# REVIEW OF STAFFING AT FAA'S COMBINED RADAR APPROACH CONTROL AND TOWER WITH RADAR FACILITIES

Federal Aviation Administration

Report Number: AV-2007-038

Date Issued: March 16, 2007



Memorandum

Date:

March 16, 2007

U.S. Department of **Transportation** 

Office of the Secretary of Transportation Office of Inspector General

Subject: ACTION: Review of Staffing at

FAA's Combined Radar Approach Control

and Tower With Radar Facilities Federal Aviation Administration

Report No. AV-2007-038

From: David A. Dobbs

> Principal Assistant Inspector General for Auditing and Evaluation

To: Federal Aviation Administrator Reply to JA-10 Attn. of:

This report presents the results of our review of staffing at combined radar approach control and tower with radar facilities. The review was requested by Representative James Oberstar, then Ranking Democratic Member of the House Committee on Transportation and Infrastructure, and Representative Jerry Costello, then Ranking Democratic Member of the House Subcommittee on Aviation, after the fatal accident of Comair flight 5191 in Lexington, Kentucky. We conducted our review between September 2006 and January 2007. Exhibit A contains details on the scope and methodology we used in conducting this review. Exhibit B lists the facilities we visited.

On the morning of August 27, 2006, Comair flight 5191 was scheduled to fly from Lexington, Kentucky, to Atlanta, Georgia. Based on preliminary reports, the pilots mistakenly taxied onto the wrong runway at Lexington and executed their take-off roll. The runway, however, was too short to complete a take-off, and a tragic accident occurred that resulted in the loss of 49 passengers and crew.

Shortly after the accident, media reports surfaced indicating that only one air traffic controller was working in the tower at Lexington at the time of the accident. According to those reports, the controller was working both tower and radar functions combined and reportedly had his back turned to the airfield during Comair 5191's take-off roll. The media also reported that this was contrary to Federal Aviation Administration (FAA) policy, which reportedly required that two controllers be present in towers that provide both tower control and radar services.

#### **OBJECTIVES**

In an August 30, 2006, letter, Representatives James Oberstar and Jerry Costello requested that the Office of Inspector General review the FAA policy that reportedly prohibited one controller from performing both radar and tower controller duties and determine the extent to which the towers covered by the policy were complying with it. A copy of their request is attached as an appendix to this report.

Specifically, Representatives Oberstar and Costello requested the Office of Inspector General to determine:

- 1. Whether the FAA guidance was written or verbal and how the guidance was communicated,
- 2. How many towers were not in compliance with the guidance at the time of the Comair accident,
- 3. How many towers were not in compliance with the guidance at some point between the date of the issuance of the guidance and the time of the Comair accident, and
- 4. What steps FAA took to (a) review staffing at its facilities to determine whether they were complying with the guidance and (b) require compliance if they were not.

#### BACKGROUND

A combined radar approach control and tower with radar facility is an air traffic control terminal that provides radar control to aircraft arriving to and departing from the primary airport and adjacent airports and to aircraft transiting in the terminal's airspace. The terminal is divided into two separate functional areas—radar approach control positions and tower positions. Radar approach control positions provide radar control service to aircraft arriving in, departing from, or transiting in airspace controlled by the facility, while tower positions control air traffic on the surface of airports by giving pilots taxiing and take-off instructions, issuing air traffic clearances, and providing separation between landing and departing aircraft. These two areas are located within the same facility or in close proximity to one another, and controllers rotate between both areas. As of January 2006, FAA operated 138 combined radar approach control and tower with radar facilities. We limited our review to 62 of the 138 facilities. These 62 facilities are

designated Levels 5 through 9 and are most comparable to the Lexington Tower (which is a Level 7 tower). 1

Figure 1. Radar Approach Control and Tower With Radar Facility at Abilene, Texas (Level 7)



Source: Office of Inspector General

#### **RESULTS IN BRIEF**

We found that FAA's Vice President of Terminal Services issued verbal guidance in late August 2005 regarding staffing at facilities that have combined radar approach control and tower with radar functions. This guidance (which was in response to an operational error that had occurred at Raleigh-Durham, North Carolina, on August 17, 2005) reiterated that during midnight shifts at facilities with both radar and tower functions, two controllers should normally be on duty performing those responsibilities.

