Military Review

U. S. Army Command and General Staff College
Fort Leavenworth, Kansas

In This Issue

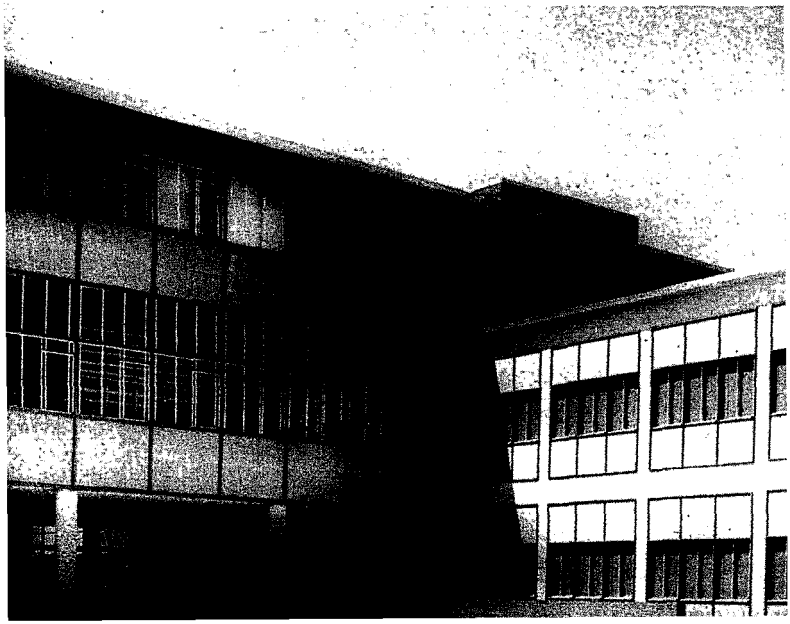
- The Kashmir War
- South of the Sahara
- Thoughts on Automation

February 66

UNITED STATES ARMY COMMAND AND GENERAL STAFF COLLEGE FORT LEAVENWORTH, KANSAS

COMMANDANT
Maj Gen Harry J. Lemley, Jr.

ASSISTANT COMMANDANT
Brig Gen Robert C. Taber



Military Review

Professional Journal of the US Army

FORTY-FOUR YEARS OF MILITARY SERVICE

VOL XLVI FEB 1966 NO 2

LESSONS FROM THE WAR IN KASHMIR

Leo Heiman

Mr. Heiman is an Israeli military correspondent and author who has reported on conflict in many parts of the world. The views expressed herein are Mr. Heiman's and not necessarily those of the MILITARY REVIEW.—*Editor.*

THE hostilities between India and Pakistan were too limited in scope to be called a war, and too limited in time to be regarded as a campaign. The Kashmir war was actually a series of sharp, but relatively minor, tactical engagements which culminated in one major battle between the massed armored formations of both armies. No strategic decisions were reached by either side. The encounter is, nevertheless, important from the operational, tactical, technical, and troop leadership points of view. Analysis of the Kashmir conflict develops 10 lessons which can be of significant value to military experts and combat commanders throughout the world.

● Strategic planning. Neither side appeared to recognize the difference between grand strategy, in which military moves are dictated by political-psychological-economic considerations, and war strategy, which is concerned with winning campaigns and major battles.

India and Pakistan are now evolving a grand strategy design vis-a-vis Red China, and each other over the Kashmir, Rann of Kutch, Bengal, Assam, and other thorny points. But they lacked a clear-cut war strategy and commanders in the field were uncertain about their mission. Was it to be an all-out general war, a limited war for certain clearly defined objectives, a prestige campaign for vaguely defined psychological advantages and political influence factors, a campaign of attrition to weaken the enemy's striking forces, or a war of conquest to annex new territories and sources of raw materials?

Lacking certainty about the outcome, and without a strategic master plan, both sides just slugged it out. This explains the relatively heavy losses in equipment and personnel

without any advantages accruing to either side after the uneasy cease-fire.

