



NATIONAL TRANSPORTATION SAFETY BOARD

**Office of Aviation Safety
Washington, D.C. 20594**

October 11, 2012

Group Chairman's Factual Report

WEATHER STUDY

ERA12FA438

A. ACCIDENT

Location: near Moscow, Tennessee
Date: July 11, 2012
Time: about 0907 central daylight time (1407 UTC¹)
Airplane: Cirrus SR20; registration N764RV

B. METEOROLOGIST SPECIALIST

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C. SUMMARY

On July 11, 2012, about 0907 central daylight time, a Cirrus SR20, N764RV, registered to Vaughn Aviation LLC and operated by an individual, sustained substantial damaged from tree and terrain impact near Moscow, Tennessee. The pilot was fatally injured. Instrument meteorological conditions prevailed at the time and no flight plan was filed for the Title 14 Code of Federal Regulations, Part 91 personal flight. The flight originated from Millington Regional Jetport Airport (NQA), Millington, Tennessee, about 0825, for an intended destination of Pensacola, Florida.

Several witnesses near the accident site heard a loud revving engine before the sound of an explosion. Smoke was seen coming from an open meadow and the authorities were notified of a possible airplane crash. One witness located approximately 1/3 of a mile southwest of the accident site observed the airplane descending, at a level attitude, about 100 feet (ft) above the ground when it caught his attention. The airplane was traveling at high rate of speed and flying from the west to the northeast moments before the explosion was heard. Authorities and first responders to the accident reported at that time the weather was low cloud ceilings and drizzling rain.

D. DETAILS OF THE INVESTIGATION

The National Transportation Safety Board's (NTSB) Senior Meteorologist was not on scene for this investigation and conducted the meteorology phase of the investigation from the Washington D.C. office, collecting data from official National Weather Service (NWS) sources including the National Climatic Data Center (NCDC). All times are central daylight time (CDT) based upon the 24 hour clock, local time is +5 hours to UTC, and UTC=Z. Directions are

¹ UTC – is an abbreviation for Coordinated Universal Time.

referenced to true north and distances in nautical miles. Heights are above mean sea level (msl) unless otherwise noted. Visibility is in statute miles and fractions of statute miles.

E. FACTUAL INFORMATION

1.0 Synoptic Situation

The synoptic or large scale migratory weather systems influencing the area were documented using standard NWS charts issued by the National Center for Environmental Prediction (NCEP) located in Camp Springs, Maryland. These are the base products used in describing weather features and in the creation of forecasts and warnings. Reference to these charts can be found in the joint NWS and Federal Aviation Administration (FAA) Advisory Circular “Aviation Weather Services”, AC 00-45.

1.1 Surface Analysis Chart

The NWS Surface Analysis Chart for 0700 CDT (1200Z) on July 11, 2012 centered over the region is included as figure 2 with the approximate accident site marked. The chart depicted a low pressure system over the Arkansas and Louisiana border at 1013-hectopascals (hPa) along a stationary front which extended northeastward through Arkansas into Tennessee, then eastward into North Carolina. The accident site was located immediately south of the stationary front in a region of general east to southeasterly wind flow, with overcast clouds and scattered rain showers. The station models depicted temperatures in the low 70’s degrees Fahrenheit (F) with temperature-dew point spreads within 2° F.