According to the Vice President for Terminal Services, he expected his area directors to disseminate the guidance to their hub managers who in turn would disseminate the guidance to individual facility managers.

We found, however, that because the guidance was verbal, it was misinterpreted and inconsistently applied. As a result, staffing on midnight shifts at combined radar approach control and tower with radar facilities was not uniformly compliant with the guidance established by the Vice President of Terminal Services. On the date of the Comair accident, there were 2 additional facilities (for a total of 3 out of 62) where only 1 controller was scheduled on the midnight shift—these were in Duluth, Minnesota, and Fargo, North Dakota.

-

<sup>&</sup>lt;sup>1</sup> FAA air traffic facilities are categorized into multiple levels (5 through 12); the higher the level, the greater the demand on a controller's judgment, skill, and decision-making ability.

We reviewed a statistical sample of 20 randomly selected weeks of staffing data for midnight shifts at 15 of the 62 facilities in our universe (a total of 2,100 shifts). Our review identified 234 shifts where only 1 controller was scheduled on the midnight shift. Based on the results of our sample, we can statistically project (with a 95-percent confidence level) that approximately 2,563 or 11.1 percent of the 23,002 total midnight shifts (at the 62 facilities in our universe) were staffed with only 1 controller between August 28, 2005, and September 2, 2006.

We did note that the number of non-compliant towers in our sample was higher at the beginning of the scope period and then steadily declined as time went on. Managers informed us that this occurred because they needed time to analyze the operational impact of the guidance on their ability to accomplish needed training and grant annual leave. Additionally, managers advised us that they needed to consult with their local union to facilitate the schedule change.

However, we also found that even though two controllers may have been scheduled on a midnight shift, there were no assurances that they were both on position. We reviewed position logs at each of the facilities we visited. (Position logs indicate which tower and radar positions are open during a shift and who is actually working those positions).

During this review, we found evidence suggesting that the radar and ground control duties were combined for substantial periods of time even though there were at least two controllers on duty. For example, at several facilities, position logs we reviewed showed that all positions on midnight shifts were routinely combined and the two controllers on duty alternated between working the one position and taking breaks.

Finally, we found that prior to the Comair accident, FAA had no controls in place to ensure that facilities had consistently implemented the verbal guidance and were uniformly complying with it. Immediately following the Comair accident, area directors placed calls to their hub managers who in turn called their facility managers to determine the extent to which the guidance had been followed and to reiterate its provisions. However, prior to those actions, no formal review of compliance had been conducted.

Since the Comair accident, FAA has formalized the verbal guidance into a written order—FAA Notice N JO 7210.639, "Consolidating Control Functions"—effective November 17, 2006. Formalizing the verbal guidance into written requirements is, in our opinion, an appropriate and necessary action. We are recommending that FAA communicate all future guidance changing or reiterating existing air traffic policies and procedures in writing to ensure uniform implementation and compliance.

We are also recommending that FAA develop and implement appropriate policies and procedures to ensure that facilities are complying with provisions of FAA Notice N JO 7210.639.

We briefed staff from Representative Oberstar's and Representative Costello's offices on December 20, 2006, concerning the results of our review. Based on discussions at that briefing, we agreed to perform a follow-up review to determine if combined radar approach control and tower with radar facilities are complying with written provisions contained in FAA Notice N JO 7210.639.

#### **FINDINGS**

## **Guidance for Staffing the Midnight Shifts Was Communicated Verbally**

We found that the guidance regarding staffing on the midnight shifts was issued verbally by FAA's Vice President of Terminal Services during the week of August 28, 2005. The guidance was issued in response to an operational error that had occurred at the Raleigh-Durham, North Carolina, air traffic control tower earlier in the month. Only one air traffic controller was working at the time of the error, and he was working both tower and radar functions combined. In that instance, the controller cleared an inbound aircraft to descend into the path of another aircraft that had departed the airport, and this action resulted in the operational error.

