A RAND research team examined options to increase the mobility, protection, and firepower of Army airborne forces, given likely future missions and threats, and identified a concept for enhancing today’s forces by adding a light armored infantry capability. This report examines the numbers and types of vehicles that would be needed to create an airborne light armored force that could be airdropped or air-landed from Air Force transport planes.

RESEARCH QUESTIONS

• What role is the U.S. Army’s airborne force likely to play in the future?
• What challenges is that force likely to face?
• What capabilities will it need to effectively address those challenges?
• Which of those capabilities could be developed in the short term (i.e., in the next three to five years), at a low cost and without the need to add new vehicle and aircraft types, beyond what is currently available within the U.S. Department of Defense?

KEY FINDINGS

U.S. Army Airborne Forces Could Play a Pivotal Role in Key Missions in the Future, Particularly Against Hybrid Threats and in Anti-Access Environments, but Could Face New Threats

• Army airborne forces are unique in their ability to deploy quickly from the continental United States via U.S. Air Force transport aircraft, including to locations deep inland and beyond the reach of maritime forces operating in littoral regions.
• Airborne forces will likely face increasingly sophisticated anti-access threats and will require increased options for quickly and safely delivering personnel and equipment to these challenging areas of operations.
A Light Armored Infantry Capability That Can be Airdropped by Parachute or Air-Landed at an Airfield Would Provide Airborne Forces with Increased Speed, Mobility, Survivability, and Firepower

- Specifically, such a capability could support missions to counter anti-access/area denial in hybrid environments, counter or secure weapons of mass destruction, counter terrorism or insurgencies, conduct noncombatant evacuation operations with support from air assets, conduct complex humanitarian assistance and disaster relief operations, rapidly establish an enclave (e.g., to prevent genocide), and rapidly interpose a peacekeeping force in a time-sensitive situation. Enhanced airborne capabilities could also offer decisionmakers better options to stabilize potential conflicts more quickly and prevent them from escalating.

- Although airborne forces currently conduct many of these operations, enhancements to the force would greatly expand that ability.

- Given the Army’s near-term requirements and the need to consider extant equipment, the Light Armored Vehicle, second generation (LAV-II), family of vehicles appears to be the most promising candidate platform for enabling an airborne force to achieve its objectives.

RECOMMENDATIONS

- The Army should refine the operational concepts associated with a new airborne light armored infantry capability, including how it will be employed and what key joint enablers will be needed.

- The Army should conduct an experimentation program before deploying this new capability on a large scale.

- The Army should examine other vehicle options beyond the one provisionally identified as the preferred candidate for this concept (the LAV-II), including the Stryker and vehicles currently in use in foreign militaries.

- The Army should determine the Air Force’s main constraints to operationalize some portion of this concept. For example, it might be helpful if more C-17 crews were airdrop-capable than is the case today. Because the Air Force transport fleet is important to the entire joint force, the Army and Air Force would need to discuss what is possible under the desired timelines and scale.

- The Army should identify additional rigging and other administrative requirements. In some cases, new rigging capacity and other infrastructure might need to be needed to accommodate light armored vehicles in the LAV-II or Stryker class.

- The Army should establish the costs for the various vehicle options it is considering, as well as for any associated new units that would be required.

- The Army should decide on an initial organizational construct for any new airborne capability. For instance, does it want to convert one or more brigades to this configuration or just a single battalion?