance with FAA Order 3120.4, without reference to the OE.

5-1-15. DOCUMENTATION RETENTION

a. The OE/OD investigation file shall:

(1) Be retained by the reporting facility for 2 1/2 years from the date of the occurrence.

(2) Be identified by a label (maximum size 3"x5") clearly marked "OPERATIONAL ERROR" or "OPERATIONAL DEVIATION," the report number, the incident local date and time, and the local date to be destroyed.

(3) Contain, as a minimum, the original FAA Forms 7210-2 and 7210-3, signed employee personnel statements and/or any similar supporting documents, the two certified re-recordings marked "Original," and "Copy" in accordance with paragraph 5-1-5c, all supporting documentation such as the original NTAP or CDR plot in both printed format and an approved electronic media, as well as all documentation from the supervisor's training plan, performance skill-checks, and the severity index chart from AAT-20.

NOTE:
A facility may elect to store the supporting data, i.e.. two certified voice re-recordings, and NTAP on a floppy disk in a separate secured place in lieu of the OE/OD investigation file.

b. Preliminary and final OE reports that are classified as low severity and/or OD reports, while retained for 2 1/2 years, shall be sanitized after 12 months so that any information, which could lead to the identification of an employee, either primary or contributory to the OE/OD, has been removed.

c. All references to a specific OE/OD shall be removed from the employees' FAA Form 3120-1 and returned to the employee 2 1/2 years after the incident. All references to a specific OE classified as a low severity and/or OD shall be removed from the employees' FAA Form 3120-1 and returned to the employee 12 months after the incident.

5-1-16. HEADQUARTERS AND AIR TRAFFIC DIVISION ROLES AND RESPONSIBILITIES

a. AAT-1 shall be responsible for establishing and maintaining an analytical and investigative element within the headquarters office of Air Traffic Evaluations and Investigations Staff, AAT-20, which shall:

(1) Maintain a central source of OE/OD data.

(2) Review all FAA Forms 7210-3, Final Operational Error/Deviation Report, for the purpose of identifying system wide deficiencies (e.g., human, equipment, and procedural) and based upon these reviews, initiate recommendations for corrective actions to reduce the occurrence of OE/ODs.

(3) Distribute, on a semi-annual basis, an OE/OD Analysis Report. This report shall, as a minimum, identify trends concerning deficiencies specified in paragraph 5-1-14a and be sent to all regions and AT facilities.

(4) Conduct periodic program evaluations to determine the effectiveness and efficiency of this program.

(5) Maintain liaison with the regions, facilities, and other headquarters AT offices and services to provide continuity and follow-up on corrective action recommendations.

(6) Provide policy interpretations concerning the administration of this order.

b. The ATD shall be responsible for establishing an analysis element within the ATD, which shall within 10 administrative workdays after receipt of Parts I and II of FAA Form 7210-3:

(1) Review Parts I and II and complete Part III. Completion of Part III ends the investigation process.

(2) Send copies of the completed FAA Form 7210-3, Parts I, II, and III and all attachments, including employee and union statements, to AAT-20 and the Planning, Information and Analysis Division, ATX-400.

(3) Send a copy of Part III to the appropriate ATM's and other ATD's, when required, and retain the original in either paper or automated form in the regional files.

(4) If the above cannot be completed within the 10-day time period, notify AAT-20 via telephone.

(5) Review all requests to reclassify OE/OD's for completeness of data and to ensure their validity before coordination with AAT-20. Send the approvals in accordance with paragraph 5-1-7, Reclassification, to AAT-20.

(6) Establish a follow-up mechanism to determine if corrective actions contained in FAA Forms 7210-3 are effective and are accomplished in a timely manner. All corrective actions shall specify a completion deadline.

(7) Provide regional assistance to facilities as required.