We met with FAA's Vice President of Terminal Services in September 2006 to obtain a better understanding of the guidance and to determine how the guidance was disseminated. During the meeting, he indicated that he was surprised to learn that only one controller was working at the time of the error and that he needed to reiterate his expectations as to how midnight shift operations should be conducted. Accordingly, he briefed the three service area directors who report directly to him and instructed them to pass the guidance down through their hub managers and ultimately to the local facility managers. According to FAA's Vice President of Terminal Services the guidance essentially stated that:

At combined radar approach control and tower with radar facilities, two controllers should perform the separate functions of tower versus radar. The facility manager should either have one controller in the tower (controlling aircraft on the surface) and one controller in the approach control (controlling aircraft in the air) or the manager could elect to operate the radar function in the tower. However, in any event, one controller was required for the tower function and a second controller was required for the radar function. The

manager could choose to close down the approach control and bring the radar function into the tower. However, if the radar function was brought into the tower, then the controller should "come with it."

The Vice President of Terminal Services indicated to us that he felt it necessary to issue the verbal guidance in order to clarify provisions of FAA Order 7210.3U, "Facility Operations and Administration," issued February 16, 2006. However, we found that while the Order contained policies requiring shared responsibility for the safe and efficient operation of a facility among all staff, it did not have specific requirements regarding staffing during midnight shifts.

## Because the Guidance Was Verbal, It Was Misinterpreted and Inconsistently Applied

We found, that because the guidance was verbal, it was misinterpreted and inconsistently applied. As a result, staffing on midnight shifts at combined radar approach control and tower with radar facilities was not uniformly compliant with the guidance established by the Vice President of Terminal Services.

### Three Towers Were Non-Compliant With the Guidance at the Time of the Comair Accident

As of January 2006, there were 138 combined radar approach control and tower with radar facilities in the National Airspace System. Seventy-three of these facilities operated 24 hours per day. In order to determine the number of facilities that were not in compliance with the guidance at the time of the Comair accident (August 27, 2006), we limited our review to 62 facilities that were designated Air Traffic Control Level 5 through 9. These 62 facilities are closest in complexity to the Lexington, Kentucky, facility (a Level 7 facility).

To determine if facilities were complying with the guidance on August 27, 2006, we contacted each of the 62 radar approach control and tower with radar facilities and requested actual staffing data for the midnight shift on that date. Based on our review of those data, we found that 3 of the 62 towers (5 percent) were not in compliance with the guidance at the time of the Comair accident. They were Duluth, Minnesota; Fargo, North Dakota; and Lexington, Kentucky.

## Eight of the 15 Towers Sampled Were Non-Compliant With the Guidance at Some Point Between When It Was Issued and the Date of the Comair Accident

To determine the number of towers that were not in compliance with the guidance at some point between when it was issued and the date of the Comair accident, we statistically selected and reviewed 15 of the 62 facilities in our universe. We performed site visits at 6 of the 15 facilities. During these visits, we requested and reviewed staffing data for 20 randomly selected weeks to determine if the towers were in compliance with the guidance. We also reviewed the same 20 weeks of staffing data for the 9 facilities that we did not visit; FAA Headquarters provided us with those data.

We found that 8 of the 15 towers in our sample were not in compliance with the guidance at some point between when the guidance was issued and the date of the Comair accident. Those facilities were: Duluth, Minnesota; Des Moines, Iowa; Huntington, West Virginia; Wilkes-Barre, Pennsylvania; Great Falls, Montana; Billings, Montana; Abilene, Texas; and Nashville, Tennessee.

Based on those results, we can statistically project (with a 95-percent confidence level) that the number of facilities in our universe of 62 facilities that were not in compliance with the guidance at some point during the sampled periods ranged between 19 and 47 facilities, with a best estimate of 33 facilities or 53.3 percent of the facilities in our universe.

However, this percentage does not represent how frequently those facilities may have had only one controller on duty during a midnight shift. For example, 1 of the 15 facilities in our sample had as few as 1 midnight shift staffed with 1 controller, while another facility in our sample had as many as 133 midnight shifts staffed with 1 controller.

