

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA23FA006

METEOROLOGY

Specialist's Factual Report

October 6, 2022

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A. ACCIDENT

Location: Arundel, Maine
Date: October 5, 2022
Time: 1356 eastern daylight time
1756 coordinated universal time (UTC)
Aircraft: Beech BE36; Registration: N902AT

B. METEOROLOGY SPECIALIST

Donald Eick
Senior Meteorologist
National Transportation Safety Board
Washington, D.C.

C. SUMMARY

On October 5, 2022, about 1356 eastern daylight time, a Beech A36, N902AT, was destroyed when it was involved in an accident near Arundel, Maine. The private pilot and passenger were fatally injured. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 business flight.

D. DETAILS OF THE INVESTIGATION

The National Transportation Safety Board's Senior Meteorologist was not on scene for this investigation and conducted the meteorology phase of the investigation remotely, collecting data from official National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) sources including the Weather Prediction Center (WPC), and the National Center for Environmental Information (NCEI). This report documents the general weather products and forecasts over the region during the period and documents the pertinent meteorological parameters to the accident. All times are reported as central daylight time (EDT) based upon the 24-hour clock, local time is -4 hours from UTC, and UTC=Z. Airport and NWS station identifiers use the standard International Civil Aviation Organization 4-letter station identifiers versus the International Air Transport Association 3-letter identifiers, which deletes the initial country code designator "K" for U.S. continental airports. Directions are referenced to true north and distances in nautical miles. Heights are in feet (ft) above mean sea level (msl) unless otherwise noted. Visibility is in statute miles and fractions of statute miles.

The accident site was located at latitude 43.423172° N and longitude 70.520445° W.

E. FACTUAL INFORMATION

1.0 Synoptic Conditions

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) and the WPC located in College Park, Maryland. These are the base products used in describing weather features and in the creation of forecasts and warnings. Reference to these charts and other products can be found in the Federal Aviation Administration (FAA) "Aviation Weather Handbook", FAA-H-8083-28¹.

1.1 Surface Analysis Chart

The northeast section of the NWS Surface Analysis Chart for 1400 EDT is included as figure 1 with the approximate accident site marked by the red star. The chart depicted a high pressure system with a central pressure of 1018-hectopascals (hPa) over Maine. A low-pressure system at 1009-hPa was located off the Maryland coast with an occluded front wrapping around the low and extending northeastward off the new England coast. The accident site was located between the high pressure system and the occluded front off the coast. The station models in the vicinity of the accident site depicted northerly winds of 10 to 15 knots, overcast clouds, with temperatures near 56° Fahrenheit (F) and dew point temperatures near 53° F.

1

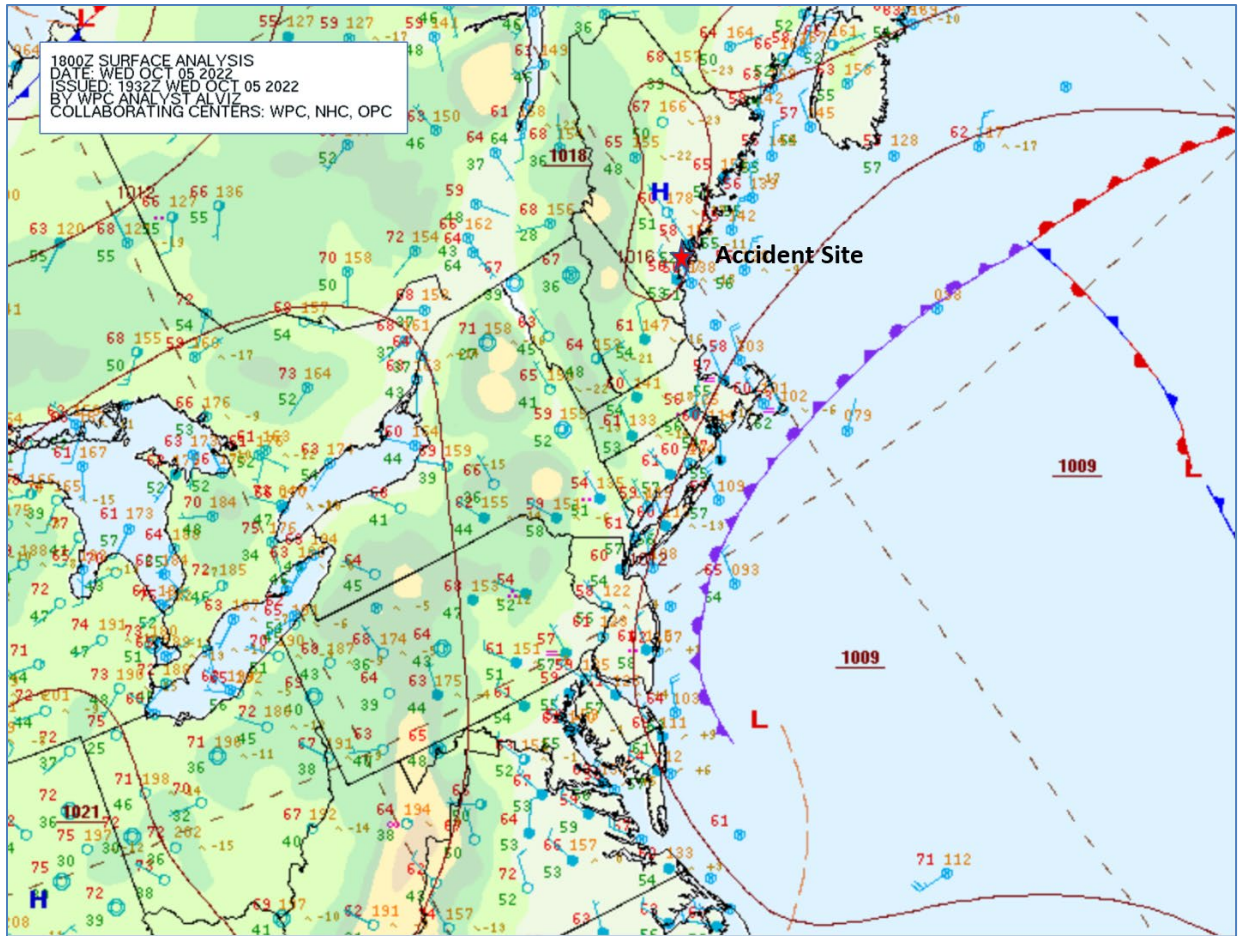


Figure 1 - Northeast section of the NWS Surface Analysis chart for 1400 EDT with the approximate accident site marked by the red star.

1.2 Regional Radar Mosaic

The NWS National Radar Mosaic for 1355 EDT is included as figure 2 with the approximate accident site marked by the red star. The image depicted an area of echoes over the Maine coast with the strongest reflectivity echoes offshore. The accident site was located under the western edge of the echoes near 20 dBZ or very light intensity echoes.

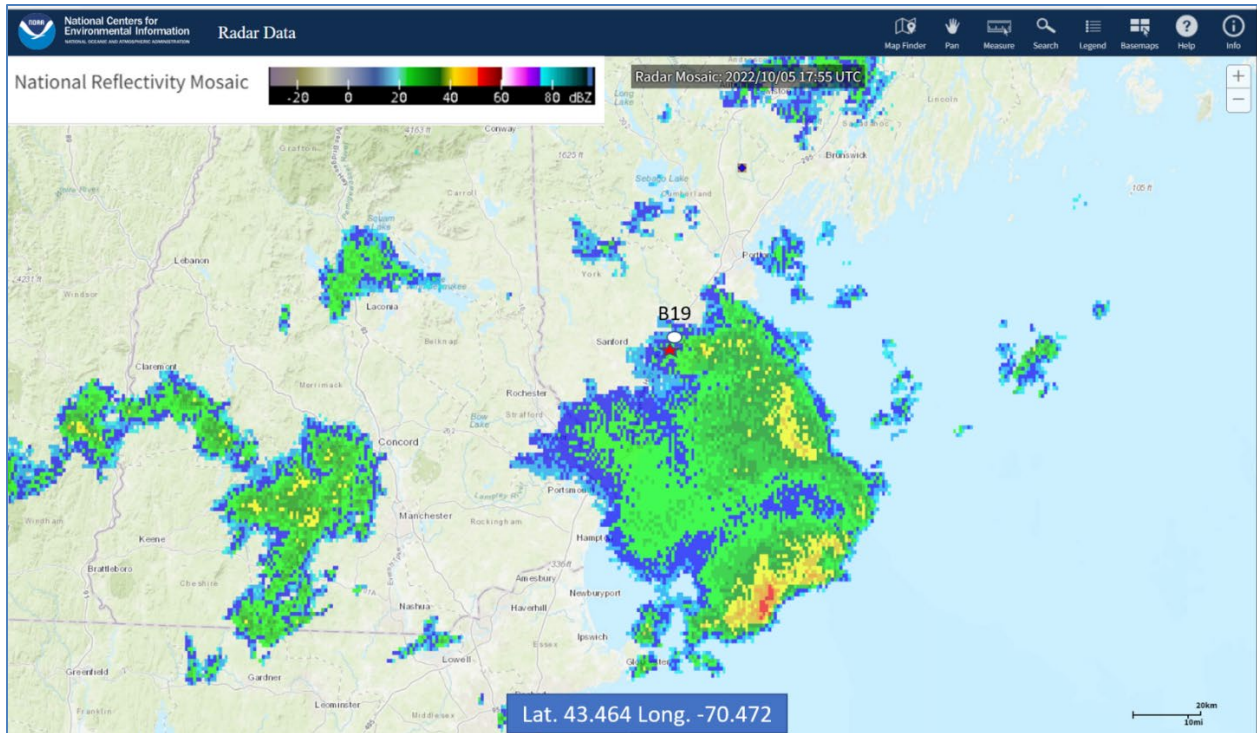


Figure 2 - Northeast section of the National Composite radar Mosaic for 1355 EDT with the approximate accident site marked by the red star.

2.0 Observations

The area was documented using official Aviation Routine Weather Reports (METAR) and Aviation Selected Special Weather Reports (SPECI). Cloud heights are reported above ground level (agl) in the following section, and the magnetic variation was estimated at 15° west based on the latest sectional chart for the area. Cloud heights in the following section are reported above ground level (agl).

2.1 Biddeford, Maine

The accident occurred while the aircraft was on a RNAV runway 6 approach into Biddeford Municipal Airport (B19), Biddeford, ME, which listed an elevation of 157 ft. The airport does not have a control tower or any weather reporting capability.

2.2 Sanford, Maine

The closest weather reporting station to the accident site was from Sanford Seacoast Regional Airport (KSFM), Sanford, ME, located about 11 miles west of B19. KSFD lists an elevation of 244 ft and had an Automated Weather Observation System

(AWOS) which was not augmented by any human observers. The following conditions were reported at the time of the accident.

Weather observation for KSFM at 1356 EDT, automated, wind from 010° at 7 knot, visibility 2 1/2 miles in light rain and mist, ceiling broken at 700 ft agl, overcast at 1,000 ft, temperature 13° Celsius (C), dew point temperature 12° C, altimeter 29.97 inches of mercury (inHg). Remarks: automated station with a precipitation discriminator, visibility 1 ½ miles variable 3 miles, rain began at 1340 EDT, ceiling 500 ft variable 1,000 ft agl, sea level pressure 1015.2-hPa, hourly precipitation less than 0.01 inches, 6-hour precipitation 0.02 inches, temperature 12.8° C, dew point temperature 12.2° C, 6-hour maximum temperature 13.3° C, 6-hour minimum temperature 11.1° C, 3-hour pressure tendency fallen 1.2-hPa.

The general flight categories and observations reported surrounding the accident from 0723 through 1600 EDT were as follows.