(8) Work closely with other ATDs when an OE/OD may involve facilities in different regions and the respective ATMs cannot concur in any phase of their investigations. If 30 administrative workdays have passed since the incident and a decision cannot be reached with the other ATDs, forward all investigative data to AAT-20 for resolution. Until a decision is reached, ensure that all recordings, data and documentation pertaining to the incident are retained.

b

1. Per FAAO 7210.56C, paragraph 5-1-1 an operational deviation is:

d. Operational Deviation (OD). An occurrence attributable to an element of the air traffic system which did not result in an Operational Error (OE) as defined in this Notice, 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; or
NOTE*This does not apply to inter/intra-facility traffic management initiatives.*
(5) An aircraft, vehicle, equipment, or personnel encroached upon a landing area that was delegated to another position of operation without prior coordination and approval.

2. Per the same order, an operational error is:

e. Operational Error (OE). An occurrence attributable to an element of the air traffic system in which:
(1) Less than 90% of the applicable separation minima results between two or more airborne aircraft, or less than the applicable separation minima results between an aircraft and terrain or obstacles (e.g., operations below minimum vectoring altitude (MVA); aircraft/ equipment / personnel on runways), as required by FAA Order 7110.65 or other national directive; or
(2) An aircraft lands or departs on a runway closed to aircraft operations after receiving air traffic authorization, or

(3) An aircraft lands or departs on a runway closed to aircraft operations, at an uncontrolled airport and it was determined that a NOTAM regarding the runway closure was not issued to the pilot as required.

f. Performance. Human conduct including actions (or inactions) leading to, during, and after an OE/PE/OD.

g. Preliminary Report. Refers to FAA Form 7210-2, "Preliminary Operational Error/Deviation Report."

h. Proximity Event. A loss of separation minima between two aircraft where 90 percent or greater separation is maintained in either the horizontal or vertical plane. This does not include any violation of wake turbulence separation minima or losses of separation that are classified under the No Conformance minima.

3. Independent and dependent operations – According to Chuck Chamberlain of ATO-T, there are no written definitions of these terms available.

c

FAA FORM 7210-3, FINAL OPERATIONAL ERROR/DEVIATION REPORT (ATQA)

Final Operational Error/Deviation Report (ATQA)
PART I. INVESTIGATIVE DATA

Report Number: D T W T 0 9 D 0 2 4

1. Date and time of incident:
MM/DD/YYYY: 0 9 2 0 2 0 0 9
Time (Local): 1 4 1 3

2. Responsible facility: DTW

Classification Level: 11

3. Severity Index: points

- ☐ A
- ☐ B
- ☐ C
- ☐ D

- ☐ Controlled
- ☐ Uncontrolled

- ☐ Converging, Opposite Flight Paths
- ☐ Converging, Crossing Flight Paths
- ☐ Same Flight Paths
- ☐ Diverging/Non-intersecting Flight Paths

4. Was weather a factor in the incident? ☐ Yes ☒ No

(If yes, explain in Block 65, Summary of Incident.)

5. Altitude/flight level of incident: 1800

6. Type of airspace:

- ☐ Class A
- ☒ Class B
- ☐ Class C
- ☐ Class D
- ☐ Other
- ☐ Class E
- ☐ Class G
- ☐ Oceanic
- ☐ Airport Surface

7. Location of Incident :

Fix: DXO
Intersection:
Direction: 185
Runway:
Distance: 1
Taxiway:
Latitude:
Longitude:
Area/Sector or Position Designator: FD/CD

8. Closest Proximity:

Vertical Feet Lateral

- ☐ Feet
- ☐ Miles
- ☐ Minutes
- ☒ N/A

9. Number of aircraft for which the controller had control responsibility at the time of the incident: 5

10. Was training in progress?

- ☐ Yes
- ☒ No

Complete blocks 11-36 for each employee

11. Enter P for primary or C for contributory:

12. Number of personnel involved: 1

13. Employee's facility:
Three-letter Identification Level Type

14. Reserved:

15. Date of birth:
MM/DD/YYYY

16. Social Security Number:
Last six digits only

17. Indicate the performance level of the employee:

- ☐ Developmental
- ☐ ATCS
- ☐ Supervisor
- ☐ Staff Specialist
- ☐ Other

If ATCS, how long since ATCS in current facility?
YY-MM

18. Last date of certification or recertification on position:
MM/DD/YYYY

- ☐ Initial Certification
- ☐ Recertification

19. Has training relevant to the incident been received within the last 12 months?

- ☐ Yes
- ☐ No

If yes, list the type and the date of that training in this block:

19A. During the 2 1/2 years prior to the incident, in how many Operational Errors has the employee been found to be the primary cause?