## Approximately 11 Percent of all Midnight Shifts at the 62 Facilities Were Staffed With Only 1 Controller Between August 2005 and the Date of the Comair Accident

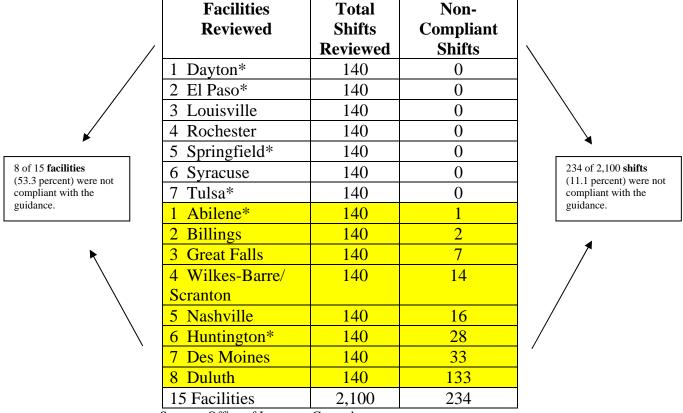
To determine how frequently midnight shifts were staffed with only 1 controller, we reviewed 140 days of staffing data for midnight shifts at each of the 15 facilities in our sample, which totaled 2,100 shifts. Of that amount, we found 234 non-compliant shifts where only 1 controller was on duty or 11.1 percent of the midnight shifts.

Based on that sample, we can statistically project (with a 95-percent confidence level) across all 62 facilities in our universe that there were between

234 (1 percent) and 5,043 (21.9 percent) non-compliant shifts out of a total of 23,002 midnight shifts from August 28, 2005, to September 2, 2006, with a best estimate of 2,563 or 11.1 percent non-compliant shifts. In other words, approximately 2,563 or 11.1 percent of the 23,002 total midnight shifts at the 62 facilities in our universe from August 28, 2005, to September 2, 2006, were staffed with only 1 controller. Figure 2 provides the results of our review at the 15 randomly selected towers.

Figure 2. Instances of Non-Compliance at the 15 Randomly Selected Towers in Our Sample

(Facilities highlighted were non-compliant)



Source: Office of Inspector General

We did note that the number of non-compliant towers in our sample was higher at the beginning of the scope period and then steadily declined as time went on. Facility managers informed us that this occurred because they needed time to analyze the operational impact of the guidance on their ability to accomplish needed training and grant annual leave. Additionally, managers advised us that they needed to consult with their local union to facilitate the schedule change. Figure 3 demonstrates this trend.

<sup>\*</sup>Facility was visited by the Office of Inspector General.

Stander of the first of the fir

Week of

Figure 3. Number of Non-Compliant Towers out of a Sample of 15 for 20 Randomly Selected Weeks

Source: Office of Inspector General

## Although Two Controllers May Have Been Scheduled, There Were No Assurances That They Were Both on Position

We also found that even though two controllers may have been scheduled, there were no assurances that they were both on position. We reviewed 10 weeks of position logs at each of the 6 facilities we visited. The position logs indicate which tower and radar positions are open during a shift and who is actually working those positions. During this review, we found evidence suggesting that the radar and ground control duties were combined for substantial periods of time even though there were at least two controllers on duty. The controllers on duty were combining all open positions and alternating between breaks and working one at a time. For example, at several facilities, position logs we reviewed showed that all positions on midnight shifts were routinely combined and the two controllers on duty alternated between working the one position and taking breaks.

## Prior to the Accident, FAA Had Not Taken Steps To Ensure That Towers Were in Compliance With the Guidance

Finally, we found that prior to the Comair accident, FAA had no controls in place to ensure that facilities had consistently implemented and were uniformly complying with the guidance. Immediately following the Comair accident, area directors placed calls to their hub managers who in turn called their facility managers to determine the extent to which the guidance had been followed and to

reiterate its provisions. However, prior to those actions, no formal review of compliance had been conducted.

Since the Comair accident, FAA has formalized the verbal guidance into a written order—FAA Notice N JO 7210.639, "Consolidating Control Functions"—effective November 17, 2006. The formal policy states the following:

At facilities where both tower and radar/nonradar approach control services are provided, the air traffic manager must ensure, to the maximum extent possible, that these functions are not consolidated unless unforeseen circumstances or emergency situations arise. . . .

During midwatch operations (between 2230 and 0630 local time), when traffic is very light, all functions may be consolidated for short meal or physiological breaks. At facilities with a tower only operation and staffing of only one certified professional controller (CPC), coordination must be accomplished with the facility providing radar/non-radar approach control services to the airport before the CPC can leave the operational quarters for physiological breaks. This should only be done during periods of light to zero traffic.

Additionally, facilities have the option of closing the radar operation altogether and transferring responsibility for the airspace to a larger facility during the midnight shift.

