

APPENDIX K

MAY 20 1

N8045Y (BE36T)

- Two lines of thunderstorms. Pilot was aware of wx prior to departure.
- Adjacent holding pattern moved south.
- Tops to 170.
- N8045Y requests FL210.
- Tells aircraft to ask for deviation approaching the weather.
- Solicits PIREP from aircraft that was through the weather at 090.
- N8045Y states would rather go over the weather than through it.
- Gives an icing report.
- Stopped at 130 for holding pattern traffic.
- Deviations approved left or right of course.
- Climbs to FL210.
- N8045Y climbing through 140 entering the precipitation area.
- 147 is last Mode C altitude observed.

- After lost communications and radar:
 - FLM advise OMIC who will issue an ALNOT.
 - Ask nearby aircraft for ELT reports.
 - Liabilities: no precipitation advisory; leveled off climb.

7110.65T, Section 2-6-2, Weather Information

- Controllers shall advise pilots of hazardous weather that may impact operations within 150 NM of their sector or area of jurisdiction.
- The broadcast is not required if aircraft on your frequency(s) will not be affected.
- Controllers within commissioned HIWAS areas shall broadcast a HIWAS alert on all frequencies, except emergency frequency, upon receipt of hazardous weather information. (SIGMET, Convective SIGMET, AIRMET, CWA, Urgent PIREP)
- ***NOTE:*** *The inclusion of the type and number of weather advisory responsible for the HIWAS advisory is optional.*

HIWAS Advisory

- “Attention all aircraft, hazardous weather information for (geographic area) is available via HIWAS, flight watch or flight service frequencies.”

Questions

- Does a single HIWAS alert broadcast meet all your requirements for hazardous weather distribution?
- If you have no aircraft on your frequency when you receive a hazardous weather product and you elect not to broadcast an alert, what is your responsibility if you subsequently get an aircraft that is flying toward the effected area?

HIWAS VORs

- ZNY: EMI, LHY, MXE, SBJ, SEG
- ZDC: ECG, EKN, HPW, OTT
- ZBW: BGR, CAM, DNY, HFD, HTO, HNK, IGN, LFV, MSS, PVD, PQI, SYR.
- ERIDS – Sector Binder Button

Solicit PIREPs when:

- Ceilings 5000 or below; Visibility less 5 nm
- Thunderstorms
- Turbulence of Moderate degree or greater
- Icing of Light degree or greater
- Wind shear

Record with PIREP

- Time
- Aircraft Position
- Type Aircraft
- Altitude
- Pilot reported data (turbulence, icing, etc.)
- *For Icing include type, intensity and air temperature.*

Descriptors

- Icing: Trace, Light, Moderate, Severe.
- Turbulence: Light, Moderate, Severe, Extreme
- *Only PIREPs can identify icing and turbulence.*
- Precipitation: Light, Moderate, Heavy, Extreme

PIREP Dissemination

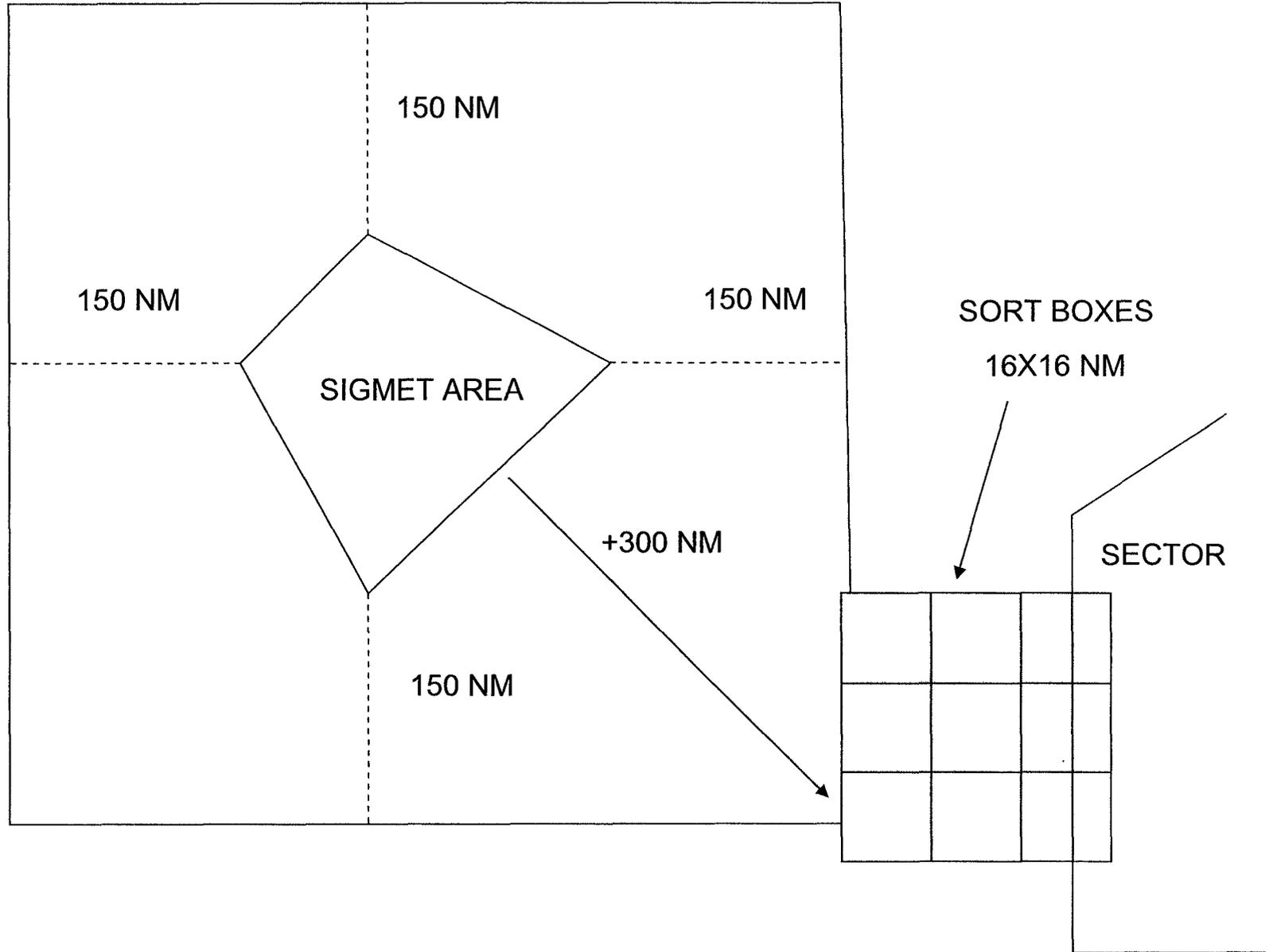
- Pass to other pilots in the area until subsequent reports indicate condition has dissipated.
- Pass to FLM for entry into ERIDS.
- FLM advises Flight Data that PIREP has been entered into ERIDS.
- Flight Data enters into AISR which sends to NWS. NWS uses PIREPs to initiate SIGMETs.