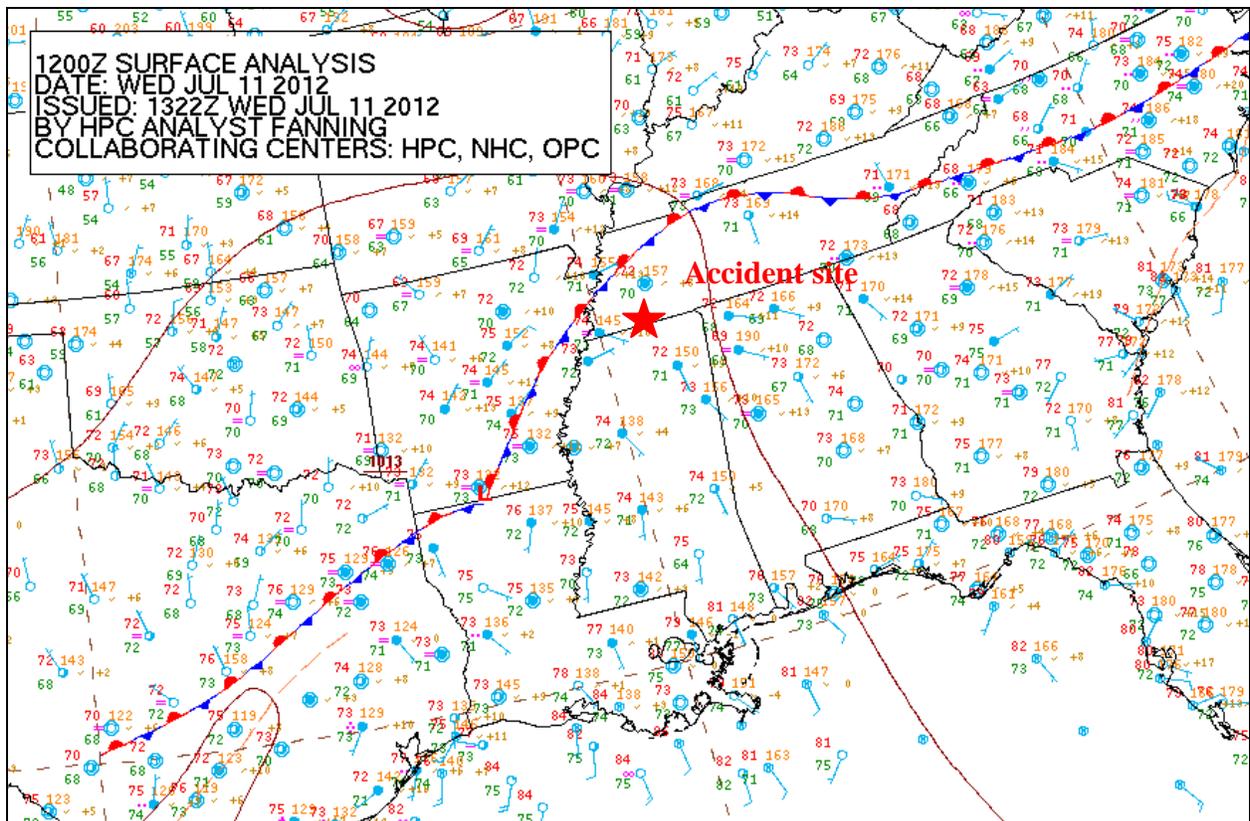


Figure 1 - NWS Surface Analysis Chart for 0700 CDT

1.2 Weather Depiction Chart

The NWS Weather Depiction Chart for 0800 CDT (1300Z) on July 11, 2012 is included as figure 2 with the approximate accident site marked. The chart depicted an extensive area of instrument flight rule (IFR) conditions² by a shaded contour line extending along and south of the stationary front from the Carolina's, Tennessee, Alabama, Mississippi, into Arkansas, and extended over the accident site. Marginal visual flight rule (MVFR) conditions³ surrounded that area of IFR conditions and extended over most of all Tennessee, Arkansas, and northern Alabama and Mississippi. The closest visual flight rule (VFR) conditions⁴ were depicted north of the frontal boundary over Kentucky, Illinois, and Missouri. The closest station model to the accident site indicated visibility 5 miles in mist, with ceiling overcast at 400 feet above ground level (agl).

² IFR conditions – are defined as a ceiling or lowest layer of cloud reported as broken, overcast, or the vertical visibility into a surface based obscuration of less than 1,000 feet and/or visibility less than 3 statute miles.

³ MVFR conditions – are defined as a ceiling between 1,000 and 3,000 feet inclusive, and/or visibility 3 to 5 miles inclusive.

⁴ VFR conditions – are defined as no ceiling or a ceiling higher than 3,000 feet and visibility greater than 5 miles.

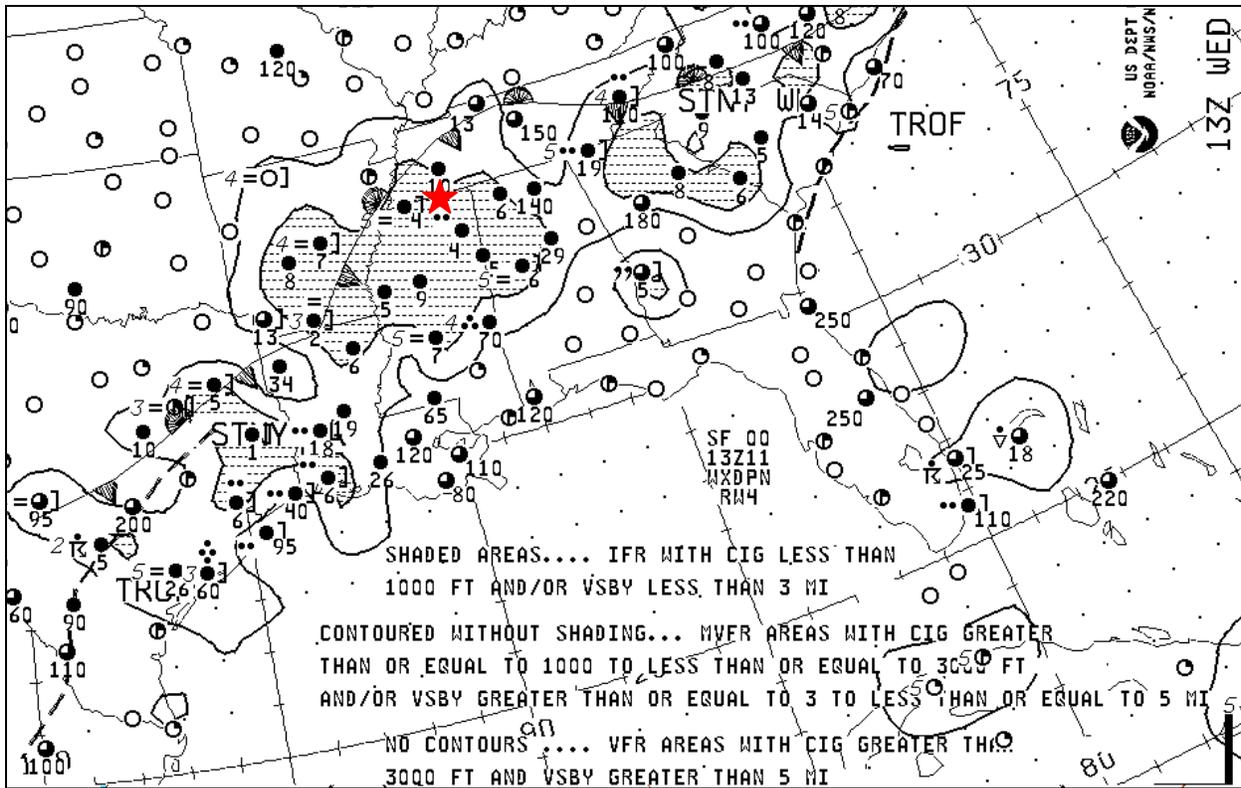


Figure 2 - NWS Weather Depiction Chart for 0800 CDT

1.3 Radar Mosaic

The NWS National weather radar mosaic for 0905 CDT on July 11, 2012 centered over the accident site is included as figure 3. The radar mosaic indicated an area of echoes associated with rain showers and thunderstorm approximately 10 miles east of the accident site over Grand Junction and continued into northern Mississippi and Alabama, with other areas of echoes southwest of Memphis and an area of intense echoes to the northeast approaching the Nashville area. No significant weather echoes were depicted over the accident site.