Formalizing the verbal guidance into written requirements is, in our opinion, an appropriate and necessary action. We are recommending that FAA communicate all future guidance changing or reiterating existing air traffic control policies and procedures in writing to ensure uniform implementation and compliance.

We are also recommending that FAA develop and implement appropriate procedures to ensure that facilities are complying with provisions of FAA Notice N JO 7210.639.

We briefed staff from Representative Oberstar's and Representative Costello's offices on December 20, 2006, concerning the results of our review. Based on discussions at that briefing, we agreed to perform a follow-up review to determine if combined radar approach control and tower with radar facilities are complying with written guidance contained in FAA Notice N JO 7210.639.

#### RECOMMENDATIONS

We recommend that FAA:

- 1. Communicate all future guidance changing or reiterating existing air traffic policies and procedures in FAA Order 7210.3U, "Facility Operation and Administration," in writing to ensure uniform implementation and compliance.
- 2. Develop and implement appropriate procedures to ensure that facilities are complying with provisions of FAA Notice N JO 7210.639, "Consolidating Control Functions."

#### MANAGEMENT COMMENTS

We provided FAA's Vice President of Terminal Services with a copy of our draft report on February 16, 2007. He agreed with the facts as presented in our report and generally concurred with our findings and recommendations.

#### **ACTIONS REQUIRED**

In accordance with Department of Transportation Order 8000.1C, we would appreciate receiving your written comments within 15 business days. Please indicate the specific action taken or planned for each recommendation and the target date for completion.

We appreciate the courtesies and cooperation of FAA representatives during this audit. If you have any questions concerning this report, please call Robin Hunt, Acting Assistant Inspector General for Aviation and Special Program Audits, at (415) 744-0420 or Dan Raville, Program Director, at (202) 366-1405.

#

cc: FAA Deputy Administrator ATO Chief Operating Officer FAA Chief of Staff Anthony Williams, ABU-100 Martin Gertel, M-1

#### EXHIBIT A. SCOPE AND METHODOLOGY

This audit was conducted in accordance with <u>Government Auditing Standards</u> prescribed by the Comptroller General of the United States and included such tests as we considered necessary to provide reasonable assurances of detecting abuse or illegal acts. The following scope and methodology were used in conducting this review.

To identify the FAA guidance regarding air traffic controller staffing during midnight shifts at combined radar approach control and tower with radar facilities performing both radar work and ground duties, we interviewed FAA's Vice President of Terminal Services and FAA's Director of Terminal Safety. We also interviewed the Directors of FAA's Terminal Service Area Directorates to determine when they became aware of the guidance and to determine what steps each Director took to ensure the facilities in their Directorates were complying with the guidance.

We interviewed hub managers to determine when they became aware of the guidance and to determine what steps they took to ensure that the facilities in their hubs were in compliance with the guidance. Finally, we interviewed facility managers at each facility we visited to determine when they became aware of the guidance and what steps they took to comply with it.

We contacted FAA to determine the number and type of facilities affected by the guidance. Per FAA, as of January 2006, there were 138 FAA combined radar approach control and tower with radar facilities, and 73 of the 138 facilities operated 24 hours a day. FAA air traffic facilities are categorized into multiple Air Traffic Control levels (5 through 12); the higher the level, the greater the demand on a controller's judgment, skill, and decision-making ability.

In order to answer the congressional request, we elected to test 62 of the 73 facilities. These 62 facilities are designated Levels 5 through 9 and are most comparable to the Lexington Tower, which is a Level 7 tower. We elected not to include facilities designated as Levels 10 through 12 in our review because their higher traffic levels and complexity make it far less likely that only 1 controller would be scheduled to work during midnight hours.

We statistically selected 15 of the 62 facilities to review. Those facilities are listed in table 1.

