

Attention

I heard AIRMET ZULU in my briefing...should I care?

Objective

To understand the significance of AIRMETs and SIGMETs.

Schedule

Ground instruction – 10 minutes

Reference Material

The Pilot's Manual PM 2 Ground School by ASA
NOAA / NWS

Material

AIRMETS

AIRMETS warn of hazards primarily to small aircraft; they are issued every 6-hours beginning at 0245 UTC with intermediate updates as needed. There are three types of AIRMETS: Tango, Sierra, and Zulu available in either textual form (WA) or graphics (G-AIRMET).

AIRMET Tango—turbulence—a forecast of non-convective activity related to turbulence of moderate intensity, low-level wind shear, or sustained surface winds of 30 knots and greater

AIRMET Sierra—IFR Weather and Mountain Obscuration—a forecast that identifies aviation weather hazards that meet in-flight advisory criteria

AIRMET Zulu—icing—a forecast of non-thunderstorm-related icing of light or greater intensity, often using VOR points to outline the area of icing (it sometimes extends beyond the FA boundary).

When checking the AIRMETS, look for VORs along or within 100 miles or so either side of your planned route. If you find such a VOR listed, then you can look closer to see if your flight is likely to be affected. Be aware that hyphens in weather data can be used for three purposes:

To indicate a range—e.g., VSBY 3-5, “visibility 3 to 5 miles”

For spacing—VSBY 3-F, “visibility 3 miles in fog”

To condition a phenomenon as lighter —RW-, “light rain showers”.

Weather Advisories - Ground Lesson

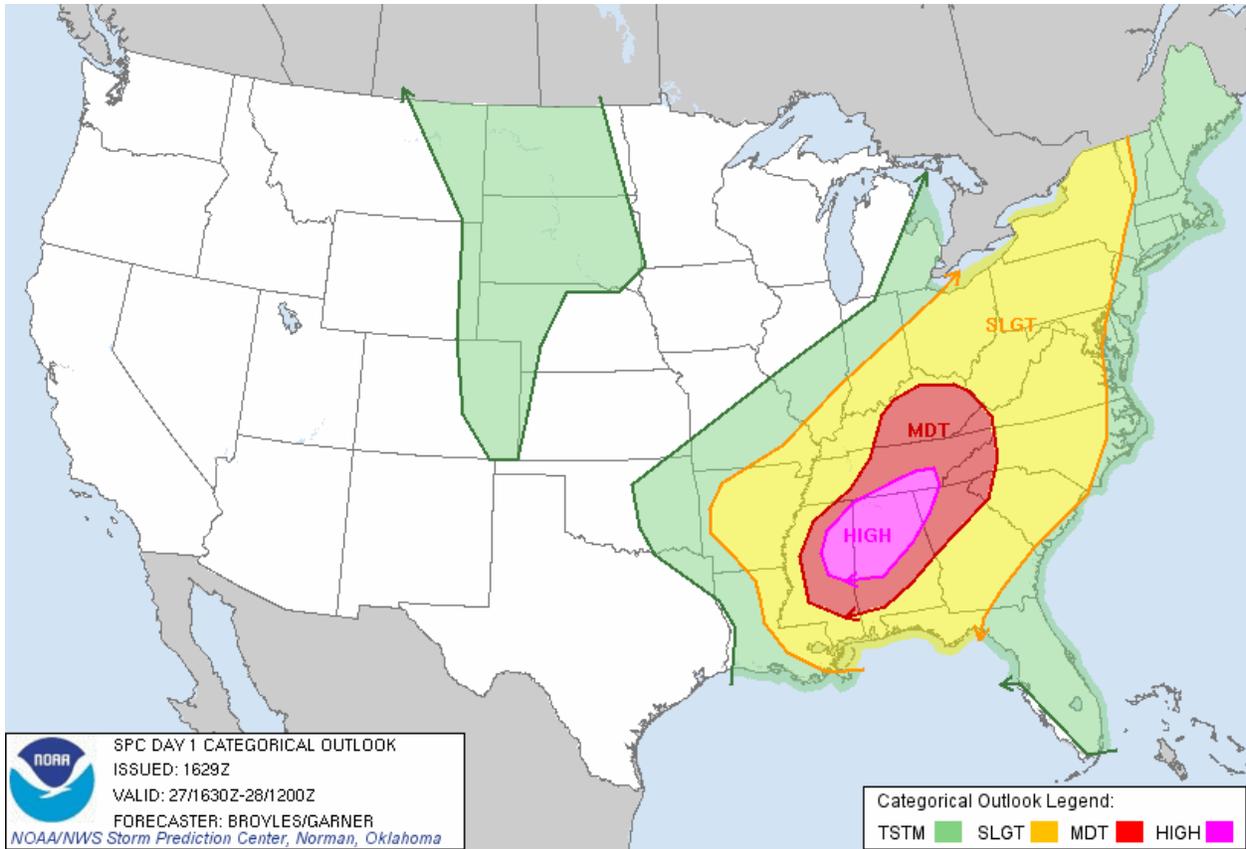


Figure 1

Understanding Severe Thunderstorm Risks					
0	1	2	3	4	5
GENERAL THUNDERSTORMS	MARGINAL RISK	SLIGHT RISK	ENHANCED RISK	MODERATE RISK	HIGH RISK
Very Common	Common	Somewhat Common	Somewhat Common	Uncommon	Rare
No severe thunderstorms	A few storms could be close to severe	Scattered severe storms possible	Numerous severe storms possible	Numerous severe storms likely	Widespread severe storms likely
No damaging or life-threatening storms expected	No damaging or life-threatening storms expected	Significant damage or life-threatening storms unlikely	Significant damage or life-threatening storms possible	Significant damage or life-threatening storms possible	Significant damage or life-threatening storms likely!
EXAMPLES					
<ul style="list-style-type: none"> • Winds to 40 mph • Small hail 	<ul style="list-style-type: none"> • Winds to 50 mph • Hail under 1" • Weakening storms 	<ul style="list-style-type: none"> • One or two tornadoes • A few reports of wind damage • Large hail > 1" 	<ul style="list-style-type: none"> • A few tornadoes • Several reports of wind damage • Large hail > 2" 	<ul style="list-style-type: none"> • Several tornadoes • Widespread wind damage • Large Hail >2" 	<ul style="list-style-type: none"> • Tornado outbreak • Derecho
National Weather Service – Kansas City, MO					

Figure 2

Weather Advisories - Ground Lesson

SIGMETs (WS) and Convective SIGMETs (WST)

SIGMETs warn of conditions that could be dangerous to all aircraft (severe icing, and severe/extreme turbulence). Convective SIGMETs are observations and/or forecasts that warn of conditions associated with thunderstorms that could be dangerous to all aircraft—tornados, large hail, embedded thunderstorms, large Cb areas (and with severe icing, severe turbulence and low-level windshear implied). They are issued when necessary to alert pilots of these conditions.

Center Weather Advisories (CWA)

Advice of the sudden development in the weather situation will often first be issued in the form of a Center Weather Advisory, for conditions beginning within 2 hours. This may be used to supplement an area forecast or prior to the issue of the appropriate AIRMET or SIGMET.