MVFR SPECI KSFM 051123Z AUTO 01009KT 10SM OVC014 12/08 A3002 RMK AO2 RAE15 P0000=

MVFR METAR KSFM 051156Z AUTO 02008KT 9SM RA OVC014 11/09 A3002 RMK AO2 RAE15B34 SLP169 P0001 60001 70001 T01110094 10122 20106 56004=

MVFR METAR KSFM 051256Z AUTO 02009KT 10SM OVC012 12/09 A3003 RMK AO2 RAE51 SLP171 P0001 T01170094=

MVFR METAR KSFM 051356Z AUTO 36010KT 10SM -RA OVC012 12/09 A3002 RMK AO2 RAB38 SLP167 P0000 T01220094=

MVFR METAR KSFM 051456Z AUTO 36009G16KT 10SM -RA OVC012 12/10 A3001 RMK AO2 SLP164 P0001 60002 T01220100 58004=

MVFR METAR KSFM 051556Z AUTO 01010KT 10SM OVC012 13/11 A2999 RMK AO2 RAE1459 SLP159 P0000 T01330106=

MVFR METAR KSFM 051656Z AUTO 01011KT 10SM OVC012 13/11 A2998 RMK AO2 SLP156 T01330106=

IFR SPECI KSFM 051746Z AUTO 01009KT 2 1/2SM -RA BR OVC010 13/12 A2997 RMK AO2 VIS 2V3 RAB20 CIG 006V012 P0000=

IFR METAR KSFM 051756Z AUTO 01007KT 2 1/2SM -RA BR BKN007 OVC010 13/12 A2997 RMK AO2 VIS 1 1/2V3 RAB20 CIG 005V010 SLP152 P0000 60002 T01280122 10133 20111 56012=

ACCIDENT 1756Z

IFR SPECI KSFM 051813Z AUTO 01007KT 4SM -RA BR OVC007 13/12 A2997 RMK AO2 CIG 004V009 P0000=

IFR SPECI KSFM 051821Z AUTO 01007KT 3SM -RA BR OVC005 13/12 A2997 RMK AO2 P0001=

IFR SPECI KSFM 051843Z AUTO 01007KT 2 1/2SM -RA BR OVC005 13/12 A2997 RMK AO2 CIG
004V007 P0001=

IFR SPECI KSFM 051852Z AUTO 01009KT 4SM -RA BR OVC005 13/12 A2996 RMK AO2 CIG
004V007 P0002=

IFR METAR KSFM 051856Z AUTO 01007KT 5SM -RA BR OVC005 13/12 A2996 RMK AO2 SLP149
P0002 T01280122=

IFR SPECI KSFM 051923Z AUTO 36008KT 2 1/2SM -RA BR OVC005 13/13 A2995 RMK AO2
P0001=

IFR SPECI KSFM 051942Z AUTO 36010KT 4SM -RA BR OVC005 13/13 A2995 RMK AO2 CIG
004V007 P0001=

IFR METAR KSFM 051956Z AUTO 36007KT 6SM BR OVC005 13/13 A2996 RMK AO2 RAE56 CIG
004V008 SLP147 P0002 T01330133=

2.3 Portland, Maine

The next closest weather reporting location was from Portland International Jetport (KPWM), Portland, ME, located 13 miles northwest of B19 at an elevation of 76 ft. The airport had an Automated Surface Observation System, which was augmented by air traffic control observers during normal operating hours. At the time of the accident the following conditions were reported.

Weather observation for KPWM at 1351 EDT, wind from 030° at 8 knots, visibility 10 miles or more, ceiling overcast at 1,400 ft agl, temperature 13° C, dew point temperature 12° C, altimeter 29.97 inHg. Remarks: automated observation station with a precipitation discriminator, rain ended at 1255 EDT, sea level pressure 1014.7-hPa, hourly precipitation less than 0.01 inches, 3-hour precipitation 0.05 inches, temperature 13.3° C, dew point temperature 11.7° C, 6-hour maximum temperature 13.3° C, 6-hour minimum temperature 10.6° C, 3-hour pressure tendency fallen 1.8-hPa.

The raw observations surrounding the period were as follows.

MVFR METAR KPWM 051151Z 02010KT 10SM OVC014 11/07 A3003 RMK AO2 SLP169
T01110067 10111 20094 56002=

MVFR METAR KPWM 051251Z 01008KT 10SM OVC011 11/08 A3003 RMK AO2 RAB28E48 SLP170
P0000 T01060078=

MVFR METAR KPWM 051351Z 36008KT 10SM -RA OVC012 12/08 A3001 RMK AO2
RAB1254E05B48 SLP163 P0001 T01170083=

MVFR METAR KPWM 051451Z 35006KT 10SM -RA OVC014 12/09 A3002 RMK AO2 RAE21B49

SLP165 P0000 60001 T01220094 55005=

MVFR METAR KPWM 051551Z 36006KT 6SM -RA BR OVC012 12/11 A3000 RMK AO2 SLP159
P0002 T01220106=

IFR SPECI KPWM 051628Z 03005KT 2SM -RA BR OVC011 12/11 A3000 RMK AO2 P0001
T01220111=

IFR METAR KPWM 051651Z 36006KT 2 1/2SM -RA BR OVC011 12/12 A2999 RMK AO2 SLP154
P0002 T01220117=

MVFR SPECI KPWM 051722Z 35007KT 9SM OVC013 13/12 A2998 RMK AO2 RAE1655 P0000
T01280117=

MVFR METAR KPWM 051751Z 36008KT 10SM OVC014 13/12 A2997 RMK AO2 RAE1655 SLP147
P0000 60005 T01330117 10133 20106 58018=

ACCIDENT 1756Z

MVFR METAR KPWM 051851Z 36008KT 10SM OVC015 14/12 A2996 RMK AO2 SLP144
T01390117=

MVFR METAR KPWM 051951Z 33006KT 3SM -RA BR OVC015 14/13 A2996 RMK AO2 RAB32
SLP145 P0000 T01390128=

IFR SPECI KPWM 051957Z 34007KT 1 1/4SM -RA BR OVC014 14/13 A2996 RMK AO2 P0000
T01390133=

2.4 NWS Depiction of Observations

A depiction of the observations from the NWS Aviation Weather Center's METAR display with the radar overlay is included as figure 3 with the approximate accident location marked by the red star. The chart depicted an area of IFR to LIFR conditions in the vicinity of the accident site and south into Massachusetts, with MVFR conditions over the interior and northern sections of Maine.

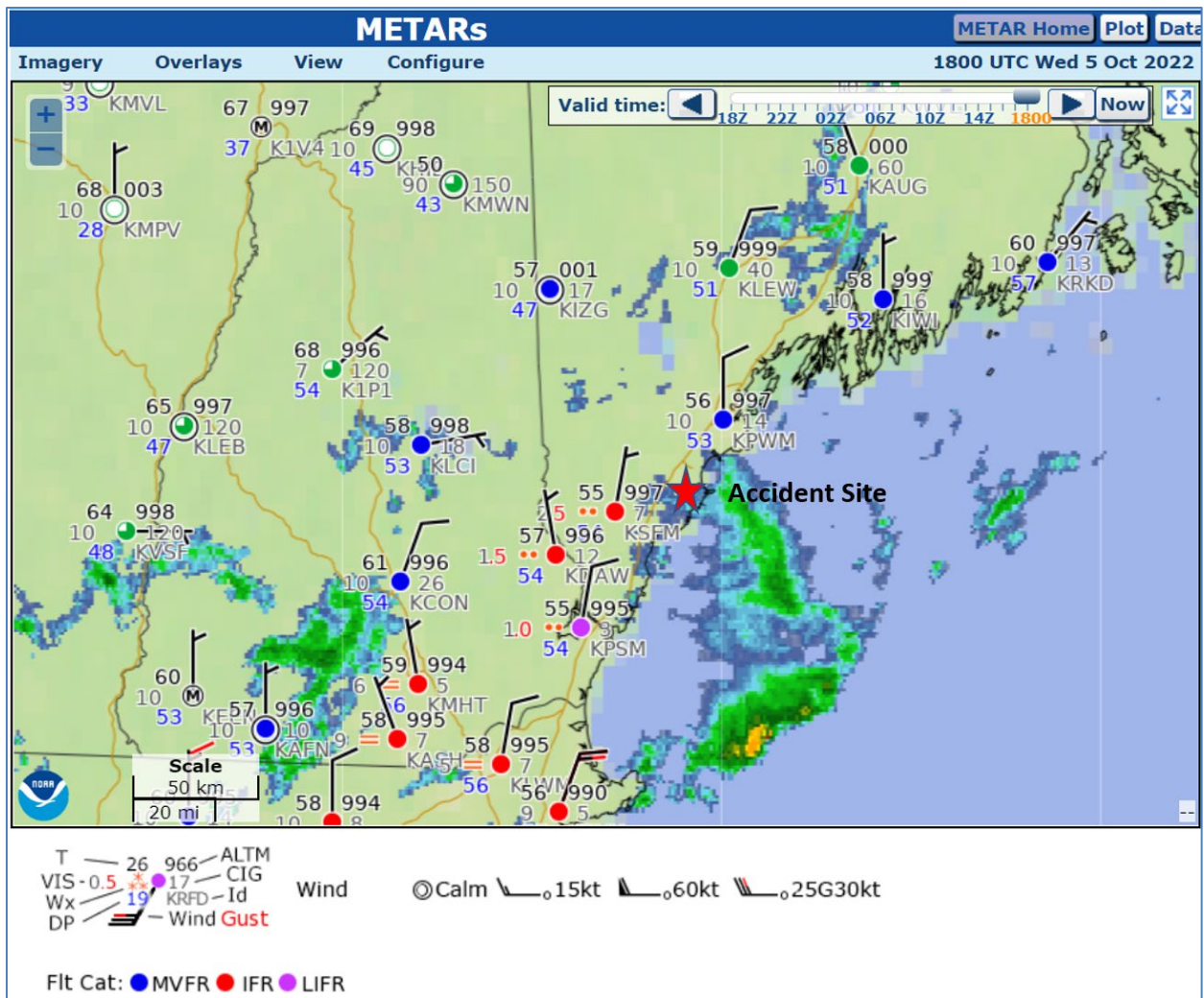


Figure 3 - NWS Aviation Weather Center's METAR display for 1355 EDT with the approximate accident site marked by the red star and regional radar overlaid.

3.0 Sounding

A High-Resolution Rapid Refresh (HRRR) numerical model data was obtained from the NOAA Air Resource Laboratory archive using the closest grid point to the accident site coordinates. The HRRR model data was then plotted on a standard skew T log P diagram using the RAOB Analysis software for 1400 EDT and is included as figure 4.

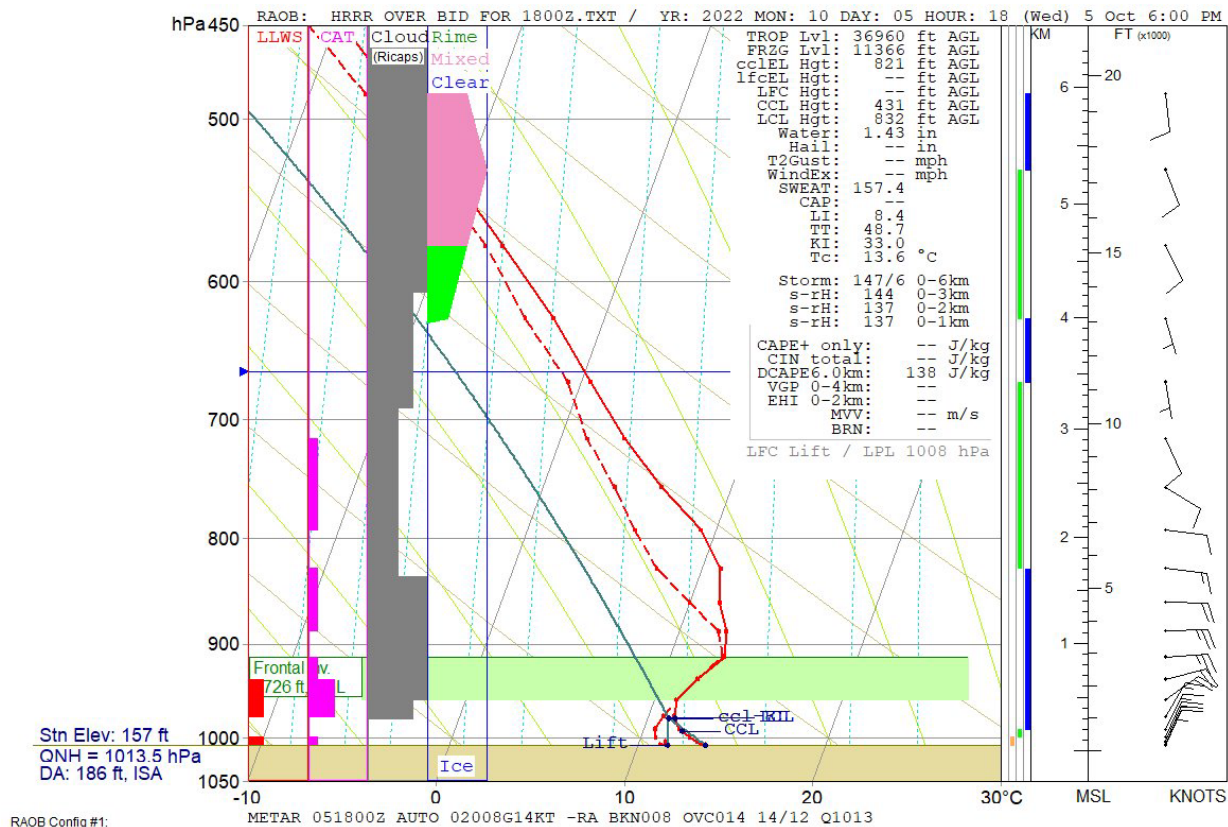


Figure 4 - HRRR model sounding for 1400 EDT over the approximate accident site.