● Operational planning. Both armies adhered to standard British patterns, never deviating from the orthodox methods of fighting by the book. By themselves, British tactics and operational ideas are not bad. Nearly all senior and field grade commanders of the Indian and Pakistani Armies are graduates of British officers' schools, staff colleges, and war academies. Many of them have acquired considerable combat experience in the British Army during World War II, fighting against the German forces in North Africa and Italy, and against the Japanese in southeast Asia.

Military System Changing

The Indian and Pakistani Armies have a proud tradition of over 150 years of service as integral parts of the British armed forces. Their organization, equipment, training methods, and tactical doctrines are patterned on orthodox British systems. However, Great Britain's traditional military system is undergoing drastic changes. The divisional pattern of organization is being broken up in favor of flexible task forces and combat teams. Traditional infantry-artillery-armor combinations are changing in favor of paratroop-helicopter-commando formations. Armored forces are massed in strategic striking formations.

Both the Indian and Pakistani Armies utilized the experience, tactical doctrines, and operational planning of the World War II period. The result was that their planning was conservative, could be predicted by staff officers on the opposite side, and could be countered with the same orthodox moves. Hence, there was no decision reached by either side.

● Deployment of armor. In the battle of attrition which stemmed from this orthodox planning, India lost 114 tanks and 57 armored cars versus 471 Pakistani tanks and armored cars destroyed, crippled, or captured. Pakistani losses were heavier for several reasons.

Armored Cars a Liability

Poor utilization of armored cars meant high losses for Pakistan. These vehicles are still greatly favored in India and Pakistan, a sentiment carried over from the days of British colonial rule. Armored cars are better suited for suppression of insurgencies and rebellions, riots, and revolts than heavy or medium tanks. But under the conditions of modern warfare, armored cars are a liability rather than an asset. Simple jeeps with machineguns and bazookas are more efficient as reconnaissance vehicles and light screening forces.

On the other hand, both the Indian and Pakistani Armies lacked armored infantry which is essential for frontal breakthrough or in-depth penetration drives. Thus, the few gains made by tanks on either side could not be exploited for lack of armored infantry and suitable carriers.

Had the commanders of the Indian and Pakistani forces converted the hundreds of armored cars and lightly armored reconnaissance vehicles for use as armored infantry carriers, this could have been a decisive move. In-

---

Leo Heiman, a frequent contributor to the MILITARY REVIEW, *was born in Poland, studied in the Soviet Union, and fought with Soviet partisan forces against the German Army for two years. He attended Munich University, and went to Israel in 1948 where he served in the army and navy for seven years. His latest article, "The Last Cavalry Charge," appeared in the January 1966 issue.*

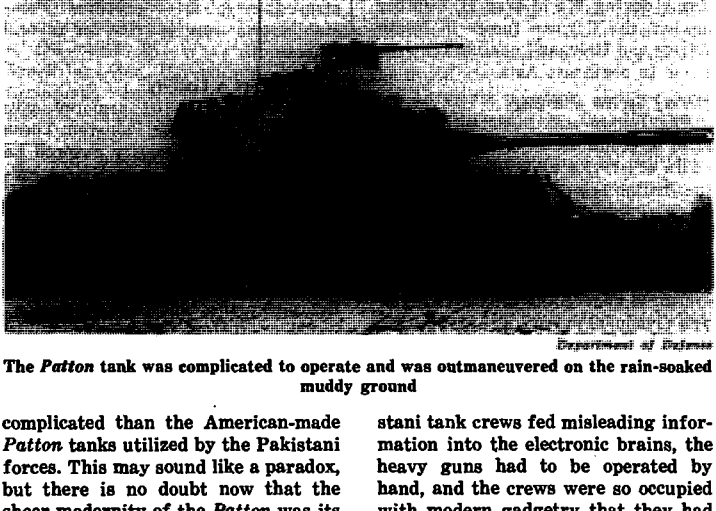
stead, there was no armored infantry to speak of. Armored cars were deployed in the standard patterns of reconnaissance, screening, and patrol—to be knocked out with bazookas, light recoilless rifles, and armor-piercing rifle grenades.