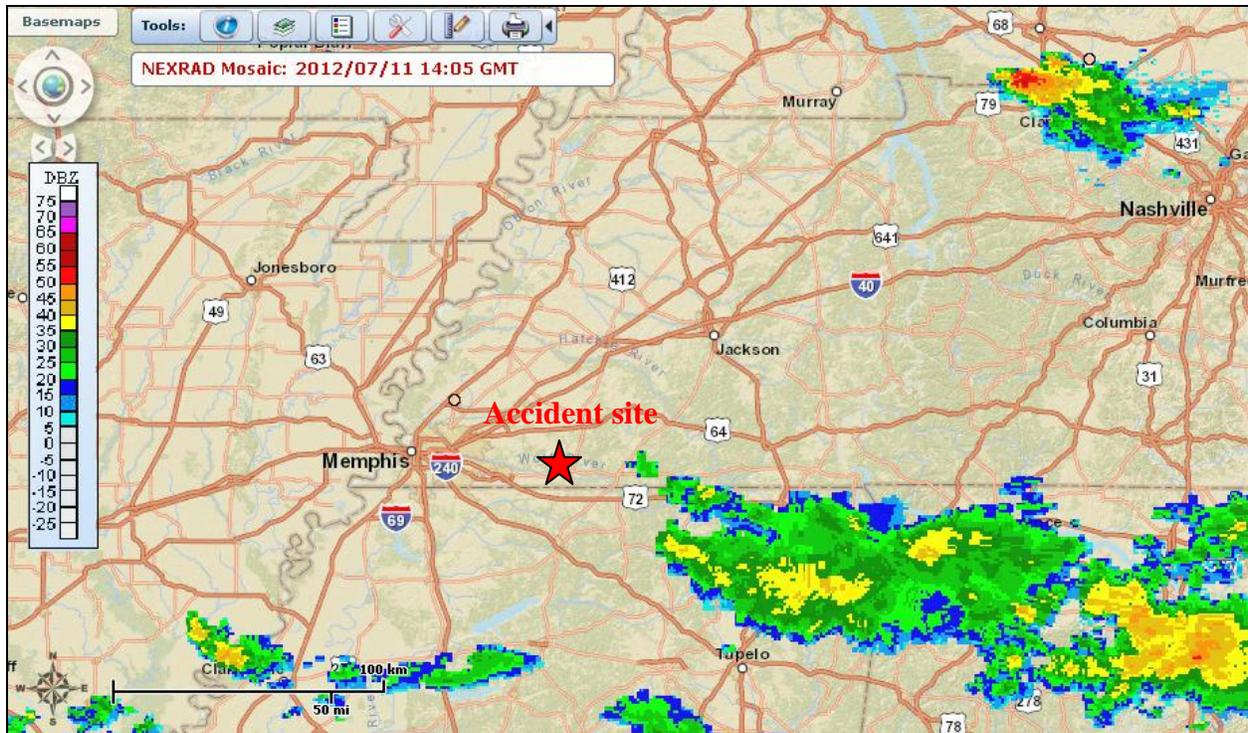


Figure 3 - NWS NEXRAD Mosaic image for 0905 CDT

2.0 Surface Observations

The following section includes the official weather observations issued by meteorological aerodrome reports (METARs) and special reports (SPECI) across the area. Cloud heights are reported in reference to agl. Figure 4 is a map of the primary observation locations with respect to the accident site that are documented below, with the wind and relative humidity at 0900 CDT highlighted in the box in red.