Table 1. Sample of 15 Facilities Reviewed

Facility ID	Facility Name	City	State	ATC Level
GTF	Great Falls International Airport	Great Falls	MT	5
DLH	Duluth International Airport	Duluth	MN	6
HTS	Tri-State/Milton J. Ferguson Field Airport	Huntington	WV	6
ABI	Abilene Regional Airport	Abilene	TX	7
AVP	Wilkes-Barre/Scranton International Airport	Wilkes-Barre/Scranton	PA	7
BIL	Billings Logan International Airport	Billings	MT	7
DSM	Des Moines International Airport	Des Moines	IA	7
ELP	☐ Paso International Airport	∃ Paso	TX	7
SGF	Springfield-Branson Regional Airport	Springfield	MO	7
DAY	James M Cox Dayton International Airport	Dayton	OH	9
ROC	Greater Rochester International Airport	Rochester	NY	8
SYR	Syracuse Hancock International Airport	Syracuse	NY	8
BNA	Nashville International Airport	Nashville	TN	9
SDF	Louisville International-Standiford Field Airport	Louisville	KY	9
TUL	Tulsa International Airport	Tulsa	OK	9

Source: Office of Inspector General

We performed site visits at 6 of the 15 facilities during the weeks of October 16, 2006, and October 30, 2006. (Before beginning this review, we also visited Roanoke Regional Airport to obtain an understanding of the data used. Roanoke was not included in the statistical sample and is not included in the analysis of the 15 sites selected). See exhibit B for a listing of the six facilities we visited.

During these visits, we also requested and reviewed staffing data for the 20 randomly selected weeks shown in table 2 to determine if the facilities were in compliance with the guidance during our scope period of August 28, 2005, through September 2, 2006.

Table 2. 20 Randomly Selected Weeks

Sample No	Beginning of Week	End of Week
1	Sunday, 02 October 2005	Saturday, 08 October 2005
2	Sunday, 09 October 2005	Saturday, 15 October 2005
3	Sunday, 20 November 2005	Saturday, 26 November 2005
4	Sunday, 11 December 2005	Saturday, 17 December 2005
5	Sunday, 01 January 2006	Saturday, 07 January 2006
6	Sunday, 05 February 2006	Saturday, 11 February 2006
7	Sunday, 19 February 2006	Saturday, 25 February 2006
8	Sunday, 05 March 2006	Saturday, 11 March 2006
9	Sunday, 02 April 2006	Saturday, 08 April 2006
10	Sunday, 09 April 2006	Saturday, 15 April 2006
11	Sunday, 16 April 2006	Saturday, 22 April 2006
12	Sunday, 23 April 2006	Saturday, 29 April 2006
13	Sunday, 07 May 2006	Saturday, 13 May 2006
14	Sunday, 21 May 2006	Saturday, 27 May 2006
15	Sunday, 28 May 2006	Saturday, 03 June 2006
16	Sunday, 11 June 2006	Saturday, 17 June 2006
17	Sunday, 25 June 2006	Saturday, 01 July 2006
18	Sunday, 23 July 2006	Saturday, 29 July 2006
19	Sunday, 20 August 2006	Saturday, 26 August 2006
20	Sunday, 27 August 2006	Saturday, 02 September 2006

Source: Office of Inspector General

We reviewed the same 20 weeks of staffing data for the 9 facilities (in our sample of 15) that we did not visit. Those data were provided by FAA Headquarters.

We interviewed facility managers at each location we visited to determine staffing levels and traffic counts on the midnight shift and obtain their views on implementation of the staffing guidance. We also interviewed union representatives at each of the six facilities we visited to obtain their view on how the implementation of the guidance had impacted staffing at the facility.

We obtained and reviewed position logs from the six facilities we visited to validate the reliability of the staffing data for each facility. The position logs indicate which tower and radar positions are open during a shift and who is actually working those positions. We also listened to tapes of conversations between controllers and pilots during the midnight shift to validate if information on the position logs were valid. At some facilities, we reviewed time and attendance records to validate the number of controllers on duty during a midnight shift.

We observed operations during the midnight shift and reviewed traffic count data for the midnight shift to determine the amount of activity on the midnight shift.

