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## WEATHER EFFECTS ON LAND OPERATIONS

Last Updated: 28 October 2020

Like operations conducted in the air, space, and cyberspace, operations in the land domain are highly susceptible to impacts from the natural environment. Air Force weather forces integrate current and predicted environmental impacts across the Army warfighting functions to enhance commanders' situational understanding, risk management, and decision making to defeat the enemy.

Specially trained Department of the Air Force personnel attached to Army units integrate environmental effects, including hydrology and space weather, into the intelligence preparation of the battlefield, the military decision-making process, and throughout operational planning and execution. Air Force forces, while in garrison and deployed, are resourced to integrate weather support into Army service component commands, corps, divisions, brigade combat teams (to include airborne), security force assistance brigades, combat aviation brigades, aviation battalions, military intelligence brigades (with aviation), and military intelligence aviation battalions.

### MAXIMIZING THE ARMY'S ELEMENTS OF COMBAT POWER

Weather information should be integrated at every decision point during the planning, execution, assessment, and sustainment of ground-based military operations. Weather forces directly support the land component commander's planning and execution at the strategic, operational, and tactical levels by providing weather effects analyses, forecasts, long-range outlooks, and climatological assessments that help shape current and future operations. Visibility and precipitation forecasts can affect decisions regarding the tempo and timing of ground operations, including decisions on when to conduct sustainment operations and where to set up logistics support areas. Persistent fog can reduce visibility, limiting the ability to locate nearby enemy ground forces. Fog can provide cover for friendly forces seeking to maneuver, resupply, or reinforce. An example of weather integration during planning for ground operations are the contributions of division weather personnel during a wet gap crossing. These personnel can shape the division commander's courses of action by: determining environmental effects to rotary wing operations, targeting, traffic ability near the bridgehead, and enemy chemical operations. These environmental assessments are critical to determining the timing of operations, the types of forces, and support assets required to meet the joint force commander's objectives.

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