The sounding indicated an elevation of 157 ft over the grid point with a near surface temperature of 13.6° C (56.5° F), a dew point temperature of 11.6° C (52.9° F), with a relative humidity of 88%, with an approximate density altitude of 186 ft. The convective condensation level (CCL) was identified at 431 ft agl and the lifted condensation level (LCL) at 832 ft agl. A frontal inversion was noted immediately above the surface through 3,000 ft, where temperature increased with altitude. The freezing level was identified at about 11,500 ft with potential structural icing above that level but above the accident airplane's cruising level enroute. The atmosphere was characterized as conditionally unstable with a Lifted Index of 8.4. The RAOB Analysis program support a broken to overcast layer of clouds from 800 ft through 5,000 ft, with another layer of broken to overcast clouds between 10,000 through 22,000 ft. The HRRR wind profile indicated a surface wind from 020° at 8 knots with winds backing to the east immediately above the surface, and then veering to the south above 9,000 ft. A low-level wind maximum was identified at 2,800 ft with a wind from 090 at 24 knots. The mean 0 to 6 km (or 18,000 ft) wind was from 120° at 8 knots. At approximately 500 ft the wind was from approximately 020° at 15 knots with a temperature of 12° C.

A table of the HRRR parameters of height, pressure, temperature (T), dew point temperature (Td), relative humidity (RH), wind, and potential Clear Air Turbulence (CAT) intensity, Low-Level Wind Shear (LLWS) based on the vertical wind shear below 10,000 ft is included below.

Height (ft-msl)	Pres (hPa)	T (C)	Td (C)	RH (%)	Wind (deg/kts)	CAT (FAA)	LLWS (FAA)
157	1008	13.6	11.6	88	022/ 8		
184	1007	13.4	11.2	87	022/ 7	LGT	LIGHT
267	1004	13.1	11.4	89	022/ 10	LGT	LIGHT
405	999	12.6	10.8	89	022/ 13		
654	990	11.9	10.6	92	023/ 15		
1046	976	11.4	10.8	96	028/ 17	MDT	LIGHT
1557	958	11.2	11.2	100	052/ 19	MDT	LIGHT
2196	936	11.9	11.9	100	075/ 22	LGT	
2883	913	12.9	12.8	99	086/ 24		
3681	887	12.5	12.1	97	088/ 23	LGT	
4565	859	11.6	10.0	90	091/ 19	LGT	
5608	827	11.0	7.6	80	098/ 15		
6790	792	9.2	5.7	79	098/ 12	LGT	
8087	755	6.3	3.8	84	125/ 9	LGT	
9547	715	3.4	1.4	87	158/ 8		

The HRRR and the RAOB Analysis program indicated a high probability of moderate turbulence between 600 and 2,100 ft in the stable layer associated with the low-level wind maximum.

4.0 Satellite Imagery

NOAA Geostationary Operational Environmental Satellite number 16 (GOES-16) infrared and visible imagery were obtained from an archive at the Space Science Engineering Center (SSEC) at the University of Wisconsin-Madison in Madison, Wisconsin, and processed using the Man-computer Interactive Data Access System (McIDAS) software. The infrared band 13 at a wavelength of 10.3 microns (μm) provided a resolution of 2 kilometers (km) with radiative cloud top temperatures, and the visible band 2 imagery at a wavelength of 0.64 μm provided a resolution of 0.5 km. The images have not been corrected for parallax error.

The GOES-16 infrared and visible imagery for 1356 EDT are included below as figures 5 and 6. The imagery depicted an area of clouds with tops near 34,500 ft.

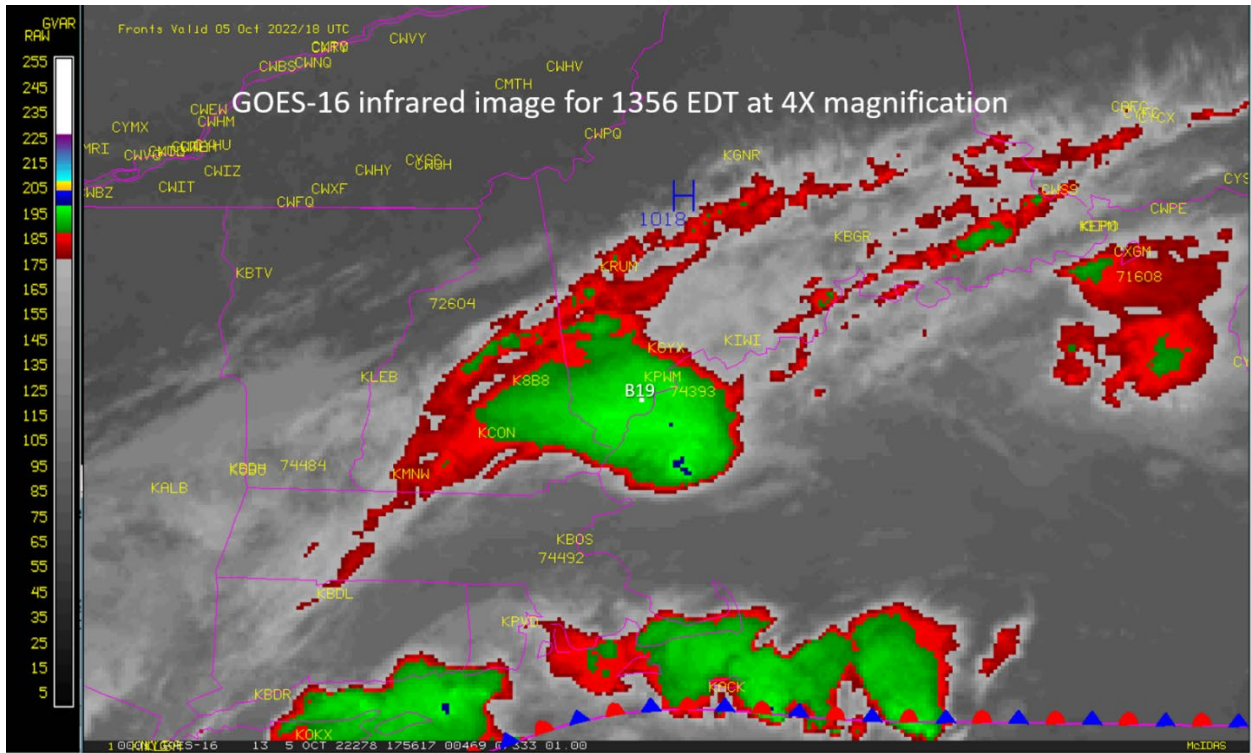


Figure 5 - GOES-16 infrared image for 1356 EDT at 4X magnification.

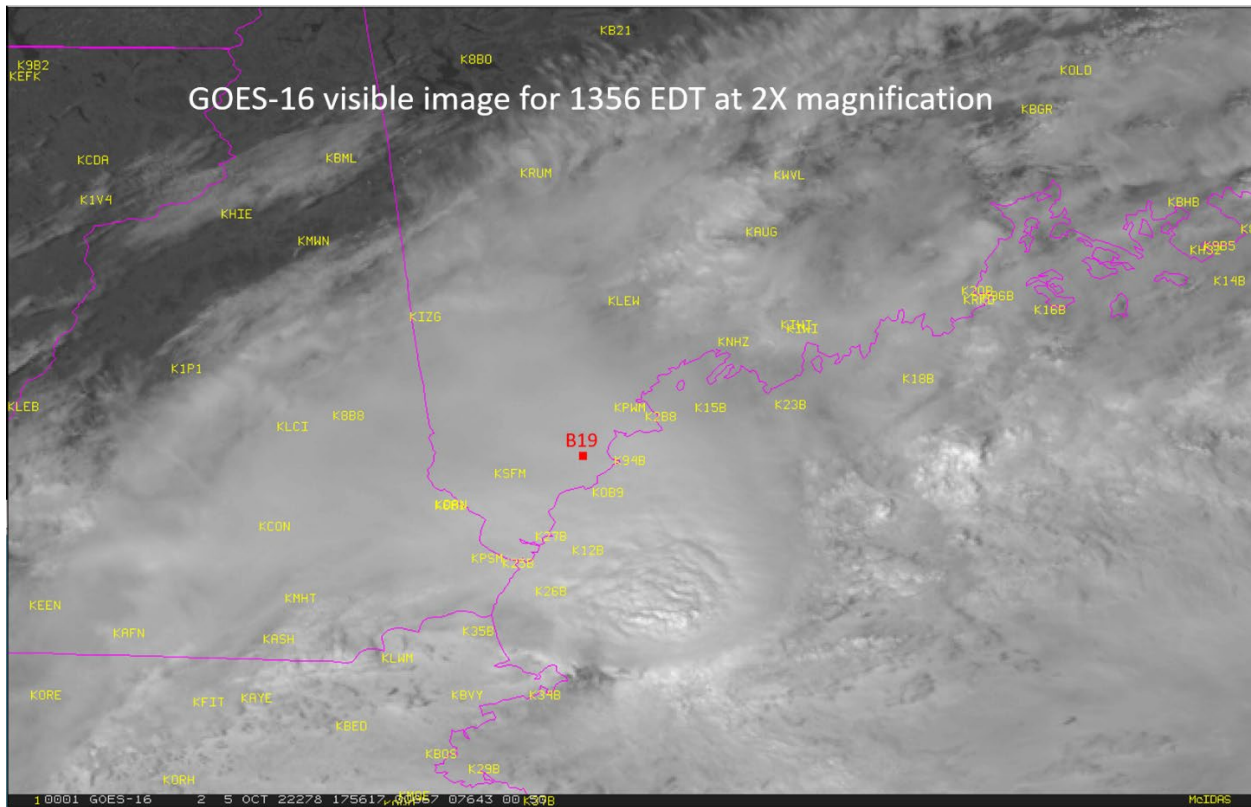


Figure 6 - GOES-16 visible image for 1356 EDT at 2X magnification.

5.0 Weather Radar imagery

The NWS Portland, ME (KGYX) Weather Surveillance Radar 1988 Doppler (WSR-88D) imagery was obtained surrounding the period. The radar was located about 30 miles north of the accident site, with the center of the 0.48° beam centered near 2,610 ft over the accident site and sampling the atmosphere between 1,100 ft and 4,120 ft. The KGYX WSR-88D 0.48° base reflectivity image for 1356 EDT with the flight track of N902AT overlaid is included as figure 7. The image depicted very light intensity echoes of 20 dBZ or less along the flight track, which were consistent with drizzle and light rain.

