

National Transportation Safety Board

Office of Aviation Safety
Central Region

CEN22LA389

METEOROLOGICAL DATA SUMMARY

ACCIDENT

Location: Appleton, Minnesota
Date: August 10, 2022
Time: 0930 central daylight time (1430 UTC)
Airplane: Air Tractor AT-502; Registration No. N73194

Closest Aviation Weather Station

Appleton Municipal Airport (KAQP)
Appleton, Minnesota, USA
45.2275018° North Latitude
96.0045294° West Longitude
1,021 ft mean sea level (airport field elevation)

Distance To Accident Site: 0 nautical mile
Direction To Accident Site: Not Applicable

Meteorological Aerodrome Report (METAR)

METAR KAQP 101253Z AUTO 05003KT 1/4SM FG OVC002 19/18 A3018 RMK AO2 P0001=

METAR KAQP 101313Z AUTO 06006KT 1SM BR OVC002 20/18 A3018 RMK AO2=

METAR KAQP 101333Z AUTO 09006KT 5SM BR BKN002 BKN090 20/18 A3019 RMK AO2=

METAR KAQP 101353Z AUTO 10005KT 10SM SCT004 SCT090 21/18 A3019 RMK AO2=

METAR KAQP 101413Z AUTO 09007KT 10SM SCT090 22/17 A3020 RMK AO2 P0001=

--- Accident Occurred at 1430 UTC (0930 CDT) ---

METAR KAQP 101433Z AUTO 08008KT 10SM SCT060 SCT090 23/17 A3020 RMK AO2 P0001=

METAR KAQP 101453Z AUTO 09010KT 10SM SCT090 23/16 A3020 RMK AO2 P0001=

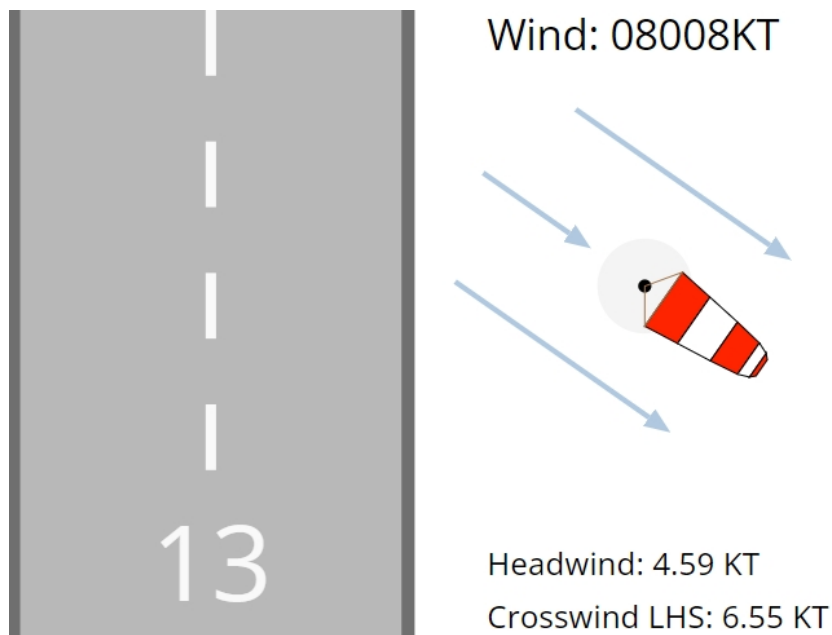
METAR KAQP 101513Z AUTO 09008KT 10SM SCT090 23/16 A3020 RMK AO2 P0001=

METAR KAQP 101533Z AUTO 10009KT 10SM SCT090 24/16 A3020 RMK AO2 P0001=

High-Resolution Rapid Refresh (HRRR) Atmosphere Model (1400 UTC)

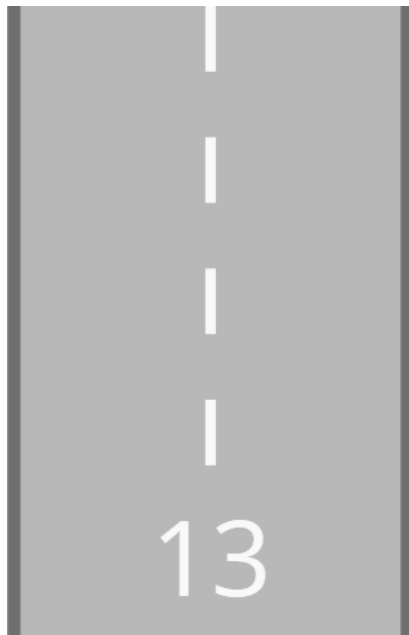
PRESSURE_hPa	HEIGHT_MSL_Meters	TEMP_C	DEWPOINT_C	WIND_DIR_DEG	WIND_SPEED_MPS
985	304	21.4	19.2	61.0	2.3
984	313	21.0	18.7	61.6	2.2
981	340	20.6	18.7	60.9	2.6
975	389	20.1	18.5	60.7	2.7
966	475	19.8	18.2	55.6	4.2
953	593	20.8	15.3	43.6	6.4
935	759	21.4	16.1	22.4	6.2
914	956	21.5	16.2	357.3	4.6
891	1175	20.6	13.3	317.9	4.3
866	1418	19.2	10.9	295.8	4.9
839	1692	17.4	8.8	281.1	5.2
808	2006	16.1	4.6	272.5	6.9
775	2357	14.7	-0.2	269.6	9.2
740	2754	12.0	-1.7	269.9	9.3
701	3201	8.7	-5.5	287.1	8.8

Crosswind/Headwind Calculation (Based on KAQP METAR at 1433 UTC)

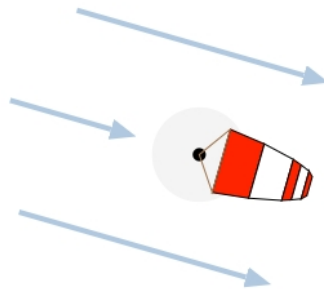


Runway Heading: 135° True
 Wind Direction: 080° True
 Wind Speed: 8 knots
 Headwind: 4.6 knots
 Crosswind: 6.6 knots from the left

Crosswind/Headwind Calculation (Based on HRRR Model at 1400 UTC)



Wind: 06104.5KT



Headwind: 1.24 KT

Crosswind LHS: 4.33 KT

Runway Heading: 135° True
Wind Direction: 061° True
Wind Speed: 4.5 knots
Headwind: 1.2 knots
Crosswind: 4.3 knots from the left