# Fort Leavenworth -- A Memoir

John H. Cushman
Lieutenant General, U.S. Army, Retired

LTG JOHN CUSHMAN RET
6200 Oregon Ave NW Apt 435
Washington, DC 20015

Relying on my personal recall, documentation saved from my tours there, and limited research, this is my tale of my time at Fort Leavenworth, a place for which I have a deep affection.

Reprinted October 2013 with the addition of JHC pages 85-96, as Volume Six to accompany my Oral History.



September, 2001

Volume I, Narrative

# Fort Leavenworth - A Memoir

**John H. Cushman**
**Lieutenant General, U.S. Army (Retired)**

## Prologue

Fort Leavenworth, Kansas, home of the Army's Command and General Staff College, figures large in my life and memories. I lived there as a teenager in 1934-36 when my father was a student in the last two-year course before World War II. In 1954-58 I was for a year a student and for three years on the faculty. And in August 1973 to February 1976 I was Commandant. Although my 1954-58 Leavenworth tour bears on that of 1973-76, I have written this memoir primarily to tell my story of the latter period, seeking to give a straightforward account, useful to history, of those times from my perspective.

It was a time of considerable change, even of tumult, as the Command and General Staff College along with the rest of the Army school system adjusted to the reorganization of the Army that had just created the Army Training and Doctrine Command (TRADOC) and to the driving initiatives of TRADOC's first commander, General William E. DePuy, at Fort Monroe, Virginia. I had been selected by General DePuy to be the Commander of a new Combined Arms Center and of the new Combined Arms Combat Development Agency (CACDA), both at Fort Leavenworth, in addition to my duties as Commandant of the Command and General Staff College.

This is a revision of a draft written by me in early 2001 and circulated for comment. I am deeply indebted to Ben Harrison, Ivan Birrer, Mike Sanger, Jess Hendrick, Bud Weaver, and Bob Doughty, who were all associates of mine in 1973-76 and are identified herein. I also thank John Romjue, who served as a TRADOC historian for that period, for reviewing my draft. Of course I take full responsibility for any errors of fact or interpretation in this final version. For those who care to read it, it is my story, from my viewpoint, as accurately and objectively as I can relate it some twenty-five years after the events.

I was born in 1921 in Tientsin, China, the son of Captain Horace O. Cushman, Fifteenth U.S. Infantry, of Danville, Illinois, and Kathleen O'Neill Cushman of Charleston, South Carolina. I enlisted in the U.S. Army in 1940 and in 1941 entered the U.S. Military Academy, graduating in 1944 and commissioned in the Corps of Engineers. I served with the 808th Engineer Aviation Battalion building airfields and port facilities in the Philippines and Japan, returning on leave in June 1946 to marry Nancy Townsend Troland. I had met Nancy three summers earlier on a cadet field trip to Fort Benning where her father, Colonel Girard B. Troland, was senior Corps of Engineers instructor at the Infantry School and Nancy was home before her senior year at Connecticut College.

On reporting back to Japan for duty I received orders to join the Manhattan Engineer District (later the Armed Forces Special Weapons Project) at Sandia Base, NM, where I became operations officer of the 38th Engineer Battalion (Special) (later the 8460th Special Weapons Group), which unit had the mission, when so ordered, of assembling atomic bombs from their components and placing them in U.S. Air Force bombardment aircraft for delivery on target.

This, Nancy's and my first assignment together, was a wonderful introduction to our Army life. We were with about sixty other newly married couples, the men of which were mostly West Pointers, classmates or near contemporary engineer officers who had been assembled by Major General Leslie Groves, the builder of the atomic bomb. After the 1946 Bikini tests the scientists, who had assembled the bomb as essentially a laboratory device, began leaving the Manhattan Project to return to their universities, and Groves decided to replace them with officers chosen from worldwide. At Sandia Base we had two children, Constance and Cecelia, and made friends that would last a lifetime.

In the summer of 1949 I entered the Massachusetts Institute of Technology to earn a Masters degree in Civil Engineering. In June 1950 I reported to the Engineer School at Fort Belvoir, VA, for the Advanced Course -- just as war broke out in Korea. On March 6, 1951, I wrote my father, brigadier general, retired...

6 March 1951

Dear Dad -

Mom has probably told you that I was considering transferring from the Corps of Engineers to the Infantry. I know that you will be interested in hearing that today I submitted my request for such a transfer.

This is something that I have been thinking over for some time. As you remember, as a cadet I was on the fence for quite a while - undecided between the Engineers and the Infantry. I eventually chose the Engineers because of their many advantages in peacetime - further education, interesting and responsible work in civil construction, and a preparation for a useful and remunerative life after retirement. I visualized that the major part of my army career would be in times of peace, when military appropriations would again be cut.

The picture today is quite different from what I expected. And I believe that for most of the rest of my career the army will be either on a partially mobilized basis or engaged in actual hostilities. Under those conditions I would much prefer service in the various command and staff jobs that exist in the combined arms. Engineer officers just don't normally get those jobs. The Corps of Engineers is today in the unfortunate position of being short 800 regular officers out of a total authorized

of about 2300. Because of this, and because of the continuing commitment of a couple hundred to the civil works program, they do not place engineer officers in branch immaterial jobs without a great deal of protest. So I can look forward, as an engineer, to a long succession of fairly specialized assignments - usually not in the field of the combined arms. To avoid such a prospect and to get into a position where I can have more varied duties is the main reason for my transfer.

There are others. I have become a believer in a nearly branchless army as an ideal - such a concept is heresy in the higher echelons of the Engineers. I have become convinced that the continuing interest of the Corps of Engineers in civil works, regardless of their statements that it is not the primary mission of the Engineers, is to the disadvantage of their army role - and hence operates to the disadvantage of the army. I personally do not want to serve in the civil works program and have no desire to ever attain to the position of Chief of Engineers. That is not a fit way for an Engineer officer to think and it is not good for me to remain in the branch.

I know that I can be of value to the army as an infantryman. My engineer training will be helpful, as will my time in the atomic bomb business. I will go first to Benning for the short advanced course they give reserve officers (13 weeks). Then I will be assigned to troops - to a division in the states or overseas. I hope to stay with a division for a couple of years, and expect that at the end of such a time I will be up to the level of my contemporaries in the Infantry. From then on I hope to continue my education in the combined arms through the varied assignments that will be open to me as an infantryman. I expect that my troop duty will be overseas - in Europe.

Naturally this was a big decision for me to make. I would like to have been able to talk to you about it but I really doubt if you would have influenced me one way or the other. It was really something for me to decide for myself. When all the facts were in it was obvious to me that there was only one answer. And in the answer Nancy and I concurred as one.

Well, we are looking forward to having both you and Mom visit us later this month - the weekend of the 25th. We hope that you can get away for that weekend - although we know that those are your busiest times. When you come down we can catch up on all the news and talk of one sort or another.

All of us send our love --

Jack

Ordered to the 4th Infantry Division then training at Fort Benning for deployment to Europe, I was sent to the Associate Infantry Officers Advanced Course en route. Coming on top of the Engineer Advance Course, that experience was invaluable to me, new to

the infantry. I studied the organization and tactical operations of infantry units from squad, through platoon, company, battalion, and regiment -- along with their communications, logistics, personnel administration, intelligence and other aspects.

The school had been energized and expanded as a result of the Korean War with its early defeats, followed by MacArthur's brilliant stroke at Inchon, advances northward, then the Chinese intervention that drove United Nations forces far south of Seoul. United Nations forces in a counteroffensive had advanced beyond Seoul when in May 1951 they were ordered to halt their attack and wait for armistice negotiations. Both sides strengthened their positions, exchanging artillery fires, and fighting lapsed to patrolling and small unit actions. In late June, the Soviet delegate to the United Nations proposed a truce, and in July truce talks began at Panmunjom, a village on the front lines twenty-five miles north of Seoul, and continued for two years.

As the war went on I, now a major, reflected on my lack of infantry combat experience and on what my getting that in Korea might mean to an infantry career. My infantry classmates, all of whom had served in combat in World War II, had the coveted Combat Infantryman's Badge, while I did not. Believing that that might make a fundamental difference, I considered volunteering for Korea. As truce talks began, I asked the opinion of a battalion commander just returned from Korea, who had been a tactical officer in my time at West Point. He said that the war in Korea was over and suggested that I go to Germany as scheduled. I took the idea no further and never mentioned it to Nancy.

Moving my family to St. Petersburg, Florida, and with six weeks out of my life for a knee operation at Walter Reed, I finally arrived in December 1951 at my first infantry troop duty in the 22d Infantry Regiment of the 4th Infantry Division in Schweinfurt, Germany. I was assigned as S-3, 1st Battalion, commanded by Major Sam Carter. Major Carter had been through two years of combat as a company commander in the 1st Infantry Division in World War II.[1] I learned a great deal from him.

In a few months we had a new regimental commander, Colonel Legrande A. Diller. In early August he transferred me from the 1st Battalion to be the regimental S-3. Six

[1]Sam Carter (who by the way had been passed over for lieutenant colonel, I am sure for his outspokenness) gave me my first searing critique of the Army school system. Using my advanced course material I had organized training for "Company in the Night Attack" with its forward assembly area, its line of departure, and its close assault. When I showed him my intended training, he told me that in the war he had seen too many lieutenants killed by applying what they had learned at Fort Benning, and that was "no way to make a night attack. The way to make a night attack is to find a place in the enemy lines where a company can get through in single file, to take a battalion through it, and by dawn to have the whole battalion behind the enemy to trap him." Later in Rommel's Infantry Attacks, I saw the same lessons applied again and again, and had the Adjutant General at Fort Campbell run off a copy for every infantry officer in the 101st Airborne Division.

weeks later, Colonel Diller suffered a heart problem of some sort after climbing a hill and was forced to leave the regiment for reasons of health.

By that time, as part of a redisposition of the forces upon the arrival in Germany of two recently mobilized National Guard divisions, the 22d Infantry Regiment, with all its dependents, had moved to Giessen, 40 miles north of Frankfurt, where the regiment would defend a new sector. Pending completion of a new kaserne being built in Kirch-Goens, closer to Frankfurt, the regiment would live in a tent city on the outskirts of Giessen and our families would be in dependent housing, nearby apartments.

In Giessen we got our new regimental commander, Colonel David L. Edwards, who had been with General Harlan Hartness, 4th Infantry Division commander, when the latter had been Assistant Commandant at the Army Command and General Staff College at Fort Leavenworth. Colonel Edwards was a demanding commander with ideas all his own, some of them unusual; he surprised us often. Within a few weeks he had fired his S-1 (personnel), his S-2 (intelligence), and his S-4 (logistics), leaving only me on the regimental staff surviving.

In a few months our barracks at Kirch-Goens were ready to move into and we did just that, giving the regiment a few weeks to settle in before leaving for six weeks at Grafenwohr, which was the training area in Bavaria large enough for regimental-size exercises and all kinds of live firing. I take some pride in getting our training program ready for that deployment; everything that could be done was done to insure that each battalion's time was well organized and could be well used. The regiment motored to Graf at the first of May.

After about four weeks at Grafenwohr I assumed command of the 2d Battalion of the regiment. Colonel Edwards had for a while been dissatisfied with the 2d Battalion's commander. When one day that commander made a serious, possibly deliberate, error reporting the status of his battalion on a regimental exercise, Colonel Edwards decided to relieve him. On his telling me his intent, I thought about it for an hour or so, then went to him to say that I thought that I could command that battalion. He agreed, and said that he would go down right away to General Hartness in Frankfurt and make that recommendation. He got in his plane, returned two or three hours later, and told me that I had the battalion. That was quite something for me as a new infantryman at age not quite 32 and with only two years as a major.

Command of the 2d Battalion was the most satisfying duty I had ever had, and ranks today as one of the most satisfying of my career. Those six months had many good mo-

ments, a memorable one of which was the feeling of elation that struck me one day as I rode in my jeep at the head of the battalion on the road to a defensive position we were about to occupy in a corps field exercise, on a day and at an hour when I knew our plans were good, my command was organized and under control, I was on top of my job, and we were going to excel -- as we did throughout the exercise.

But, with the oversupply of qualified lieutenant colonels for battalion command, that job could not last. After six months I became the regimental S-4, or supply officer. It was an opportunity to learn about a different sphere of regimental activity, but it was a decided come-down from having commanded a battalion. Seeing ahead of me a full year before I would complete my three-year tour in Germany, I decided to seek reassignment.

