



Federal Aviation Administration

Memorandum

Date: October 23, 2009
To: Paul Sheridan, Director, Central Service Area
From: Kelly C. Nelson, Manager, Minneapolis ARTCC
Prepared by: ZMP Quality Assurance Office
Subject: NWA188 NORDO Review (P-GL-C-ZMP-09-011)

In response to your questions regarding NWA188, NORDO flight on October 22, 2009:

It is our understanding that NWA188 became NORDO in ZDV Sector 28, and progressed through ZDV18, 08, and 09, before entering ZMP29. ZDV had no communication with NWA188 for approximately 26 minutes before the flight entered ZMP Sector 29 airspace.

ZDV Sector 09 controller advised ZMP Sector 29 controller that NWA188 was NORDO. ZMP Sector 29 controller advised ZMP Area 5 FLM that NWA188 was NORDO. ZMP Area 5 FLM did not advise the OMIC as they believed the OMIC was already aware of the NORDO flight. ZMP Area 5 FLM called company dispatch to send an ACARS message to the pilots and also advised the next ZMP FLM (Area 3) of the NORDO. ZMP Area 3 FLM then advised the OMIC that NWA188 was NORDO.

The OMIC had incorrectly assumed the DEN (Domestic Events Network) had been advised. Shortly thereafter, the Area 3 FLM reported to the OMIC that NWA188 was still NORDO. At that time, the ZMP OMIC contacted the DEN and stated "I assume you already know about this, but NWA188 is still NORDO." (This appears to be the first notification to the DEN.)

ZMP sector 13 established communications with NWA188 by having company aircraft use ZDV 28's frequency to attempt to contact the flight crew. This proved successful. After establishing communications with NWA188 the controller queried the pilot to ascertain whether the aircraft had a fuel critical situation. The pilot communicated he did not have a fuel issue. Furthermore, the sector 13 controller issued the pilots of NWA188 a series of confidence turns in order to establish that cockpit integrity had been maintained.

ZMP made 10 broadcast attempts on frequency, two calls to Delta (old Northwest) Dispatch for ACARS messages; and one attempt on Guard to contact NWA188.

ZMP has briefed our workforce and management team on the importance of NORDO notifications to the OMIC position. We have reiterated NORDO procedures to our OMICs. They are required to **always** notify the DEN when a NORDO flight enters our airspace; regardless of their belief, or assumption, that the DEN may have already been notified. In this case we did not receive notification from ZDV's OMIC that the DEN had been notified -- that alone should have triggered a different response on our part.

The entire sequence in ZMP airspace has been added to FALCON, and SATORI(s) have been uploaded to the KSN site.



Federal Aviation Administration

Minneapolis Air Route Traffic Control Center
512 Division Street, Farmington, MN 55024

Memorandum

Date: October 22, 2009
From: Larry Tighe, Acting Airspace & Procedures Manager, ZMP ARTCC
To: All operational employees
Prepared By: Paul Hughes, 5536
Subject: Reporting requirements for NORDO aircraft

This memo is to remind all ZMP operational employees of the requirement to report NORDO aircraft and other suspicious activities on the Domestic Events Network (7610.4). Aircraft being out of communications with ATC (NORDO) for more than 5 minutes is considered suspicious and must be reported. Controllers shall report these circumstances to the area Front Line Manager. FLM's shall forward the report to the OMIC, who in turn reports the situation on the domestic events network.

ATC facilities are required to report all suspicious activities. Suspicious situations include, but are not limited to NORDO situations in excess of 5 minutes (except routine loss of communications with VFR aircraft) and unauthorized deviations from the assigned route (except routine weather deviations). A change of destination or in flight emergency is considered suspicious for air carrier, cargo and scheduled air taxi aircraft.

Any other circumstances considered suspicious by ATC shall also be reported. If you are in doubt about whether a situation constitutes a suspicious event, report it to your FLM. If you have any questions about these requirements, contact the ZMP Airspace & Procedures office.



Federal Aviation Administration

Memorandum

Date: October 30, 2009
To: Director Central Service Area, Paul Sheridan
From: Air Traffic Manager, Kelly C. Nelson
Subject: Action Plan

Synopsis: On the evening of October 21, 2009, an incident occurred within the National Airspace System (NAS) which has drawn national attention to the performance of the Air Traffic Organization (ATO) and to national security. Northwest 188 (NWA188), an Airbus 320 from San Diego CA (SAN) to Minneapolis MN (MSP) had lost communication with air traffic controllers inside Denver ARTCC (ZDV) airspace and transition through Minneapolis ARTCC (ZMP). Although several attempts were made on the part of Air Traffic Controllers (CPC), and Front Line Managers, (FLM) to establish communications through various means, the aircraft continued to proceed toward the Minneapolis area without timely notification on the Domestic Events Network (DEN).