19B. During the 2 1/2 years prior to the incident, in how many Operational Errors has the employee been found to be contributory?

Final Operational Error/Deviation Report

Report Number: D T W T 0 9 D 0 2 4

37. Was an OSIC or CIC on duty at the time of the incident?

Enter A for OSIC
Enter C for CIC

38. Was the assigned OSIC/CIC present in the operational area at the time of the incident?

☒ Yes ☐ No

39. Did the employee require OSIC/CIC assistance prior to the incident?

☐ Yes ☐ No

40. Did the assigned OSIC/CIC provide assistance?

☐ Yes ☐ No
(Explain in Block 65, Summary of Incident.)

41. If sectors were combined, did the OSIC/CIC approve the combination?

☐ Yes ☐ No ☐ Not combined ☒ N/A

42. If the positions were combined, did the OSIC/CIC approve the combination?

☒ Yes ☐ No ☐ Not combined

43. In what activity was the assigned OSIC/CIC engaged at the time of the incident?

☒ General Supervision
☐ Direct operational supervision
☐ Working a position of operation
☐ Administering training
☐ Receiving training
☐ Other

44. Was the OSIC/CIC certified in the area of specialization where the incident took place?

☒ Yes ☐ No ☐ N/A (If no, explain here)

45. Traffic complexity? 3

1	2	3	4	5
Low		Avg.		High

46. Indicate which factors were associated with traffic complexity.

☐ Weather
☐ Terrain
☐ Airspace configuration
☒ Number of aircraft
☐ Experience level
☐ Emergency situation
☐ Runway configuration
☐ Runway condition
☐ Flow control
☐ Special Event
☐ Other

47. Type of Control Provided

☐ Radar ☐ AFSS/FSS
☒ Tower ☐ TFM
☐ Oceanic
☐ Non-radar

48. Required separation was by:

☐ FAA Order
☒ Facility Letter of Agreement (LOA) or Directive

FAA Order: Facility LOA/Directive: D21/DTW

Paragraph: Paragraph: 12.A.3.A

49. Were any deficient procedures noted as a result of the incident?

☐ Yes ☒ No
(If yes, explain here)

50. Were any special procedures in effect at the time of the incident (e.g. Traffic Management Program)?

☐ Yes ☒ No
(If yes,explain here)

FAA FORM 7210-3, FINAL OPERATIONAL ERROR/DEVIATION REPORT (ATQA)

Final Operational Error/Deviation Report (ATQA)
PART I. INVESTIGATIVE DATA

Report Number: D T W T 0 9 D 0 2 3

1. Date and time of incident:
MM/DD/YYYY: 0 8 2 1 2 0 0 9
Time (Local): 1 9 4 8

2. Responsible facility: DTW

Classification Level: 11

3. Severity Index: points

- ☐ A
- ☐ B
- ☐ C
- ☐ D

- ☐ Controlled
- ☐ Uncontrolled

- ☐ Converging, Opposite Flight Paths
- ☐ Converging, Crossing Flight Paths
- ☐ Same Flight Paths
- ☐ Diverging/Non-intersecting Flight Paths

4. Was weather a factor in the incident? ☐ Yes ☒ No

(If yes, explain in Block 65, Summary of Incident.)