Although I began my search seeking duty at a joint or allied headquarters in Germany or France, my desire to do so became known at the headquarters of the US Army in Europe (USAREUR), at Heidelberg, and soon I was told that I would go to that staff's G-3 office, with station at Cologne with the I Belgian Corps. There I was to be a member of a newly created US liaison team assigned to help the Belgian army, now a part of NATO's forces, adapt to the use of the nuclear weapon in the defense of its sector.[2]

I had become regimental supply officer November 5, 1953. On December 15 I received orders to Cologne, effective December 21. We now had a family of six, with Kathleen having been born while I was at MIT and Mary just the previous May. I made a reconnaissance to Cologne, then requested leave time so that our family could spend Christmas in Bad Nauheim, and in early January we moved. By then Nancy and I knew that she was pregnant with our fifth child. We hadn't known that in November.

As Belgium was a country with two languages, both French and Flemish were used in the headquarters, but everyone spoke French. I had studied French in night school in Washington while we were at Fort Belvoir, and soon became fluent enough to brief the Belgians in that language. The corps headquarters was organized under the British staff system, which meant that it was much smaller than that of an American corps and correspondence was less formal. I found that both interesting and refreshing.

---

[2]NATO's forces in Germany had grown since 1951. The I Belgian Corps was part of the mostly British Northern Army Group. US and French forces were in Central Army Group with headquarters at Heidelberg alongside USAREUR. Both these army groups were under Allied Forces Central Europe at Fontainebleu, France, where I had hoped for assignment, as well as at SHAPE in Paris. Since my time at Sandia, nuclear weapons had become part of the US Army's arsenal, to be fired by artillery as well as delivered by tactical air. US nuclear munitions teams were stationed around Germany with procedures for turning those munitions over when ordered to allied forces, who would use their own artillery to fire them. Our two-man detachment at Cologne was to assist the Belgians in understanding the tactical employment of these weapons and in obtaining them when and if a war began so that they could use them properly. We tested those procedures in command post and field exercises.

Time was available and I had been reading on military history and operations for some years, so I began writing an article on the future of the Army in the atomic age. Taking our team's sedan I visited Stuttgart, where the commander of the VII Corps, the famed Lieutenant General James A. Gavin, was trying out some interesting initiatives in operational concepts. I took time off from my job to go by car to nearby battlefields of World Wars One and Two. Having admired the writings of the British historian and military analyst B.H. Liddell-Hart, I began a correspondence with him in which he invited me to visit him in England. I did so for a delightful overnight with him and his wife Kathleen. All of this was interesting to me, but it was simply making the best of an assignment that I had blundered into, that while rewarding in some ways I did not really like very much, and that I was unable to do anything about.

Then one April day in our office I received a call from my boss in Heidelberg, saying that the Infantry assignment people in the Pentagon had asked if I could be released to attend next fall's Command and General Staff College course at Fort Leavenworth -- and was I willing to curtail my tour to do that? My answer was yes! I soon advised headquarters that Nancy was due to have a baby in August so we had to travel well before that time. On May 7th we received orders telling us to proceed to Bremerhaven to arrive May 25th and to board the transport USS Geiger for New York.

## Part One, 1954-1958

We expedited our travel from Germany, arrived at Fort Leavenworth in early July, and soon were living in the "Beehive." Jack, Jr., was born in August.

Classes would not begin until late August, and looking for an interesting place to work for a few weeks, I arranged to be assigned to a small new section of the College called Combat Developments. A section of six or seven officers who had previously been instructors, it was in the basement of Wagner Hall, which was the College Library and Archives building.[3] They were working on something called ANA, Atomic Non-Atomic Army. By 1954 the people at Sandia Base, NM, and in the Army's Ordnance Corps had developed and begun to test some low yield nuclear weapons and the field artillery cannon and missiles to deliver them. Soon after I arrived, ANA was succeeded by TRANSANA, Transition to the Atomic Non-Atomic Army.

The Army had only nine years earlier successfully completed a World War; only the year before it had ended the war in Korea. Nuclear weapons and missiles were on the horizon; a military revolution was brewing. The Army knew it must adjust, but it was venturing into the unknown. TRANSANA visualized a new United States Army from battalion through regiment, division, corps, and field army that would incorporate the air- and artillery-delivered nuclear weaponry now under development.

At this stage of my career, I was acutely conscious of being a engineer-recently-turned-infantryman who, in my ten years after graduating from West Point, had seen combat in neither of the two wars. True, I had just served very well in the 22d Infantry Regiment in Germany, where as a major I had for six months commanded a battalion. But I did not wear the Combat Infantryman's Badge. Strive as I might to be well regarded, I knew that nothing could substitute.

In September the course began. Classes were in 55-man classrooms in Gruber Hall, which in my father's time as a student had been a huge riding hall for the cavalry troops stationed at Fort Leavenworth. The meticulously prepared "lecture-conference" instruction was uniform across the three sections scheduled simultaneously, and was identical when given by the same three instructors to the other three-quarters of the class, a quarter at a time. Very much a product of World War II experience, its map exercises

[3]The library's reading room was on the first floor, and I remembered coming in there as a teenager when my father was a student and reading the newspapers' comic strips. In the basement of Grant Hall off the sally port under the clock tower was the location of the barber shop, now closed, where I had got my hair cut.

were almost entirely set in Europe. In the class were friends from my youth and fellow West Pointers of my time there, including many classmates.[4]

The course: staff procedures, decision making, tactical problems starting at division, logistics, a lot of memorization, and a load of books and maps to carry in a book bag down to class from the Beehive each morning and back. Six hours of class every day, and plenty of reading and other homework to do the night before, maps spread out on the floor or dining room table. No classes on weekends, with much golf then (and even weekday afternoons) for those who played. Playing with a partial set of inexpensive clubs I was among the occasional golfers, not very good at it.

As was becoming my lifelong and not entirely admirable habit, I sought to excel and was consistently in the top four or five in the class standings that were provided to students every two or three months. However, in the final days of the course I "busted" the examination on corps offensive operations, which had involved the employment of nuclear weapons in an attack of an enemy force. I had paid insufficient attention to the instruction beforehand, perhaps rebelling because it had seemed to be less than believable. My barely passing grade brought my final class standing to twelfth out of 650, not in the top ten announced at graduation, and I was very disappointed in myself.[5]

I had decided that after a student year I would seek assignment as a Leavenworth instructor, to continue developing as a troop-oriented professional soldier. I had twice been asked by West Point to become an instructor there, but I had begged off. Midway in my Leavenworth year I was told by the assignment people in the Pentagon that I was to go next to West Point to serve the required three-year "utilization tour" of my civil engineering year at MIT. In March 1955, uncertain of being asked to remain at the College on the teaching faculty, I approached Colonel Seth Weld, who was director of a new CGSC research and analysis office, to ask if he would intercede and arrange that I be assigned to his domain. He did, and I was; and although I would not be a full time instructor on the platform as I had hoped, we would stay at Leavenworth.

As the course ended and during my instructor training for new faculty members,[6] I prepared a comprehensive proposal for overhauling the Regular Course curriculum --

[4]In bachelor housing across the street from the Beehive lived Mark Boatner, a friend from my Fort Benning youth. A like-thinking and reform-minded activist who among other things decried the Army's "over-supervision" during the later years of the Korean War, Mark and I had frequent discussions during the school year. We formed a small and informal group of students holding similar views, with a view to publishing a "mailing list" through which we would continue to maintain contact, but nothing came of that idea.

[5]This paragraph is in here because the event played, I think, an important part in shaping my attitudes to nuclear warfare and to Leavenworth.

[6]For many years I kept the recording that each new instructor was required to make of extemporaneous remarks. Typical of my attitude at the time, mine was a call for the "majors of the Army" to be agents of reform.

concept, content, sequencing, and methods of instruction. I laid my recommendations out on a large sheet of graph paper on which I had pasted typed notes descriptive of my suggested course organization and content. My proposal incorporated the idea of a "pilot model" course which, using a fraction of the faculty, would present a markedly different year-long course to a part of the Regular Class for test and evaluation, and would then be modified for adoption by all the following year. During the school year Dr. Ivan Birrer, the College educational advisor, and I had many discussions on the curriculum, so when I completed my work I addressed my proposal to Major General Garrison H. Davidson, Commandant, and gave it to Dr. Birrer to take to him. I received no acknowledgment from General Davidson, who must have been bemused by my effrontery.[7]

In 1951 I had begun to write for professional magazines; my first article was on mine warfare for the Combat Forces Journal, formerly the Infantry Journal. While at Cologne I had sent them "Thoughts on Training," based on my experience with the 22d Infantry; it appeared while I was waiting for the course to begin. In October the Combat Forces Journal published my "What is the Army's Story," suggesting that the Army get straight the public message of its reason for being. At Cologne, while reading and visiting General Gavin's headquarters, I had begun a long piece called "Harness the Revolution" that I finished after arriving at Leavenworth. I submitted it to the College monthly, Military Review; it won the January 1955 monthly prize.[8]

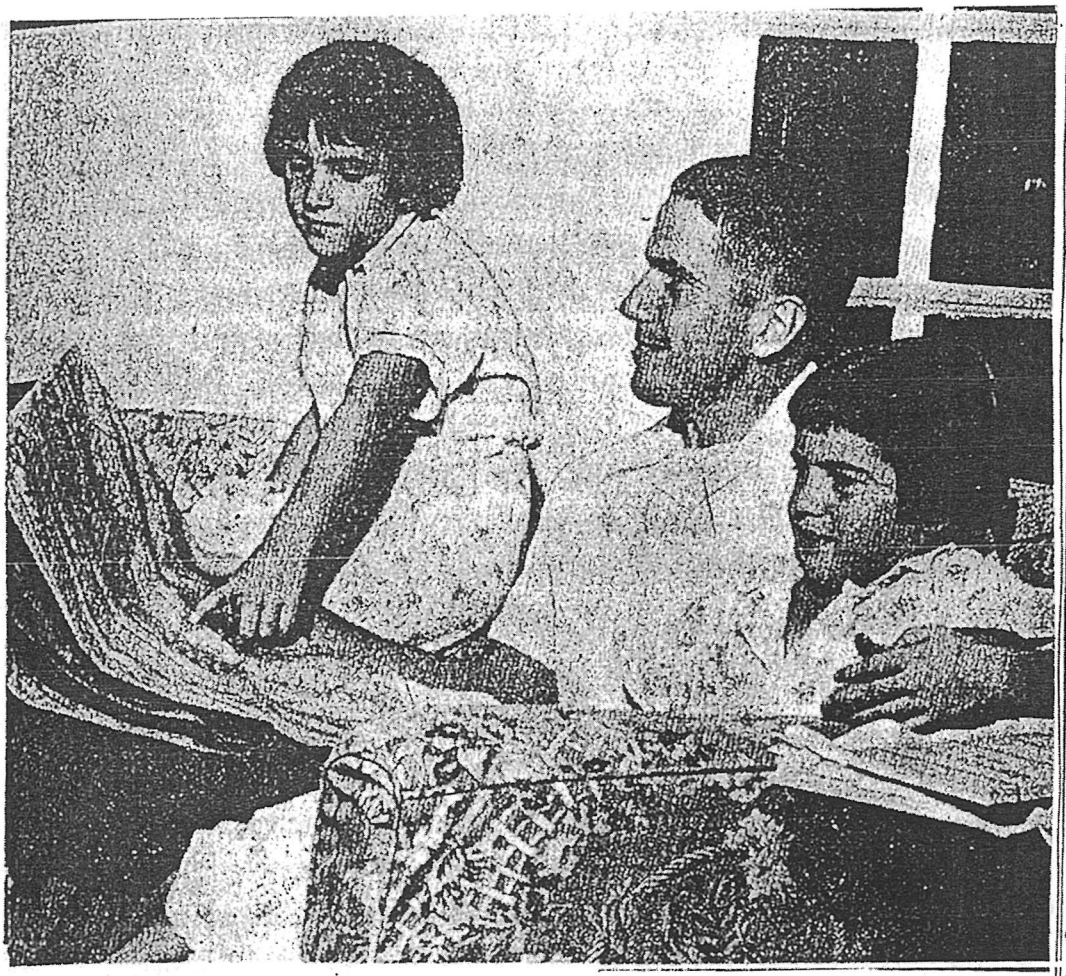
That summer of 1955 Nancy took the children by air to Lexington, while I took leave to drive the car through Virginia's Shenandoah Valley to study Stonewall Jackson's Civil War campaigns,[9] then through Washington to Boston, doing business along the way.

---

[7]Later in the year I asked the Assistant Commandant, Brigadier General William F. Train, for an appointment. I left him with a book from the College library by the British military analyst and historian Major General J.F.C. Fuller, whose many writings I had admired for some time. The book was Memoirs of an Unconventional Soldier; I called General Train's attention to those pages in which General Fuller told how, when between the wars he became Assistant Commandant of the British Army's staff college at Camberly, England, he had called in the Director of Instruction and told him to throw out all instructional material; the course would be rewritten in its entirety. I suggested that such action was now called for on the part of General Train. Nothing came of my visit but he graciously sent me a note later listing some well known British officers of World War II who had attended Camberly at General Fuller's time.