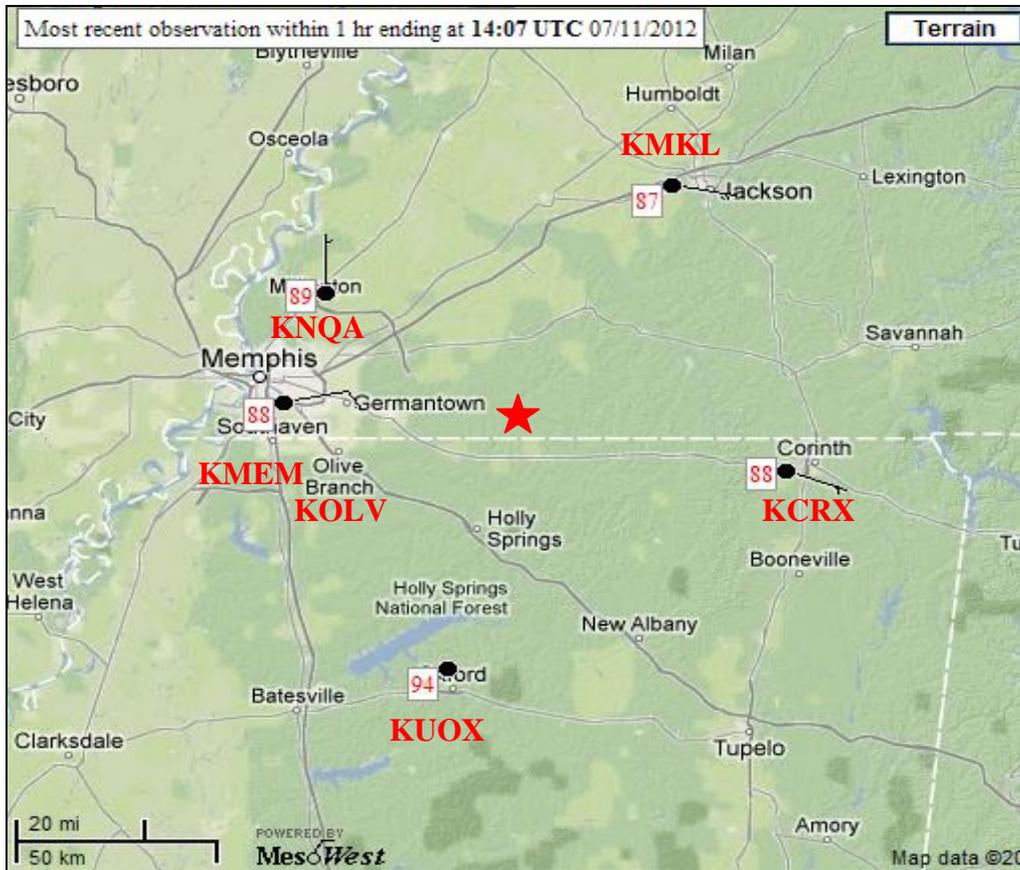


Figure 4 - Mesowest map of observations

2.1 Olive Branch Airport (KOLV), Olive Branch, Mississippi

The closest official weather reporting location to the accident site was from Olive Branch Airport (KOLV), located approximately 20 miles west in Olive Branch, Mississippi, at an elevation of 402 feet. The airport had an Automated Weather Observation System (AWOS) and reported the following conditions at the approximate time of the accident:

Olive Branch weather at 0750 CDT (1250Z), wind from 090° at 4 knots, visibility 5 miles in mist, ceiling overcast at 400 feet agl, temperature and dew point 22° Celsius (C), altimeter 30.00 inches of mercury (Hg).

Data was reported missing between 0800 and 1200 CDT for unknown reasons. The raw observations surrounding the period are included below along with the general flight category reported:

<i>KOLV 111150Z 0000KT 3SM BR OVC003 22/22 A2999=</i>	<i>LIFR</i>
<i>KOLV 111155Z AUTO 10005KT 7SM OVC003 22/ A2998 RMK A01 P000=</i>	<i>LIFR</i>
<i>KOLV 111250Z 09004KT 5SM BR OVC004 22/22 A3000=</i>	<i>LIFR</i>
<i>Missing data</i>	
<i>Accident 1407Z</i>	<i>IFR</i>
<i>KOLV 111755Z 05009KT 8SM BKN015 BKN020 OVC026 24/23 A3000=</i>	<i>MVFR</i>

2.2 Memphis International Airport (KMEM), Memphis, Tennessee

The next closest reporting location to the accident site was from Memphis International Airport (KMEM), located approximately 29 miles west, at an elevation of 341 feet, which reported the following conditions:

Memphis weather at 0884 CDT (1354Z), wind from 080° at 7 knots, visibility 9 miles, ceiling overcast at 600 feet agl, temperature 24° C, dew point 22° C, altimeter 29.99 inches of Hg. Remarks: automated observation system, sea level pressure 1015.0 hPa, temperature 23.9° C, dew point 21.7° C.

The raw observations were as follows:

<i>KMEM 111254Z 09007KT 5SM BR OVC004 23/22 A2998 RMK AO2 SLP147 T02330217=</i>	<i>LIFR</i>
<i>KMEM 111350Z 09007KT 9SM OVC006 24/22 A2999 RMK AO2=</i>	<i>IFR</i>
<i>KMEM 111354Z 08007KT 9SM OVC006 24/22 A2999 RMK AO2 SLP150 T02390217=</i>	<i>IFR</i>
Accident 1407Z	IFR
<i>KMEM 111454Z 08010KT 10SM OVC008 24/22 A3000 RMK AO2 SLP154 T02390217 51006=</i>	<i>IFR</i>
<i>KMEM 111549Z 08008KT 10SM OVC010 24/22 A3001 RMK AO2=</i>	<i>MVFR</i>
<i>KMEM 111554Z 08009KT 10SM OVC010 24/22 A3001 RMK AO2 SLP157 T02440217=</i>	<i>MVFR</i>

2.3 Millington Regional Jetport Airport (KNQA), Millington, Tennessee

Millington Regional Jetport Airport (KNQA), Millington, Tennessee was located 30 miles west-northwest at an elevation of 319 feet, and reported the following conditions:

Millington weather (KNQA) at 0855 CDT (1355Z), wind variable at 5 knots, visibility 10 miles, ceiling overcast at 1,200 feet, temperature 24° C, dew point 22° C, altimeter 30.00 inches of Hg.

The raw observations surrounding the period were as follows:

<i>METAR KNQA 111135Z COR 06003KT 10SM OVC011 23/22 A2997 RMK=</i>	<i>MVFR</i>
<i>METAR KNQA 111155Z COR VRB03KT 10SM OVC013 23/22 A2998 RMK=</i>	<i>MVFR</i>
<i>METAR KNQA 111215Z COR 07004KT 10SM OVC013 23/22 A2999 RMK=</i>	<i>MVFR</i>
<i>METAR KNQA 111235Z COR 07004KT 10SM OVC013 23/22 A2999 RMK=</i>	<i>MVFR</i>
<i>SPECI KNQA 111255Z COR 08003KT 6SM BR OVC009 23/22 A2999 RMK=</i>	<i>IFR</i>
<i>METAR KNQA 111315Z COR 08004KT 6SM BR OVC009 23/22 A2999 RMK=</i>	<i>IFR</i>
<i>METAR KNQA 111335Z COR VRB04KT 6SM BR OVC009 24/22 A2999 RMK=</i>	<i>IFR</i>
<i>SPECI KNQA 111355Z COR VRB05KT 10SM OVC012 24/22 A3000 RMK=</i>	<i>MVFR</i>
Accident 1407Z	MVFR
<i>METAR KNQA 111415Z AUTO 07004KT 10SM OVC014 24/22 A3000 RMK=</i>	<i>MVFR</i>
<i>METAR KNQA 111435Z COR 00000KT 10SM OVC012 25/22 A3000 RMK=</i>	<i>MVFR</i>
<i>METAR KNQA 111455Z COR 09006KT 10SM OVC012 25/22 A3000 RMK=</i>	<i>MVFR</i>
<i>METAR KNQA 111515Z COR 07007KT 10SM BKN015 OVC023 25/22 A3000 RMK=</i>	<i>MVFR</i>

2.4 Roscoe Turner Airport (KCRX), Corinth, Mississippi

Roscoe Turner Airport (KCRX), located in Corinth, Mississippi 40 miles east of the accident site at an elevation of 425 feet had an AWOS and reported the following conditions:

Corinth (KCRX) weather at 0910 CDT (1410Z), wind from 110° at 5 knots, visibility 8 miles in light rain, ceiling overcast at 500 feet, temperature 22° C, dew point 20° C, altimeter 30.02 inches of Hg. Remarks; automated observation system, hourly precipitation 0.01 inches.

