Through a Glass Darkly:
Exploring the Future of Armor by Examining the Past

by Lieutenant Colonel Arthur W. Connor, Jr.

For now we see through a glass darkly; but then face to face: now I know in part; but then shall I know even as also I am.

1 Corinthians 13:12

Divining the future of armor and cavalry in the 21st century is like viewing a movie through a glass darkly. Many scenes are unclear, and different people see different things. What is the role of the main battle tank in a force projection army? What are the requirements for scouts and cavalry in future contingency operations? What effect will digitization have on armor and cavalry forces? There are a myriad of other questions equally as germane and perplexing to the armor community. As a way of providing some perspective and guidance, I offer the views of the Army’s leaders from an equally tumultuous time, 1949. The end of the Second World War left many Army leaders asking questions about armor and cavalry similar to those posed today. To answer those questions, the Chief of Staff of the Army (General of the Army Omar Bradley) tasked General Jacob L. Devers, the commander of Army Field Forces, to “provide a comprehensive and current statement of policy in matters of doctrine and material pertaining to armor.”

The U.S. Army of 1946-1950 was adrift, attempting to occupy Germany and Japan while searching for a role in the new national security environment of the nascent Atomic Era. Reductions in personnel, equipment, and training continued unabated until the advent of the Korean War, with armor units suffering heavily. When war broke out in Korea on 25 June 1950, there were no tank battalions available to Eighth Army to fight the North Korean T-34 tanks. Tanks were taken off their pedestals at Fort Knox and pulled out of the jungles of the Pacific battlefields and shipped to Korea. How then, did the Army view armor, tanks, and their role prior to the disaster of Task Force Smith and the initial fighting in Korea?

On 31 January 1949, a letter was sent to Major General Ernest Harmon appointing him chairman of the Army Field Forces Advisory Panel on Armor. The panel was to meet at Fort Monroe on 7 February, and Harmon was to present his findings to General Devers on 18 February. The panel consisted of representatives from Cavalry, Infantry, Field Artillery, Engineers, and the Marine Corps, and included Brigadier General Bruce C. Clarke and Colonel Paul A. Disney. Although the Office of the Chief of Cavalry was eliminated in March 1942, officers of the Armored Force of WWII were assigned to Cavalry after the war. Armor branch would come into being only after Congress passed the Army Organization Act of 1950. The immediate cause for the formation of this panel was to present a coherent body of policy regarding armor to Great Britain and Canada at a series of joint standardization conferences on armor and field artillery to begin in March 1949. The purpose of the panel was much greater, however:

The purpose of the study upon which this document is based was to establish, by review, interrogation, and critical evaluation, the doctrine of armor, and the policies affecting equipment requirements and development in order to provide an authoritative Armor policy statement, bearing Department of the Army approval, to all agencies of the U.S. Army. The report, as approved, will furnish guidance in staff planning, service school instruction, and troop training. It will provide a firm and sounder basis for R&D staffs and technical agencies in effecting the equipment requirements of the Field Army.

A tremendous amount of work for only eleven days! Nonetheless, the panel issued their report on 18 February 1949 in ten sections, covering everything from doctrine to flamethrower policy. Section I of the report covers U.S. Army armor doctrine, a subject then barely nine years old.

The doctrine section of the report begins with a short history of armored warfare and defines armor as tanks, armored cavalry, armored infantry, armored engineers, armored artillery, and the service support required to “form an integrated and a balanced fighting force, the nucleus of which is tanks.” Armor combines its mobility and great firepower to concentrate its mass of power at a decisive point on the battlefield, upsetting “enemy time and space factors,” while hindering “rapid enemy reaction.” What a prescient conclusion! At first glance, I thought I was reading from TRADOC Pamphlet 525-5, Force XXI Operations, or Army Vision 2010. The TRADOC pamphlet discusses future land combat operations as “designed to control main battle areas, accelerate, or moderate as necessary the pace of battlefield events.” Isn’t the massing of combat power at a decisive point while upsetting enemy time and space factors in essence a rudimentary definition of operational dominant maneuver? Dominant maneuver, however, consists of two elements: strategic and operational. “Strategic maneuver equates to the Army’s requirement to project the force.”

The authors of the report understood the need for strategic maneuver, even in 1949. In writing on possible theaters of war, the authors go into great detail on the need to insure armor forces are deployable:

If war is forced on the United States, it is the policy of this nation that the war will be waged on foreign soil. However, this nation is so organized politically that it cannot choose the situation or the location under which it will fight initially. Initially we may have to fight in an area unsuited to Armor. Considering any potential enemy, there is little likelihood of fighting a major war without having to ship an expeditionary force across several thousand miles of water. Armor in the U.S. Army must be dimensioned by the requirement that it be transportable to overseas theaters.