[8]It opened with "In this crucial hour of decision that is upon us today, the United States Army must find the answers to two massive questions: What is the role of the Army in our nation's security? How should it organize to fulfill that role?... Once the role is determined the task is this - - to do today those things that will make that Army of the future an unbeatable fighting instrument. Revolutionary means of warfare are now emerging. We must integrate these means into a superlative weapons system for ground combat. With objectivity, imagination, and vision we must attack this task. Extraordinary leadership and character will be required to see it though..." A major with ten years service, I was neither in doubt nor shy!

[9]The LeavenworthTimes story on that trip is on the next page. My interest in Jackson's Valley campaigns would have repercussions almost thirty years later when I was Commandant.



DAUGHTERS MAKE RECONNAISSANCE—Connie Cushman, 8, points to a spot on the map used by her father, Maj. John H. Cushman of Ft. Leavenworth, during his recent tour of the Shenandoah Valley while sister Cecelia, 6, looks on. Major Cushman, here shown telling the girls about his trip shortly before their bedtime, is a student of historic battle sites. (Times Photo)

THE LEAVENWORTH TIMES, Sunday Morning, September 4, 1955.

# *Major Visits Shenandoah Valley As a Scholar, Not a Vacationer*

By CAROLINE COLLINS

In the course of delving into accounts of this summer's vacation spots, the reply "battlefields" is disconcerting on an Army post. The popular conception persists that a man likes to put as much distance as possible between himself and his job when vacation time comes around.

The lure of the Shenandoah Valley with its history of Stonewall Jackson's mobile campaign proved too strong a lure, however, for Maj. John H. Cushman, a student at last year's regular course, CGSC, and currently assigned to the Combat Developments Sections of the college. While Mrs. Cushman and their children traveled by train to her family home at Lexington, Mass., Major Cushman drove to Shenandoah National Park where he camped for four days studying General Jackson's "beautiful example of deception and movement."

A man who militarily sees beyond the physical limits of terrain and weapons involved, the major explained, "I feel the study of other operations — not so much tactics or weapons but the effect of personality, the factor of luck, the will of the leader — give a better idea of what makes a successful leader."

"I believe military history is one of the best things any officer can study," he said. His interest in battlefields was aroused during study of the Civil War at the United States Military Academy where he was graduated in 1944. A later tour in Europe from 1951-1954 when he was a battalion commander in the 22nd Infantry of the 4th Division gave Major Cushman an opportunity to study a number of historic battle sites.

The earnest dark-haired officer who appears as much the athlete as a military man described the World War II battlefields of Arnaville, France, and Schmidt, Germany, where small unit actions predominated. He noted that the highly destructive German artillery detonating in the trees of the Huertgen Forest had virtually changed the character of the land to raw farmland, now resettled by refugees from the East Zone of Germany.

Asked for the sources used in the intensive study which precedes a trip to a battlefield, the major crossed the room to pull a book from a case well-filled with professional volumes. "US Army in World War II, Three Battles, Arnaville, Altuzzo and Schmidt" was the businesslike title on the first book. Regarding the Civil War, he feels the best source is a pamphlet entitled "Shenandoah" published by the Australian Staff College in 1952, the late date indicative of recent interest in this "example of a war of movement."

Major Cushman's attractive blonde wife sat curled in a chair halfway across the high-ceilinged room. (Due to the size of their family, composed of Constance, 8, Cecelia, 6, Kathleen O'Neill, 5, Mary Allerton, 2, and Jack Jr., 1, they are entitled to large quarters in the famed Beehive.) She confessed to a lively interest in the histories of battles but has been able to accompany her husband only once to the actual site. That was at Waterloo, which they both described as similar to Atlanta with its cyclorama. Mrs. Cushman feels it an especially rewarding experience for a wife to accompany a military man to a battlefield.

Traces of trenches and devastation at Verdun, Somme and Cambrai were noted in the young officer's tour of scenes of conflict. Roman battlefields in Belgium and France where Caesar's legions fought claimed his interest. Military history became increasingly meaningful and vivid as he was able to see the areas of operations.

But above all his interest centered in Field Marshal Rommel's push through the Maginot Line in 1940, when almost 50 miles were covered in a single 24-hour period. After detailed study, Major Cushman traveled from Dinant, Belgium, to Cambrai. A side incident of interest was the concrete post knocked down by the first German tank to cross the Line at the customs gate at Sivry; it was never restored.

Major Cushman's method of studying a battlefield is first to drive to where he can overlook most of the ground, then to compare his maps and read over material concerning the site. Particularly rewarding are conversations with natives in the vicinity of the battlefield.

While at Shenandoah studying General Jackson's Battle of Port Republic he obtained a great deal of local color from two elderly schoolmarms. Their home, recently torn down, had been a Confederate hospital, and pictures taken in 1902 showed the hole in the chimney made by a Yankee cannon ball. Until the day the house was destroyed, bloodstains on the floor under the rug were reminders of that campaign.

Throughout the evening the recurrence of the word "mobility" finally brought the conversation back where it began — to Shenandoah and a campaign which was won by the use and exploitation of mobility by an inferior force to accomplish its mission. And back to something more difficult to define which had likewise threaded the conversation — the military insight, the personality, the vision of such great leaders as Jackson which is made manifest upon the scenes of their triumphs.

The major, who has done some writing in the past, is interested in applying his research in an article "to emphasize the factor of mobility in modern war." And next? The answer came with no hesitation whatsoever. He's looking toward Georgia and Sherman's campaign. After that many other battlefields will doubtless kindle the interest of this military scholar.

Under Colonel Weld I found an outlet for my reform-minded activism. The previous year had been bad for the Army. President Eisenhower had put into place a new military strategy with the short title of "massive retaliation." It would rely on the nuclear weapon and an expanded Air Force to meet military challenges, and would substantially reduce the size of the Army. The defense budget he proposed at end-1954 reflected the new strategy. The Army Chief of Staff, General Matthew Ridgway, objected strenuously, arguing that United States military capabilities must provide for meeting situations short of those that might call for nuclear response. He got nowhere and in July 1955 he was replaced by General Maxwell Taylor. Meanwhile a group of activist Army colonels in the Pentagon had been mobilizing to fight the Army's battles in the Congress and in the media. Among those was Colonel George Forsythe, with whom in the 22d Infantry I had become good friends and who had a high regard for me. I wrote him to enlist in the effort.

On my travels east I stopped to see George Forsythe in Washington, then continued on my way to Lexington, visiting various political-military think tanks at Princeton, Columbia, Harvard, and MIT and sizing up the growing academic support, as the Cold War continued unabated, for readiness for "limited war," as differentiated from all-out nuclear war with the Soviet Union.

When I returned to Leavenworth I kept in touch with George, and beat the drums for that kind of thinking. That fall, he was among those creating the Association of the United States Army (AUSA), whose new monthly magazine Army would project the Army's line. He and others organized the founding AUSA annual meeting at Fort Benning, to which the College sent a delegation. As the action officer at Leavenworth on that project, I was a delegation member and was soon the moving figure behind setting up the Henry Leavenworth chapter of the AUSA (its first chapter) and became its secretary.

In September 1955 Colonel Weld's domain was reorganized and I went into a new section called Current Analysis, concentrating on short range development of the Army's organization and doctrine.[10] I became the College project officer on ATFA, the Atomic Field Army, the new name for the Army of the future, and sought without success to

[10]Among other projects I was action officer for the College position on results of tests at Fort Benning of a new organization and tactics for the infantry division. I drafted a recommendation that the commander of the division's new logistic support command also be the the division G-4 (logistics staff officer); that concept had worked successfully in the British Army. People were so busy that this heresy slipped by until I specifically highlighted it to the Commandant's attention, at which an uproar ensued, as I had expected, and that notion was expunged. I was also engaged in the study of new organization for the command posts of division and corps, to be called a Tactical Operations Center, that would provide more effective coordination of operations, including the use of nuclear weapons. That title and concept have remained to this day.

mobilize support for it to be the vehicle for College instruction in the 1956-57 curriculum. I was assigned to present two hours of instruction on ATFA for that course.

That fall I organized a group of faculty members, all senior and some far senior to me, who began an unofficial study of the "optimum strategy and organization" for war short of nuclear war on the Soviet Union's periphery; our goal was to prepare a series of thought-provoking articles for the Military Review, which appeared about a year later.

Aside from all that, I had been named secretary of the post dramatic club and was working within the Holy Name Society of St. Ignatius Church on post toward persuading the post authorities to provide bus transportation to parochial schools in Leavenworth, while at the same time getting the Diocese of Kansas City, Kansas, to accept the increased enrollments in the schools downtown that would result.

Family and post life, in 1955-56, my first faculty year, was not helped by our having to live another year with our five young ones in the Beehive with its dingy halls and cluttered stairwells; as a major I had not enough rank for four-bedroom faculty quarters. But that summer we were able to move into quarters in East Normandy. The next two years at Leavenworth would be markedly different professionally from my first faculty year.

June 14th, 1956, was the birthday of the Infantry (and of the US Army, in 1775), for which Infantry officers at Fort Leavenworth were organizing an Infantry Ball. Lt. Col. Bev Read was in charge, and he recruited me to help, along with Major Dick Hallock, who had just graduated from the Regular Course. Dick and I were to take from storage a large replica of the Combat Infantryman's Badge and install it overhead in the ballroom. As we worked we fell into conversation, quickly realizing that we had similar ideas about the inadequacies of the Regular Course.[11]

At just that time, the Commandant, General Davidson, was being replaced by Major General Lionel C. McGarr, whom Dick knew rather well from having served under him as a regimental S-3 when McGarr was commanding the 7th Infantry Division in the Korean War. We agreed that together we would build a plan to overhaul the College curriculum with a view to presenting it to General McGarr. At the end of September, having met with General McGarr to arrange it, Dick presented to him our joint paper.

---

[11]Dick (Richard R.), a graduate of Oberlin College and well-educated in the liberal arts, was a brilliant officer with an incisive mind. He became an Army officer through Officer Candidate School and served in an airborne infantry battalion in Europe in World War II. In the late '40s-early '50s, he had served in Army intelligence in Europe, whence he had become a special assistant to General Lucius Clay, the US Army commander, as the Cold War was heating up. He had there developed a unique ability to sit at a senior officer's side advising on policy and personalities, which he exploited in his soon-to-become-close relationship with General McGarr.

Typed by me on our home portable and reproduced here, it was to be fateful in my, and Fort Leavenworth's, life.[12]

30 September 1956

1. a. CGSC instruction is inadequate. It is out of date, sterile, stereotyped, inflexible, unimaginative, and fails to prepare for conditions as they exist in the field. Its doctrine is essentially ETO-World War II and its approach to atomic warfare is to superficially impose atomics on conventional doctrine.

b. At a time when it is vital to the future of the Army and the security of the nation that service schools lead in support of the announced aims and policies of the Chief of Staff, CGSC support is late and incomplete.

c. CGSC does not develop the qualities that will equip the professional officer for his future responsibilites in the atomic-air age: initiative, imagination, flexibility and independence of mind, moral courage, and command decisiveness. It is even questionable how well CGSC prepares the officer for conventional war, should one occur today.

d. Related problems exist, such as: limited classified instruction, nonresident instruction, research side of college.

e. The cause of this situation lies in the CGSC system, the organizational concept and operational procedures that have grown up with time. This ponderous system has mastered the management, through the sheer work involved in any significant change. The Staff is overcentralized and out of balance with the Line. The system is complacent, inbred, essentially negative in outlook, closes ranks against change, and stifles growth. It not only fails to exploit the considerable talents available, but it absorbs additional talents without useful product. Attempts to change the College have had piecemeal effect because they did not attack the basic root of the problem, the system.

2. a. The basic missions of the College are:(1) to prepare officers to fight today, and (2) to prepare professional officers for the future.

b. This means that the course of instruction must be changed to: (1) teach doctrine that can be used in combat today, (2) incorporate the new division and other organizations, (3) train realistically and imaginatively in atomic warfare, and (4) develop the faculties which equip an officer to keep pace with the rapid change in war.

c. Related problems must be solved concurrently.

d. The present system cannot produce changes of this magnitude in the time available.

e. With a new approach CGSC can turn apparent disadvantages into assets. It can make these changes and at the same time support the aims of the Chief of Staff and assume its role of leadership.

[12]The 194-page USACGSC document, Special Report of the Commandant, 1 January 1959, which was essentially Dick Hallock's 1958 work, is a comprehensive exposition of the changes of the next three years.

We adapted my earlier idea of a "pilot model," except that we recommended that, in one year, part of the College would write a complete new curriculum, while at the same time the rest of the faculty carried out the old one. The paper went on...

