

Factual Report – Attachment 1

Summary of an interview conducted with the National Weather Service meteorologist at the Oakland Center Weather Service Unit who was on duty the morning of the accident.

METEOROLOGY

DCA19CA081

*Submitted by: Mike Richards
NTSB, AS-30*

Interviewee: Jerome Jacques
Representative: None
Date / Time: March 6, 2019
Location: ZOA CWSU
Present: Mike Richards, NTSB; Brian Hirsch, NWS
Investigator: Mike Richards

During the interview Mr. Jerome Jacques stated the following:

Mr. Jacques stated that he has been a meteorologist with the National Weather Service (NWS) for 19 years. Prior to working at the ZOA CWSU, Mr. Jacques worked at the NWS Weather Forecast Offices in Las Vegas, Nevada, and Kansas City/Pleasant Hill, Missouri. Prior to his entering the NWS, Mr. Jacques had 20 years' experience in the United States Air Force. Mr. Jacques' shift on the accident day was from about 0445 to 1245 PST and he indicated that the severe turbulence PIREP from the accident aircraft came out close to the shift change at the end of his shift. A 0445 start time is the earliest start time at any CWSU in the country.

On a typical morning shift, upon entering his workspace Mr. Jacques will first turn on the "SFO Marine Stratus" webpage. He will then begin to log into all the various systems and monitors at the CWSU, begin to pull up scripts that run displays he likes and begin to read Area Forecast Discussions (AFDs) from the region. Mr. Jacques stated that prior to 0500 the forecaster concentrates on briefing and readying himself and considers the CWSU open for business at 0500 and if he gets a call prior to that time he will put it off. Around 0500 he will, on active days, call the Terminal Aerodrome Forecast writer at the NWS Weather Forecast Office in Monterey, California. However, on quiet days he will just sometimes open up NWChat. Mr. Jacques will then go to the ZOA TMU and brief them. He next calls NORCAL TRACON TMU and provides a daily briefing. After that he will begin to type up the general forecast for the SFO approach that goes into the SFO Marine Stratus webpage, which is supposed to be completed by 0515 but Mr. Jacques stated that he normally gets this done by 0520 to 0525. He will then begin working on the preduty weather briefing and will be multi-tasking because of various telephone conference calls that may occur during this time including a daily call with the FAA Command Center National Aviation Meteorologist (NAM). Mr. Jacques stated that he shoots for 0545 for completion of the preduty weather briefing. He indicated the ZOA agreement for producing the video preduty weather briefings was 0630, but that his supervisor has asked his staff try to have them completed by 0545. Mr. Jacques stated he is all for doing the preduty weather briefings but they are difficult to complete by 0545 during active weather.

Mr. Jacques stated that he will wake up about 0300 when he has a 0445 shift and will look at weather before he begins his 40-minute drive to work. To support his preduty weather briefing Mr. Jacques will review the AFD from the NWS Monterey Weather Forecast Office, the SFO Marine Stratus page, model and satellite data, OAK sounding data, local observations and other data. For the morning preduty weather briefing on the day of the accident, Mr. Jacques stated that he was concerned with embedded thunderstorms in the region and that he was not too concerned with severe turbulence at that time and that he did not have severe turbulence "on his mind." Mr. Jacques issued a CWA that morning on top of an already existing Convective SIGMET.

Regarding AFDs, Mr. Jacques stated he only looked at the AFD from the NWS Monterey Weather Forecast Office and did not review the AFD from the NWS Reno Weather Forecast Office. He stated that it is rare for him to communicate with NWS Weather Forecast Offices except for Monterey, but his NWS chat auto logs into the Sacramento and Reno NWS Weather Forecast Offices. Mr. Jacques stated that if he had seen the morning AFD from the NWS Reno Weather Forecast Office, at a minimum he would have called the NWS Aviation Weather Center to talk to them about issuing a SIGMET, and that it would have influenced the content of his preduty weather briefing for controllers that morning. Mr. Jacques stated that he had never seen language that strong discussing turbulence hazards as what was found in that morning's AFD from the NWS Reno Weather Forecast Office. Mr. Jacques indicated that he normally does not communicate with other NWS offices via NWSSchat and that it can be a "black hole." He stated that if he had seen the morning AFD from the NWS Reno Weather Forecast Office he would have given the Reno office a call. Mr. Jacques stated that sometimes the NWS Sacramento Weather Forecast Office will reach out to them, but that 99 percent of the time it is he who reaches out to other NWS Weather Forecast Offices and that it is usually regarding the TAFs. He stated that he can probably count on one hand the times over the last 7 years that NWS Weather Forecast Offices other than Monterey have reached out directly to him.

Mr. Jacques indicated that he issued the CWA prior to the accident time over the central California valley that was on top of the already existing SIGMET for severe turbulence up to FL300, and he did so because he felt the severe turbulence hazard existed up to FL330 based of PIREPs. He did not coordinate with the Aviation Weather Center on this CWA but had coordinated with them earlier in the day on other advisories.

Mr. Jacques stated that when they get PIREPs logged by controllers at ZOA, he puts them into the AIS-R system and uses the AWC PIREP entry page as a backup. PIREPs with the remark "ZOA CWSU" are PIREPs that his CWSU has entered into the national system. Mr. Jacques indicated that this remark is to help the monthly "bean counting" or tracking of PIREPs that they have handled. ZOA Flight Data provides backup to PIREP entry when the CWSU is closed and they serve as a "backstop" when the CWSU is open.

The CWSU can create the content for the displays located at the end of each area that present weather information, however the FAA does not ask very much about the content of those displays. Mr. Jacques indicated that he does not know if geographic plotting of SIGMETs has ever been on those displays at ZOA.