FRICITION AND THE FIGHT FOR BROWN PASS

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Faculty Seminar Leader:
COL Dave Tretler

Faculty Advisor:
COL John Sullivan
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National War College, 300 5th Avenue, Fort Lesley J. McNair, Washington, DC, 20319-6000

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Carl Von Clausewitz stated "everything in war is very simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war. Countless minor incidents – the kind you can never really foresee – combine to lower the general level of performance, so that one always falls short of the intended goal." The very essence of war as a clash of opposite wills creates friction. Uncertainty, or the fog of war, "constitutes one of the most serious sources of friction in war, by making things appear entirely different from what one had expected." On 14 February 1997, Task Force (TF) 1-16 Infantry attacked into Brown Pass at the National Training Center of Fort Irwin, California. Personal safety, confusion, fear, and fatigue combines with a hostile physical environment to impact on the effectiveness of both men and machines. After less than four hours of battle, it was clear that friction and uncertainty had dominated the outcome.

**FRICITION and UNCERTAINTY**

Before continuing, we must first establish a point of reference for each of these terms. Friction is the force that makes the simple difficult and the difficult seemingly impossible. Friction results from the effects of time, space, and human nature. It is the fundamental force that makes real war different from the abstract model of "absolute war." Our enemy is an independent and animate force who seeks to resist our will and impose his own on us. Our military courses of action
the main defensive area are oriented south. Two dismounted infantry companies with 100 soldiers each anchor the defense on both flanks. Combat security outposts deploy forward to deny penetration by reconnaissance elements. Deception positions cause early deployment by attacking forces and premature initiation of indirect artillery fires. Anti-tank (AT) vehicle ambush positions deploy forward to disrupt and attrit the attacking enemy forces. Obstacles are used to delay and disrupt movement. An AT reserve repositions to deny penetration or counterattacks to restore the defense. Reconnaissance, attack helicopters, and artillery fires from higher headquarters support the defense. Persistent and nonpersistent chemical agents, along with artillery-delivered mines, are used to shape the battlefield. The enemy builds their engagement area in accordance with set norms and is fully capable of defending against an enemy three to four times its size.

The friendly plan is simple and flexible, incorporates prudent risks, and depends on initiative among subordinate commanders to minimize uncertainty and friction. TF 1-16 Infantry is an infantry-heavy task force consisting of two mechanized infantry companies, one tank company, one engineer company, scouts, heavy mortars, air defense, and smoke generators. TF 1-16 conducts a deliberate attack along an exterior line to seize key terrain vicinity Brown Pass to allow a trailing tank task force to attack unimpeded to a subsequent objective. Terrain forces the TF to use a "frontal approach." On order, task force scouts conduct aggressive reconnaissance to locate obstacles and confirm location of enemy forces in Brown Pass.
At 0545 hours, the TF crosses the line of departure. Both mechanized infantry teams (Team D and Team C) attack abreast followed by mortars, smokers, engineers, and the tank team (Team A). Teams C and D occupy support by fire positions and orient into Brown Pass. Mortars occupy firing points to suppress antitank weapons and dismounted infantry within the Brown Pass area. Smokers move to point of breach and obscure zone of penetration from enemy observation and effective AT fires. Engineers breach one passage lane in Brown Pass and reduce obstacles on a second lane. Air defense secures breach force and TF main effort. Field artillery priority of fires focus on destroying enemy dismount infantry strong points, obscuring the zone of penetration, suppressing the motorized rifle platoon at the point of penetration, and disrupting the movement of the enemy reserves to block penetration. After breach is clear, Team A attacks by fire to occupy hasty defensive positions on enemy's side of obstacle belt. Teams C and D follow to expand breach for follow-on forces. TF assumes prudent risk by attacking with no dedicated reserve.