3. a. The solution is for CGSC to concentrate on changing the basic system concurrently with preparation of the 57-58 courses of instruction. The current management and system continue to conduct the 56-57 course, making all changes possible within their capacity.

b. Establish now a group to plan, develop, and test the 57-58 course and to form the nucleus of the new instructional organization. Initially, the chief of this group is essentially responsible to the Commandant. He has first priority on personnel and other support. Using a selected group of current students as a prototype class and as potential future instructors, he plans, develops, and tests the new course. This group must start out small, keen, eager, and imaginative. It will be a dynamic nucleus which through its own qualities will attract and integrate other dynamic individuals as it grows. By August 1957 the nucleus will have expanded to a new instructional staff and faculty, with a new personality. The old instructional organization will concurrently phase out, together with its personality.

c. During the same period, planning proceeds to solve the related problems (future doctrine, nonresident instruction, etc) so as to produce an integrated solution. This provides an opportunity for a basic solution to these interlocking problems.

d. This solution is feasible in terms of manpower resources, since it does not visualize a completely new rewrite. Rather it visualizes a new basic course plan, into which much of the present course can be logically integrated, ~~with relatively minor change~~.

We thought better of those last four words, which in the event were entirely inaccurate. Dick drew a line through them just as he was leaving to see General McGarr.

In the early summer of 1956, General Taylor, Army Chief of Staff, had reacted to the pressures on him to get in step with the "New Look" strategy and budget competition. He abandoned the idea of simply modifying the division organization, and decided instead to create out of the blue a totally different "pentomic" division, the first of which would be the 101st Airborne Division, to be activated at Fort Campbell, Kentucky. Its "pent" derived from the five battle groups that were its maneuver elements, each of which had five maneuver companies; this eliminated the battalion and regimental echelons of the former "triangular" division (and, further, provided no command slots between captain and colonel). It's "tomic" came from the Honest John missiles with nuclear warheads that were in its division artillery.

Early in October 1956, the CGSC began development of a new Army field manual for the Army's pentomic infantry divisions, to which all active Army and National Guard triangular infantry divisions were to be converted. I was named to the committee that would write this new manual.[13]

**Maj Gen Lionel C. McGarr**

That summer of 1956, an Educational Survey Commission, chartered a year earlier by General Davidson, had completed a study of the Command and General Staff College program and methods;[14] although positive, it had also been quite critical. General McGarr wanted to put its recommendations immediately into effect. Meeting alone in his quarters with Dick Hallock (with me off stage as Dick's accomplice), he began without the knowledge of any of the faculty to prepare dynamite charges. They would shake the very foundations of the Command and General Staff College as he drove it to adjust to the changes demanded by his continuing guidance.

The first dynamite charge came October 25, 1956, when General McGarr met with the faculty to tell them that they would rewrite completely the College curriculum for the 1957-58 school year (known as the "slant eight" curriculum, for the "/8" which followed each subject's number). He soon followed that with a detailed, signed, eleven page single-spaced paper, "Guidance for Planning the /8 Curriculum," that he had prepared with Dick's help. Then he issued a blizzard of directives calling for the faculty to study ways to organize and work to accomplish the rewrite. Of course I knew that Dick's hand was behind all this; we cooperated covertly. But, as yet, few suspected Dick and no one suspected our collaboration.

[13]Made in desperation in an effort to gain resources and regard for the Army's contribution in the nuclear-oriented Eisenhower administration, General Taylor's decision turned out to be a mistake. The new organization was the untested product of a study by a small group and did not work well in practice. Within three years all the Army's infantry divisions, both active and National Guard, were converted. Then, in 1961, upon President Kennedy's election which led to an increase in Army strength, all were converted back to something resembling the old organization, with brigade replacing the regimental echelon.

[14]The Commission was composed of three outstanding combat commanders of World War II (Lt Gens Manton S. Eddy, Geoffrey Keyes, and Troy S. Middleton) and three distinguished civilian educators. Eddy and Middleton had been instructors at the prewar College, and after the war Eddy had been its Commandant.

On December 4, 1956, General McGarr cut through the welter of the faculty's studies and addressed the faculty with his solution -- a complete reorganization of the College instructional departments, first, for the curriculum's rewrite, then for its execution. The old departments would stay in place for the execution of "slant seven," while the new departments would report to the "/8 Coordinator," Colonel Ward Ryan. On that day I was reassigned from the committee writing the division field manual, where I had finished Chapter 1, Introduction, and was made a part of Colonel Ryan's office. And Dick, who had been operating all along in the Department of Non-Resident Instruction, was named the Commandant's "special assistant for /8 planning," with an office adjacent to that of General McGarr. Nine weeks had elapsed since our paper went to General McGarr. The course would begin in August 1957, nine months away.

General McGarr was not an adept change agent. Communication and persuasiveness were not his strong suits. Very much the proven combat commander, he was intelligent, insightful, and shrewd. But compared to the smooth and likable Gar Davidson, his equally intelligent though less visionary and decisive predecessor, McGarr came across as blunt, rough, humorless, and suspicious -- not easy to like. His guidance was largely in writing or in speeches to the faculty, mostly prepared with Dick Hallock's help, with no give-and-take and little explanation to the listeners groping for understanding.

Ward Ryan and the new department directors, quickly named, first had to design the course. Virtually every "unit of instruction" (lesson) in the Regular Course, 1100-plus hours in length, was to be rewritten. Because the locales of the map exercises that were the heart of the course (e.g., The Infantry Division in the Defense) went worldwide (not 95% in Europe as in previous years); most of these exercises were placed in a new locale. For each one the author/instructor had to find maps and prepare overlays, write the general and special situations with their First Requirements, then their Second and Third Requirements, with the teaching/learning points for each. The department head or his subordinate section head then had to conduct a faculty review of the entire package and of its doctrinal references. After this review the entire bundle had to be sent to the print plant to be made into hundreds of copies in time for instructors to become thoroughly prepared to teach the lesson.

The Commandant soon issued his "approach to instruction"...

> *Instruction is designed to develop student reasoning ability, decision-making ability, character, self-expression, and ability for team work. Specifically, the student must be able to recognize a problem, determine the basic issues involved, obtain the necessary information for solution, understand and properly apply principles, analyze problems based on available information, arrive at sound logical solutions or decisions with reasonable*

*speed, communicate his reasoning and decisions with facility, both orally and in writing, and know how to supervise so as to ensure proper execution. While the student is indoctrinated in sound doctrine and procedures, detailed instruction and memory work in skills and techniques which are subject to change and more rapidly learned in the field are held to the minimum. Instruction is oriented primarily on developing logical, practical, and original reasoning ability in military problem solving, rather than on the merits of any single solution. Particular attention is given to the development of intellectual honesty, integrity, and professional values and standards.*

The Commandant's, and his faculty's, problem was to define how to accomplish these worthy goals. Among the host of initiatives that followed: classroom configurations that allowed increased small group discussion,[15] instructor evaluation of student oral performance, and acceptance of sound logic that led to other than the "approved solution."

The faculty divided into two camps, the larger of which, coalescing around the Assistant Commandant, Brigadier General William F. Train, lined up against McGarr describing his program as unnecessary -- "change for change's sake." A few were on his side, most importantly Dr. Ivan Birrer, the Educational Advisor, who had seen commandants come and go since 1948 and who, keeping his lines open to the dissenters, was helpful in making things work. Ward Ryan was loyal, as was the rock-solid Colonel John Franklin, College Secretary, along with the newly chosen /8 department directors. But because General McGarr's persuasive and communicative skills were so lacking, these loyalists were often hard put to defend his decisions, despite their essential soundness. General Train, who would be gone by summer, found himself out of the loop for /8 instruction and relegated to simply completing the '56-'57 year.

Dick Hallock and I continued to work together. I would occasionally give Dick a hand with ideas, or comment on what he was considering. Discussing them with him, among others, I wrote two important directives, The Doctrinal Basis for Instruction, and The Design of Units of Instruction, that attempted to spell out how to go about achieving the intent of the Commandant's guidance. I was the author of the 40-page 1957/58 Catalog of Courses that would articulate the new Leavenworth. Dick and I would spend hours either at his quarters or mine thrashing out ideas. As it became known that we were in touch with each other, people talked of the "major" revolution at Leavenworth. I sensed that I was not well regarded by some who, correctly, saw me as a Hallock ally.

Working 12-14 hours a day, my time went by fast. Everything was in flux -- new doctrine came off the press; an innovative category of subject matter called "Situations Short of

[15]Ivan Birrer came up with the idea of two-man tables that could be arranged for group work, with curtains pulled to divide the classroom. Bell Hall, the new College building, was then under construction; it opened in 1958 with folding partitions that allowed each large classroom to be divided into four small ones.

War" (Dick Hallock's idea) was added to the curriculum; a variety of instructional methods was introduced; the student evaluation system was modified; atomics were incorporated from the ground up. Lessons were to be built in blocks of three hours, scheduled one in the morning and one in the afternoon. The schedule took shape.

Permit me to reproduce these pages from the /8 Catalog of Courses. They represent our effort's final product, which was profoundly different from that which went before...

THE Regular Course curriculum consists of 8 courses of study, 1 prepared by each of the 6 academic departments and 1 by the Department of Combat Developments, except that the Department of Staff and Educational Subjects presents 2 courses of study. Each course of study focuses on the achievement of the instructional purpose of the curriculum.

Recognizing the impossibility of exploring completely the entire gamut of ground operations, any curriculum is at best a sampling of the more vital subject areas. The subject content of each course of study is selected to provide the best and most comprehensive sample of possible learning experiences, consistent with the depth of approach essential to understanding.

The curriculum is introduced by a series of subjects not assigned to a course of study, the purpose of which is to place the course in perspective. This includes such instruction as *Content and Nature of the Curriculum, The Army and National Security,* and *The Principles of War and their Application in Atomic Warfare.*

The courses of study are:

STAFF—148 hours

The purposes of specific instruction in staff subjects are: to provide thorough grounding in staff mechanics; to provide initial application of these fundamentals, procedures, and techniques in basic problems; to present basic instruction in oral and written communication; and to provide a broad understanding of staff theory and pertinent staff systems.

The staff is taught as the vital and essential tool of command. The higher level staffs are taught after a thorough grounding at division level. This instruction is followed by thorough and detailed application of staff integrated in all other courses of study, so that actually these hours are a relatively small part of the total instruction in staff activities.

The broader treatment of the staff later in the year includes the consideration of staffs of other services and other nations in *Comparative Staff Systems.* It also includes *The Staff as a Tool of Command,* which synthesizes and culminates all staff instruction. Parts of this subject deal with *The Intelligence Function, The Control and Coordination of Tactical Operations,* and *The Control and Coordination of Administrative Support Operations.*

This approach to staff instruction is designed to produce a graduate who not only is well grounded in staff mechanics and procedures, but who also can serve confidently on any staff in any future situation.

SPECIAL WEAPONS—47 hours

With respect to technical special weapons instruction, the aim of the Regular (and Associate) Course is to prepare the student as a com-

mander or general staff officer in the supervision of the trained specialist, the atomic weapons staff officer. Classified technical instruction in special weapons required to accomplish this purpose is contained in this course of study. Atomic warfare instruction throughout the curriculum is unclassified, except that additional classified technical instruction is contained in 30 hours of instruction specifically designated in other courses of study. This course includes instruction on the technical aspects and operational problems of chemical, biological, and radiological warfare, which is also applied in other courses of study.

INFANTRY DIVISION—253 hours

The instruction in infantry, armored, and airborne division operations is the heart of the curriculum and the foundation of tactical instruction. The purpose of infantry division instruction is to provide the student with experience as a commander and staff officer in making and executing decisions and problem solving in the area of infantry division operations so as to develop basic understanding of the capabilities and doctrine of the infantry division in the wide variety of roles, operational environments, and types of operations characteristic of its operations in modern war. Thorough understanding of infantry and other division operations, portrayed realistically in a corps and field army framework, make

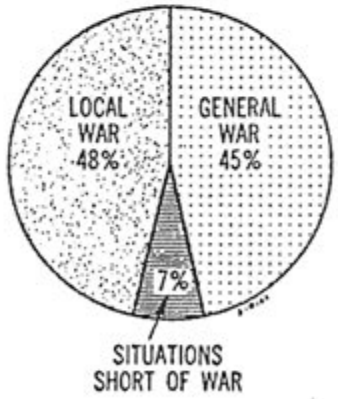
• • • • • • •

*All instruction reflects the atomic-age Army and its versatility in the many roles it will have in different forms of war.*

*The course is completely atomic, since in the future all ground operations will take place under the threat of the use of atomic weapons, and to classify operations as "atomic" and "nonatomic" oversimplifies the problem. The term "nonactive atomic" more nearly describes the condition in which atomic weapons are not being used but may be used at any time by either side.*

*Fundamentals are taught in an "active atomic" environment, pointing out nonactive atomic differences. The bulk of applicatory tactical and logistical instruction is under active atomic conditions. Nonactive atomic operations are taught with varying degrees of the threat of use of atomic weapons, and to the extent necessary to ensure that the graduate is capable of performing with equal facility in either active or nonactive atomic conditions.*

*The scale of use of atomic weapons varies from the threat only, through intermittent and wide use, to their unrestricted use as part of an all-out thermonuclear exchange.*




*The percentage figures (left) for the Regular Course on forms of war reflect all applicatory tactical instruction in which the strategic setting of the operational problem is significant. Initial basic instruction in staff subjects and the technical aspects of atomic weapons is not included, although much of this is placed in a local or general war setting. Nonactive atomic operations are taught only in the local war and situations short of war environment.*

it relatively easier to advance to instruction at these higher levels. In this course of study, as well as in those which follow, the student reinforces and augments his earlier specific staff instruction by its application in realistic combat situations.

