



MEMORANDUM FOR RECORD

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Office of Aviation Safety-Eastern Region

Date: November 20, 2025

Subject: ERA24LA100

Contact: Weather Data and Information

As part of the investigation, an NTSB Meteorology Subject Matter Expert (SME) was asked to obtain weather data. He provided the following data and information:

Observations - The official NWS observations issued surrounding the accident site were documented using standard Aviation Routine Weather Reports (METARs) and Specials Weather Reports (SPECI) disseminated longline surrounding the period. Cloud heights are reported above ground level (agl) in these reports, and the magnetic variation was estimated at 6° west based on the latest sectional chart for the area.

The accident occurred on landing at Orlando International Airport (KMCO), Orlando, Florida, which listed an elevation of 96 ft and had a Federally installed and maintained Automated Surface Observation System (ASOS) which was augmented by certified weather observers. The physical location of the ASOS was near the touchdown zone between runway 18R and 18L, approximately 1,000 ft south of the beginning of runway 18R and 425 ft east of the runway center line. The following conditions were reported surrounding the period of the accident.

SPECI KMCO 281739Z 27015G23KT 10SM FEW021 SCT041 BKN250 21/14 A3002
RMK AO2 T02110144=

METAR KMCO 281753Z 28012G22KT 10SM FEW023 SCT041 SCT100 BKN250 22/14
A3001 RMK AO2 SLP159 60000 T02170144 10222 20194 58009=

METAR KMCO 281853Z 26017G24KT 10SM FEW045 FEW090 FEW250 22/12 A2998
RMK AO2 PK WND 26026/1818 SLP151 T02220117=

METAR KMCO 281953Z 27014G24KT 10SM FEW045 FEW090 FEW250 22/08 A2998
RMK AO2 SLP150 T02220083=

METAR KMCO 282053Z 26016G23KT 10SM FEW045 SCT085 SCT250 22/08 A2998
RMK AO2 PK WND 26027/2000 SLP150 T02170083 56009=

Accident 2123Z

METAR KMCO 282153Z 28015G22KT 10SM FEW045 FEW085 19/09 A2999 RMK
AO2 SLP154 T01940089=

METAR KMCO 282253Z 28012KT 10SM FEW085 17/08 A3001 RMK AO2 SLP161
T01670083=

METAR KMCO 282353Z 28012KT 10SM CLR 15/08 A3004 RMK AO2 SLP169
T01500083 10228 20150 53019=

5-minute observations for the period from 1500 through 1655 EST are included below. The 5-minutes observation at 1620 EST indicated wind from 270° at 16 knots with gusts to 23 knots, visibility 10 miles and greater, sky clear below 12,000 ft.

15:00:31 5-MIN KMCO 282000Z 27018G27KT 10SM FEW090 22/08 A2998 40 40
900 280/18G27 RMK AO2 PK WND 26027/2000 T02220083

15:05:31 5-MIN KMCO 282005Z 27016G27KT 10SM FEW085 22/08 A2998 40 39
900 270/16G27 RMK AO2 PK WND 26027/2000 T02220078

15:10:31 5-MIN KMCO 282010Z 28016G23KT 10SM FEW085 22/08 A2998 50 40
900 290/16G23 RMK AO2 PK WND 26027/2000 T02220083

15:15:31 5-MIN KMCO 282015Z 28015G22KT 10SM SCT085 22/08 A2998 50 42 900
290/15G22 RMK AO2 PK WND 26027/2000 T02170083

15:20:31 5-MIN KMCO 282020Z 27011G20KT 10SM BKN085 22/08 A2998 50 42
900 270/11G20 RMK AO2 PK WND 26027/2000 T02170083

15:25:31 5-MIN KMCO 282025Z 29013KT 10SM BKN085 22/09 A2997 50 43 900
300/13 RMK AO2 PK WND 26027/2000 T02170089

15:30:31 5-MIN KMCO 282030Z 27014G19KT 10SM BKN085 22/09 A2997 50 43
900 270/14G19 RMK AO2 PK WND 26027/2000 T02170089

15:35:31 5-MIN KMCO 282035Z 26015G26KT 10SM OVC085 21/09 A2998 40 45
800 260/15G26 RMK AO2 PK WND 26027/2000 T02110089

15:40:31 5-MIN KMCO 282040Z 27014G26KT 10SM OVC085 21/09 A2998 50 45
800 270/14G26 RMK AO2 PK WND 26027/2000 T02110089

15:45:31 5-MIN KMCO 282045Z 26016KT 10SM BKN085 22/08 A2998 40 42 900
270/16 RMK AO2 PK WND 26027/2000 T02170083

15:50:31 5-MIN KMCO 282050Z 27012G21KT 10SM FEW045 SCT085 SCT250 22/08
A2998 40 40 900 270/12G21 RMK AO2 PK WND 26027/2000 SLP150 T02170078
58009