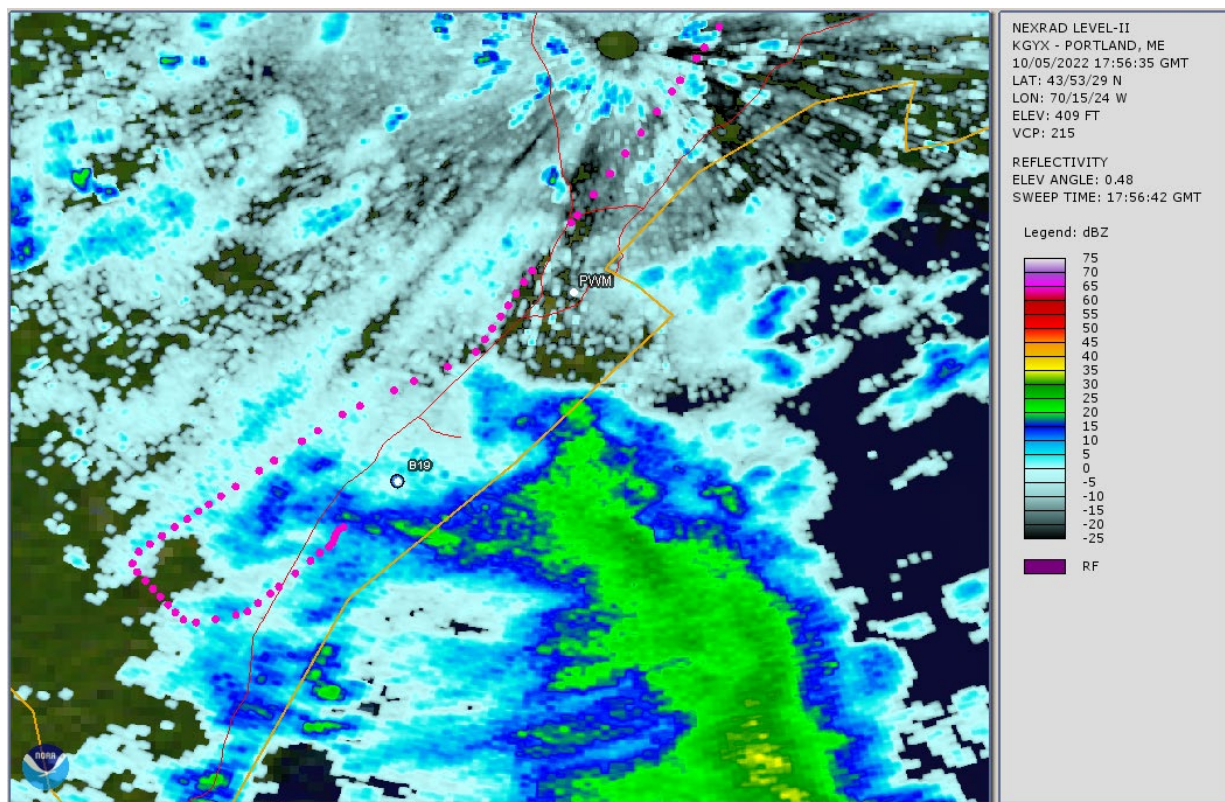


Figure 7 - KGYX WSR-88D 0.48° base reflectivity image for 1356 EDT with flight track.

6.0 Pilot Reports

The following pilot reports or PIREPs were recorded between 1100 and 1600 EDT within 60 miles of the accident site below 12,000 ft.

PWM UA /OV PWM110002/TM 1607/FLDURC/TP CRJ9/SK BASE 012

PWM UA /OV PWM030012/TM 1630/FL5100/TP P46T/SK OVC012/WX 6SM -RA/RM DURC BROKE OUT OF CLOUDS 051FT

PWM UA /OV PWM180020/TM 1655/FL050/TP C402/WX MOD PRECIP/TB LIGHT

PWM UA /OV PWM/TM 1742/FL015/TP CRJ7/SK BASE OVC015

BOS UA /OV ENE180010/TM 1803/FL060/TP C402/TB LIGHT TO MOD TURB

PWM UA /OV PWM/TM 1900/FL012/TP CRJ9/SK BASE OVC012

7.0 NWS Forecasts

7.1 Terminal Aerodrome Forecast

The closest Terminal Aerodrome Forecast (TAF) to the accident site was issued for KPWM. While a TAF is only valid for a 5 mile radius of the specific airport, pilots will often refer to the closest TAF to get a better breakdown of expected wind, visibility, and cloud cover over the area. The TAF's issued surrounding the period from any preflight planning to the time of the accident were as follows.

TAF KPWM 051120Z 0512/0612 03006KT 6SM -RA BKN015

FM052200 VRB03KT 6SM BR BKN025=

AMD TAF KPWM 051739Z 0518/0618 03006KT 2SM -RA BR OVC012

FM052000 36005KT 6SM -RA BR OVC015

FM061300 32003KT P6SM BKN250=

The TAF available prior to the accident aircraft's departure from KPQI was issued at 0720 EDT and expected MVFR conditions to prevail during the period with winds from 030 at 6 knots, visibility 6 miles or more in light rain, with a broken ceiling at 1,500 ft agl. The next scheduled TAF was issued at 1339 EDT or 17 minutes prior to the accident and forecasted IFR conditions with visibility 2 miles in light rain and mist, with a ceiling overcast at 1,200 ft agl.

7.2 Area Forecast Discussion

The NWS Area Forecast Discussions (AFD) are issued by each WFO to describe the short-term weather conditions within their region with an aviation section that includes the general conditions as it relates to the creation of the TAF. These are useful for additional aviation-related issues that cannot be encoded into the TAF and provide some reasoning behind the forecast. These are generated roughly every 6 hours and corresponds to the release of the latest TAFs for that office. The NWS Gray/Portland Weather Forecast Office (WFO) issued the following Area Forecast Discussion (AFD) at 1349 EDT.

FXUS61 KGYX 051749

AFDGYX

Area Forecast Discussion
National Weather Service Gray ME
149 PM EDT Wed Oct 5 2022

.SYNOPSIS...

High pressure will keep most of the area dry through Thursday night, but a slow-moving area of low pressure passing to our south brings some showers across southern New Hampshire through today and eventually the Maine coast later today and this evening before exiting east into the Atlantic. A strong cold front brings rain showers to the region Friday and Friday night with much cooler temperatures over the weekend behind the front.

.NEAR TERM /UNTIL 6 PM THIS EVENING/...

130PM Update... The thunderstorm over the waters has remained pretty stationary and still hasn't moved onshore. I broadened the shower coverage a bit more from the last update as well as increased the PoPs over the midcoast overnight with more mesoscale models showing precipitation lingering over that area overnight. The sky cover cutoff has remained at the mountains to little changes to the sky cover were needed although dewpoints are increasing to the north. Minor updates to temperatures and dewpoints to reflect current observations.

.AVIATION /18Z WEDNESDAY THROUGH MONDAY/...

Short Term...An area of low pressure passing south of the region today will bring the potential for showers, mainly spanning from MHT-PSM-PWM. In addition to this, MVFR ceilings are likely across these sites through this time period, possibly reaching CON and RKD. Drier air to the north should keep the rest of the terminals VFR. VFR conditions are then expected on Thursday.

Long Term...VFR conditions will dominate most terminals Thursday night through Friday morning, although some valley fog and scattered SHRA may develop late at night, especially across northern TAF sites. A cold front will then cross through from north to south on Friday afternoon and evening, with some restrictions possible due to scattered SHRA. Winds will become northwesterly behind this front on Friday night through Saturday, with some gusts up to 20-25kts possible. While VFR conditions will prevail for most sites, some restrictions may linger through Saturday at northern TAF sites such as KHIE. VFR conditions are then expected for Sunday at all sites.

.GYX WATCHES/WARNINGS/ADVISORIES...

ME...High Surf Advisory until 8 PM EDT this evening for MEZ023-024.

NH...High Surf Advisory until 8 PM EDT this evening for NHZ014.

MARINE...Small Craft Advisory until noon EDT Thursday for ANZ150-152-154.

7.3 Graphic Forecast for Aviation

The NWS Graphic Forecast for Aviation (GFA) is a graphical depiction of surface wind, thunderstorms, precipitation, color-coded general flight categories, and cloud cover bases and tops reported in msl heights, from graphical output from the NWS National Digital Forecast Database (NDFD) with the Graphic-Airmen's Meteorological Information (G-AIRMET) for IFR conditions, mountain obscuration, icing conditions, and strong surface wind overlaid. The GFA provides a forecast for the enroute phase of flight and for locations without a TAF. The GFA is available at the NWS AWC website and through other weather briefing services. The 3-hour GFA surface and cloud

forecasts with the Graphic-AIRMETs valid for 1400 EDT are included below in figures 8 and 9.

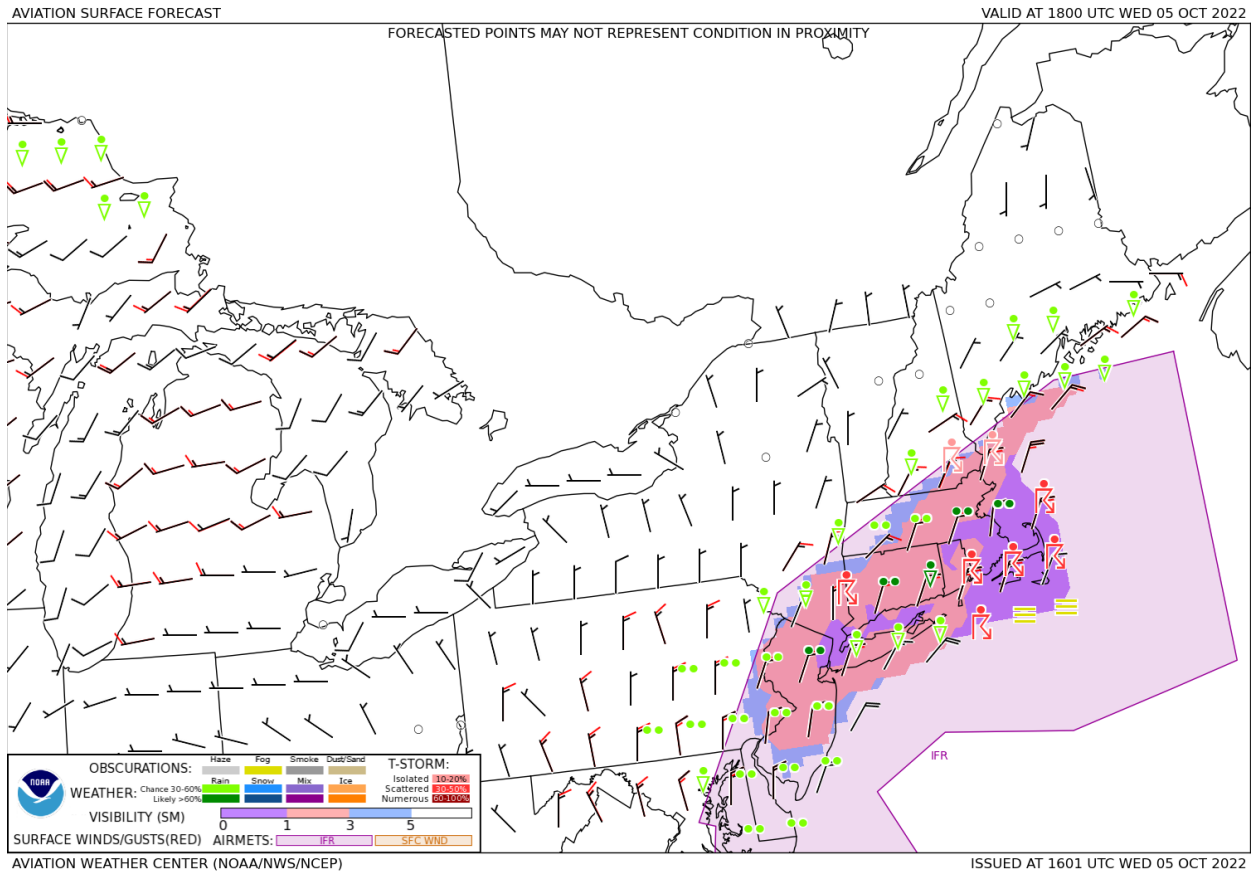


Figure 8 - GFA 3-hour Surface Forecast valid for 1400 EDT.