5. Altitude/flight level of incident: 4000

6. Type of airspace:

- ☐ Class A
- ☒ Class B
- ☐ Class C
- ☐ Class D
- ☐ Other
- ☐ Class E
- ☐ Class G
- ☐ Oceanic
- ☐ Airport Surface

7. Location of Incident :

Fix: DXO
Direction: 260
Distance: 4
Latitude:
Longitude:
Area/Sector or Position Designator:
Intersection:
Runway:
Taxiway:

8. Closest Proximity:

Vertical Feet
Lateral
- ☐ Feet
- ☐ Miles
- ☐ Minutes
- ☒ N/A

9. Number of aircraft for which the controller had control responsibility at the time of the incident: 3

10. Was training in progress?
- ☒ Yes
- ☐ No

Complete blocks 11-36 for each employee

11. Enter P for primary or C for contributory: P

12. Number of personnel involved: 1

13. Employee's facility:
Three-letter Identification | Level | Type

14. Reserved:

15. Date of birth: MM/DD/YYYY

16. Social Security Number: Last six digits only

17. Indicate the performance level of the employee:
- ☐ Developmental
- ☐ ATCS
- ☐ Supervisor
- ☐ Staff Specialist
- ☐ Other

If ATCS, how long since ATCS in current facility?
YY-MM

18. Last date of certification or recertification on position: MM/DD/YYYY
- ☐ Initial Certification
- ☐ Recertification

19. Has training relevant to the incident been received within the last 12 months?
- ☐ Yes
- ☐ No

If yes, list the type and the date of that training in this block:

19A. During the 2 1/2 years prior to the incident, in how many Operational Errors has the employee been found to be the primary cause?

19B. During the 2 1/2 years prior to the incident, in how many Operational Errors has the employee been found to be contributory?

Final Operational Error/Deviation Report

Report Number: D T W T 0 9 D 0 2 3

37. Identify the OSIC/CIC assigned at the time of the incident?

Enter A for OSIC
Enter C for CIC: A

Last name | First name | MI | SSN (Last six digits)

38. Was the assigned OSIC/CIC present in the operational area at the time of the incident?

☒ Yes ☐ No

39. Did the employee require OSIC/CIC assistance prior to the incident?

☐ Yes ☒ No

40. Did the assigned OSIC/CIC provide assistance?

☐ Yes ☐ No

(Explain in Block 65, Summary of Incident.)

41. If sectors were combined, did the OSIC/CIC approve the combination?

☐ Yes ☐ No ☐ Not combined ☒ N/A

42. If the positions were combined, did the OSIC/CIC approve the combination?

☒ Yes ☐ No ☐ Not combined

43. In what activity was the assigned OSIC/CIC engaged at the time of the incident?

☐ General Supervision
☒ Direct operational supervision
☐ Working a position of operation
☐ Administering training
☐ Receiving training
☐ Other

44. Was the OSIC/CIC certified in the area of specialization where the incident took place?

☒ Yes ☐ No ☐ N/A (If no, explain here)

45. Traffic complexity? 3

1	2	3	4	5
Low		Avg.		High

46. Indicate which factors were associated with traffic complexity.

☐ Weather
☐ Terrain
☐ Airspace configuration
☐ Number of aircraft
☒ Experience level
☐ Emergency situation
☐ Runway configuration
☐ Runway condition
☐ Flow control
☐ Special Event
☒ Other

See Appendix

47. Type of Control Provided

☐ Radar
☒ Tower
☐ Oceanic
☐ Non-radar
☐ AFSS/FSS
☐ TFM

48. Required separation was by:

☐ FAA Order
☒ Facility Letter of Agreement (LOA) or Directive

FAA Order: Paragraph:

Facility LOA/Directive: DTW/D21

Paragraph: CH 9 A(2)

49. Were any deficient procedures noted as a result of the incident?

☐ Yes ☒ No

(If yes, explain here)

50. Were any special procedures in effect at the time of the incident (e.g. Traffic Management Program)?

☐ Yes ☒ No

(If yes,explain here)