The raw observations surrounding the period were as follows:

<i>METAR KCRX 111250Z AUTO 12005KT 10SM OVC005 22/20 A3001 RMK AO2=</i>	<i>IFR</i>
<i>METAR KCRX 111330Z AUTO 11005KT 10SM -RA OVC006 22/20 A3002 RMK AO2=</i>	<i>IFR</i>
<i>METAR KCRX 111350Z AUTO 11005KT 5SM -RA BKN005 OVC011 22/20 A3002 RMK AO2=</i>	<i>IFR</i>
<i>Accident 1407Z</i>	<i>IFR</i>
<i>METAR KCRX 111410Z AUTO 11005KT 8SM -RA OVC005 22/20 A3002 RMK AO2 P0001=</i>	<i>IFR</i>
<i>METAR KCRX 111430Z AUTO 10005KT 10SM -RA OVC005 22/20 A3003 RMK AO2 P0001=</i>	<i>IFR</i>
<i>METAR KCRX 111450Z AUTO 12006KT 9SM -RA OVC006 23/21 A3003 RMK AO2 P0001=</i>	<i>IFR</i>

2.5 University Oxford Airport (KUOX), Oxford, Mississippi

The closest weather reporting location to the south of the accident site was from University Oxford Airport (KUOX), Oxford, Mississippi, was located approximately 40 miles south at an elevation of 452 feet and reported the following:

Oxford (KUOX) weather at 0915 CDT (1415Z), wind from 140° at 3 knots, visibility 10 miles, ceiling overcast at 600 feet, temperature 23° C, dew point 21° C, altimeter 30.01 inches of Hg.

The raw observations were as follows:

<i>KUOX 111335Z AUTO 00000KT 10SM OVC006 23/22 A3000 RMK AO2=</i>	<i>IFR</i>
<i>KUOX 111355Z AUTO 00000KT 10SM OVC006 23/22 A3000 RMK AO2=</i>	<i>IFR</i>
<i>Accident 1407Z</i>	<i>IFR</i>
<i>KUOX 111415Z AUTO 14003KT 10SM OVC006 23/21 A3001 RMK AO2=</i>	<i>IFR</i>
<i>KUOX 111435Z AUTO 00000KT 10SM OVC006 23/21 A3001 RMK AO2=</i>	<i>IFR</i>
<i>KUOX 111455Z AUTO 00000KT 10SM OVC010 23/21 A3002 RMK AO2=</i>	<i>MVFR</i>
<i>KUOX 111515Z AUTO 12003KT 10SM OVC013 23/21 A3002 RMK AO2=</i>	<i>MVFR</i>

2.6 McKellar–Sipes Regional Airport (KMKL), Jackson, Tennessee

McKellar–Sipes Regional Airport (KMKL), located 41 miles northeast in Jackson, Tennessee, at an elevation of 434 feet had an ASOS and reported the following conditions:

Jackson (KMKL) weather at 0853 (1353Z), wind from 100° at 6 knots, visibility 10 miles, ceiling overcast at 1,000 feet, temperature 23° C, dew point 21° C, altimeter 30.03 inches of Hg. Remarks: automated observation system, ceiling 900 feet variable 1,200 feet, sea level pressure 1016.4-hPa, hourly precipitation 0.01 inches, temperature 22.8° C, dew point 20.6° C.

The raw observations were as follows:

<i>KMKL 111253Z 11006KT 10SM OVC010 23/21 A3002 RMK AO2 SLP161 T02280206=</i>	<i>MVFR</i>
<i>KMKL 111353Z 10006KT 10SM OVC010 23/21 A3003 RMK AO2 CIG 009V012 SLP164 P0001 T02280206=</i>	<i>IFR/MVFR</i>
<i>Accident 1407Z</i>	<i>MVFR</i>
<i>KMKL 111453Z 10006KT 10SM OVC012 24/21 A3003 RMK AO2 SLP164 60001 T02390211 51006=</i>	<i>MVFR</i>
<i>KMKL 111511Z 10007KT 10SM OVC016 24/21 A3003 RMK AO2=</i>	<i>MVFR</i>
<i>KMKL 111526Z 10006KT 10SM OVC014 25/22 A3003 RMK AO2=</i>	<i>MVFR</i>
<i>KMKL 111553Z 11008KT 10SM OVC016 26/21 A3004 RMK AO2 SLP167 P0001 T02560211=</i>	<i>MVFR</i>

3.0 Upper Air Data

The NWS Nashville, Tennessee, site number 72327, 0700 CDT (1200Z) upper air sounding plotted on a standard Skew-T Log P chart is included as figure 5. The sounding indicated a moist and unstable low-level environment, with the lifted condensation level (LCL) or approximate base of the clouds at 500 feet agl. The relative humidity was greater than 75 percent from the surface through 17,000 feet msl. The freezing level was identified at approximately 14,500 feet.

The sounding wind profile indicated winds from the south through 8,000 feet with wind speeds less than 10 knots through 10,000 feet. No strong vertical wind shears were noted to produce any significant turbulence below 18,000 feet.