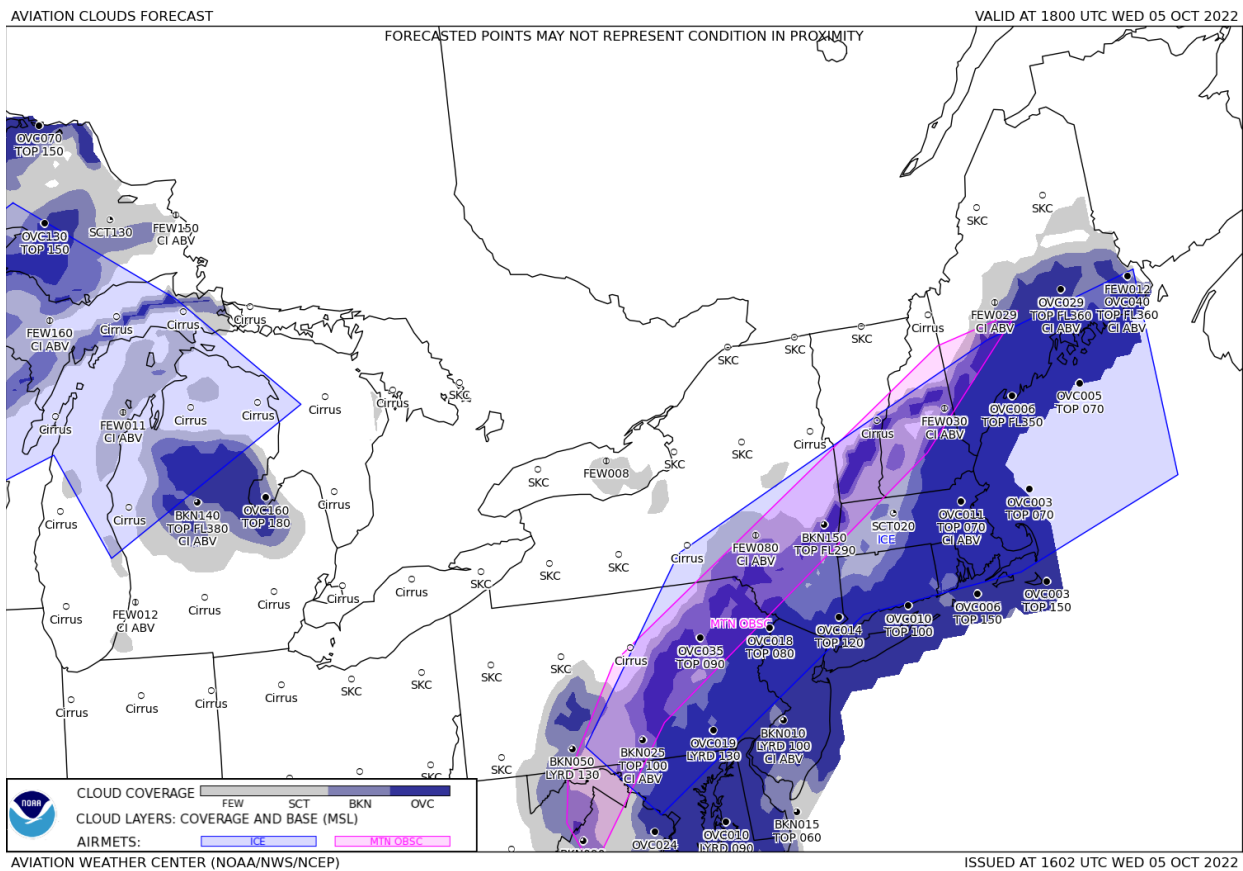


Figure 9 - GFA 3-hour Cloud Forecast valid for 1400 EDT.

7.4 Inflight Weather Advisories

In-flight Aviation Weather Advisories are forecasts that advise en route aircraft of the development of potentially hazardous weather. Inflight aviation weather advisories in the conterminous U.S. are issued by the NWS AWC, as well as from the Center Weather Service Units (CWSU) at the various Air Route Traffic Control Centers (ARTCCs). There are four basic types of inflight aviation weather advisories: the Significant Meteorological Information (SIGMET), the Convective SIGMET, the G-AIRMET, and the Center Weather Advisory (CWA). Inflight advisories serve to notify en-route pilots of the possibility of encountering hazardous flying conditions that may not have been forecast at the time of the preflight briefing. Whether or not the condition described is potentially hazardous to a particular flight is for the pilot to evaluate based on experience and the operational limits of the aircraft. Once issued they are broadcast by FAA air traffic controllers upon issuance and available on inflight weather broadcasts.

The NWS AWC had Graphic-AIRMETs for IFR conditions and moderate turbulence below 18,000 ft over the accident site valid for the period is included as

figure 10. A higher advisory was also current for moderate icing conditions above 11,000 ft, which is not shown.

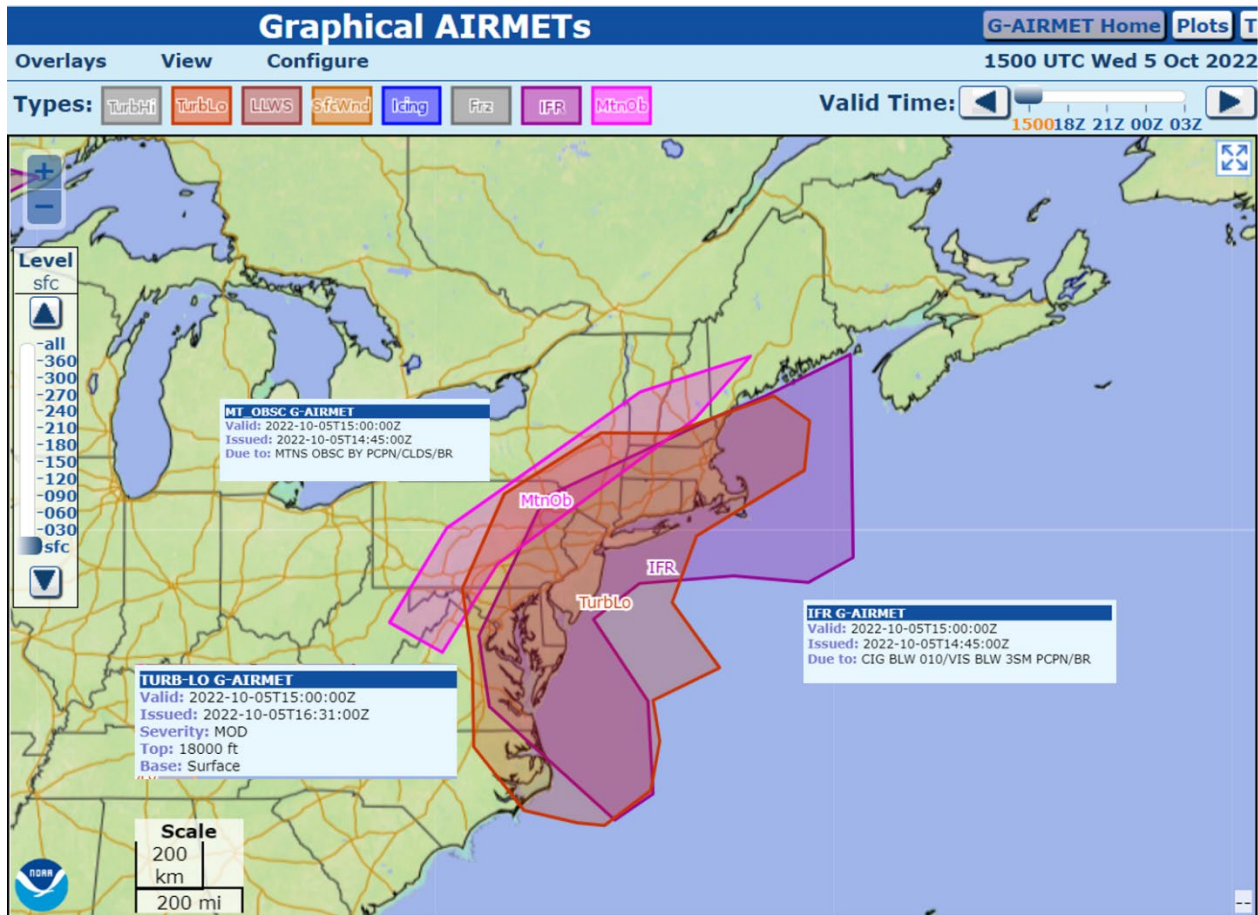


Figure 10 - G-AIRMETS current during the period.

8.0 Weather Briefing Information

The pilot filed an IFR flight plan with ForeFlight. The data created is reproduced here.

Date Created Wed, 05 Oct 2022 16:03:26 GMT
 Status SUCCESSFUL
 ARTCC State Sent: SPL
 Request Type FILE
 Ident N902AT
 Tail N902AT
 Type IFR
 Type/Equip BE36/BDLOY
 Speed 176
 From KPQI
 To B19
 Alternate

Route
Departure Time (old) 16:15
Departure Time Wed, 05 Oct 2022 16:15:00 GMT
ETE 1:17
Cruise 6,000
Fuel 4:33
Remarks
Pilot Eldon Morrison
Address 181 Spruce Pt Rd Yarmouth Me 04096
Email eldon@cpmconstructors.com
Phone
Base B19
Souls 2
Color W/M/B
Destination Contact
Destination Phone
Generated FPL Message
(FPL-N902AT-IG
-BE36/L-BDLOY/CB2
-KPQI1615
-N0176A060 DCT
-ZZZZ0117
-DEST/B19 DOF/221005
-E/0433 P/2 R/VE J/F
A/WHITE WITH MARKINGS MAROON BLUE
C/ELDON MORRISON (redacted)
Expected Route

A standard weather briefing was generated for the flight and is included as attachment 1. No other weather graphical information were viewed in the app. The pilot also reviewed the following airport data in the app, which provides METAR.TAF, MOS and other weather products, as well as airport information such as frequencies, runways, etc. The pilot also reviewed the B19 RNAV runway 6 approach, and the KPQI and KPWM airport diagram, and KPQI RNAV runway 01 approach plate.