ARMORED DIVISION—113 hours

Similarly, the purpose of armored division instruction is to provide the student with experience in making and executing decisions and problem solving in armored division operations so as to develop basic understanding of the capabilities and doctrine of the armored division in modern war. Additional time allocated to this subject over that of previous years provides wider coverage of the various types of operations, gives the student more experience in a division which has a different organizational structure for its maneuver elements, and provides instruction which is common to infantry, airborne, and armored divisions in those operations for which mechanized mobile forces are particularly well suited.

AIRBORNE OPERATIONS AND ARMY AVIATION—147 hours

This course of study includes airborne division, airborne corps, Army aviation, and air-landed operations of the infantry division. It too is oriented on decision making and problem solving, with the view toward developing understanding of air mobile operations and their tremendously growing importance in modern war. Instruction in Army aviation is directed at the introduction and basic application of this subject; the use of army aviation is emphasized in tactical and administrative support operations in all instruction. These subject areas are grouped into one course of study presented by a single newly organized department to ensure the energetic pursuit of concepts of air mobility. Instruction in unconventional warfare is also assigned to this course of study; this latter reflects College emphasis on guerrilla and antiguerrilla operations and on the politico-psychological aspects of modern war on the technical level.

LARGER UNITS AND ADMINISTRATIVE SUPPORT—247 hours

This course of study includes corps, field army, administrative support of larger forces (both logistics and personnel management), and joint operations. These related areas are combined into one course of study to economize on time in instruction by eliminating duplication of coverage, to ensure the integrated approach to doctrinal development and instruction that is vital to progress in these areas, and to give special attention to the vital importance of logistics in modern war. Although this instruction includes the logistical support of larger units, it does not include: division level logistics specifically covered in departmental courses of study (infantry, armored, and airborne); airborne corps logistics specifically covered in the airborne-army aviation course; staff aspects of logistics specifically covered in the staff course; and applicatory logistical instruction integrated in all courses.

Certain instruction by Navy, Air Force, and Marine representatives at the College is included in this course of study. A portion of this course of study is presented at the outset of the curriculum to provide the student with an overall understanding of the environment in which tactical operations take place.

FUTURE WARFARE—65 hours.

From the point of view of the student, the purpose of this instruction is to prepare him to adjust rapidly to the conditions of future war and to contribute to the modernization of the army. From the point of view of the

College, this instruction also serves as a means of evaluating future concepts, developed at the College or elsewhere, and for improving the analysis of weapons. This is a refinement and extension of instruction in this subject presented in previous years.

The course of study includes three short subjects on the Army Combat Developments System, techniques of field testing, and concepts of organization and doctrine currently under development and test. Following this, the instruction presents two 12-hour subjects designed to develop student ability to evaluate weapons systems and to project the student into division operations and organizational concepts in future environments. The last subject of the course is a 6-day exercise in which the student develops and evaluates concepts of future war in an area of strategic significance. Six guest lectures on research and development activities are included in this course. In addition, some future warfare instruction is given in all other courses of study.

EDUCATIONAL SUBJECTS—97 hours

The purpose of this course of study is specifically the long-term development of values, standards, and theoretical knowledge of the student as a professional soldier. Although the entire curriculum orients on this purpose, the educational subjects are distinguished in that they are devoted to the "cultivation of wisdom and judgment" rather than toward the acquisition of a skill. Thus, the treatment of learning is entirely educational, rather than partly training in nature. This course extends a concept of previous years and improves it by treating sustantially the same amount of material in a single block taught by a newly organized section under an integrated approach.

Selected areas from six subjects are presented: *Military Geography, Comparative Military Systems, Legal Status of the Military, Military Organization and Management, Military Psychology and Leadership,* and *Military History.* The College is receiving advice and assistance from the educational world in the preparation and conduct of this instruction. The British and French representatives to the College assist in preparation and presentation of this course of study.

This course not only reinforces by sound theory all other courses of study but additional solid practical value is also expected. Examples: management instruction uses specific "cases" which not only develop judgment, understanding, and discrimination, but also illustrate current management problems both in the Army and in business; and *The Legal Status of the Military* includes required instruction on martial law and the function of the Army in civil emergencies, as well as orientation on such subjects as the "status of forces" agreements.

THE GUEST SPEAKER PROGRAM

Throughout the year, guest speakers are invited to address the student body and to answer student questions in the discussion period which follows each speaker's presentation. The guest lectures are among the most profitable aspects of the course. The program is designed to provide outstanding speakers on professionally and ethically educational topics; to provide stimulating and intelligent ideas from outside agencies and institutions; and to inform students firsthand of the latest thinking on future concepts and materiel of other military agencies.

These pages of the summer of 1957 described what the College leadership was seeking to do. Actual achievement no doubt fell short of these ambitious goals.

In March 1957 I organized a widely attended and successful CGSC conference on "Roles and Operational Environments of the Army in the Field" (ROETAF) that was aimed at insuring that our /8 instructional map exercises reflected and supported the Chief of Staff's new National Military Program. We also attempted to define atomic warfare environments by levels, from being only a threat, to limited use, to large scale use -- a subject that the Army has since wrestled with but never successfully.

That fall I joined a committee writing a new Field Manual 100-5, Operations -- the manual that by tradition sets forth the basic operational doctrine for army forces in the field. Issued in 1949 to reflect the Army's experience in World War II, it had been revised in 1954 after the Korean War. The Army needed a new version to reflect developments in munitions. Soon after that the College was told to prepare an "Army Combat Power Exercise" that a team of Leavenworth instructors was to take into the field to illustrate the new doctrine. I worked on that project too.

During this period, an essential feature of my professional thought began to develop; it was to continue throughout my career and into retirement. I called it then "air/land warfare" or "the air/land battle." The concept stemmed from a conviction that not since the airplane became a means of war in 1917 had there been anything called "land warfare"; it was forever after that "air/land warfare," the doctrine for which required a unified approach. I believed that it was incumbent on the Army, working of course with the Air Force, to lead the way in articulating this doctrine. For this draft FM 100-5, I wrote the initial Chapter One, Introduction, and then Chapter Two, The Air/Land Battle. Chapter Two did not survive into the final field manual and is nowhere to be found.

As the /8 course opened Dick Hallock intimated that he was thinking of asking General McGarr to request my extension on the faculty for another year; I told him that I would prefer not. In September 1957, the visiting Secretary of the Army General Staff, Major General William C. Westmoreland, asked to see me in General McGarr's office; it seemed to be an interview. I soon learned that his office was asking to have me assigned to the Chief of Staff's Coordination Group, the small study cell in the Chief's immediate office when my three years at Leavenworth were to be completed.[16] I wrote the assignment people in the Pentagon that I would prefer that to being extended at the

[16] I surmised that, while George Forsythe, my friend and mentor, had left the Coordination Group, my reputation lingered there, and that new people in that office who had come to our ROETAF Conference had been impressed by my potential as a candidate for their group. One of these visitors was Colonel William E. DePuy, who as a lieutenant colonel at V Corps in Germany was in charge of the battalion test exercise program when I took the 2d Battalion, 22d Infantry, 4th Infantry Division through it in the summer of 1953. We scored highest in the regiment. Bill DePuy came to lunch at our quarters in 1957 and I remember my three-year-old son Jack holding his hand as they walked up the concrete path to our front door at 24 Buckner Drive.

College for a year. On October 10th I received Department of the Army orders to Washington, to report no later than June 30, 1958. That settled the matter.

Our second son, Ted, was born in May 1958; the following month our family of eight left for Washington. Before my departure General McGarr wrote in my copy of /8 Catalog of Courses, "With appreciation and admiration for your great contribution," and presented me with an Army Commendation Medal for my work since 1956.

While I was pleased with General McGarr's recognition, I left Fort Leavenworth somewhat troubled about the reputation that I feared that I had acquired there -- that of a collaborator though Dick Hallock with General McGarr who from within the faculty served them rather than his direct superiors and confreres.

I may be too hard on myself, but my handling of my role in this overhaul of Leavenworth has been a concern of mine ever since. Because I fully agreed with the direction General McGarr was taking, and had indeed been party to his taking that direction, I worked for months with Dick Hallock while keeping the degree to which we worked together from my colleagues and from the College hierarchy whom I was seeking to serve well. As 1957 wore on and the /8 course took shape, I cut back working with Dick, ending it when I submitted through Ward Ryan my draft Catalog of Courses, on which Dick had commented to me privately. My conduct seemed the right thing to do at the time. For the first time to anyone I reveal here its full nature.

* * * * * * *

*That summer I went on to the Coordination Group in the Office of the Chief of Staff, whence in early 1961 to the Office of the General Counsel (Cyrus R. Vance) to work on Robert McNamara's Pentagon reorganization schemes, thence in 1962 as a military assistant to Mr. Vance when he was named Secretary of the Army. From there I went to Vietnam to serve a few weeks in Saigon, then as senior advisor to the commander of the 21st Infantry Division and 42d Division Tactical Area in Vietnam's Delta. After a year at the National War College I joined in 1965 the 101st Airborne Division at Fort Campbell, KY, where I served as installation Director of Supply and division and post chief of staff, and then took command of the 101st's 2d Brigade as the division was alerted for December 1967 deployment to Vietnam, where I led the brigade in the fighting north of Hue during Tet 1968 and its aftermath. In 1968, a new brigadier general, I commanded Fort Devens, Massachusetts, returning in February 1970 to Vietnam. There I was deputy senior advisor then the major general senior advisor to the Commander, IV Corps and Military Region IV, returning in 1972 to Fort Campbell to command the 101st Air-*

*borne Division. I welcomed the division's colors back from Vietnam and brought it to full combat readiness under a Unit of Choice recruiting program. My next assignment, in August 1973, returned me to Fort Leavenworth as Commandant.*

*Dick Hallock did not fare as well. He left Leavenworth in 1959 for Turkey, then returned to the Pentagon, and later was a student at the Army War College under Major General Train, whose nemesis he had been while Train was Assistant Commandant, CGSC. At Fort Campbell in 1965, I received a desperate call from him; General Train had butchered him on his academic report to the extent that he had been passed over for colonel, and he was seeking advice or help. Dick successfully challenged that evaluation and was in due time promoted, but retired not long afterward. I know that he worked in Iran during the Shah's regime, and lived out his last years in California then Ohio, leaving a bequest to his cherished Oberlin College that funded its Hallock Auditorium.*

## Part Two, 1973-1976

*There is no way that in fifty pages or so I can cover fully my thirty-month second tour at Fort Leavenworth. Histories written at the Combined Arms Center and in the Training and Doctrine Command address in detail this turbulent time. Here I deal with some highlights and a few major issues of my tour as I see them. From the huge stack of papers that I saved from those times, I have selected some; they are attached as annexes. For a full appreciation of my story, I ask the reader to look them over carefully.*

### The Beginning

The story of this tour at Fort Leavenworth begins in June 1973 when I, then a major general commanding the 101st Airborne Division at Fort Campbell, Kentucky, was visited by General Alexander Haig, Army Vice Chief of Staff. As he was preparing to depart, General Haig hinted that he knew my next assignment, saying only that I would have a nice set of quarters. Somehow I sensed that I would be Commandant of the Command and General Staff College. I soon received my orders.

I had taken command of the 101st fourteen months earlier, welcoming its colors and a few hundred of its soldiers back from Vietnam. At the April 1972 homecoming ceremony were General William C. Westmoreland, Army Chief of Staff,[17] who officiated at the transfer of the division colors to me from my classmate Tom Tarpley, its last commander in Vietnam, and General Ralph Haines, commanding the Continental Army Command. General Westmoreland was planning a major reorganization of the Army in the continental United States. In charge of the study project, called Steadfast, was Lieutenant General William E. DePuy, Assistant Vice Chief of Staff of the Army. Waiting for the ceremony to begin, I overheard General Haines taking exception in conversation to the direction the reorganization study was taking; it was evidently visualizing a breakup of CONARC.