15:55:31 5-MIN KMCO 282055Z 26016G24KT 10SM SCT085 22/08 A2998 40 42 900
270/16G24 RMK AO2 T02170083

16:00:31 5-MIN KMCO 282100Z 27013G24KT 10SM SCT085 22/08 A2998 40 42 900
280/13G24 RMK AO2 T02170083

16:05:31 5-MIN KMCO 282105Z 27017G22KT 10SM FEW085 22/08 A2998 40 42 900
280/17G22 RMK AO2 T02170083

16:10:31 5-MIN KMCO 282110Z 27014G22KT 10SM CLR 21/08 A2998 40 42 800
270/14G22 RMK AO2 T02110078

16:15:31 5-MIN KMCO 282115Z 28011KT 10SM CLR 21/08 A2998 40 43 800 280/11
RMK AO2 T02110083

16:20:31 5-MIN KMCO 282120Z 27016G23KT 10SM CLR 21/09 A2998 40 45 800
270/16G23 RMK AO2 T02110089

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16:25:31 5-MIN KMCO 282125Z 27016G23KT 10SM CLR 21/07 A2999 40 41 700
270/16G23 RMK AO2 T02060072

16:30:31 5-MIN KMCO 282130Z 28013G23KT 10SM CLR 21/08 A2999 40 43 700
290/13G23 RMK AO2 T02060078

16:35:31 5-MIN KMCO 282135Z 28013G21KT 10SM CLR 21/08 A2999 40 45 700
290/13G21 RMK AO2 T02060083

16:40:31 5-MIN KMCO 282140Z 28015G23KT 10SM CLR 20/08 A2999 30 46 700
280/15G23 RMK AO2 T02000083

16:45:31 5-MIN KMCO 282145Z 28013G23KT 10SM CLR 20/08 A2999 30 46 700
280/13G23 RMK AO2 T02000083

16:50:31 5-MIN KMCO 282150Z 29015G22KT 10SM FEW045 FEW085 20/08 A2999
30 46 700 290/15G22 RMK AO2 SLP154 T02000083

16:55:31 5-MIN KMCO 282155Z 27012G22KT 10SM CLR 19/09 A2999 30 50 600
280/12G22 RMK AO2 T01940089

A table of the 1-minute wind data is included below (Figure 1). The 1-minute data includes the running 2-minute average wind, and the 5-second maximum wind during the previous 60-seconds

<i>Time</i>	<i>2-min avg wind</i>		<i>2-min avg</i>	
<i>Speed</i>	<i>5-sec max wind</i>		<i>5-sec max speed</i>	
1553	260	16	256	22
1554	257	15	261	20
1555	264	16	267	24
1556	266	16	263	17
1557	273	15	275	20
1558	279	15	282	18
1559	282	13	274	21
1600	270	13	268	19
1601	265	12	264	17
1602	272	14	266	21
1603	273	15	261	21
1604	273	16	281	22
1605	272	17	273	22
1607	279	15	279	20
1608	278	15	277	19
1609	270	15	271	19
1610	267	14	264	17
1611	267	14	267	18
1612	266	14	278	17
1613	272	14	269	20
1614	276	12	276	13
1615	276	11	268	15
1617	274	12	266	16
1618	272	14	274	20
1619	270	15	261	23
1620	267	16	268	19
1621	267	17	262	23
1622	265	19	254	22
1623	261	18	256	22
1624	260	18	255	23
1625	268	16	273	18

Figure 1 1-minute wind data

Pilot Reports: the following PIREPs within 50 miles of KMCO 2 hours prior to the accident:

MCO UA /OV RWY35R/TM 2000/FLDURD/TP A20N/RM SMOOTH RIDE
 MCO UA /OV RWY35R/TM 2016/FLDURD/TP A333/RM LIGHT CHOP ORL UA /OV
 ORL070005/TM 2030/FL015/TP E55P/RM LITTLE BUMPY
 MCO UA /OV KMCO170005/TM 2047/FLDURGD/TP CL30/TB +-10 KTS/RM ON RWY
 36L FINAL ORL UA /OV ORL070003/TM 2102/FL010/TP B738/RM +-5 KTS ON FINAL
 MCO UA /OV RWY36L/TM 2105/FLDURD/TP B752/RM +OR-10KT SHORT FINAL

Terminal Aerodrome Forecasts: The forecasts current during the period were as follows.

TAF KMCO 281739Z 2818/2924 28014G22KT P6SM BKN015 OVC025
FM281900 29016G23KT P6SM FEW030
 FM290300 29012G18KT P6SM SKC
 FM291500 32014KT P6SM SKC
 FM292300 31008KT P6SM SKC=

The forecast issued for the preflight planning indicated a wind from 270° at 16 knots gusting to 24 knots for the planned estimated time of arrival. The forecast was updated at 1553 EST with no change in the wind forecast.

AMD TAF KMCO 282053Z 2821/2924 27016G24KT P6SM FEW030
 FM290300 29012G18KT P6SM SKC
 FM291500 32014KT P6SM SKC
 FM292300 31008KT P6SM SKC=

Inflight Weather Advisories

G-AIRMET issued at 2045Z and valid thru 2100Z for occasional moderate turbulence from the surface to 10,000 FT.