NOTAMS included:

Destination NOTAMs
NAVIGATION
None

COMMUNICATION
None

SERVICE
None

OBSTRUCTION WITHIN 10 NM
Greaton Airfield (98M)
BGR 08/152 98M OBST TOWER LGT (ASR 1020829) 433239.00N0702414.00W
(5.3NM ESE 98M) 581.7FT (507.9FT AGL) U/S 2208290418-2210130417

AIRSPACE WITHIN 10 NM

None

SPECIAL USE AIRSPACE WITHIN 10 NM

None

RUNWAY

None

TAXIWAY

None

APRON

None

AERODROME

Biddeford Municipal (B19)

BGR 01/560 B19 AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23- 12, 2021-23-13 2201190501-2401190501

FDC

None

OTHER/UNVERIFIED

None

Enroute Navigation NOTAMs

KBGR

BGR 09/133 BGR NAV ILS RWY 15 LOC/GP U/S 2210031300-2210072100

KBGR

BGR 08/160 BGR NAV ILS RWY 15 CAT II NA 2208291428-2210312000EST 2B7

BGR 10/090 2B7 NAV BUP NDB U/S 2110250255-2301302000EST

KLEW

LEW 10/002 LEW NAV LEWIE MKR BCN U/S 2210041727-2304042111

KDAW

BGR 07/181 ESG NAV NDB U/S 2207302103-2501062000EST

3B4

BGR 07/181 ESG NAV NDB U/S 2207302103-2501062000EST

KPSM

BGR 07/181 ESG NAV NDB U/S 2207302103-2501062000EST

KZBW

ISP 10/069 IGN NAV VOR U/S 2210051524-2210072000

KZBW

BUF 10/022 HNK NAV VOR NOT MNT 2210040810-2210072000EST

KZBW

BUF 10/020 UCA NAV TACAN NOT MNT 2210040326-2210072000EST

KZBW

BID 10/002 SEY NAV VOR U/S 2210032149-2210052000EST

KZBW
HFD 09/015 HFD NAV VOR U/S 2209301416-2210142000EST
KZBW
ISP 09/220 CMK NAV VOR U/S 2209292125-2210072000
KZBW
BTV 09/227 CAM NAV VOR/DME U/S 2209291132-2210242000EST
KZBW
BAF 09/016 BAF NAV TACAN AZM U/S 2209261421-2210312000EST
KZBW
ALB 09/009 ALB NAV TACAN AZM U/S 2209051442-2212262000EST

Enroute Rwy/Twy/Apron/AD/FDC NOTAMs

KHUL
HUL 09/001 HUL RWY 23 RWY END ID LGT U/S 2209021403-2303052111EST
KMLT
FDC 2/3379 MLT IAP MILLINOCKET MUNI, MILLINOCKET, ME.
RNAV (GPS) RWY 29, AMDT 1C...
LPV DA 734/HAT 326 ALL CATS.
2208031851-2408031850EST
KLRG
FDC 2/5548 LRG ODP LINCOLN RGNL, LINCOLN, ME.
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 3...
TAKEOFF MINIMUMS: RWY 17: 700-2 1/4 WITH A MINIMUM CLIMB OF 389 FEET
PER NM TO 1100 OR 1100-2 1/2 FOR CLIMB IN VISUAL CONDITIONS. ALL
OTHER DATA REMAINS AS PUBLISHED.
2208231828-2408231828EST
KLRG
BGR 01/776 LRG RWY 17/35 CHANGED TO RWY 16/34 2201271841-PERM
KOLD
BGR 10/005 OLD RWY 30 WIP CONST ADJ 2210031452-2212151200
KOLD
FDC 2/6531 OLD ODP DEWITT FLD/OLD TOWN MUNI, OLD TOWN, ME.
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 1...
TAKE-OFF MINIMUMS: RWY 04, 12 17W, 35W: NA - ENVIRONMENTAL.
ALL OTHER DATA REMAINS AS PUBLISHED. 2205191258-2405191258EST
KBGR
BGR 08/161 BGR RWY 15 ALS U/S 2208291428-2210312000EST
KBGR
BGR 08/087 BGR TWY L CLSD 2208161313-2301010500
KOWK
BGR 10/002 OWK RWY 03/21 CLSD 2210031200-2210071800
KOWK
BGR 08/106 OWK RWY 15 RWY END ID LGT U/S 2208191333-2302202111EST
KOWK
FDC 1/6503 OWK IAP CENTRAL MAINE /NORRIDGEWOCK, NORRIDGEWOCK, ME.
RNAV (GPS) RWY 15, AMDT 1...
NOTE: PROCEDURE NA AT NIGHT.
DISREGARD NOTE: CIRCLING RWY 3, 21, 33 NA AT NIGHT.
CHANGE HELICOPTER NOTE TO READ RWY 15 HELICOPTER VISIBILITY
REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHANGE NOTE TO READ: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE
AUGUSTA STATE ALTIMETER SETTING: INCREASE LPV DA TO 607 FEET,
LNAV/VNAV DA TO 659 FEET AND LNAV/VNAV VISIBILITY ALL CATS 1/8 SM.

INCREASE ALL MDA 80 FEET AND LNAV CAT C VISIBILITY 1/4 SM AND AND
CIRCLING CAT C VISIBILITY 1/2 SM.
2106031520-2306031520EST

KWVL

WVL 09/008 WVL AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO
TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS
REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND
CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT
USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND
INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13 2210010401-2410010401

KWVL

FDC 2/6529 WVL IAP WATERVILLE ROBERT LAFLEUR, WATERVILLE, ME.
ILS OR LOC/DME RWY 5, AMDT 4D...
DISREGARD PLANVIEW NOTE: PROCEDURE NA EXCEPT FOR ACFT EQUIPPED WITH
SUITABLE RNAV SYSTEM WITH GPS.
PLANVIEW NOTE: TERMINAL ROUTE FROM ROLAF INT/I-RLU 17.7 DME TO PEYSI
INT/I-RLU 12.89 DME NA.

2209131451-2409131447EST

KAUG

AUG 09/032 AUG AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO
TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS
REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND
CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT
USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND
INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13 2210010401-2410010401

KAUG

FDC 2/2191 AUG IAP AUGUSTA STATE, AUGUSTA, ME.
RNAV (GPS) RWY 17, ORIG-C...
DISREGARD PLANVIEW PROCEDURE NA NOTES AT YOSTT AND NOLLI.

2209062016-2409062016EST

KAUG

FDC 1/6226 AUG IAP AUGUSTA STATE, AUGUSTA, ME.
RNAV (GPS) RWY 8, AMDT 2...
LP MDA NA ALL CATS; LNAV MDA NA ALL CATS.

2111101651-2311101651EST

KAUG

AUG 11/011 AUG RWY 08/26 CHANGED TO 2613FT X 75FT.
DECLARED DIST: RWY 08 TORA 2613FT TODA 2613FT ADSA
2613FT LDA 2613FT. RWY 26 TORA 2613FT TODA 2613FT ADSA
2613FT LDA 2613FT. 1611081830-PERM

3B5

BGR 09/116 3B5 AD AP RDO ALTIMETER UNREL EXC FOR ACFT USING
APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND
INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13 2210010401-2410010401

KIWI

IWI 09/004 IWI AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO
TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS
REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND
CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT
USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND

INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13 2210010401-2410010401

KIWI

IWI 01/004 IWI RWY 07 PAPI U/S 2201252317-2301092000EST

ME95

FDC 2/2635 ME95 SPECIAL CMMC AIR AMBULANCE LANDING SITE, LEWISTON,
ME.

COPTER RNAV (GPS) 163, AMDT 1...

RDO ALTIMETER UNREL EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS
OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS
DIRECTIVE 2021-23-13.

2210010401-2410010402EST

4ME9

FDC 2/2633 4ME9 SPECIAL STEPHENS MEML HOSPITAL, NORWAY, ME.

COPTER RNAV (GPS) 204, ORIG...

RDO ALTIMETER UNREL EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS
OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS
DIRECTIVE 2021-23-13.

2210010401-2410010402EST

4ME9

FDC 1/1129 4ME9 SPECIAL NORWAY, NORWAY, ME.

COPTER RNAV (GPS) 204, ORIG...

NOTE: IFR DEPARTURE NA.

2103041729-2303031729EST

4ME9

FDC 1/0846 4ME9 SPECIAL NORWAY, NORWAY, ME.

COPTER RNAV (GPS) 204, ORIG...

CHANGE PLANVIEW NOTE TO READ: NORWAY HELIPORT ELEV 381, 230 /
1.25NM.

2101051513-2301051512EST

81B

BGR 09/117 81B AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO
TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS
REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND
CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT
USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND
INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13 2210010401-2410010401

KLEW

LEW 09/011 LEW AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO
TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS
REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND
CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT
USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND
INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13 2210010401-2410010401

KLEW

LEW 09/004 LEW APRON EAST RAMP CLSD 2209071237-2210151900

KLEW

LEW 09/005 LEW TWY J CLSD 2209071237-2210151900

KBXM

BGR 09/118 BXM AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO
TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS

REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12, 2021-23-13 2210010401-2410010401

KBXM

FDC 2/4465 BXM IAP BRUNSWICK EXEC, BRUNSWICK, ME.

RNAV (GPS) RWY 19L, AMDT 1B...

CIRCLING CAT C/D MDA 840/HAA 765, VIS CAT C 2 1/4, CAT D 2 1/2.

CHANGE NOTE TO READ: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PORTLAND ALTIMETER SETTING: INCREASE LPV DA TO 382 FEET AND ALL VISIBILITIES 1/4 SM; INCREASE LNAV/VNAV DA TO 410 FEET AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDA 60 FEET AND LNAV AND CIRCLING CATS C/D 1/4 SM. CHANGE NOTE TO READ: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 43C. DELETE NOTE: DME/DME RNP -0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH-GPS.

THIS IS RNAV (GPS) RWY 19L, AMDT 1C. 2208221635-PERM

KBXM

BGR 02/499 BXM RWY 01L/19R CLSD 2202172016-PERM

KBXM

FDC 2/0793 BXM IAP BRUNSWICK EXEC, BRUNSWICK, ME.

ILS OR LOC RWY 1R, AMDT 1...

TERMINAL ROUTE FROM AUG VOR/DME TO BAILI NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.

AUG VOR/DME R-206 RESTRICTED BEYOND 25NM AND BELOW 2900FT.

2202021916-2402021916EST

ME98

FDC 1/2357 ME98 SPECIAL LONG ISLAND, LONG ISLAND, ME.

COPTER RNAV (GPS) 306, ORIG...

IFR DEPARTURE NA.

2101081554-2301081554EST

KPWM

PWM 10/005 PWM RWY 18 PAPI U/S 2210051735-2210051900

KPWM

PWM 10/008 PWM RWY 11 FICON 5/5/5 100 PCT WET OBS AT 2210051234.

2210051234-2210061234

KPWM

PWM 10/009 PWM RWY 18 FICON 5/5/5 100 PCT WET OBS AT 2210051234.

2210051234-2210061234

KPWM

PWM 10/007 PWM APRON TERMINAL APN WIP SFC PAINTING

2210051208-2210051900

KPWM

PWM 10/004 PWM RWY 29 PAPI U/S 2210051200-2210051600

KPWM

PWM 09/052 PWM AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS

REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12, 2021-23-13 2210010401-2410010401

KPWM

REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12, 2021-23-13 2210010401-2410010401

KPWM

REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12, 2021-23-13 2210010401-2410010401

KPWM

KPWM

FDC 2/2565 PWM IAP PORTLAND INTL JETPORT, PORTLAND, ME.
ILS RWY 11 (SA CAT I), AMDT 4B ...
ILS RWY 29 (SA CAT I - II), AMDT 4A ...
ILS RWY 11 (CAT II - III), AMDT 4B ...
PROCEDURE NA EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF
COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS
DIRECTIVES 2021-23-12, 2021-23-13 2210010401-2410010402EST
KPWM

FDC 2/9847 PWM IAP PORTLAND INTL JETPORT, PORTLAND, ME.
RNAV (GPS) RWY 29, AMDT 3B...
LNAV MDA 680/HAT 624 ALL CATS. VISIBILITY CATS C/D 1 3/8.
VDP AT 1.84NM TO RW29.
CIRCLING CATS A/B/C MDA 760/HAA 684. VISIBILITY CAT C 2.
CHANGE NOTE TO READ: FOR INOP MALSR, INCREASE LNAV/VNAV ALL CATS
VISIBILITY TO 1 3/4 MILE, INCREASE LNAV CATS C/D VISIBILITY TO 1 3/4
MILE.

TEMPORARY CRANE 393FT MSL 1.12NM NORTHEAST OF RWY 29
(2021-ANE-2-OE).

2209192024-2211202024EST

KPWM

FDC 2/9850 PWM IAP PORTLAND INTL JETPORT, PORTLAND, ME.
ILS OR LOC RWY 11, AMDT 4B...
CIRCLING CATS A/B/C MDA 760/HAA 684. VISIBILITY CAT C 2.
FINUS FIX MINIMUMS: CIRCLING CATS A/B/C MDA 760/HAA 684. VISIBILITY
CAT C 2.

TEMPORARY CRANE 393FT MSL 1.45NM NORTHEAST OF PWM AIRPORT
(2021-ANE-2-OE).