After assault into Brown Pass is complete and one passage lane is secured, the TF occupies hasty defensive positions north of pass (decisive point) to secure the trailing tank task force's attack through Brown Pass complex to subsequent objectives. Decisive to this operation is rapid penetration of obstacles and motorized rifle platoons at the point of penetration. TF endstate is 50% of available combat power in position to block enemy combined arms reserve from massing on trail tank task force and all enemy vicinity Brown Pass destroyed or forced to withdraw.
Starting combat power is 26 infantry fighting vehicles (M2s), 18 tanks (M1s), four air defense vehicles (BSFVs), six infantry squads, six sapper squads, and five heavy mortars.

**FRICTION and the BROWN PASS FIGHT**

After several days of continuous fighting, the TF began preparing for combat operations in their tactical assembly areas. Four battles in six days have pressed many soldiers to their physical and mental limits. Physical exhaustion from constant jerking in the hull of armored vehicles, excessive heat and cold, inadequate sleep, intensity of previous battle, loss of comrades, and pessimism regarding personal survival shapes the uncertainty of the next battle. A competitive rhythm has developed between the opposing wills, with each belligerent trying to influence and exploit tempo and the continuous flow of events to suit his purpose. The TF staff’s intelligence preparation of the battlefield and friendly options reduce vulnerability and uncertainty to enemy intentions by describing enemy courses of action. One is never absolutely positive that all enemy capabilities and intentions have been anticipated, so the TF scouts move forward to locate obstacles and confirm the array of enemy forces in the main defensive area. "War is the realm of uncertainty. A sensitive and discriminating judgement is called for to scent out the truth."³ At 1950 hours, 13 February, the scouts make contact with a forward enemy reconnaissance element losing one section to direct fire. At 0405 hours, 14 February, another scout section is destroyed by direct fire in the vicinity of Brown

Pass. By 0430 hours, the remaining two scout sections establish four observation posts in the objective area. "Countless minor incidents" such as darkness, terrain and geographical obstacles, physical exertion, degraded command and control, and chance combine to create unplanned friction. Uncertainty is not reduced because the scouts are unable to determine the exact location of enemy positions and the main obstacle belt. A complete picture of the enemy is not clear, but the TF is directed by higher to initiate the attack. The "difficulty of accurate recognition constitutes one of the most serious sources of friction in war, by making things appear entirely different from what one had expected."^4

At 0545 hrs, the TF crosses the line of departure. Units jockey under complete cover of darkness intermingling with other friendly units. Speed and observation is degraded due to primary reliance on thermal sights and night vision devices. Radio communication checks are jammed as vehicle commanders struggled to change frequencies at the last minute. Infantrymen crammed into the rear of their BFVs concentrate on the details of the next fight. As Clausewitz stated, the "battalion is made up of individuals, the least important of whom may chance to delay things or somehow make them go wrong."^5

At 0601 hours, the enemy fires a persistent nerve agent on southeast entrance to Brown Pass to force (impose his will) the TF into killing zones under degraded chemical uniform posture. The scouts report the chemical strike, but the message is not passed to the TF. At 0620 hours, the sun begins to rise forcing the

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^4 Ibid., 117  
^5 Ibid., 119
TF to stop for several minutes to remove all night sights and revert to day sights. The TF continues to attack, but leaves Team C behind unknowingly, poor communications and loss of situational awareness is the primary cause. The TF is now committed without all available combat power; the simple becomes suddenly incomprehensible. The "difficulties accumulate" and friction abounds. At 0654 hours, the TF is engaged by friendly close air resulting in the fratricide of one M1 and one M2. In this developing environment of friction, uncertainty, and fluidity, the battle slowly gravitates toward disorder. The TF's "Jominian" plan is not synchronized, instructions are misinterpreted in chemical protective masks, communications fail, and mistakes and unforeseen events continue to occur. "War is the realm of chance Chance makes everything more uncertain and interferes with the whole course of events."

The TF bypasses the chemically contaminated area and moves to the southwest entrance of Brown Pass. Enemy observers engage the TF with indirect artillery and rocket fires, long range AT fires, and close air support destroying two M1s, four M2s, and one infantry squad. Team D establishes support by fire position on southwest side of pass while Team C moves to assault positions along southeast side. As a result of stumbling into the chemically contaminated area and improper reactions to chemical strike, two infantry squads are destroyed. The enemy dismounted infantry strongpoints engage Team D at 0715 hrs with anti-tank and artillery fires and destroy two M1s and three M2s. The combined effects of lethal

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6 Ibid., 101.
enemy artillery, effective radio jamming, enemy close air strikes, improper friendly reactions to contact, and poor situational awareness by vehicle commanders induce dispersion that strains the limits of positive human control. Again, "countless minor incidents" combined to make the apparently easy so difficult.