2

Mandatory Briefing Item

ASOS and TDWR Wind Measuring Equipment Differences

		O.I.	Date			O.I.	Date
DTW-7 Whitehurst, John	**JW**						
DTW-7.1 Ricks, Dan	**OR**			**DTW-7.4 Kruse, Don**	**KZ**	KZ	3-19
Berrien, Robert	***AB***			Kubinski, Michael	BD		3/19
Desantis, Larry	DS			Mueller, Paul	PJ		
Kasal, Brian	**BK**			Ruehl, Dan	DR	DR	3/17
Reinbold, Robert	RB			***Smith, Ryan***	***II***	II	3/18
Scanlon, Steve	SE			***Stewart, Jakeim***	***JS***		
Torres, Jaidy	JD			Thomson, David	EZ		
Walker, Craig	CW	CW	3/19	Vaught, Anthony	TV		
				Wheatley, Richard	RW		
DTW-7.2 Barttelt, Kevin	**KB**						
Campau, Bernard	CU						
Carlson, Ron	YR			**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		
Holt, Matthew	***MH***			Chatel, Greg	CL		
Jones, Byron	***BO***			***Gault, Brian***	***BG***	BG	3/17
Kirby, Anthony	TK	TK	3-20	Haefner, Amelia	JJ		
Schrimscher, Steve	SS			Haefner, Robert	RD	----	-------
				Keener, Sean	***SK***		
				Klawender, Gary	CK		
				Mack, Regan	MZ	MZ	3/19
DTW-7.3 Thompson, Angela	**AT**						
Demers, Brent	***BT***	BT	3-17				
Ferguson, Richard	RF	✓	3-17				
Kuhlmann, Kenneth	KX	KX	3/19				
Pierce, Harold	HP						
Pytlak, Ron	RP	RP	3-17				
Rodriguez, Richard	RZ			**DTW-5 Grand, Earl**	EG		
Sugent, Vincent	VM			Szelag, Jeff	TU		
Summers, Justin	***BS***						
				SYS-1			
				Fairbanks, Chris	CJ		
				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		

Federal Aviation Administration

Memorandum

Date: 03/15/10

To: All Personnel

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

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

Subject: ASOS and TDWR Wind Measuring Equipment Differences

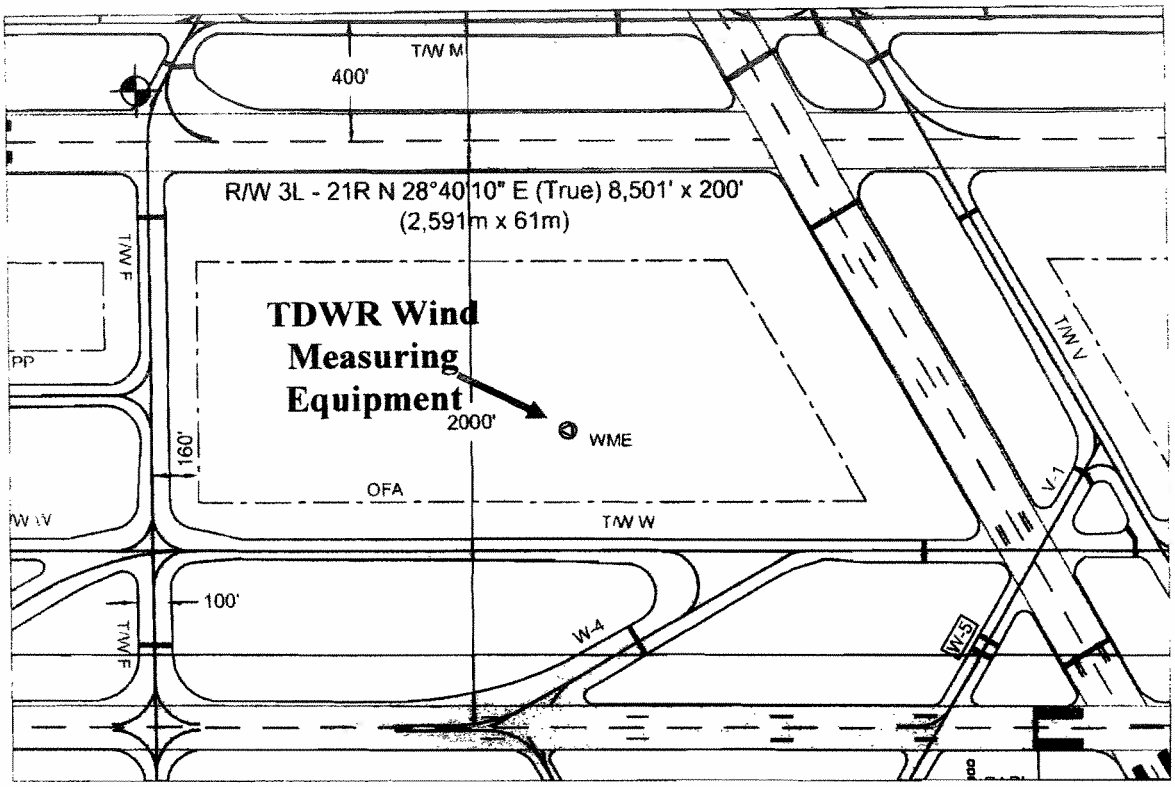
As we are still occasionally dealing with discrepancies between the Automated Surface Observing System (ASOS) and the Terminal Doppler Weather Radar (TDWR) Wind Measuring Equipment (WME), it was determined that controller/pilot interface may be enhanced by knowledge of capabilities and limitations between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