2209192024-2211202024EST

KPWM

FDC 2/9852 PWM IAP PORTLAND INTL JETPORT, PORTLAND, ME.
RNAV (GPS) RWY 36, AMDT 2A...
LNAV MDA 580/ HAT 531 ALL CATS, VISIBILITY CAT C/D 1-1/2.
CIRCLING CATS A/B/C MDA 760/HAA 684. VISIBILITY CAT C 2.
TEMPORARY CRANE 267FT MSL 5319FT SOUTH OF RWY 36 (2021-ANE-6386-OE).
TEMPORARY CRANE 393FT MSL 1.45NM NORTHEAST OF PWM AIRPORT
(2021-ANE-2-OE).

2209192024-2211202024EST

KPWM

FDC 2/9855 PWM IAP PORTLAND INTL JETPORT, PORTLAND, ME.
ILS OR LOC RWY 29, AMDT 4A...
RNAV (GPS) RWY 11, AMDT 4B...
RNAV (GPS) RWY 18, AMDT 2A...
CIRCLING CATS A/B/C MDA 760/HAA 684. VISIBILITY CAT C 2.
TEMPORARY CRANE 393FT MSL 1.45NM NORTHEAST OF PWM AIRPORT
(2021-ANE-2-OE).

2209192024-2211202024EST

KPWM

PWM 06/088 PWM TWY A RUNUP PAD FOR RWY 11 CLSD 2106211904-PERM
KSFM
SFM 10/002 SFM TWY C BTN APCH END RWY 14 AND TWY F WIP HWY EQPT ADJ
EAST SIDE DLY SR-2100 2210031044-2210072100
KSFM

SFM 01/013 SFM AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO

TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS
REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND
CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT
USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND
INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13 2201190501-2401190501

KDAW

DAW 01/018 DAW AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO
TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS
REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND
CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT
USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND
INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13

2201190501-2401190501

3B4

BGR 01/375 3B4 AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO
TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS
REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND
CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT
USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND
INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,
2021-23-13 2201190501-2401190501

KPSM

PSM 10/028 PSM AD AP ALL SFC WIP WELL WORK 2210051126-2210052100

KPSM

PSM 10/026 PSM RWY 34 FICON 5/5/5 100 PCT WET OBS AT 2210051030.
2210051030-2210061030

KPSM

PSM 10/025 PSM AD AP ALL SFC WIP GRASS CUTTING DLY 0730-2000
2210050730-2210072000

KPSM

PSM 10/011 PSM RWY 16/34 CLSD DLY 0200-1000 2210040200-2210071000

KPSM

PSM 10/008 PSM RWY 34 RWY ID SFC MARKING FADED
2210010116-2211012359

KPSM

PSM 10/005 PSM AD AP ARFF
VEHICLE U/S INDEX UNCHANGED 2210010109-2211012359

KPSM

PSM 10/006 PSM APRON NORTH APN CLSD TO FIXED WING AND ROTARY WING
2210010109-2211012359

KPSM

PSM 10/003 PSM APRON TXL K E 200FT CLSD 2210010108-2211012359

KPSM

PSM 10/004 PSM APRON NORTH GA APN SHOULDER MARKINGS FADED
2210010108-2211012359

KPSM

PSM 10/002 PSM TWY A SFC PAINTED HLDG PSN SIGNS AT RWY 34 NOT STD
2210010107-2211012359

KPSM

FDC 2/1943 PSM IAP PORTSMOUTH INTL AT PEASE, PORTSMOUTH, NH.

RADAR 1, AMDT 1A...

NOTE: ASR RWY 16; FOR INOPERATIVE ALS, INCREASE CATS A/B VISIBILITY TO 1 MILE, CATS C/D/E VISIBILITY TO 1 1/8 MILE. ASR RWY 34; FOR INOPERATIVE ALS, INCREASE CATS A/B VISIBILITY TO 1 MILE, CATS C/D/E VISIBILITY TO 1 3/8 MILE..

2205311754-2405311754EST

KPSM

PSM 01/104 PSM AD AP RDO ALTIMETER UNREL. AUTOLAND, HUD TO TOUCHDOWN, ENHANCED FLT VISION SYSTEMS TO TOUCHDOWN, HEL OPS REQUIRING RDO ALTIMETER DATA TO INCLUDE HOVER AUTOPILOT MODES AND CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-12,

2021-23-13 2201190501-2401190501

3NH4

FDC 2/4683 3NH4 SPECIAL PORTSMOUTH RGNL HOSPITAL, PORTSMOUTH, NH. COPTER RNAV (GPS) 25, ORIG...

RDO ALTIMETER UNREL EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVES 2021-23-13.

2201190500-2401190506EST

ARTCC NOTAMs

KZBW

IFDC 2/7605 ZBW CT..AIRSPACE NEW BRITAIN, CONNECTICUT..

TEMPORARY FLIGHT RESTRICTIONS.

OCTOBER 5, 2022 LOCAL. PURSUANT TO 49 USC 40103(B)(3), THE FEDERAL AVIATION ADMINISTRATION (FAA) CLASSIFIES THE AIRSPACE DEFINED IN THIS NOTAM AS 'NTL DEFENSE AIRSPACE'. PILOTS WHO DO NOT ADHERE TO THE FOLLOWING PROC MAY BE INTERCEPTED, DETAINED AND INTERVIEWED BY LAW ENFORCEMENT/SECURITY PERSONNEL. ANY OF THE FOLLOWING ADDITIONAL ACTIONS MAY ALSO BE TAKEN AGAINST A PILOT WHO DOES NOT COMPLY WITH THE RQMNTS OR ANY SPECIAL INSTRUCTIONS OR PROC ANNOUNCED IN THIS NOTAM:

A) THE FAA MAY TAKE ADMINISTRATIVE ACTION, INCLUDING IMPOSING CIVIL PENALTIES AND THE SUSPENSION OR REVOCATION OF AIRMEN CERTIFICATES;

OR

B) THE UNITED STATES GOVERNMENT MAY PURSUE CRIMINAL CHARGES, INCLUDING CHARGES UNDER 49 USC SECTION 46307; OR

C) THE UNITED STATES GOVERNMENT MAY USE DEADLY FORCE AGAINST THE AIRBORNE ACFT, IF IT IS DETERMINED THAT THE ACFT POSES AN IMMINENT SECURITY THREAT.

PURSUANT TO 14 CFR 91.141, ALL ACFT FLT OPS INCLUDING REMOTE CONTROLLED ACFT OPS ARE PROHIBITED: WI AN AREA DEFINED AS 3NM RADIUS OF 415619N0724105W (BAF188013.5) SFC-2999FT AGL EFFECTIVE 2210051415 UTC (1015 LOCAL 10/05/22) UNTIL 2210051530 UTC (1130 LOCAL 10/05/22).

WI AN AREA DEFINED AS 3NM RADIUS OF 414133N0724617W (HFD300010.5) SFC-2999FT AGL

EFFECTIVE 2210051500 UTC (1100 LOCAL 10/05/22) UNTIL 2210051900 UTC (1500 LOCAL 10/05/22).

WI AN AREA DEFINED AS 3NM RADIUS OF 415619N0724105W (BAF188013.5)

SFC-2999FT AGL

EFFECTIVE 2210051815 UTC (1415 LOCAL 10/05/22) UNTIL 2210051930 UTC (1530 LOCAL 10/05/22).

EXC THE FLT OPS LISTED BLW:

1. ACFT ARR OR DEP KBDL AP.
 2. LAW ENFORCEMENT, FIREFIGHTING, AND MEDEVAC/AIR AMBULANCE FLIGHTS ON ACT MISSIONS.
 3. ACFT OPS NECESSITATED FOR SAFETY OR EMERGENCY REASONS.
 4. ALL ACFT APPROVED TO OPERATE WI THE TFR MUST BE SQUAWKING AN ATC DISCRETE CODE AT ALL TIMES WHILE IN THE TFR AND MUST REMAIN IN TWO-WAY RADIO COM WITH ATC.
 5. UAS OPERATORS WHO DO NOT COMPLY WITH APPLICABLE AIRSPACE RESTRICTIONS ARE WARNED THAT PURSUANT TO 10 U.S.C. SECTION 130I AND 6 U.S.C. SECTION 124N, THE DEPARTMENT OF DEFENSE (DOD), THE DEPARTMENT OF HOMELAND SECURITY (DHS) OR THE DEPARTMENT OF JUSTICE (DOJ) MAY TAKE SECURITY ACTION THAT RESULTS IN THE INTERFERENCE, DISRUPTION, SEIZURE, DAMAGING, OR DESTRUCTION OF UNMANNED AIRCRAFT DEEMED TO POSE A CREDIBLE SAFETY OR SECURITY THREAT TO PROTECTED PERSONNEL, FACILITIES, OR ASSETS.
 6. THE SYSTEM OPERATIONS SUPPORT CENTER (SOSC), IS THE COORDINATION FACILITY FOR GOVERNMENT AGENCIES AND IS AVAILABLE DAILY FROM 0700-2300 EASTERN, PHONE 202-267-8276 FOR COORDINATION.
 7. THE FAA RECOMMENDS THAT ALL AIRCRAFT OPERATORS CHECK NOTAMS FREQUENTLY FOR POSSIBLE CHANGES TO THIS TFR PRIOR TO OPERATIONS WITHIN THIS REGION. OPERATORS MAY REVIEW THE TFR DETAILS ON THE INTERNET AT [HTTPS://TFR.FAA.GOV/](https://tfr.faa.gov/) OR [HTTPS://WWW.1800WXBRIEF.COM](https://www.1800wxbrief.com). IF QUESTIONS REMAIN, CONTACT FLIGHT SERVICE AT 800-992-7433.
- 2210051415-2210051930.

KZBW

IBUF 10/021 UCA COM REMOTE COM OUTLET 122.2, 255.4 U/S
2210040330-2210072000EST

KZBW

IBDR 09/150 ZBW AIRSPACE RDO ALTIMETER UNREL WI AN AREA DEFINED AS 19.5NM RADIUS OF 440500N0701635W (AUG254025.1) SFC-5000FT AGL. HEL OPS REQUIRING RDO ALTIMETER DATA TO INCLUDE OFFSHORE INSTRUMENT OPS, HOVER AUTOPILOT MODES, SAR AUTOPILOT MODES, AND CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVE 2021-23-13 2210010401-2410010401

KZBW

IBDR 09/151 ZBW AIRSPACE RDO ALTIMETER UNREL WI AN AREA DEFINED AS 430219N0721552W (GDM357030.9) TO 432715N0703228W (ENE079003.6) TO 410834N0685820W (ACK115048.4) TO 401745N0730004W (DPK167032.8) TO 402430N0731540W (DPK187023.1) TO 402001N0733734W (JFK172019.2) TO 404752N0731722W (DPK072000.7) TO 405154N0732255W (DPK333005.7) TO

405116N0735144W (LGA016004.2) TO 411455N0735203W (CMK274013.1) TO 411910N0740511W (CMK288022.9) TO 412027N0740420W (CMK292022.4) TO 412901N0742033W (HUO079012.1) TO 414508N0745820W (HMK151024.2) TO 415237N0750418W (HMK147015.6) TO 420828N0754127W (HMK297017.3) TO 421835N0760247W (CFB034010.0) TO 424056N0755740W (SYR170030.6) TO 425558N0760338W (SYR166015.1) TO 425635N0762824W (SYR233017.6) TO 425250N0763955W (SYR241026.3) TO 430327N0764620W (SYR267025.6) TO 433813N0764711W (ART251036.6) TO 440822N0762251W (ART322017.7) TO 442150N0755649W (ART024025.2) TO 444344N0752955W (ART039052.6) TO 444042N0754218W (ART031046.3) TO 444911N0754426W (ART027053.9) TO 445815N0745338W (ART051079.1) TO 450454N0745820W (ART046082.4) TO 451055N0743451W (BTV324076.0) TO 450022N0741513W (BTV324058.5) TO 450022N0725914W (BTV028037.5) TO 440015N0730759W (BTV190023.7) TO POINT OF ORIGIN SFC-5000FT AGL. HEL OPS REQUIRING RDO ALTIMETER DATA TO INCLUDE OFFSHORE INSTRUMENT OPS, HOVER AUTOPILOT MODES, SAR AUTOPILOT MODES, AND CAT A/B/PERFORMANCE CLASS TKOF AND LDG NOT AUTHORIZED EXC FOR ACFT USING APPROVED ALTERNATIVE METHODS OF COMPLIANCE DUE TO 5G C-BAND INTERFERENCE PLUS SEE AIRWORTHINESS DIRECTIVE 2021-23-13 2210010401-2410010401

KZBW

!ART 09/013 ART COM REMOTE COM OUTLET 122.1 U/S
2209301357-2210132000EST

KZBW

!FDC 2/5913 ZBW NY..ROUTE ZBW.

