National Transportation Safety Board

Office of Aviation Safety

Washington, D.C. 20594-2000

June 13, 2012

METEOROLOGICAL ADDENDUM 1

ERA12MA122

A. Accident

Location: Green Cove Springs, Florida
Date: December 26, 2011
Time: approximately 0554 eastern standard time (1054 UTC[1])
Aircraft: Bell 206B, registration: N5016M

B. Meteorological Specialist

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C. Summary

On December 26, 2011, at 0554 eastern standard time, a Bell 206B, N5016M, operated by SK Logistics, d.b.a. SK Jets, collided with terrain while maneuvering near Green Cove Springs, Florida. The certificated airline transport pilot and 2 passengers (a doctor and a medical technician) were fatally injured. The on-demand air taxi flight was conducted under the provisions of 14 Code of Federal Regulations Part 135. Night instrument meteorological conditions prevailed along the route and no flight plan was filed for the planned flight to Shands Cair Heliport (63FL), Gainesville, Florida. The flight originated from Mayo Clinic Heliport (6FL1), Jacksonville, Florida, about 0537.

[1] UTC – is an abbreviation for Coordinated Universal Time.

D. Details of Investigation

During the investigation of this accident investigators learned the accident pilot had been in a previous accident that occurred on December 22nd, 2007[2]. Brief weather conditions surrounding the December 22nd, 2007 accident are documented below and referenced in the human performance group chairman's factual report.

1.0 Surface Observations

The area was documented utilizing official NWS Meteorological Aerodrome Reports (METARs) and Specials (SPECIs). The following observations were taken from standard code and are provided in plain language.

The surface observations from December 22nd, 2007 around 0530 EST near St. Augustine, Florida, are documented below:

An Automated Surface Observing System (ASOS[3]) at Northeast Florida Regional Airport (KSGJ) was located 4 miles north of St. Augustine, Florida, at an elevation of 10 feet, and has a 4° westerly magnetic variation[4]. These observations were taken from automated equipment and were not supplemented by a human observer. The following observations were taken and disseminated around 0530 EST[5]:

[0315 EST] KSGJ 220815Z 01011G19KT 310V040 5SM OVC006 13/12 A3005 RMK AO1

[0335 EST] KSGJ 220835Z 35014G20KT 310V110 5SM OVC006 14/12 A3005 RMK AO1

[0355 EST] KSGJ 220855Z 34011KT 4SM OVC005 13/11 A3005 RMK AO1 52003

[0415 EST] KSGJ 220915Z 33011KT 310V010 4SM OVC005 12/11 A3005 RMK AO1

[0435 EST] KSGJ 220935Z 33010G16KT 2 1/2SM OVC005 12/11 A3006 RMK AO1

[0455 EST] KSGJ 220955Z 32010KT 3SM OVC004 12/11 A3006 RMK AO1

[0515 EST] KSGJ 221015Z 32010KT 2 1/2SM OVC004 12/11 A3007 RMK AO1

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[2] See NTSB accident MIA08CA040.
[3] ASOS – Automated Surface Observing System is equipped with meteorological instruments to observe and report wind, visibility, ceiling, temperature, dewpoint, altimeter, and barometric pressure.
[4] Magnetic variation – The angle (at a particular location) between magnetic north and true north.
[5] The bold sections in this NWS product and the rest of products in the addendum are to highlight the individual sections that directly reference the weather conditions that are or will affect the accident location around the accident time.

0530 EST

[0535 EST] KSGJ 221035Z 33011G16KT 2 1/2SM OVC004 12/11 A3007 RMK AO1

[0555 EST] KSGJ 221055Z 33010KT 260V010 2SM OVC004 12/11 A3007 RMK AO1

[0615 EST] KSGJ 221115Z 34011G15KT 300V010 2 1/2SM OVC004 12/10 A3008 RMK AO1

[0635 EST] KSGJ 221135Z 36009KT 320V090 3SM OVC004 12/10 A3008 RMK AO1

[0650 EST] KSGJ 221150Z 35010KT 1/2SM -RA OVC004 12/11 A3008

[0750 EST] KSGJ 221250Z 36013G20KT 1SM -RA OVC004 13/12 A3009

KSGJ weather at 0455 EST, wind from 320° at 10 knots, 3 miles visibility, an overcast ceiling at 400 feet agl, temperature of 12° Celsius (C), dew point temperature 11° C, altimeter of 30.06 inHg.

KSGJ weather at 0515 EST, wind from 320° at 10 knots, 2 and a half miles visibility, an overcast ceiling at 400 feet agl, temperature of 12° C, dew point temperature 11° C, altimeter of 30.07 inHg.