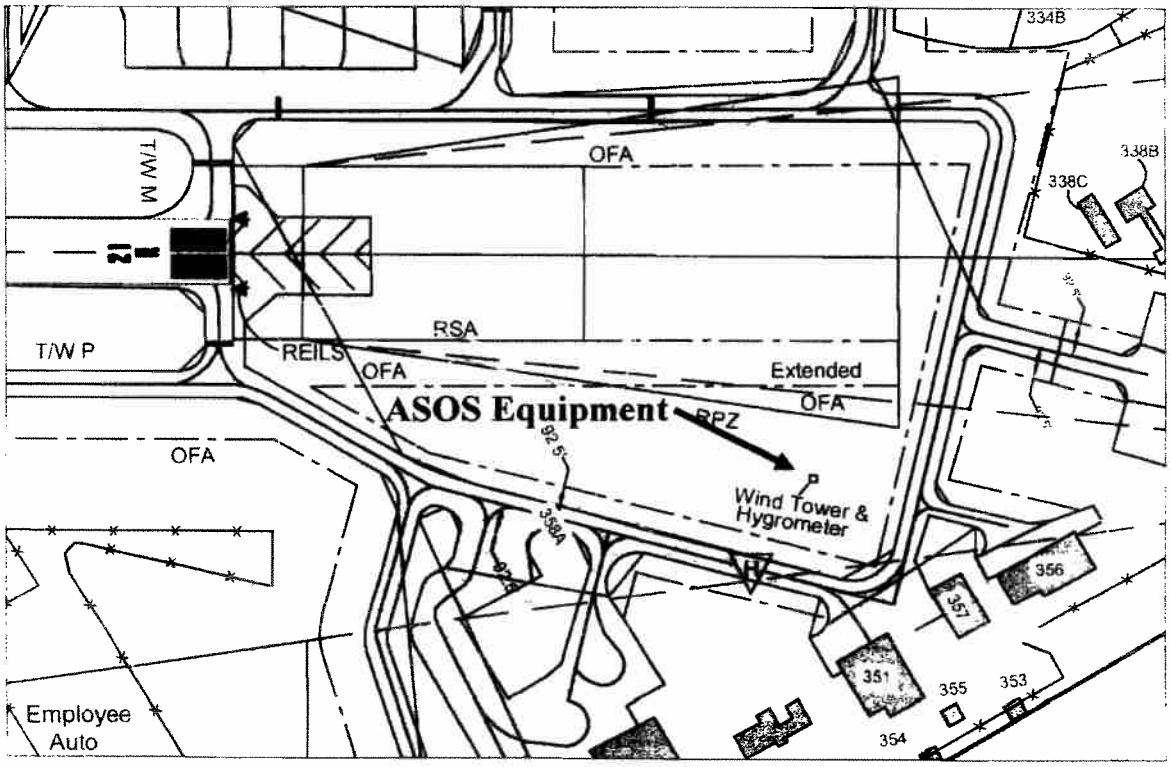
LOCATION OF SENSORS: As indicated on the following diagrams, sensors for each system are located a significant distance from each other. The ASOS wind sensor is located approximately 1000' northeast of the Runway 21R threshold and it is mounted on a thirty foot high pole. The TDWR WME is actually the 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.