The tanks themselves were better handled by the Indians than by the Pakistanis, mainly because the Indian tanks were older, simpler, and less complicated than the American-made *Patton* tanks utilized by the Pakistani forces. This may sound like a paradox, but there is no doubt now that the sheer modernity of the *Patton* was its undoing vis-a-vis the older, slower, weaker, and simpler *Centurions* and *Shermans* used by the Indians.

As an armored fighting vehicle, the *Patton* is so vastly superior to *Centurions* and *Shermans* that under normal conditions no comparisons could be made. But the US tanks proved too complicated for the soldiers who operated them. The *Patton* weapon system relies on computers which control the main gun. For effective firing, the crew must feed correct information into the computer which then does the rest.

During maneuvers and field exercises, the Pakistani tank brigades proved to be quite efficient, but real war is vastly different from war games. In the zone of military operations, computers went wrong, Pakistani tank crews fed misleading information into the electronic brains, the heavy guns had to be operated by hand, and the crews were so occupied with modern gadgetry that they had little time left for fighting. To many armies, ultramodern hardware is not an asset.

Apart from having trouble with the *Patton's* automated fire control equipment, the Pakistanis were handicapped by their battle deployment. They applied proper deployment procedure by sending an armored brigade of 70 *Pattons* steamrolling across the Indian



The *Patton* tank was complicated to operate and was outmaneuvered on the rain-soaked muddy ground

defenses in the Kashmir sector without bothering about the open flanks. But lack of armored infantry precluded tactical exploitation of the initial gains. When fuel and ammunition supplies were exhausted, the Pakistani brigade ground to a halt. Lacking infantry protection, the Pakistani tanks became easy prey for Indian hunter-killer teams which stalked the *Pattons* with jeep-mounted 106-millimeter recoilless rifles, bazookas, and flamethrowers.

Advance Not Screened

In the Punjab sector, the Pakistanis also sent a 70-tank brigade steamrolling forward, but failed to screen its advance with jeeps and motorized patrols. The heavier *Pattons* could not maneuver on the rain-soaked muddy ground as easily as the lighter Indian *Centurions* and *Shermans*, and the few dry tracks across the battle zone were heavily mined by the Indians. Combat engineers were not sent ahead to clear the mines and prepare attack lanes across the muddy fields.

Moreover, at this time of the year, Punjab fields are covered with sugarcane and grass two to three meters high. The low silhouette of the *Patton* is intended to guarantee extra protection against enemy antitank fire and provides better conditions for hull-down deployment in major armored battles. But in the grass and sugarcane of Punjab, the Pakistani tanks had to operate blindly. To direct their fire, the tank commanders would climb up on the turrets and scan the field through binoculars, shouting down orders to the crews who then fed the information into computers.

The exposed tank commanders became easy prey for Indian snipers and were mowed down by machineguns, shrapnel, and mortar bursts. If the armored infantry had accompanied the Pakistani tanks into battle, they and their vehicles would have cleared lanes of fire in the grass, making ultimate victory certain. But lack of specially trained infantry and carriers turned success into failure.

Defensive Posture

On the Indian side, orthodoxy and lack of imagination paid off. The Indians did not even attempt to rush their tank battalions into battle. They deployed their *Centurions*, *Shermans*, and the few French-made *AMX* light tanks in hull-down positions protected by earth, logs, and sandbags. The Indian posture was strictly defensive without any attempt at breakthrough actions, in-depth penetrations, indirect flanking drives, or sudden assaults at night. Relying on horseshoe or V-shaped main lines of resistance, the Indians created three defensive lines at main road junctions, vital passes, and decisive sectors.

On the only sector where the Indians attacked—near the city of Lahore—the tanks were pulled back as soon as the infantry could dig trenches up front. The first Indian line was always manned by infantry with machineguns, light and medium mortars, bazookas, and recoilless rifles.

