

EFFECTIVE DOWNWIND MESSAGE WORKSHEET

AUTHORITY: TM 3-11.32 /MCRP 10-10E.5/NTRP 3-11.25/AFTTP 3-2.56

ZULUM: TIME OF WIND OBSERVATION (DATE-TIME GROUP) (DDtttt ZMMMyyyy) _____
 VALID TIME OF DOWNWIND MESSAGE: _____ DTG valid from _____ DTG valid to _____

DATA AND CALCULATIONS

MESSAGE LINE	YIELD (KT)	CT HEIGHT (METERS)	CB HEIGHT (METERS)	2/3 STEM HEIGHT (METERS)	(1) DISTANCE OF GZ/CB RADIAL LINE (KM)	EFFECTIVE WIND SPEED - sss (KPH) (1) X 1 = sss TIME OF FALL ROUND UP TO NEXT HIGHEST KILOMETER PER HOUR	(2) AZIMUTH OF GZ/CT RADIAL LINE (DEGREES)	(3) AZIMUTH OF GZ/ 2/3 STEM RADIAL LINE (DEGREES)	EFFECTIVE DOWNWIND DIRECTION - ddd (DEGREES) SUM OF (2) + (3) / 2 = ddd ^{1,3}	WARNING AREA ANGLE ² (DEGREES)
		<i>Numbers are estimates, may not match nomogram</i>				2 = _____				
						X = _____			2 = _____	
						X = _____			2 = _____	
						X = _____			2 = _____	
						X = _____			2 = _____	
						X = _____			2 = _____	
						X = _____			2 = _____	
						X = _____			2 = _____	
						X = _____			2 = _____	

EFFECTIVE DOWNWIND MESSAGE³

ZULUM DDttttZMMMyyyy/DDttttZMMMyyyy/DDttttZMMMyyyy// _____
 ALPHAM /-ddd/sss/-// _____
 BRAVOM /-ddd/sss/-// _____
 CHARLIEM /-ddd/sss/-// _____
 DELTAM /-ddd/sss/-// _____
 ECHOM /-ddd/sss/-// _____
 FOXTROTM /-ddd/sss/-// _____
 GOLFM /-ddd/sss/-// _____

LEGEND

DD day
 ddd downwind direction (degrees)
 or downwind distance
 MMM month
 sss wind speed
 tttt time
 yyyy year
 Z zulu

¹ When the azimuth of the ground zero/cloud-top radial line (2) or the azimuth of the ground zero/2/3 stem radial line (3) falls in the first quadrant (0° to 90°) and the other falls in the fourth quadrant (270° to 360°), result (2) + (3)/2 will be the back azimuth of the effective downwind direction. In this case, determine ddd by the following method: If result is greater than 180°, subtract 180°; If result is less than 180°, add 180°. Enter in the effective downwind message.

² For special cases when warning angle is greater than 40° the applicable line contains three additional digits to denote warning angle (standard format) or one additional digit to denote the code for the expanded warning angle (NATO MTF).

³ When wind speeds are below 8 kph, the applicable line of the effective downwind message contains only three digits to reflect the downwind distance of Zone 1 (ddd). This will be a circle plot.