SIGMETs

- PIREPS will trigger SIGMET/AIRMET.
 - SIGMETs issued for:
 - Severe Turbulence
 - Severe Icing
 - Volcanic Ash (Montserrat)
 - Unscheduled; 4 hour timeframe.
 - Convective SIGMETs issued for:
 - Conditions related to TS.
 - Hourly, 365 days a year.

HOST reads the VOR description and applies a particular geometry to determine distribution. Any sector with an adapted sort box that falls within that range gets a strip with the SIGMET details.

SIGMET "SUPER" BOX



SIGMET 261157 MKCE WST 261155 CONVECTIVE SIGMET 35E VALID
UNTIL 1355Z MA RI NY CSTL WTRS FROM 140ENE ACK-90ESE ACK-110SSW
ACK LINE EMBD TS 30 NM WIDE MOV FROM 24035KT. TOPS TO FL280.

83 86 64 66 68 WRIO 55 56 42 ND10 35 92 LGAT LGAA
ND30 NB30 34 50 51 73 75 JFKT NE20 NC10 NA10 NA40 ISPO
NB1D FRGO TEBO 39 HPNT HPNO NC20 91 HVNO BDRO DXRO OXCO POUO

NC30 BGMT

#164 / 1 OF 2

#164 / 2 OF 2

SIGMET 261157 MKCE WST 261155 CONVECTIVE SIGMET 36E VALID
UNTIL 1355Z NJ DE MD VA CSTL WTRS FROM 60ESE CYN-100S HTO-110E
ORF-40E SBY-60ESE CYN AREA EMBD TS MOV FROM 25035KT. TOPS TO
FL320.

83 86 34 35 66 73 75 92 91 64 66 10 09
25 PHDT PHAO PHCO 68 26 27 WRIO MDTT MDTO 55 ILGT ILGO PHDD

#165 / 1 OF 2

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42 56 39 RDGO NXXT NXXO ND10 LNST LNSO ABET ABEA PNEO TTNO CXYT
CXYO AVPT AVPO 50 51 EWRT EWRA NA40 NB30 MMUO LGAT LGAA ND30
JFKT NE20 NC10 NA10 ISPO NB1D FRGO TEBO HPNT HPNO NC20 IPTO
HVNO BDRO ELMT ELMO BGMT DXRO OXCO NC30 POUO

AIRMETs

- Every six hours: 0845z, 1445z, 2045z, 0245z
- Moderate Turbulence
- Moderate Icing
- Ceilings below 1000' or Visibility less than 3.
- Sustained surface winds of 30 knots or greater.
- Widespread mountain obscuration.

Flight Data sends to all printers using a GI message. Because of size, multiple CIDs may exist for one AIRMET.

S2 AIRMETS FOR UPDATE 2 ARE STORED AS FOLLOWS SIERRA 135 558/TANGO
448 098 289/ZULU 276.....261449/VV

Weather Services

- Use the term “Precipitation” when describing radar-derived weather
- *“Area of Heavy to Extreme precipitation between ten o'clock and two o'clock, one five miles. Tops to one five thousand. Area is two-five miles in diameter.”*
- WARP Displayed Intensities: Moderate (royal blue), Heavy (checkered cyan), Extreme (cyan)
- Inform tower of observed precipitation that is likely to impact their operation (IPT)

WARP Altitude Filter Key

JO 7210.629A

- 240-600: Sector 9; Sector 42; Sector 34; Sectors 82, 83.
- 330-600: Sector 8; Sector 72.
- 000-600: All other ZNY Sectors.

Other Points

- South end of TS line is usually most severe.
(Anchor Cell)
- WARP radar lags. Flights may see things you don't and vice versa.
- Provide a minimum of 20 nm when vectoring around thunderstorms. (AOPA)
- ZNY has a Weather Monitor Plan per HQ.
Composed of direct observations by OM and post event review by QA.
- Value Prevention; Avoid Confirmation Bias.

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within that range gets a strip with the SIGMET
details.**

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Accident Videos

- ZJX: N4467D C421 KTKI-KTPA 060. Encountered severe turbulence. Aircraft was inverted and pilot was unable to recover.
- ZHU: N729MS B100 KUVA-KLEE FL250. Encountered severe turbulence. Unable to maintain assigned altitude. Eventually lost control of aircraft and crashed.