Pakistani tanks had little trouble rolling over the infantry, albeit at a heavy cost in wrecked and damaged vehicles. With one exception, they could not breach the second defensive line of dug-in Indian tanks. On the one occasion in Punjab where they did breach the second defensive line, their advance petered out in front of the third Indian line which was composed of artillery, heavy mortars, and combat engineers who planted minefields and tank traps between the second and third lines.

The Indian defensive posture proved efficient against the Pakistanis. This defense, however, would have been disastrous against a more imaginative enemy, one deploying flanking forces at night, utilizing paratroops and helicopter formations, striking with armored infantry and combat engineers ahead of the tanks, and attacking behind rolling artillery barrages and smoke screens.

Information Service of India

An Indian patrol moves over rugged terrain

● Deployment of artillery. Both sides adhered to standard British patterns. Indian artillery was more effective than Pakistani, but lack of self-propelled artillery and armored assault guns, mobile mortars, and motorized rocket launchers was felt. It is clear that the day of conventional towed artillery is over. The Pakistanis made a belated attempt to mount heavy mortars on trucks, but the vehicles broke down under the impact of recoil.

● Deployment of infantry. Although the bulk of the Indian and Pakistani Armies consists of infantry divisions, the brunt of the fighting was borne by the armored forces. On the Indian side, a few infantry hunter-killer teams were used in Punjab, and infantry defenses slowed down Pakistani tank drives and inflicted telling losses. On the Pakistani side, the infantry divisions remained largely unemployed. The Indians admit that one highly trained battalion of armored infantry or paratroops could have easily carried out the tasks of an entire division—with its numerous auxiliary, administrative, and support units.

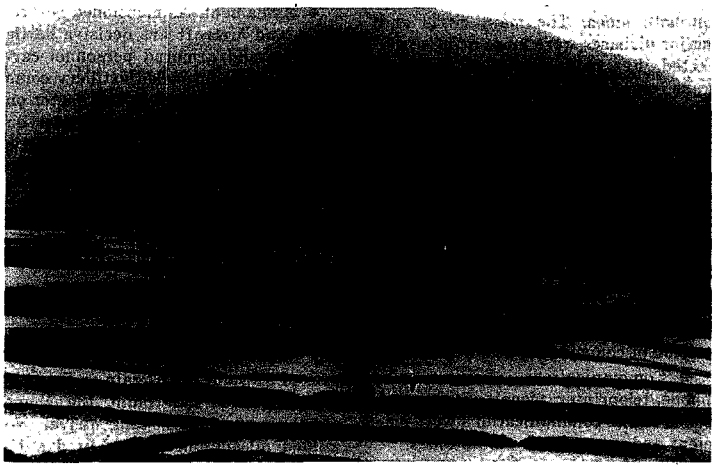
Adhering to standard British patterns, Indian and Pakistani infantry divisions were deployed with two companies up front and two in reserve; two battalions up front and one in reserve; and two brigades up front

and one in reserve. Simple arithmetic shows that only eight rifle companies out of 36 in a division saw actual combat. The 28 companies in reserve did little or nothing. This system may have been necessary in the trenches of World War I, or even in the Battle of Monte Cassino in World War II, but under the specific conditions of Indo-Pakistan hostilities, the system is outdated. The bulk of a division is standing by idle, while eight rifle companies must bear the weight of the enemy's armored attack.

• Deployment of commando and raiding units. Only two paratroop platoons were dropped—one by the Indians and one by the Pakistanis—to create panic and confusion by diversionary actions. The absence of airborne formations, paratroop battalions, helicopter forces, and trained commando squadrons reflects the orthodoxy of army commands on both sides. Under specific conditions in the Indo-Pakistan theater of hostilities, such forces could have made a decisive contribution to the war effort if properly trained, deployed, utilized, and controlled.

• Deployment of aviation. The role of the combat air forces of both sides was to provide low-level support for their ground troops. There were no strategic bombardment missions, no airlifts and air-bridge supply operations. Surprise attacks on enemy airbases were few and not effective. Low-level support missions were launched with greater efficiency by the Indians than by the Pakistanis. Once again, the reason was that the American-made jet aircraft utilized by the Pakistani Air Force were too modern for conventional frontline warfare.