#### **EXHIBIT B. FACILITIES VISITED**

- Tri-State/Milton J. Ferguson Field, Huntington, West Virginia
- Abilene Regional Airport, Abilene, Texas
- El Paso International Airport, El Paso, Texas
- Springfield-Branson Regional Airport, Springfield, Missouri
- James M Cox Dayton International Airport, Dayton, Ohio
- Tulsa International Airport, Tulsa, Oklahoma

#### **EXHIBIT C. MAJOR CONTRIBUTORS**

Daniel Raville Program Director

Angela McCallister Project Manager

Marshall Jackson Senior Analyst

Benjamin Huddle Analyst

Tasha Thomas Analyst

Petra Swartzlander Statistician

Andrea Nossaman Writer-Editor

#### APPENDIX. CONGRESSIONAL REQUEST



#### U.S. House of Representatives

#### Committee on Transportation and Infrastructure

Washington, DC 20515

James L. Oberstar Ranking Democratic Member

Chairman

Lloyd A. Jones, Chief of Staff Elizabeth Megginson, Chief Counsel

**Don Doung** 

August 30, 2006

David Beymsfeld, Democratic Chief of Stall

Mr. Todd Zinser Acting Inspector General U.S. Department of Transportation Washington, D.C. 20590

Dear Mr. Zinser:

There have been some disturbing reports in the wake of the August 27, 2006 Comair Flight 5191 crash in Lexington, Kentucky. This terrible tragedy resulted in the deaths of 49 people, and the media has reported, and the Federal Aviation Administration (FAA) has confirmed, that the Blue Grass Airport air traffic control tower was understaffed at the time of the accident.

Air traffic controllers are an important component to the safe operation of our nation's air traffic system, and their effectiveness requires proper staffing levels at each facility. It was reported that in November 2005, an overloaded controller at the Raleigh, North Carolina airport directed two planes too close to one another, and this close call prompted the FAA to issue "guidance" forbidding air traffic controllers with certain responsibilities from working alone.

An FAA statement of August 29, 2006, states that some air traffic control towers which control surface traffic also "separate airborne aircraft using radar equipment. FAA guidance is to provide individual controllers for the radar and control tower functions." It is not clear whether this guidance is written or verbal. The statement further indicates that this guidance was not followed at the Lexington tower where the manager decided to have "one controller handle both functions during the overnight shift." While the National Transportation Safety Board has yet to issue a full report of its findings regarding the causes of the Comair Flight 5191 accident, it is not too early to investigate how widely the staffing practice at the Blue Grass Airport is practiced at other critical air traffic control facilities across the nation.

Mr. Todd Zinser Page 2

Therefore, we would like your office to review the November 2005 FAA guidance, and determine the extent to which the towers covered by the guidance are complying with it. Was the "guidance" written or verbal? If verbal, how was it communicated? How many towers were not in compliance at the time of the Comair accident, and how many were not in compliance at some point between the dates of the issuance of the guidance and the accident? What steps did FAA take to review staffing at its facilities to determine whether they were complying with the guidance, and to require compliance if they were not?

If, in the course of your work, you identify other relevant issues that you believe the Congress should be aware of, we would like you to include them in your analysis.

Should you have any questions or need any additional information, please contact Stacie Soumbeniotis, Democratic Staff Director, or John Drake, Democratic Professional Staff, of the Subcommittee on Aviation at (202) 225-9161.

Sincerely,

James L. Oberstar

Ranking Democratic Member Committee on Transportation

and Infrastructure

Jerry F. Costello

Ranking Democratic Member Subcommittee on Aviation

The following pages contain textual versions of the graphs and charts found in this document. These pages were not in the original document but have been added here to assist screen readers.

## Report on the Review of Staffing at the Federal Aviation Administration's Radar Approach Control and Tower with Radar Facilities.

#### **Section 508 Compliant Presentation**

Figure 2. Instances of Non-Compliance at the 15 Randomly Selected Towers in Our Sample

Facilities	Total	Non-
Reviewed	Shifts	Compliant
	Reviewed	Shifts
1 Dayton	140	0
2 El Paso	140	0
3 Louisville	140	0
4 Rochester	140	0
5 Springfield	140	0
6 Syracuse	140	0
7 Tulsa	140	0
1 Abilene	140	1
2 Billings	140	2
3 Great Falls	140	7
4 Wilkes-Barre/	140	14
Scranton		
5 Nashville	140	16
6 Huntington	140	28
7 Des Moines	140	33
8 Duluth	140	133
15 Facilities	2,100	234

Source: Office of Inspector General

- The facilities that the Office of Inspector General visited: Dayton, El Paso, Springfield, Tulsa, Abilene, and Huntingdon.
- 8 of 15 **facilities** (53.3 percent) were not compliant with the guidance. These facilities were Abilene, Billings, Great Falls, Wilkes-Barre/Scranton, Nashville, Huntington, Des Moines, and Duluth.
- 234 of 2,100 **shifts** (11.1 percent) were not compliant with the guidance.