T/W M
400'
R/W 3L - 21R N 28°40'10" E (True) 8,501' x 200'
(2,591m x 61m)
T/W F
TDWR Wind
Measuring
Equipment
2000'
WME
160'
OFA
T/W W
T/W V
V-1
100'
W-4
W-5


334B
T/W M
OFA
338B
338C
RSA
T/W P
REILS
OFA
Extended
OFA
ASOS Equipment
RPZ
92.5'
OFA
Wind Tower &
Hygrometer
356
357
351
355
353
354
Employee
Auto

b

Vincent Sugent

From: <Gary.F.Ancinec@faa.gov>
To: "Vince Sugent" <vinjamie@comcast.net>; <John.Whitehurst@faa.gov>
Sent: Sunday, March 21, 2010 9:13 AM
Subject: Re: DTW Wind

Yax pulled it from the binder. As for content, no one in this building believes that the discrepancies are acceptable regardless of their frequency.

Gary Ancinec
D21 Staff Manager (A)

From: "Vincent Sugent" [vinjamie@comcast.net]
Sent: 03/21/2010 01:55 AM AST
To: John Whitehurst; Gary F Ancinec
Subject: DTW Wind

Guys,

This was put in the read during the shift portion of the R & I binder.

I thought there was to be training to cover this issue. That being said, I do not think that Mandatory Briefing Item's should be in the R & I binder, especially in the read during the shift portion.

The past few MBI's have been put in the read during the shift portion of the R & I.

Additionally, the discrepancies are not occasional as stated by Mr. Bazman, they are constant. We never receive wind gusts from the TDWR.

Vin

c

3/9/09

PROBLEM REPORT

4-30-09 DATE: 2104 TIME (Z): VM INITIALS: POSITION: GNE

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

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:

TDWR 12005G18 > 2104Z
ASOS 17014

TDWR 11006G19 > 2108Z
ASOS 18013

TDWR 11006G22 > 2111Z
ASOS 18014

TDWR CALM
ASOS 18016G25 > 2116Z

TDWR 18005G21 > 2121Z
ASOS 19009G25

TDWR CALM > 2130
ASOS 20018G24

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

CONTROLLERS - FORWARD TO FLM/CIC.
Mandatory Information – Date, Time, Initials

PROBLEM REPORT

3 20 07

DATE 7-15-09 TIME (Z) 2300 INITIALS: VM POSITION GSW

STARS EFSTS ETMS ASDE-A/MASS FREQ SSCS ROUTING OTHER

STARS CONFIG FIXED PAIRS

ZLC COMBINED WITH

EFSTS CONFIG

	TRAN		RECV		TYPE AC
FREQ	MAIN	STBY	MAIN	STBY	LOCATION

PROBLEM:

ACID 19006G32

FLIGHT CALM

ATTACH FLIGHT STRIP HERE WHEN APPLICABLE

STARS – EFSTS – SSCS – ROUTING must be accompanied with a flight strip

CONTROLLERS - FORWARD TO FLM/CIC

Circle One