At 0730 hours, Team C's remaining infantry dismounts begin clearing the northeastern side of Brown Pass. Teams C and D move forward in support of dismounted efforts to clear the pass area. Smokers provide obscuration. The enemy engages with direct fire and close air destroying one M1 and three M2s. At 0755 hours, the enemy fires a nonpersistent strike vicinity southern entrance to pass killing two M1 crews and one infantry squad. Both team commanders are killed. In the absence of strong leadership, uncertainty within each team temporarily degenerates into utter confusion and paralyzing inaction. Understanding the TF commander's intent and objective, junior leaders, "possess(ing) a standard of judgement knowledge of men and affairs ... common sense" and "guided by the laws of probability," eventually consolidate and reorganize remaining combat power and continue to attack. The surviving soldiers continue to fight because of fear, pride, and loyalty; friction and chaos is reduced due to junior leaders who become decisive under the weight of real responsibility. "Like danger, physical effort is one of the great sources of friction in war. Its limits are uncertain ... (and) exceedingly hard to gauge."}

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7 Ibid., 117.
8 Ibid., 115.
The TF continues to fight through the pass and by 0820 hours, losses five M2s and one infantry squad to direct fire rendering both Team C and D ineffective. Team A follows engineers into the pass, but is engaged by enemy close air; three M1s are destroyed. At 0900 hours, the TF reaches its culminating point and is unable to continue the attack. The brigade commander adjusts his scheme of maneuver and directs attack along an alternate axis. At 0905 hours, the TF commander is killed by direct fire along with remaining sapper elements. “Iron will-power can overcome friction, but of course it wears down the machine as well.”9 By 0920 hours, remnants of TF 1-16 move into hasty defensive positions to consolidate and reorganize. The battle is over before the TF is able to range the enemy with direct fire systems. On this day, the defense is the stronger form of war. The TF’s ending combat power is two M1s, one M2, one infantry squad, and one BSFV; the enemy remains combat effective firmly entrenched in his defensive positions.

Failure to take appropriate actions on contact resulted in the loss of command and control at all levels. As a result, the TF was unable to mass combat power at the critical point on the battlefield. The enemy was able to synchronize their combat power against the TF resulting in heavy losses. The TF was unable to meet higher headquarters intent of destroying enemy vicinity Brown Pass and securing key terrain.

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9 Ibid., 119.
CONCLUSION

"The second and most pervasive of war's enduring characteristics is what Clausewitz called friction."10 In war, nothing ever happens quite the way it is supposed to. Units arrive at locations not when they are ordered to, but minutes or hours later. They bring not their full strength, but a portion. When ordered to attack, some soldiers advance and some never get the word. The enemy whom they are to attack is not where the staff estimated, but somewhere else. Nobody ever quite knows what is going on because the "fog of war" (uncertainty) envelopes the battlefield. Because war is waged against a living and thinking enemy, that enemy takes deliberate measures to conceal his strength, his intentions, and anything else of interest about himself. He attempts to act in ways that one will not expect. War is dangerous; that danger, both physical and psychological, will effect the behavior of soldiers and impact on outcomes. Such was the case in the Battle for Brown Pass. On this training day, the combined forces of friction and uncertainty cause TF 1-16 Infantry to fall short of their intended goal. "No general can accustom an army to war . (and) . the elements of friction. Peacetime maneuvers are a feeble substitute to the real thing; but even they can give an army an advantage over others."11 In short, these factors prevent war from being a linear process and create an unpredictable see-sawing between opposing wills.

10 Strategic Review Summer 1997 (Boston: United States Strategic Institute), 17
11 Clausewitz, 122.
Bibliography