KSGJ weather at 0535 EST, wind from 330° at 11 knots with gusts to 16 knots, 2 and a half miles visibility, an overcast ceiling at 400 feet agl, temperature of 12° C, dew point temperature 11° C, altimeter of 30.07 inHg.

The Jacksonville Naval Air Station (KNIP) was also reporting weather conditions around 0530 EST on December 22nd, 2007. KNIP had an elevation of 20 feet and a 6° westerly magnetic variation. The following observations were disseminated around 0530 EST:

[0153 EST] KNIP 220653Z AUTO 34011KT 5SM BR OVC011 10/09 A3008 RMK AO2 CIG 006V012 SLP180 T01000089=

[0203 EST] KNIP 220703Z AUTO 34012KT 5SM BR OVC009 09/09 A3007 RMK AO2 CIG 006V012=

[0253 EST] KNIP 220753Z AUTO 35013KT 4SM BR OVC007 09/09 A3007 RMK AO2 CIG 004V009 SLP179 T00890089=

[0322 EST] KNIP 220822Z AUTO 36014KT 5SM BR OVC005 09/08 A3007 RMK AO2 CIG 004V009=

[0353 EST] KNIP 220853Z AUTO 36015KT 6SM BR OVC007 09/08 A3007 RMK AO2 CIG 005V010 SLP178 T00890083 50000=

[0453 EST] KNIP 220953Z AUTO 35013KT 5SM BR OVC007 09/08 A3009 RMK AO2 SLP183 T00890078=

0530 EST

[0553 EST] KNIP 221053Z AUTO 36013KT 6SM BR OVC007 09/08 A3010 RMK AO2 CIG 006V011 SLP186 T00890078=

[0653 EST] KNIP 221153Z AUTO 35014KT 6SM BR OVC007 09/08 A3011 RMK AO2 SLP191 T00890078 10106 20089 52014=

[0753 EST] KNIP 221253Z 36013KT 4SM BR OVC007 09/08 A3014 RMK AO2 SLP200 T00940083=

KNIP weather at 0353 EST, wind from 360° at 15 knots, 6 miles visibility and mist, an overcast ceiling at 700 feet agl, temperature of 9° C, dew point temperature 8° C, altimeter of 30.07 inHg. Remarks: ceiling variable between 500 and 1,000 feet agl, sea level pressure 1017.8 hPa, temperature 8.9° C, dew point temperature 8.3° C, 3-hourly pressure increase then decrease of 0.0 hPa.

KNIP weather at 0453 EST, wind from 350° at 13 knots, 5 miles visibility and mist, an overcast ceiling at 700 feet agl, temperature of 9° C, dew point temperature 8° C, altimeter of 30.09 inHg. Remarks: sea level pressure 1018.3 hPa, temperature 8.9° C, dew point temperature 7.8° C.

KNIP weather at 0553 EST, wind from 360° at 13 knots, 6 miles visibility and mist, an overcast ceiling at 700 feet agl, temperature of 9° C, dew point temperature 8° C, altimeter of 30.10 inHg. Remarks: ceiling variable between 600 and 1,100 feet agl, sea level pressure 1018.6 hPa, temperature 8.9° C, dew point temperature 7.8° C.

2.0 Terminal Aerodrome Forecast

A Terminal Aerodrome Forecast (TAF[6]) was issued for KNIP at 0416 EST which was valid at 0530 EST and for a 24-hour period beginning at 0400 EST. The TAF forecast for KNIP was as follows:

TAF KNIP 220909 **35012KT 8000 BR BKN010 OVC040 540006 QNH2994INS**
TEMPO 0913 4800 BR OVC005
FM2000 08010KT 9999 NSW BKN025 500000 QNH2996INS
BECMG 0103 VRB04KT 8000 BR BKN010
TEMPO 0509 0400 FG OVC002
AUTOMATED SENSOR METWATCH 2209 TIL 2213 T08/11Z T23/21Z=

[6] Terminal Aerodrome Forecast (TAF) – These forecasts apply to a five statute mile radius from the center of the airport runway complex where the TAF is valid.

The forecast expected wind from 350° at 12 knots, 5 miles visibility and mist, a broken ceiling at 1,000 feet agl, overcast skies at 4,000 feet agl, and occasional moderate turbulence in cloud from the surface to 6,000 feet msl. Temporary conditions of visibility at 3 miles, mist, and an overcast ceiling at 500 feet agl was expected between 0400 and 0800 EST.

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