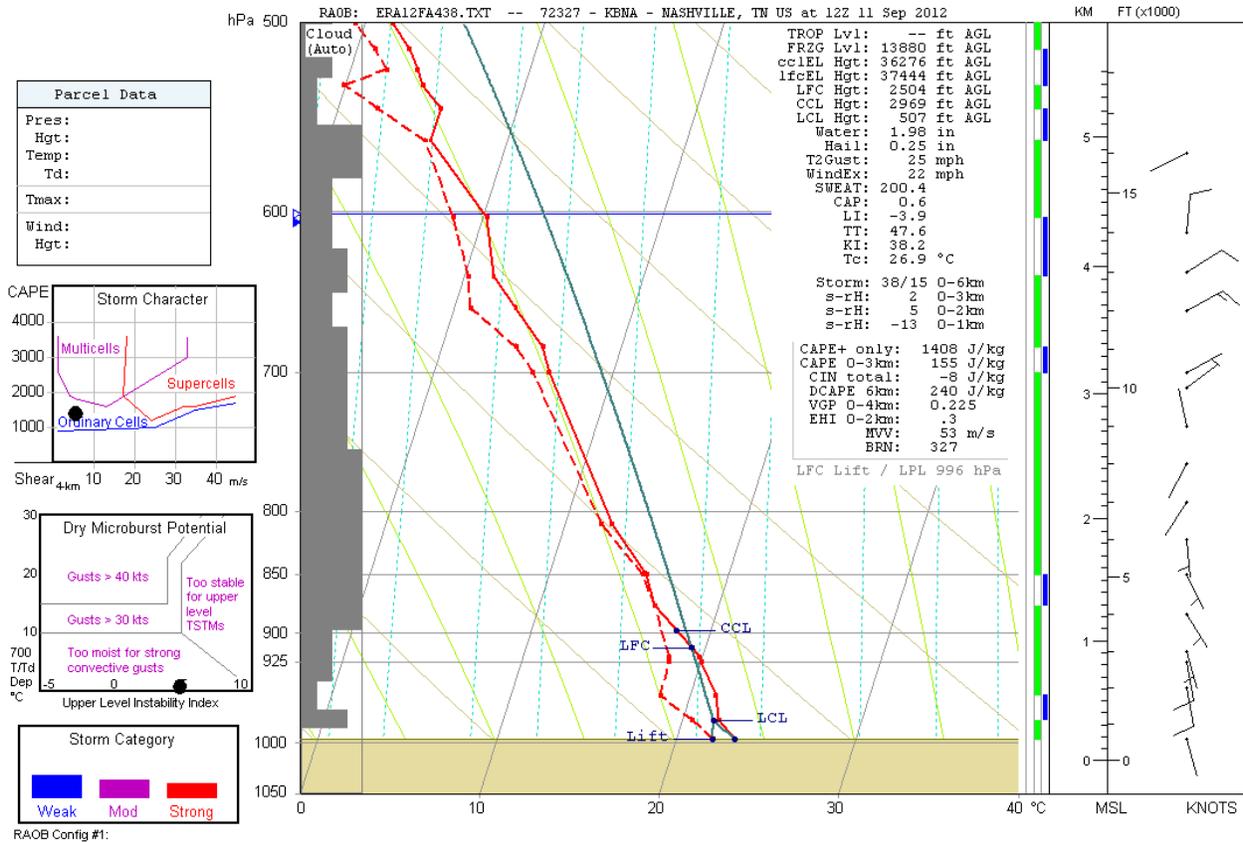


Figure 5- Nashville upper air sounding for 0700 CDT

4.0 Satellite Data

The Geostationary Operational Environmental Satellite number 13 (GOES-13) data was obtained and displayed on the National Transportation Safety Board's Man-computer Interactive Data Access System (McIDAS) workstation. Both visible and infrared imagery was obtained surrounding the time of the accident.

The GOES-13 infrared image for 0902 CDT (1402Z) at 2X magnification and with a standard MB temperature enhancement curve applied is included as figure 6. The image depicted a large area of low stratiform clouds with a radiative cloud top temperature of 283° kelvin or 9.84° C over the accident site, which corresponded to cloud tops near 8,000 feet.

Figure 7 is the GOES-13 visible image for the same period at 2X magnification, with a 1 kilometer resolution over the area. The image depicted multiple layers of clouds over the area that produced an overcast cloud cover of stratiform clouds over the region and the accident site. Cumulus congestus type clouds associated with vertical development and rain showers can be identified east, with additional development southwest of Memphis.

5.0 Pilot Reports

The following pilot reports were recorded over Tennessee surrounding the period from 0600 through 1300 CDT below 18,000 feet.

MKL UA /OV MKL /TM 1111 /FLUNKN /TP C182 /SK OVC014-TOP020 /TA 20 /RM BKN Lyr ABV SMTH RIDE=

MKL UA /OV MKL/TM 1207/FLUNKN/TP C208/SK OVC012-TOP020/RM DURGC TOPS ENRT MEM-MKL 020 AWC-WEB:FCTMKL=

BNA UA /OV M54360017 /TM 1159 /FL035 /TP SR22 /TA 25 /WV 11016KT /TB NEG /RM CLEAR BELOW=

BNA UA /OV GHM225030/TM 1208/FL160/TP P46T/TA M04/IC LGT RIME /RM ZME=

MKL UA /OV MKL/TM 1213/FLUNKN/TP C208/SK OVC014-TOP021/RM DURGC MEM-MKL TOPS 020 CLR ABV CORRECTION ON PREVIOUS MKL RPT AWC-WEB:FCTMKL=