As ground attack aircraft, the *F-104C* and the *F-86* proved less efficient than the slower and less sophis-



United Nations

A United Nations military Observer Group vehicle on a rain-soaked road in Kashmir

ticated French *Mystere* jets, British hunter *Hawks* and Indian-made *Gnats*.

Napalm bombs used by the Pakistanis proved less effective against tanks and artillery than the rockets and armor-piercing bombs utilized by the Indians. Napalm bombs are valuable in attacks on stabilized defenses, fortified villages, or soft-skinned vehicle convoys. Their value is exaggerated against tanks, on moist soil, muddy ground, and water-soaked grass fields. French-made five-inch rockets, and regular 20-millimeter and 30-millimeter aircraft cannon fire proved more effective.

Antiaircraft Defense

Antiaircraft defenses were scanty on both sides. The main cities and major airbases were more or less protected by radar-controlled 3.7-inch guns, regarded as obsolete in Europe, 40-millimeter *Bofors*, and—on the Pakistani side—90-millimeter US weapons. But frontline formations had to rely for their protection on 50-caliber *Browning* machineguns and 20-millimeter *Oerlikon* cannon mounted on trucks and weapons carriers. Their fire proved ineffective against jets. Both sides lacked sophisticated radar-controlled antiaircraft guns and motorized antiaircraft batteries for protection of convoys and armored forces.

- Communications. Radio, telephone, teleprinter, visual, courier, and coded signal communications were efficient and up to date on both sides.

- Leadership. Apart from the criticism which can be leveled against the orthodox rigidity, lack of imagination, and flexibility, troop leadership on both sides was good. Senior officers did not hesitate to lead their troops into combat rather than issue orders from rear area headquarters. Control of troops was efficient, and relations between officers and lower ranks satisfactory. The spirit of patriotism, national pride, and religious feeling guaranteed good morale, superior discipline, and instant reaction to orders on both sides.

Of great importance to leadership was the fact that both the Indian and Pakistani Armies are professional forces composed of regulars enlisted for long terms of military service. The recruiting offices are able to handpick the replacements. Compared to the general level of education and performance in both countries, the military standards—especially in infantry and artillery—are high in the armies of both countries.

- Armament. As mentioned before, tanks and aircraft are decisive battle weapons and armored personnel carriers and self-propelled artillery come next. Light mortars—52-millimeter on the Indian side and 60-millimeter on the Pakistani side—proved of little practical value. Not even the medium 81-millimeter mortars scored results which justify their deployment in modern battles.

Antitank Artillery Effective

Good results were achieved by Indian 120-millimeter mortars of French origin. British 4.2-inch pieces were less effective. Antitank artillery proved its value once again as the only weapon which can blunt the sharp edge of an enemy tank drive. No guided missiles or ground-fired antitank rockets were used. The towed 57-millimeter and 75-millimeter cannon proved worthless. The only weapons which produced results were jeep-mounted 106-millimeter recoilless rifles and infantry bazookas. Antitank mines proved effective only if used in strings of five, placed in X-shaped patterns.

Machineguns were the major infantry source of massed and sustained firepower. The US 50-caliber is still the best machinegun on the battlefield. British *Vickers*, US 30-caliber, and assorted light machineguns proved less effective. Automatic rifles also proved less effective in the hands of Indian and Pakistani soldiers than a combination of submachineguns and old-fashioned bolt action rifles for sharpshooters. There is clearly a need for a lightweight machinegun for front-line use by infantry platoons, combining the volume and effectiveness of fire of the 50-caliber with the simplicity of use and handling of the British *Bren* gun.

The three fundamental elements of land combat are: man, his weapons, his mobility means. The proper relationship of these three elements is the dynamic of land combat. Weapons change, the means of mobility change, man himself changes, but the dynamic of combat remains the proper relationship of these three elements.

Brigadier General George B. Pickett, Jr.