Figure 3. Number of Non-Compliant Towers out of a Sample of 15 for 20 Randomly Selected Weeks

Week Sample	Dates for Sample Week	Number of Non-Compliant Towers
Number		
1	October 2, 2005 to October 8, 2005	5
2	October 9, 2005 to October 15, 2005	7
3	November 20, 2005 to November 26, 2005	5
4	December 11, 2005 to December 17, 2005	4
5	January 1, 2006 to January 7, 2006	4
6	February 5, 2006 to February 11, 2006	2
7	February 19, 2006 to February 25, 2006	2
8	March 5, 2006 to March 11, 2006	1
9	April 2, 2006 to April 8, 2006	2
10	April 9, 2006 to April 15, 2006	1
11	April 16, 2006 to April 22, 2006	1
12	April 23, 2006 to April 29, 2006	2
13	May 7, 2006 to May 13, 2006	1
14	May 21, 2006 to May 27, 2006	2
15	May 28, 2006 to June 3, 2006	2
16	June 11, 2006 to June 17, 2006	1
17	June 25, 2006 to July 1, 2006	1
18	July 23, 2006 to July 29, 2006	1
19	August 20, 2006 to August 26, 2006	2
20	August 27, 2006 to September 2, 2006	1

Source: Office of Inspector General

Table 1. Sample of 15 Facilities Reviewed

Facility Identification	Facility Name	City	State	Air Traffic Control Level
GTF	Great Falls International Airport	Great Falls	Montana	5
DLH	Duluth International Airport	Duluth	Minnesota	6
HTS	Tri-State/Milton J. Ferguson Field Airport	Huntington	West Virginia	6
ABI	Abilene Regional Airport	Abilene	Texas	7
AVP	Wilkes-Barre/Scranton International Airport	Wilkes- Barre/Scranton	Pennsylvania	7
BIL	Billings Logan International Airport	Billings	Montana	7
DSM	Des Moines International Airport	Des Moines	Iowa	7
ELP	El Paso International Airport	El Paso	Texas	7
SGF	Springfield-Branson Regional Airport	Springfield	Missouri	7
DAY	James M. Cox Dayton International Airport	Dayton	Ohio	9
ROC	Greater Rochester International Airport	Rochester	New York	8
SYR	Syracuse Hancock International Airport	Syracuse	New York	8
BNA	Nashville International Airport	Nashville	Tennessee	9
SDF	Louisville International-Standiford Field Airport	Louisville	Kentucky	9
TUL	Tulsa International Airport	Tulsa	Oklahoma	9

Source: Office of Inspector General

Table 2. 20 Randomly Selected Weeks

Sample Number	Beginning of Week	End of Week
1	Sunday, 02 October 2005	Saturday, 08 October 2005
2	Sunday, 09 October 2005	Saturday, 15 October 2005
3	Sunday, 20 November 2005	Saturday, 26 November 2005
4	Sunday, 11 December 2005	Saturday, 17 December 2005
5	Sunday, 01 January 2006	Saturday, 07 January 2006
6	Sunday, 05 February 2006	Saturday, 11 February 2006
7	Sunday, 19 February 2006	Saturday, 25 February 2006
8	Sunday, 05 March 2006	Saturday, 11 March 2006
9	Sunday, 02 April 2006	Saturday, 08 April 2006
10	Sunday, 09 April 2006	Saturday, 15 April 2006
11	Sunday, 16 April 2006	Saturday, 22 April 2006
12	Sunday, 23 April 2006	Saturday, 29 April 2006
13	Sunday, 07 May 2006	Saturday, 13 May 2006
14	Sunday, 21 May 2006	Saturday, 27 May 2006
15	Sunday, 28 May 2006	Saturday, 03 June 2006
16	Sunday, 11 June 2006	Saturday, 17 June 2006
17	Sunday, 25 June 2006	Saturday, 01 July 2006
18	Sunday, 23 July 2006	Saturday, 29 July 2006
19	Sunday, 20 August 2006	Saturday, 26 August 2006
20	Sunday, 27 August 2006	Saturday, 02 September 2006

Source: Office of Inspector General