MKL UA /OV MKL/TM 1224/FLUNKN/TP P28A/SK OVC014/RM DURGD GPS20 AWC-WEB:FCTMKL=

MEM UA /OV MEM045010 /TM 1257 /FLUNKN /TP C560 /SK BKN-OVC011-TOP025/OVC052-TOP120/ SKC /RM FROM MEMA=

MKL UA /OV MKL/TM 1339/FLUNKN/TP BE30/SK OVC014-TOPUNKN/RM DURGC SCT TOPS 045-050 AWC-WEB:FCTMKL=

Accident 1407Z

MKL UA /OV MKL/TM 1418/FLUNKN/TP BE20/SK OVC015-TOP033/RM DURGC TO SYI CLR ABV OVC AWC-WEB:FCTMKL=

MKL UA /OV MKL/TM 1422/FLUNKN/TP C525/SK OVC016/RM DURGD GPS 20 BASES 016-017 AWC-WEB:FCTMKL=

MKL UA /OV MKL/TM 1430/FLUNKN/TP C208/SK OVC016/RM DURGD GPS 20 AWC-WEB:FCTMKL=

MKL UA /OV MKL/TM 1439/FLUNKN/TP BE30/SK OVC012/RM DURGD VOR RY 02 AWC-WEB:FCTMKL=

MEM UA /OV MEM345010 /TM 1509 /FL070 /TP PA24 /TB NEG=

MKL UA /OV MKL/TM 1602/FLUNKN/TP B350/SK OVC020-TOP035/RM DURGD ILS RY 02 AWC-WEB:FCTMKL=

MKL UA /OV MKL/TM 1735/FLUNKN/TP BE10/SK BKN026/RM DURGD ILS RY 02 AWC-WEB:FCTMKL=

There were a significant number of pilot reports made in the vicinity of McKellar-Sipes Regional Airport (KMKL), Jackson, Tennessee, and reported overcast clouds with bases between 1,200 and 1,600 feet msl (or approximately 800 and 1,200 feet agl) with tops between 2,000 and 5,000 feet msl surrounding the period.

6.0 Area Forecast

The NWS Area Forecast issued at 0445 CDT and current at the time of the accident warned users to see the latest AIRMET Sierra series advisory for IFR conditions and mountain obscuration information, and indicated that a stationary front was influencing the area. The forecast for western Tennessee expected broken clouds at 1,000 to 2,000 feet msl, with a second broken layer at 10,000 feet with tops to 18,000 feet with visibility 3 to 5 miles in mist until 0900 CDT, with isolated light rain showers and thunderstorms. The conditions were expected to become from 1100 to 1300 CDT scattered to broken clouds at 3,000 feet, broken at 6,000 feet layered to 25,000 feet, with occasional visibility 3 miles in scattered light rain showers and thunderstorms. The raw forecast was as follows:

FAUS44 KKCI 110945 2012193 0932
FA4W
DFWC FA 110945
SYNOPSIS AND VFR CLDS/WX
SYNOPSIS VALID UNTIL 120400
CLDS/WX VALID UNTIL 112200...OTLK VALID 112200-120400
OK TX AR TN LA MS AL
.
SEE AIRMET SIERRA FOR IFR CONDS AND MTN OBSCN.
TS IMPLY SEV OR GTR TURB SEV ICE LLWS AND IFR CONDS.
NON MSL HGTS DENOTED BY AGL OR CIG.
.
SYNOPSIS...STNR FNT OVR SRN TN-NWRN MS-SWRN AR-NERN TX BY 04Z OVR
NRN AL-NRN MS-SRN AR-SERN OK-CNTRL TX.
.
TN
WRN-MIDDLE...BKN010-020 BKN100 TOP FL180. TIL 14Z VIS 3-5SM BR.
ISOL -SHRA/TSRA. CB TOP FL400. BECMG 1618 SCT-BKN030 BKN060 LYRD
FL250. OCNL VIS 3SM SCT -SHRA/TSRA. CB TOP FL450. OTLK...MVFR CIG
TSRA.
ERN...BKN015-025 LYRD FL250. VIS 3-5SM BR. WDLY SCT -SHRA/ISOL
-TSRA. CB TOP FL400. BECMG 1315 BKN035. OCNL VIS 3SM SCT
-SHRA/TSRA. OTLK...MVFR CIG TSRA.
.
MS
NRN-CNTRL...BKN010-020 LYRD FL250. OCNL VIS 3SM BR. WDLY SCT
-SHRA/TSRA. CB TOP FL400. BECMG 1518 BKN030. SCT -TSRA. CB TOP
FL450. OTLK...MVFR CIG TSRA.
SRN...BKN010-020 TOP FL180. OCNL VIS 3SM BR. 14Z BKN040.
17Z LYRD FL250. WDLY SCT -TSRA. CB TOP FL450. OTLK...VFR TIL 02Z
TSRA.

7.0 In-Flight Weather Advisories

The NWS had AIRMET Sierra update 1 current over the area for IFR conditions and mountain obscuration conditions over the region. Figure 8 is a plot of the advisories over the satellite image for the period. The advisories were as follows:

WAUS44 KPCI 110845

2012193 0836

WA4S

DFWS WA 110845

AIRMET SIERRA UPDT 1 FOR IFR AND MTN OBSCN VALID UNTIL 111500

AIRMET IFR...OK TX AR TN LA MS AL MO IL KY

FROM 40NE LOZ TO HMV TO GQO TO 50SW PZD TO 40W CEW TO 60SSE LFK
TO 50WNW PSX TO 40ENE DLF TO 20N JCT TO 20SE ADM TO 30WNW FSM TO
40E RZC TO 40NE LOZ

CIG BLW 010/VIS BLW 3SM PCPN/BR. CONDS CONTG BYD 15Z ENDG 15-18Z.

AIRMET MTN OBSCN...TN KY

FROM 50WSW BKW TO HMV TO GQO TO 50WSW LOZ TO 50WSW BKW
MTNS OBSC BY CLDS/PCPN/BR. CONDS CONTG BYD 15Z THRU 21Z.