What went wrong: As NWA188 progressed through the various sectors within ZMP, communications from CPC to the Area FLM was affected. Routine actions such as broadcast on emergency frequencies, contact through other airborne aircraft, loss of communication procedures, and notification through Northwest Dispatchers to communicate frequencies through Aircraft Communications Addressing and Reporting System (ACARS) were attempted. The Area 5 FLM briefed the Area 3 FLM of the NWA188 situation, however, did not notify the OMIC. Attempts to contact NWA188 continued on the part of the controllers. FLMs continued to work through Northwest operations. Area 3 FLM notified one of the Operations Managers (OM) and asked if they were aware of NWA188. This OM, not assigned the OMIC position, wrote the information on a sheet of paper and it is not known if this information was shared with the on duty OMIC. The acting OMIC was made aware of the situation when NWA188 was approximately 25 miles southwest of MSP, at FL370, by the Area 3 FLM once again. At that time the OMIC contacts the DEN and states "I assume you already know about this, but NWA188 is still NORDO". This is when the first notification to the DEN that NWA188 was NORDO.

Corrective Action: An urgent message was distributed to all operational personnel at ZMP reiterating the importance of informing the FLM and Operations Manager in Charge, (OMIC) of any know or suspected loss of communications with aircraft. (Completed)

Face to face briefings from the Facility Manager with all Operational Managers on duties and expectations as it relates to NORDO aircraft. (Completed)

OMICs are briefing all operational personnel on the expectation and responsibility to notify the Area FLM of all known or suspected loss of communication. This is accomplished through the Facility's daily operational briefings which occur twice daily. (On going)

OMICs are briefing all FLMs of the requirements of aircraft with loss of communication during the Facility's operational standup briefings. These briefings occur three times daily. (On going)

Quality Assurance along with the Training department will develop a stand-up briefing to share lessons learned and brief operational personnel on the requirements for assisting a loss communications aircraft. To be completed inclusive of operational personnel briefings, November 16, 2009.

Quality Assurance along with the Operational Support office will determine the need and develop a Facility requirement to identify NORDO aircraft within the facility that is readily apparent to all observing the aircraft's data block. To be completed inclusive of procedural briefing to operational personnel, December 15, 2009.

Training department to develop and administer biannual refresher training on Loss Communications Procedures. This training will encompass expectations associated with loss of communications for the performance of a position relief briefing (PRB), informing adjacent sectors, CPC, FLM, OMIC and DEN notification. This action will be completed and administered to all operational personnel in the December 2009, refresher training.



Federal Aviation Administration

Memorandum

Date:

To: Chris Metts, Director, En Route & Oceanic Operations
Western Service Area

From: Kevin Stark, Air Traffic Manager
Denver Air Route Traffic Control Center

Subject: Management Action Plan Reference NWA188

The following actions are being taken to address the facility performance deficiencies identified in the NWA188 incident.

Failure to Recognize and Report NORDO Aircraft

1. All personnel have or will be verbally briefed prior to working an operational position on the requirements of FAA JO 7110.65S, paragraph 2-1-25, Supervisory Notification, and FAA JO 7210.46, Special Operations, paragraph 7-3-1a, Suspicious Aircraft/Pilot Activity. This is to be accomplished as a HOT item.
2. I have met face to face with all operations managers (OM) and all front line managers (FLM) this week to discuss operational focus and the impact to safety and security. I am conducting mandatory all personnel briefings starting Monday, November 2 concerning the actions taken with NWA188.
3. The Operations Support Evaluations Team (OSET) is spending the week of October 26-30, 2009, remote monitoring to verify that facility personnel are meeting the requirements of JO7610.4. Additionally, all FLMs are required to wear head sets while in the operational quarters to facility spot checks.
4. The Quality Control Office is monitoring in the operations areas a minimum of 1 hour each day for the next two to four weeks to verify NORDO aircraft requirement compliance.
5. The Quality Control Office is contacting other en route facilities to determine which of the available URET tools are being used and their effectiveness. Currently Denver Center personnel do not have a facility requirement. Personnel have the option of using

any one of the several "memory joggers". The intention is to consider other facility best practices and then, in conjunction with NATCA, determine which of the options is the best and to implement a facility-wide requirement. These meetings with NATCA will start the week of November 2, 2009.

6. Personnel involved in the NWA188 incident are completing personnel statements to support the incident package. Additionally, OMs have directed a review session be conducted, using FALCON with voice, with each employee involved.