Once again, I am staggered by the clear vision of the future presented by General Harmon and his fellow panel members. The same conditions identified in 1949 are relevant for the employment of armor today. Increasing urbanization throughout the world dictates the use of armor in villages and cities, mandating vehicle designs that take that fact into account. More importantly, if our armored forces cannot get to the fight (strategic maneuver), they are irrelevant in a force projection army. An entire section of the report (Section III) deals with the issue of U.S. Army Tank Policy and
the need to make the armor force deployable.

Section III delineates the need to insure tanks can be transported via rail in “fighting condition,” that all tanks must be able to “move on highways” without destroying the roadbed or bridges, and that tanks organic to divisions “must be transportable in assault type [LST, LCM] craft.” The authors recognize the importance of harbor facilities for off-loading tanks, and recommend that tank development “be coordinated with the Department of the Navy so that appropriate changes can be made to existing facilities and craft, and [for] the specifications for new equipment.” While recognizing the limitations of current transport aircraft, the panel is unambiguous on the need to make armored vehicles transportable by air. “It is obviously desirable, if not essential, that an armored division be capable of transport by air, as well as by rail or water. The adoption of a 36 ton medium [tank] is evidence of the ultimate possibility of making the armored division theoretically airborne.” Such a force projection division would have great utility today and in the next century, and had it been available may have mitigated many of the enemy advantages in the opening stages of the Korean War. Army Vision 2010 reiterates this fifty-year-old argument. A power projection force composed of lighter, more durable warfighting systems will be on the way to the area of operations “within hours of the decision to deploy.” In many instances, the airborne division is the first Army force to deploy in a crisis. The panel examined the issue of armor support for the airborne division. In 1949, as today, there was wide disagreement on the issue of armor support for the airborne division. The 1949 table of organization for the airborne division included two heavy tank battalions as attachments and one cavalry reconnaissance company (equipped with 1/4-ton jeeps and M-24 Chaffee light tanks). The panel recognized that it was impossible to get the heavy tank battalions into the fight with the airborne division until well after the parachute assault, unless it was used as regular infantry. Additionally, the M-24 light tank could not enter the fight via parachute, and an adequate armored car was not in the inventory. In essence, the panel encountered the exact same problems facing the 82nd Airborne Division today following the deactivation of 3-73 Armor. The panel recommended an effort to produce an armored car for the airborne reconnaissance company with a weight of 20,000 pounds mounting a gun of not less than 76 mm. The same armored car would be used in the light cavalry regiment. “The development of an armored car mounting multiple machine guns as the only armament is considered economically and tactically unsound.” The reconnaissance troops of the light divisions and the scout platoons of tank and mechanized battalions today all contain a light armored car that mount only a single machine gun or grenade launcher, the HMMWV. Is it possible to project force anywhere in the world today without a viable armored car or light tank?

General Harmon’s panel specifically addressed the issue of the role of the light tank and armored car. The justification for a light tank and armored car can be found in how we approach reconnaissance. The current edition of FM 17-95 Cavalry Operations, defines reconnaissance as “an inherent part of security and other combat missions.” There are six fundamentals of successful reconnaissance operations, including gain and maintain contact with the enemy. Existing U.S. doctrine in 1949 also considered reconnaissance as an element of security “requiring fighting capability.” The light tank (M-24) allowed the Light Armored Cavalry Regiment of 1949 and the Reconnaissance Battalion of each armored division to fight for intelligence. In order to replace the light tank, an armored car “must have equivalent armament and cross country mobility.” Can the 2d Cavalry, the reconnaissance troops of light divisions, and our scout platoons fight for intelligence today without a light tank or an armored car equivalent?

The report concludes with a lengthy enclosure [sic] that summarizes the conclusions of each of the ten sections. The authors are vehement in their belief that armor enables the Army to conserve manpower and “obtain decisive results in the shortest period of time,” considerations that color the employment of all armed forces today. Armor must “be dimensioned” by the ability to deploy to overseas theaters, and balanced combined arms teams must exist, “or be easily formed in all echelons.” As the members of the panel gazed into the dark glass of the future in 1949, so too must we gaze into the equally dark glass of the 21st century. Today’s force projection Army “must be able to quickly project lethal and survivable combat power” anywhere in the world. In order to remain viable on the next battlefield, armor and cavalry must contribute to the Army’s unique capability “to exercise direct, continuing, and comprehensive control over land, its resources, and people.” Otherwise, our branch and purpose will fade into the tapestry of history, much as the horse cavalry did in 1942.

Notes
4 See James A. Sawicki, Cavalry Regiments of the U.S. Army (Dunmurf, Virginia: Wyvern Publica-
7 Report, Section I, 5.
8 Report, Section I, 6.
10 Department of the Army, Army Vision 2010, 11.
11 Report, Section I, 8-14.
12 Report, Section III, 5-6.
13 Report, Section III, 7.
14 Ibid.
15 Army Vision 2010, 11.
16 Report, Section VII, 4-7.
17 Report, Section VII, 5.
19 Report, Section IX, 2.
20 Report, Inclosure 1, 1.
21 TRADOC Pam 525-5, 4-7.
22 Army Vision 2010.

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