[17]General Westmoreland had commanded the 101st at Fort Campbell years before. In Vietnam I had served under him as a division advisor (1963-64) and commanding the 2d Brigade of the 101st in Vietnam (1967-68). As Chief of Staff he had visited Fort Devens in 1969 during my time in command there, and I had made a favorable impression on him. It was he who told me in 1971, when I visited his office while on leave from Vietnam, that I would command the division when it returned home; and it was he, speaking later that year at an AUSA luncheon at Fort Campbell, who announced that the division would come back to Fort Campbell and that I would command it.

In early 1973 the study was completed and its recommended reorganization was approved by the Secretary of the Army; it did indeed divide CONARC into two parts. A new Forces Command, its headquarters to be at Fort McPherson, Georgia, would encompass all of the Army's active, Army Reserve, and National Guard units in the continental United States. The remainder of CONARC, namely the Army's service schools and training centers, would be gathered under a new Training and Doctrine Command (TRADOC) which would take over CONARC's headquarters at Fort Monroe, Virginia, and which would also assume the functions and people of the Army's Combat Development Command, heretofore located at Fort Belvoir, Virginia. TRADOC would be commanded by the to-be-promoted General William E. DePuy, who selected me to be his commander at Fort Leavenworth.

I had come to know Bill DePuy rather well. I was with him in the Army Chief of Staff's Coordination Group in 1958-59; he then went on to the Imperial Defense College and to battle group command in Germany. When he returned to the Army Staff in 1962 to take charge of counterinsurgency I was a military assistant to Secretary of the Army Cyrus Vance; we renewed our association. There he made brigadier general. General Westmoreland, who had in 1964 become the US commander in Vietnam, brought Bill over to be his J-3 (operations officer) masterminding the US forces buildup and their early operations. After a year or so he commanded the 1st Infantry Division in some of its heaviest fighting, returning to duty in the Joint Chiefs of Staff as its counterinsurgency expert, thence to duty in the Office of the Chief of Staff. When I took command of the 101st Airborne Division, I recruited his star performer in the A-Vice shop, Lieutenant Colonel Lou Menetrey (who had been selected for colonel below the zone) as my G-3 (operations officer), with a promise that he would get a brigade in a year. I then recruited another star performer, Lt Col Fred Mahaffey, to replace Lou as G-3.[18]

Bill DePuy thus knew what we were doing in the 101st. For one thing, we were putting into practice ideas that I had learned from him on the tactics of the infantry rifle squad, as he first espoused these in an insightful article that he had written in 1961 or so, called "11 Men, 1 Mind." He had further developed his squad and platoon tactical thinking in movement to contact and assault tactics that featured "overwatch," and had put them into practice in the 1st Infantry Division. In the 101st we had adopted and extended these techniques in our squad and platoon training, and had prepared battle drills and a training film on them. With others, Bill had watched us, using a Unit of Choice

[18]Both Menetrey and Mahaffey went on to four-star rank.

recruiting program, build the all-volunteer 101st from less than a thousand men to a fully combat-ready division by the summer of 1973.[19]

Bill DePuy had his favorites, who made up a roster of very good men, but, although he chose me to command Fort Leavenworth, I was never one of them. This story of my two and one-half years in command at Fort Leavenworth cannot be told without describing my problems with Bill DePuy and his with me. After I left Leavenworth for Korea in 1976 I never saw or heard from him again.[20] In his last days, I wrote his son Billy of my sorrow that his life was ending. May his soul rest in peace.

Under Steadfast, Fort Leavenworth (then commanded by my USMA 1944 classmate Jack Hennessey, who was being promoted to lieutenant general) had been designated the Combined Arms Center (CAC). CAC was one of three TRADOC "coordinating centers," the other two being the Administrative Center at Fort Benjamin Harrison, Indiana, and the Logistics Center at Fort Lee, Virginia. Each center was to "coordinate" the activities of the various Army service schools that came under its umbrella; for CAC this meant the schools of the combat and combat support arms -- Fort Benning (Infantry), Fort Knox (Armor), Fort Rucker (Aviation), Fort Belvoir (Engineer), and so on.

As CAC commander, I was also to command CACDA, the Combined Arms Combat Development Agency, which heretofore had been the Fort Leavenworth activity of the Army Combat Development Command, now absorbed into TRADOC. The Deputy CG,

---

[19]From the TRADOC History: "Commissioned from Army ROTC as a second lieutenant of Infantry, General DePuy saw combat in Europe with the 90th Infantry Division, in which he commanded an infantry battalion at age 25 and ended the war as division operations officer. Later, he served almost three years in Vietnam where he commanded the 1st Infantry Division in 1966-67. In the early 1970s, as Assistant Vice Chief of Staff of the Army, he led a small planning group that developed the concept of revitalizing the Army by focusing the work of preparing the Army for war in a command dedicated solely to that task. DePuy came to Fort Monroe to establish the new command in 1973, and became its first commander. Over the next four years, he spearheaded what was perhaps the most dramatic single advance in tactics, equipment modernization, and training ever undertaken by the peacetime Army. After he retired in 1977, he continued to influence the direction of the Army and TRADOC as a military affairs writer, lecturer, and advisor. Recognized as one of the great Army leaders of his time, he died at Arlington, Virginia in 1992. His legacy was the trained and ready Army that went to Panama in Operation Just Cause in 1989 and to the Persian Gulf in 1990 and 1991." In 1964-67 I had taken exception to Bill DePuy's approach to fighting in Vietnam, having heard enough for me to believe that both as General Westmoreland's J-3 and then as division commander he had misunderstood the nature of the war, downrating pacification and emphasizing massive search and destroy operations by US forces, while allowing those to shunt aside the ARVN (Army of the Republic of Vietnam) troops and to take insufficient note of province and local forces and their advisors who were in the closest touch with the people.

[20]But a few years after I retired I was asked by Joshua Lederberg, a Nobel laureate, to join a group he was assembling for a project for, as I remember, the National Academy of Sciences on the use of artificial intelligence in military decision making. When I demurred, for reasons I do not remember well, he persuaded me to accept, saying that General DePuy had recommended me when he himself had turned Dr. Lederberg down because of commitments of his own.

CACDA, recently arrived, was another classmate and good friend, Major General Dennis P. McAuliffe.[21] His assistant was Brigadier General Edward F. Gudgel, Jr.

Maj. Gen. John H. Cushman

My office would be in that of my third "hat" -- Commandant, Command and General Staff College -- in Bell Hall, the academic building which had been completed in 1958 as I had been leaving. Its entrance was through a door that also opened on the office of the Assistant Commandant. This was the peerless Ben Harrison, brigadier general and my indispensable partner for the next 30 months.

In July, while still at Fort Campbell, I had taken four of my 101st work horses, Lou Menetrey, Fred Mahaffey, John Crosby (G-1), and Tom Brain (Cdr, Support Command) to Fort Sheridan, Illinois, to visit the Recruiting Command. I had just completed an intensive fourteen months recruiting from scratch the 101st Airborne Division and bringing it to full combat readiness; these men had been with me through that experience, replete with its stress and innovations. I planned that evening in the visiting officers' quarters to probe with them how I should approach my new responsibility. Lou Menetrey was familiar with the thinking behind Steadfast; both he and Fred Mahaffey knew the views and characteristics of General DePuy.

I told them that I had to decide if I should go into my new job, which would be quite different but which I thought called for reform-minded action, with the same kind of intensity with which I had dealt with the division. In three or four hours, exploring with me the nature of the challenge, they helped me decide that I could do just that, and that I would.

I was fairly familiar with the current Fort Leavenworth. Several months earlier I had visited there for a general officers conference. In the 101st I met with a half-dozen students who had just graduated and then joined. I arranged for background information to be mailed to me. Taking my family (we now had a fifth daughter, Anne) by automobile, I

[21]Replaced within a year by Maj Gen William R. Wolfe, Jr., Phil McAuliffe soon went on to become the three-star Commander in Chief, U.S. Southern Command.

arranged a short vacation for us on the way in a cabin on a lake at Fort Leonard Wood, Missouri. Colonel Tom Giboney, CAC's Chief of Staff, met me there with some more papers and for a day of discussion; I was pleased to learn that my friend from my earlier tour, Dr. Ivan Birrer, was still on the scene as Educational Advisor. Tom took back my draft opening remarks to be typed and to be looked at by key people, including Ivan. Our family arrived I think on Friday, August 10th, the welcoming ceremony was on Monday,[22] and I opened the Regular Course on Wednesday morning the 15th.

**Brig. Gen. Benjamin L. Harrison**

In writing this account, it was a pleasure for me to read once again the 21-page manuscript of my opening remarks. They were too long, perhaps, but I poured into them all of the expectations and convictions I had now arrived at, recalling all the while my experiences of almost twenty years before. They were indeed a blueprint for what I meant to accomplish, and for what I believe I largely did accomplish. Edited then somewhat for posterity, they are at Annex A.[23]

## Instruction

Although my every day at Fort Leavenworth would be a melange of instruction, doctrine, and combat developments, I thought my first priority to be the Regular Course. Two recent events directly affected it: OPMS and EAD.

[22]In which the post band welcomed me with the 82d Airborne's "I'm All-American and proud to be..."

[23]My remarks reflect a real affection for Fort Leavenworth. I was glad to be back in its familiar and evocative surroundings. In 1934-36 we lived in student housing at 324-G Doniphan. When I was visiting Nancy at her home in 1944, her mother, discussing the problems of "clearing quarters," mentioned that the cleanest set of quarters she had ever moved into was at Leavenworth, where Nancy's father had been in the one-year class of 1936-37. It turned out that Major Troland's family had moved into quarters vacated by Major Cushman's. I well remembered helping my Dad clean them! Score one point for the suitor of Nancy Troland. Those years I had gone to Immaculata High School. In 1973 I received a letter from Sister Mary Constantia, a high school teacher in Kansas City, KS, who had seen my name in the newspaper. She wrote, "At Immaculata High School 40 years ago, I taught geometry to a little redheaded boy from Fort Leavenworth. He was one of the youngest and brightest in the class. His name was 'Jack' Cushman. After high school he received an appointment to West Point... I am writing to ask you if you could be that little chap that was such a pleasure to teach." Sister came up at Christmas time to visit us and to meet my visiting mother.

OPMS, the Officer Personnel Management System, introduced by the Army in 1971, had established some fifty officer specialty fields that allowed each officer at about ten years service to broaden his opportunities for service and advancement by pursuing a "secondary specialty," such as "financial management," in addition to his or her primary specialty, such as "air defense artillery." The College had anticipated this development a few years earlier by allowing each student to choose "electives" -- not part of the "core curriculum." The electives had increased each year, and would do so again.

FACULTY BOARD

Colonel Joseph D. Hynes, Inf
Secretary

Colonel Marshall Sanger, Inf
Director of Resident Instruction

Colonel William E. Bartholdt, FA
Director of Nonresident Instruction

Colonel Jess B. Hendricks, Armor
Director, Department of Command

Colonel Charles R. Smith, Inf
Director, Department of Tactics

Colonel Lamar Weaver, Jr, QMC
Director, Department of Logistics

Colonel Herschel E. Chapman, Inf
Director, Department of Strategy

Ivan J. Birrer, PhD
Director, Evaluation and Review

Colonel Alfred C. Ring, FA
Director of Doctrine

Colonel William P. Pipkin, ADA
Director of Allied Personnel

Lieutenant Colonel (P) Rupert F. Glover, Inf
Class Director

EAD, the Echelons Above Division study, recently approved by Army Chief of Staff Creighton W. Abrams, had eliminated the field army echelon, which had been a fixture of the standard Army in the Field since World War I, and had made the corps, heretofore an echelon of tactical command only, one of administrative (personnel and logistics) support. Corps would not only direct the operations of divisions and other units in the corps; it would support them with service support. This would require considerable rewrite of instruction.

But these would be only part of what was about to take place as I set about to overhaul the entire curriculum. Four weeks after taking command, I had assessed the situation sufficiently to meet with the Faculty Board[24] to start the process. Using its verbatim transcript, Ben Harrison wrote a September 26 memorandum for the faculty that summarized the meeting. On reading that memorandum decades later for this work, I was pleased to observe its vision and clarity.[25] At Annex B; it too deserves a good look.

I told the Faculty Board that my first requirement was that <u>the curriculum be real</u> (page 2, Annex B). Thus, as we dealt with teaching the infantry division in the defense, I insisted

[24]Except for moving Joe Hynes from the Department of Command (to which I added the Profession of Arms Committee) to Secretary and replacing him with Jess Hendricks of Tactics, and except for the Department of Tactics, headed until June 1974 by the exemplary Colonel John D. White, the organization and Faculty Board shown here was unchanged to produce and open the '74-'75 course.