J563 LAMED, NY TO U.S. BORDER NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.

2209121246-2409121246EST

KZBW

!FDC 2/3327 ZBW ROUTE ZBW ZNY ZDC.

Q481 CONFR, MD TO DEER PARK (DPK) VOR/DME, NY NA.

2209080919-2304200901EST

KZBW

!FDC 2/3324 ZBW ROUTE ZBW ZDC.

Q445 PAACK, NC TO KYSKY, NY NA.

2209080918-2304200901EST

KZBW

!FDC 2/3321 ZBW ROUTE ZBW ZDC.

Q167 ZJAAY, MD TO SSOXS, MA NA.

2209080917-2304200901EST

KZBW

!FDC 2/3318 ZBW ROUTE ZBW ZNY ZDC.

Q133 CHIEZ, NC TO PONCT, NY NA.

2209080915-2304200901EST

KZBW

!FDC 2/3295 ZBW ROUTE ZBW ZDC ZJX.

Q97 CAKET, SC TO PRESQUE ISLE (PQI) VOR/DME, ME NA.

2209080902-2304200901EST

KZBW

!VSF 08/008 VSF COM REMOTE COM OUTLET 122.5 U/S

2208291306-2210312000EST

KZBW

!FDC 2/5716 ZBW ROUTE ZBW.

V268 INNDY, MA MRA 5500. PVD R-093 UNUSABLE BEYOND 12NM BELOW 5500.

2208081410-2408081409EST

KZBW

!FDC 2/5708 ZBW ROUTE ZBW.

V139 PROVIDENCE (PVD) VOR/DME, RI TO INNDY, MA MEA 5500. PVD R-093
UNUSABLE BEYOND 12NM BELOW 5500.

2208081408-2408081408EST

KZBW

!ACK 07/038 ACK COM VOR VOICE U/S 2207141603-2210142111EST

KZBW

!FDC 2/2754 ZBW NY..ROUTE ZBW.

V16, V374 YODER INT, CT DME REQUIRED EXCEPT FOR ACFT EQUIPPED WITH
SUITABLE RNAV SYSTEM WITH GPS.

HTO VOR R-010 UNUSABLE. 2205111803-2405112359EST

KZBW

!FDC 2/5017 ZBW MA..AIRSPACE HANOVER, MA..TEMPORARY FLIGHT
RESTRICTIONS WI AN AREA DEFINED AS 1NM RADIUS OF 420521N0705216W
(BOS178016.9) SFC-2499FT EXPLOSIVE DEVICE CLEAN-UP. PURSUANT TO 14
CFR SECTION 91.137(A)(1) TEMPORARY FLIGHT RESTRICTIONS ARE IN
EFFECT. ONLY RELIEF ACFT OPS UNDER DIRECTION OF HANOVER FIRE DEPT
ARE AUTH IN THE AIRSPACE. HANOVER FIRE DEPARTMENT TEL 781-826-0360
IS IN CHARGE OF ON SCENE EMERG RESPONSE ACT. BOSTON /A90/ APP, TEL
603-594-5551 IS THE FAA CDN FACILITY.

MON-FRI EXC HOLIDAYS 1100-2000

2204041100-2211042000

KZBW

!FDC 2/0800 ZBW ME..ROUTE ZBW.

V268 MESHL, ME MRA 7000.

AUG VOR/DME R-213 UNUSABLE BELOW 7000FT AT 63NM.

2202021921-2402021920EST

KZBW

!FDC 2/5595 ZBW ROUTE ZBW ZNY. J174 HAMPTON (HTO) VORTAC, NY
R-234 TO YAZUU, NJ NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV
SYSTEM WITH GPS. HTO VOR R-234 UNUSABLE.

2201182000-2304232000

KZBW

!FDC 1/5067 ZBW CT..AIRSPACE NEW BRITAIN, CT..LASER LGT RESEARCH WI
AN AREA DEFINED AS 414129N0724556W (HFD300010.3) SFC-13000FT AT AN
ANGLE OF 90DEG FM THE SFC PROJECTING UP TO 13000FT, AVOID HAZARD.
THIS BEAM IS INJURIOUS TO PILOTS/PAX EYES.

BRADLEY /BDL/ TRACON TEL 860-386-3530 IS THE FAA CDN FACILITY.

2201010000-2212312359

KZBW

!FDC 1/5071 ZBW CT..AIRSPACE NORTH HAVEN, CT..LASER LGT RESEARCH WI
AN AREA DEFINED AS 412530N0725233W (MAD322010.6) SFC-4000FT AT AN
ANGLE OF 90DEG FM THE SFC PROJECTING UP TO 4000FT, AVOID
HAZARD. THIS BEAM IS INJURIOUS TO PILOTS/PAX' EYES WI SFC-4000FT
AGL

VER AND 200FT HORIZONTALLY.

BRADLEY /BDL/ TRACON TEL (860) 386-3530 IS THE FAA CDN FACILITY

2201010000-2212312359

KZBW

!FDC 1/2386 ZBW NY..ROUTE ZBW ZNY.

J55 HAMPTON (HTO) VORTAC, NY R-236 TO MANTA INT, NJ NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
HTO VOR R-236 UNUSABLE. 2110121731-2310121731EST
KZBW

!FDC 1/2417 ZBW NY..ROUTE ZBW.
V447 CAMBRIDGE (CAM) VOR/DME, NY R-039 TO MUDDI INT, VT NA.
V447 MUDDI INT, VT TO MONTPELIER (MPV) VOR/DME, VT R-237 NA.
V447 MONTPELIER (MPV) VOR/DME, VT R-037 TO RNPCY, VT NA.
2108201254-2308201250EST
KZBW

!FDC 1/3698 ZBW CT..ROUTE ZBW.
V39, V487, V91 MOONI, CT TO STUBY, CT NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
ALB VORTAC R-175 70NM UNUSABLE. 2107021333-2307011333EST
KZBW

!FDC 1/9539 ZBW NH..ROUTE ZBW.
J49 ALBANY (ALB) VORTAC, NY TO SQUAM, NH NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
ALB VORTAC R-071 UNUSABLE FROM 40 TO 120NM. 2106241337-2306221337EST
KZBW

!FDC 1/7349 ZBW NY..ROUTE ZBW.
V576 HANCOCK (HNC) VOR/DME, NY TO DELANCEY (DNY) VOR/DME, NY MEA 4900.
2106041700-2306021700EST
KZBW

!FDC 1/4955 ZBW NY..ROUTE ZBW.
V146 ALBANY (ALB) VORTAC, NY R-139 TO COP NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
ALB VORTAC UNUSABLE R-139 UNUSABLE. 2106011338-2306011334EST
KZBW

!FDC 1/2840 ZBW NY..ROUTE ZBW.
V46 HAMPTON (HTO) VORTAC, NY R-285 TO COP NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
HTO VOR R-285 UNUSABLE. 2104211547-2304231547EST
KZBW

!FDC 1/2841 ZBW NY..ROUTE ZBW.
V16, V374 YODER INT, CT DME REQUIRED EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
HTO VOR R-010 UNUSABLE. 2104211547-2304231547EST
KZBW

!FDC 1/2843 ZBW NY..ROUTE ZBW.
V308 COP TO HAMPTON (HTO) VORTAC, NY R-039 NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
HTO VOR R-039 UNUSABLE. 2104211547-2304231547EST
KZBW

!FDC 1/2845 ZBW NY..ROUTE ZBW.
V268 COP TO HAMPTON (HTO) VORTAC, NY R-079 NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
HTO VOR R-079 UNUSABLE. 2104211547-2304231547EST
KZBW

!FDC 1/2852 ZBW NY..ROUTE ZBW.
J55 TRAIT INT, RI TO HAMPTON (HTO) VORTAC, NY R-052 NA EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.

HTO VOR R-052 UNUSABLE. 2104211547-2304231547EST
KZBW
!FDC 1/2857 ZBW NY..ROUTE ZBW ZNY.
V139, V268, V308 HAMPTON (HTO) VORTAC, NY R-236 TO MANTA INT, NJ NA
EXCEPT FOR ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
HTO VOR R-236 UNUSABLE. 2104211547-2304231547EST
KZBW
!FDC 1/0407 ZBW NY..ROUTE ZBW ZNY.
V374, V39 VOLLU, NY TO CARMEL (CMK) VOR/DME, NY MEA 6500 EXCEPT FOR
ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
V39 SPARTA (SAX) VORTAC, NJ TO VOLLU, NY MEA 6500 EXCEPT FOR ACFT
EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
CMK VOR R-266 UNUSABLE, SAX VTAC R-084 UNUSABLE BELOW 6500.
2103252115-2303232115EST
KZBW
!FDC 1/0398 ZBW NY..ROUTE ZBW ZNY.
V3, V405, V419 FALLZ, NJ TO CARMEL (CMK) VOR/DME, NY NA EXCEPT FOR
ACFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
CMK VOR R-255 UNUSABLE. 2103252110-2303232110EST
KZBW
!FDC 1/0400 ZBW NY..ROUTE ZBW ZNY.
V188 NYACK, NY TO CARMEL (CMK) VOR/DME, NY NA EXCEPT FOR ACFT
EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
CMK VOR R-255 UNUSABLE. 2103252110-2303232110EST
KZBW
!FDC 1/9325 ZBW NY..ROUTE ZBW.
V489 WEARD, NY TO ALBANY (ALB) VORTAC, NY NA EXCEPT FOR AIRCRAFT
EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS.
2103012022-2303012022EST
KZBW
!FDC 1/7821 ZBW NY..ROUTE ZBW.
T300 JONNN, NY TO UUBER, NY MEA 5100.
2101271619-2301251619EST
KZBW
!FDC 1/3699 ZBW MA..ROUTE ZBW.
V39 CHESTER (CTR) VOR/DME, MA TO VAPER, MA MEA 4000, MOCA NA.
2101131311-2301131311EST
KZBW
!FDC 0/7657 ZBW ROUTE ACFT LDG KLGA,KHPN,KDXR VIA THE NOBBI FIVE
ARR DME REQUIRED AT FIX PETER BELOW 15000FT
2012310500-PERM
KZBW
!FDC 0/3022 ZBW CT..ROUTE ZBW.
V475 NORWICH (ORW) VOR/DME, CT R-082 TO PROVIDENCE (PVD) VOR/DME,
RI R-263 MOCA 2100.
2012101722-2212101722EST
KZBW
!FDC 0/1998 ZBW RI..ROUTE ZBW.
V405 PROVIDENCE (PVD) VOR/DME, RI R-165 TO FALMA INT, RI MOCA 1700.
2012091540-2212101540EST
KZBW
!FDC 0/6157 ZBW NY..ROUTE ZBW.
V3 CARMEL (CMK) VOR/DME, NY TO RACEY, CT NA. COP MOVED TO RACEY,

CT.
2011051721-2211051800EST
KZBW
!FDC 0/6158 ZBW NY..ROUTE ZBW.
V188 CARMEL (CMK) VOR/DME, NY TO SEALL, CT NA.
2011051721-2211051800EST
KZBW
!FDC 0/6159 ZBW NY..ROUTE ZBW.
V374 CARMEL (CMK) VOR/DME, NY TO CREAM, NY NA.
2011051721-2211051800EST

F. ATTACHMENTS

1. Foreflight Weather briefing

Submitted by:

Donald Eick
NTSB Senior Meteorologist