AIRMET MTN OBSCN...TX

FROM 60W INK TO 80SSE FST TO 90S MRF TO ELP TO 60W INK
MTNS OBSC BY CLDS/PCPN/BR. CONDS CONTG BYD 15Z ENDG 15-18Z.

WAUS44 KPCI 110845

2012193 0833

WA4Z

DFWZ WA 110845

AIRMET ZULU UPDT 1 FOR ICE AND FRZLVL VALID UNTIL 111500

NO SGFNT ICE EXP OUTSIDE OF CNVTV ACT.

FRZLVL...RANGING FROM 135-160 ACRS AREA

WAUS44 KPCI 110845

2012193 0831

WA4T

DFWT WA 110845

AIRMET TANGO UPDT 1 FOR TURB VALID UNTIL 111500

NO SGFNT TURB EXP OUTSIDE OF CNVTV ACT.

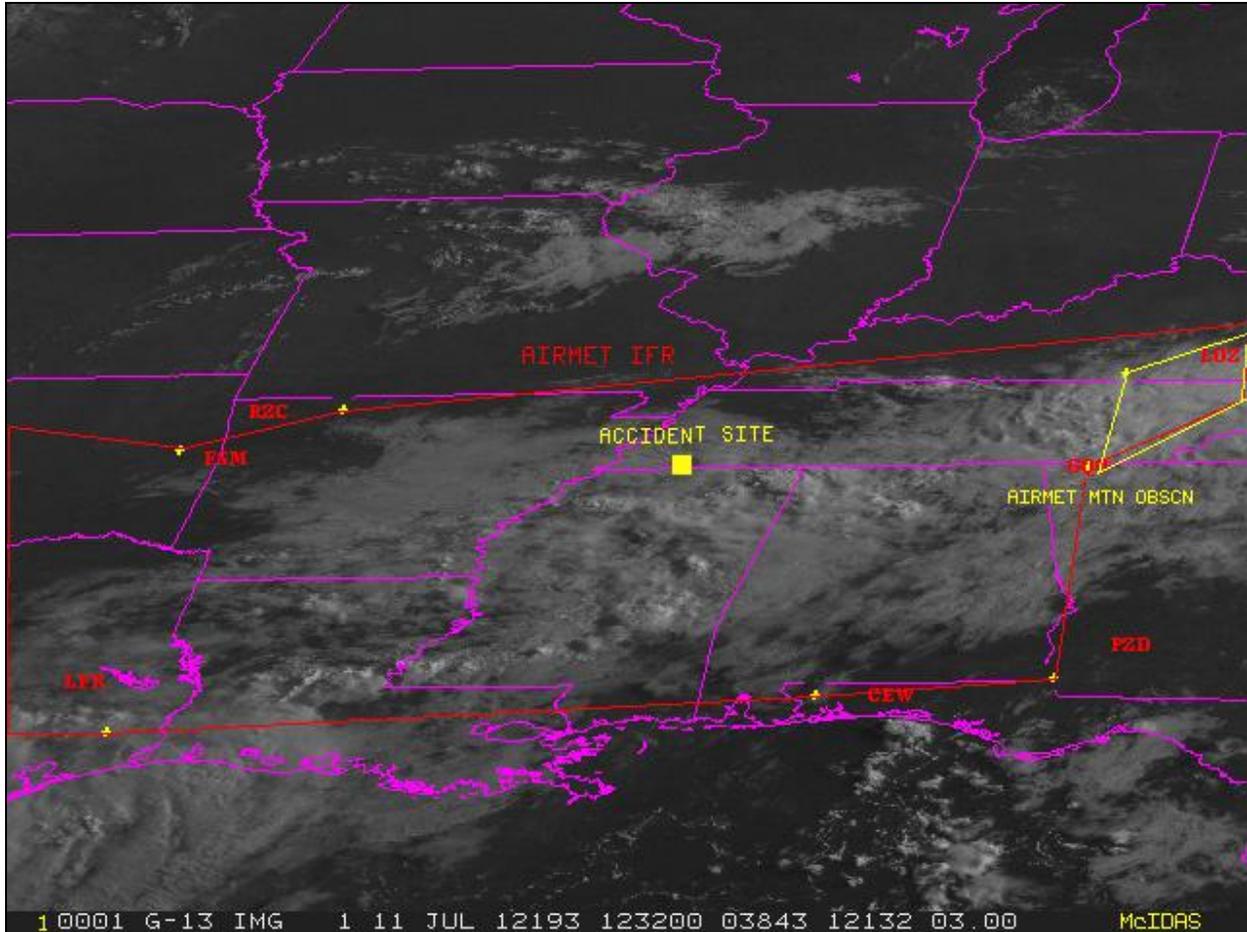


Figure 8- Plot of AIRMET Sierra for IFR conditions

8.0 Terminal Aerodrome Forecast (TAF)

The closest NWS Terminal Aerodrome Forecast (TAF) to the accident site was issued for Memphis International Airport (KMEM). The TAF was valid for a 5 statute mile radius of the airport, but is often used by pilots to get a better time specific forecast of wind, visibility, and cloud cover over in an area. The forecast current for KMEM at the time was as follows:

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TAF KMEM 111132Z 1112/1212 11005KT 5SM BR OVC007
FM111600 11006KT P6SM VCSH BKN011
FM111700 11008KT P6SM VCTS BKN018 BKN035CB
FM112000 12007KT P6SM VCTS BKN025 BKN035CB
TEMPO 1120/1124 4SM TSRA BKN035CB
FM120200 10006KT P6SM VCSH SCT010 BKN020
TEMPO 1203/1206 5SM -SHRA
FM120900 06004KT 6SM BR OVC007=
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The forecast for KMEM expected wind from 110 at 5 knots, visibility 5 miles in mist, and a ceiling overcast at 700 feet agl. IFR conditions were expected through 1100 CDT.

Donald Eick
NTSB Senior Meteorologist