[25]I also have a verbatim transcript of another meeting, which at this date impresses me with its verbosity and wanderings, aspects Ben Harrison and I surely policed up as we worked on Annex B. As Major Doughty relates in his paper (see footnote 28 below), the faculty, struggling to understand, was not always clear as to just what I intended (nor, unfortunately, was I).

that we portray the units of the school's fictional 20th Infantry Division defending frontages approaching those then in effect for our divisions in Europe. Howls came that "that is not how we want to fight"; instructors wanted to teach the principles of defense under what could be called "standard" conditions. Our solution was to have the Tactics Department prepare 31 hours of tactics orientation, then teach defensive operations in a continuing exercise that portrayed the school's X Corps with its three divisions on Germany's eastern border on a frontage similar to that of V Corps, differing only in that we did not reveal the actual war plans.

I later went with Ben Harrison and Colonel White, Tactics Department director, out on the ground west of Fort Leavenworth where we conceived a problem that placed a brigade as part of a division on a front like that of a division in Europe. There, in an elective required of all combat arms officers, students could see for themselves what such a situation meant on the ground and could learn to cope with it.

Another charge was Make them think,[26] Many years before I had read the classic Infantry in Battle, prepared at the Infantry School under the direction of Colonel George C. Marshall, Assistant Commandant.[27] On its first page, at the head of its first chapter, "Rules," were these words, which I had long ago assimilated into my thinking:

> The art of war has no traffic with rules, for the infinitely varied circumstances of combat never produce exactly the same situation twice. Mission, terrain, weather, dispositions, armament, morale, supply, and comparative strength are variables whose mutations always combine to form a new tactical pattern. Thus, in battle, each situation is unique and must be solved on its own merits.
>
> It follows, then, that the leader who would become a competent tactician must first close his mind to the alluring formulae that well-meaning people offer in the name of victory. To master his difficult art he must learn to cut to the heart of a situation, recognize its decisive elements and base his course of action on these. The ability to do this is not God-given, nor can it be acquired overnight; it is a process of years. He must realize that training in solving problems of

[26]"Make them think" was Annex B's third charge. Its second item of guidance was titled Hard Work. While various indicators had told me that students were not working very hard, it was not until I went shopping for groceries at the commissary one day that that impression became vivid. I was in my car approaching the spot where prisoners from the USDB (US Disciplinary Barracks, a facility on post) would take the grocery bags from a loading dock and place them in the cars of the shoppers. As the student who was in line ahead of me got out of his car to open his trunk, I saw inside all the books and advance lesson material that he had been issued before opening day weeks before; they were tied up in string just as they had been issued, untouched.

[27]Infantry in Battle, The Infantry School, 1934. Its 2d Edition, 1939, was reproduced at Fort Leavenworth in about 1958 by permission of the copyright holders, the Combat Forces Journal. In the Catalog of Courses which I had authored in 1957, I had quoted these lines from its page 14: "Every situation encountered in war is likely to be exceptional... It is more valuable to be able to analyze one battle situation correctly, recognize its decisive elements, and devise a simple, workable, solution for it, than to memorize all the erudition ever written of war."

all types, long practice in making clear, unequivocal decisions, the habit of concentrating on the question at hand, and an elasticity of mind, are indispensable requisites for the successful practice of the art of war.

The leader who frantically strives to remember what someone else did in some slightly similar situation has already set his feet on a well-travelled road to ruin.

I directed that Infantry in Battle be issued to each student in the 1974-75 class. I let the faculty know that the words above were to be their guideposts. Achieving that aim in practice would be another matter; it became a never-ending search for methods.

In mid-September, along with Colonel Jess Hendricks of the Tactics Department, I traveled to Germany to learn first hand the situations and deployments of our forces there, so that these would be realistically reflected in our instruction. We visited the headquarters of U.S. Army, Europe, V Corps, and the 3d Armored Division, and the 11th Armored Cavalry Regiment and the two kasernes where Jess and I had commanded battalions, myself twenty years before. We ended our trip with a visit to the British Staff College at Camberly, where we received an orientation on the curriculum and dropped in on "syndicates" in which small student groups were routinely led by an instructor, quite differently from our College practice. This trip reinforced my conviction that we should emphasize real world conditions and small group instruction.[28]

## Doctrine

While at Leavenworth in the mid-fifties, I had formed views about doctrine, which the Army defines in part as "that which is taught," and its relationship to classroom instruction, where the faculty desirably forges advances in doctrine. But Army doctrine is also what is written in field manuals and generally applied in the field. With Steadfast, the writing of Army doctrine, which in 1962 had been assigned from the schools to the Combat Development Command, was reassigned back to the schools. The College resumed a major responsibility. What would the College produce?

Soon after I arrived at Fort Leavenworth, General DePuy called a meeting of all the school commandants on training literature, i.e. "doctrine." At that conference I presented basic beliefs that I had developed over the years. They are at Annex C.

[28]In 1975 I asked a student in the 1975-76 course, Major Robert A. Doughty, who had a Masters degree in history (and who later became Head of the History Department, USMA), to use some electives that year to prepare a history of my regime at Leavenworth. I opened my and the College's files to him. His Final Report, The Command and General Staff College in Transition 1946-1976, dated 11 June 1976, is available at the Defense Technical Information Center. I have used it to refresh my memories as I have written this account. Upon receiving his report in my next assignment commanding I Corps (ROK/US) Group in Korea, I was displeased; following my instructions very well, he had been entirely candid. But I got over my offended pride and accepted his criticism as valid. When my Korea subordinate, MG John R. Thurman commanding the 2d Infantry Division, was ordered to be the next Commandant at Leavenworth, I gave him my copy of the report.

The following month there came an event that would fundamentally affect every school commandant's writing of doctrine and instruction. On October 6, which was Yom Kippur and the holiest day of the year for the Jewish people, Egypt and Syria, using Soviet mechanized doctrine and materiel, attacked Israel by surprise, including technological surprise, on two fronts. Egypt's forces swiftly crossed the Suez Canal and overran the Bar-Lev line. Syria, outnumbering Israel in the north by some 1,100 tanks to 150, took the Golan Heights and nearly reached its 1967 border with Israel. Israel suffered hundreds of casualties and lost nearly 150 planes to Soviet-supplied air defense, but its forces reacted with skill and courage. On October 10 the tide of the war began to turn; the Syrians were pushed back and Israel advanced into Syria proper. As the Soviet Union airlifted weaponry and logistics to Damascus and Cairo, the United States staged a similar massive airlift to Israel. Israeli forces crossed the Suez Canal and surrounded the Egyptian Third Army on October 21. A first cease fire failed; a second cease fire ended the war on October 25.

The Arab-Israeli War triggered a concentrated TRADOC effort to learn its many lessons on armor-antiarmor, mechanized infantry, artillery, air defense, air support, mine warfare, electronic warfare, intelligence, battlefield logistics, and so on.[29] The last US forces having left Vietnam, this effort evolved into a single-minded focus by TRADOC on applying the war's lessons to Europe, where NATO defenders faced similar odds against the Warsaw Pact. TRADOC's watchwords became to "train to fight outnumbered" and "win the first battle of the next war," meaning war with the Soviet Union.

For the College the lessons of the Mideast War would first appear in two Tactics Department electives in the Spring Term of 1973-74, both with heavy student research and participation. One of these was classified, available to only US students, for which a great deal of outside material had been generated. The other, based on news reports and analyses in the public domain, was for allied officers; it brought together in the same classroom the several Arab officers, along with the one Israeli officer,[30] in the class.

As Commander, Combined Arms Center, it was my assigned duty to coordinate the instruction of the Infantry, Armor, Field Artillery, Air Defense, Aviation, Aviation and other schools. So, telling TRADOC of my intention and inviting representation, with the Tactics Department in the lead and with CACDA's participation, we organized a series of

---

[29] I had brought Brigadier General Morris J. Brady, my Assistant Division Commander in the 101st, to replace the departing Ed Gudgel as Assistant Commander, CACDA. Brought in early, Morey was tasked by TRADOC with coordinating and preparing a TRADOC-wide assessment of the war and its lessons.

[30] A colonel,he had left the course to serve his country when war broke out, to return when it was over.

"defense conferences" (DEFCONs) to which the schools sent representatives to discuss how each might want to teach defensive operations in Europe.[31]

## Combat Developments

When I had temporarily joined its seven-man Leavenworth component as a CGSC student-to-be in 1954, Army combat developments consisted of that group and a handful of people at CONARC led by a major general. In 1973, after TRADOC took over the Combat Development Command, the combat development staff at Fort Monroe amounted to a little less than 300 people; another 4,000 were at the three coordinating centers, at the schools, and at separate agencies. This apparatus, whose numbers paled alongside the training center establishment which he also commanded, came into the imaginative and energetic hands of General DePuy. Reinforcing it with the school faculties, DePuy would build it into an engine of great influence that he would wield with a single-minded energy along with other mechanisms to remake the Army.

On April 25-26, 1973, soon after taking command of TRADOC, General DePuy had visited CACDA. Phil McAuliffe had prepared a Memorandum for Record that said that General DePuy had told CACDA's assembled senior people that he...

> "...regards the combat developments mission as one of charting the direction in which the Army in the Field should move in peacetime in terms of improving its combat, combat support and combat service support capabilities through the development of new concepts and doctrine, and the introduction of new materiel and organizations, so as to be better prepared for employment in wartime or in crisis situations. To accomplish this mission, first priority must be given to measuring the effectiveness of Army units in the field, employed in a given scenario, with present equipment and capabilities. This measurement of present capabilities would constitute a baseline from which to evaluate the improvements in capabilities resulting from new weapons systems or organizational changes. Such evaluations would be made on an incremental basis, from the present toward the future. For example, an evaluation of a new light division would start with an assessment of the present capabilities of the 82d Airborne Division to operate in a Mid-East scenario (the result becomes the baseline). Then would follow an assessment of the improvements to be achieved to include deficiencies corrected (in terms of percentage of increase in effectiveness, or probability of target detection and kill, of area coverage, etc.) by the introduction of weapons and materiel (such as TOW-COBRA) in the 1975-76 period; then look

[31] In mid-August 1973 I had called the commandants of the Armor, Infantry, and Aviation Schools to set up a meeting at Leavenworth on the use of aviation, thinking that, having just commanded the Army's only airmobile division and its 400-plus helicopters, I had something to contribute to a treatment of that subject. Soon after I did so, General DePuy called me to say that, notwithstanding my coordinating duties, I was not to use my initiative in such matters without checking with him, and "let's not do it now." In due time I was instructed by General DePuy to discontinue my DEFCONs; SCORES (see below) would be the vehicle.

at the period of the late 1970s; and then the early 1980s, if appropriate. At each stage, a determination of the deficiencies remaining should serve as a focus for further combat developments effort. General DePuy intends, by this approach, to be able to influence the thrust and configuration of the Army in the Field commencing in the near term and extending forward....

"He outlined the combat developments responsibilities within TRADOC: The Schools will be in the forefront on individual weapon effectiveness; tactical unit (i.e., division) effectiveness will be the responsibility of CAC; the comparison or relationship of families of weapons will be a CAC responsibility; force effectiveness, i.e., for a force of approximately corps level, will be CAC responsibility..." (emphasis in the original)

Swept along by the brilliant, articulate, and forceful General DePuy, CACDA responded with a "living model," which soon took on the name SCORES (Scenario-Oriented Recurring Evaluation System). When Phil McAuliffe unveiled his concept to me soon after my arrival, I made little input[32] and he took it to General DePuy, who approved it.

With vigor and plentiful resources TRADOC put SCORES into effect. Remodeling a stable, we at Leavenworth built a secure complex where classified scenarios could be conceived, wargamers could work, and briefings could be held for them and for visitors from TRADOC and the schools. Each school established a SCORES contingent that used our scenarios to create the details relevant to that school's interest. A Mideast scenario came first. But with the Yom Kippur War, attention shifted to Europe; that scenario portrayed V Corps deployed in essentially its existing war plan configuration. I, as CAC commander, would personally play the commander, V Corps.

We set up the opposing Soviet-style combined arms armies. Then, knowing everything about the assumed enemy, I issued the corps defensive operation plan, after which I issued a division plan, after which the Armor and Infantry School players issued the brigade plans for that division, the Field Artillery School players issued the corps and division artillery plans, and so on through the various schools. Then the enemy, played by a "threat" team, attacked. Using a simulation, a model called Jiffy, we ran an open war game in which players could see both sides and we recorded how the battle unfolded. Periodic critiques and adjustments were part of the process, attended by TRADOC combat developments staffers and from time to time by General DePuy himself.

Though I kept my distaste for this ponderous process to myself, I could not get enthusiastic about SCORES. Its scenario frameworks might serve the schools as commonly

[32] I had my reservations then but, not well formed, they would have involved fundamentally questioning the concept of what became SCORES as a way to determine the future form of the army in the field. Having been on the scene only a few weeks, I did not express them. I thought it was no time to disagree with General DePuy on so basic a part of his thinking.

based vehicles through which to justify their separate material items.[33] Its feedback to College tactics instructors, although initially expected to be of some value (see Annex D, referenced below), did not materialize and I did not find it worthwhile to force tight connections. As to measuring force effectiveness I saw SCORES as a waste of people and resources; there were so many better ways to determine force effectiveness.[34]

**Instruction (contd)**

The war in Vietnam was over for US forces. We decided that -- for instruction in tactics, logistics, joint operations, and staff work -- much of the 1974-75 curriculum would be built on two quite different scenario-based vehicles. One, portraying a deployed force, would be in Europe. The other, portraying a contingency force, would be in the Middle East. The Tactics Department would prepare the basic framework and teach most of each course, with teams from other departments participating where they should.

To illustrate our approach, at Annex D is the guidance of Colonel Jess Hendricks, the Tactics committee chief responsible for the Middle East scenario, which was to be an excellent vehicle for instruction in force structure development, movement planning, and joint operations and command relationships, as well as tactics.[35]

As we built the curriculum, a first question was: What would be the center of gravity of instruction? To a query from General DePuy, Jack Hennessey had said that a reasonable ratio of Regular Course instruction would be 10 percent below division, 55 percent at division, and 35 percent above division. The TRADOC response had come back: Make it 25, 50, and 25. Another issue was the relative emphasis that we should place on preparing students for their assignments in the years soon after graduation, compared to their long-range potential service as division and corps commanders or principal staff officers, the traditional orientation of the course. The TRADOC guidance: In-

[33]Donn Starry, Commandant of the Armor School, made good use of Europe I by concentrating his attention on a single brigade-size engagement around Hunfeld. There he experimented with the employment of tanks and armored personnel carriers, and artillery and engineers, in novel ways, wargaming competing defending concepts and coming up with ideas for the defense that made their way into doctrine.

[34]The TRADOC historian reports that by the mid-1980s SCORES, which had by then produced its fifth Europe scenario and was producing one every two years in Korea, Southwest Asia, Panama, and Alaska, had become unwieldy and very costly in manpower and dollars. General William R. Richardson, TRADOC commander, settled on three scenarios: Europe, Southwest Asia, and Korea. He sought other ways to develop tactics and doctrine and, useless for measuring force effectiveness, SCORES was overtaken by them.

[35]In 1973-74 TRADOC and the Army Staff began a massive switch from an Army focused on Vietnam to one focused on Central Europe. This Middle East teaching scenario reflects our aim at Leavenworth to give contingency forces, in all their force projection implications, emphasis equal to forces devoted to Europe. Our thought had little effect on the Army at large, which for understandable (but, in my judgment at the time, faulty) reasons through the 1980s gave contingency forces a priority below those for Europe. The result was that when the Berlin Wall fell and the Warsaw Pact broke up, the Army's Europe-oriented and heavy forces thinking was in no position to adapt to the new strategic situation. Only recently and at a disadvantage has the Army begun its "transformation."

crease emphasis on the immediate assignments. A third issue was whether as a matter of philosophy Leavenworth should emphasize training (e.g., the preparation of orders), or education (a deeper understanding of the military art). The decision: both.

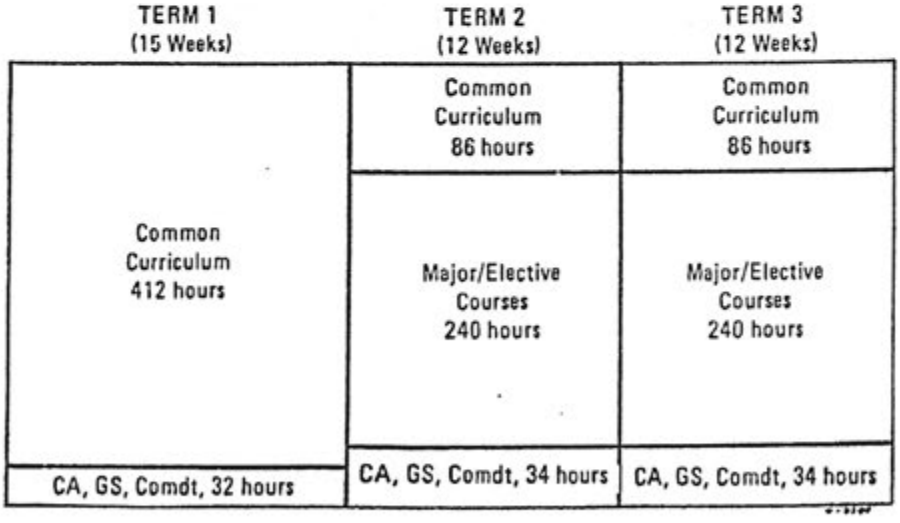
These issues were resolved in a paragraph in the 1974-75 course catalog:

> The Regular Course curriculum is designed to produce trained and educated graduates of quality, insight, character, and motivation who are suitably prepared to do their jobs well in whatever positions they assume, to include eventual positions of great responsibility, and who will exercise a continuing influence for good on the Army.

In the current year each student was taking six electives of 56 hours each. We calculated that 12 electives of 40 hours each would be right for 1974-75; that would be about 42% of his instruction. At four weeks into the course, guided by a faculty counselor, he would declare a "major."[36]

Ivan Birrer had long been a proponent of a term structure that provided for a common curriculum in Term 1, and electives and common curriculum in Terms 2 and 3. We went to a configuration that looked like this (from the catalog)...

> The 39-week academic year is divided into three terms, as illustrated graphically in figure 1. In the first term, the student will complete the majority of the common curriculum. In the second and third terms, the student will finish the common curriculum, take those courses required to complete his major, and those additional courses to round out his full curriculum. The major program is determined by a combination of student choice and faculty counseling. Each elective course in terms two and three is 40 hours.
>
> Communicative Arts (CA), Guest Speakers (GS), and Commandant's Time (Comdt) make up the rest of the academic program.




[36]The class of 1100 being a mix of all Army branches and other Services plus 100 foreign students, the "majors" were Tactics; Staff Operations; Operations and Force Development; Joint and Combined Operations; Management; Strategic Studies; and Security Assistance/Problems of Developing Nations.

Our twenty classrooms were organized into four groups, each of which was scheduled separately. My loyal, intelligent and dedicated team (essentially the Faculty Board, page 31, led by Ben Harrison) put together the Regular Course, piece by piece, and scheduled it. I was in the process up to my elbows, often to their frustration.

Knowing that CGSC students had disdained their tactics instruction (a disgraceful, to my mind, sign of this was that combat arms officers had been overwhelmingly choosing electives from fields other than tactics), I resolved to make tactics interesting in 1974-75.

Key to our Tactics instruction was a 31 hour lesson on the Nature and Characteristics of Ground Combat. Of utmost importance to me personally, its makeup is shown below.

NATURE AND CHARACTERISTICS
OF
GROUND COMBAT

| TITLE | HOURS | |
|---|---|---|
| BATTLE OF SCHMIDT | 3 | HISTORIC EXAMPLE |
| CONTEMPORARY WARFARE | 1 | LECTURE BY DEP COMDT |
| INFANTRY | 4 | LECTURE/WORK GROUP /GUEST SPEAKER |
| CAVALRY | 2 | LECTURE/WORK GROUP |
| ARMOR | 2 | LECTURE/WORK GROUP |
| FIRE SUPPORT | 2 | LECTURE/WORK GROUP |
| AVIATION | 2 | LECTURE/WORK GROUP |
| AIR DEFENSE | 2 | AF, ARMY LECTURE/WORK GROUP STUDENT PAPER |
| ENGINEER | 2 | STUDENT TEAM LECTURE/ CONFERENCE STUDENT PAPER |
| COMMUNICATIONS-ELECTRONICS/EW | 2 | STUDENT LECTURE/WORK GROUP |
| COMBAT SERVICE SUPPORT | 1 | LECTURE/WORK GROUP |
| OPERATIONAL ANALYSIS OF BATTLEFIELD DYNAMICS | 2 | LECTURE/WORK GROUP |
| WEAPONS' EFFECTS & THEIR SIGNIFICANCE | 2 | GUEST LECTURER |
| SUMMARY | 2 | DUFFER'S DRIFT |
| EXAMINATION | 2 | 20% OF 3121 EVALUATION |

We would start by having them read Objective: Schmidt, by Charles B. MacDonald, which told the story of the 112th Infantry Regiment, 28th Infantry Division, in the Huertgen Forest in November 1944. His account was in Three Battles: Arnaville, Altuzzo, and Schmidt, published in 1952 by the Army's Chief of Military History. I had discovered it in

a Stars and Stripes bookstore as I served in the 4th Infantry Division's 22d Infantry. Involving every level from individual soldier to corps, it was a gripping case study in leadership, decision making, the employment of the combined arms, and the nature of war. In February 1954 I had visited that battlefield, the book in hand, and had walked the notorious Kall Trail among other terrain. The Chief of Military History sent us a copy of the book for each student and the Tactics faculty.[37] It was a great introduction and Ben Harrison would follow it with his own lecture.

Then came ten periods on the basic components of a division force. Selected students, with faculty help, would write these lessons; some of these students joined the faculty upon graduation. These lessons were largely in 13-14 man work groups, often student-led. At Ben Harrison's suggestion I invited Brigadier General Richard D. Cavazos[38] to do the infantry lecture; a masterful speaker, in Marshall Auditorium Dick held spellbound a quarter of the class at a time.

I will let Bob Doughty (see footnote 28) tell about the first three of the four Infantry hours:

> Being infantry, General Cushman wanted to make certain the class was an excellent presentation, so he took a personal interest in the content and in the excellence of the presentation.
>
> On the day the class was first presented, it was given once in the morning and once in the afternoon. The initial portion of the class was in Eisenhower Auditorium, and the latter portion -- primarily a discussion in small work groups -- took place in the section rooms. When General Cushman saw the first presentation in the morning, he immediately directed several changes in the Eisenhower Auditorium portion of the instruction. When the section team portion was completed at noon, General Cushman immediately assembled all the instructors in one of the classrooms and told them how the material presented in the auditorium and in the section rooms would be changed. At that time he also handed the instructors another student issue that had just arrived from a hasty printing at the printing plant. By the time the presentation was again given in the afternoon, a very different class was presented to the second group.

When I told Bob that I remembered no such event, he assured me he had heard the story several times. His account continued:

> Amidst this dynamic environment of frequent change, the instructors often felt frustrated and did not understand the basic thrust of what was happening. In previous years, lesson plans had been the result of years of development, days of rehearsal, and many hours of careful screening by the chain of command and the individual instructors. Now they were often the results of last minute changes. While this did not overwhelm most of the faculty, it did detract from

[37]When I returned to Leavenworth on a visit in 1979 I was stunned to find these books on pallets on the College loading dock. They were headed for property disposal, a fate that I was able to prevent at the time.
[38]Now General, US Army, Retired, Cavazos had earlier been a tactics instructor at CGSC.

the instruction of the less flexible members of the faculty. This undoubtedly affected the quality of instruction for the Class of 1974-1975, but the Commandant was slowly and successfully imposing the changes on an often unwilling and misunderstanding faculty.

The summary lesson of this block was to read and discuss The Defence of Duffer's Drift,[39] which tells the story of the Boer War's Lieutenant Backsight Forethought, a platoon commander who has been ordered to hold on a river line the only ford using which an enemy column can reinforce sorely pressed Boer forces to his south. In a series of six dreams with ever more favorable (rather, ever less disastrous) outcomes, the lieutenant finally arrives at a solution that suffices. It is a classic tale of tactical decision making. I was one of 20 instructors who led the work group instruction.

This is the Tactics common curriculum;[40] each of the other "majors" had a similar list. In a lecture to the whole class I taught the Tactics first hour.

| *Title* | *Hours* |
|---|---|
| Introduction to Tactics | 1 |
| Organization of the Army in the Field, Brigade and Higher | 3 |
| Lessons of the 1973 Middle East War | 4 |
| The Nature and Characteristics of Ground Combat | 31 |
| Contingency Force Operations (Middle East Setting) | 40 |
| Forward Deployed Force Operations (European Setting) | 48 |

Below are the electives from which the student majoring in Tactics must take six, as specified, and of course more should he so choose.

*Mandatory:*

3506 Coordination of Combined Arms
3511 Brigade and Battalion Operations
3516 The Tactical Commander in Training and Combat

*Two of the following:*

3521 Development of Combat Divisions
3601 Advanced Division and Corps Operations
3606 Retrograde Operations
3616 Antiarmor Operations
3621 Tactics in Specialized Situations
3626 Defense on Extended Frontage—Division, Brigade, and Battalion
3631 Passage of Major Water Obstacles
3636 Airmobile and Air Cavalry Combat Brigade Operations
3641 Combat in Built-Up and Fortified Areas
3646 Tactical Nuclear Operations (SECRET)
3651 Mine Warfare and Obstacles (SECRET)
3656 War Gaming
3661 Advanced Combat Support Applications (SECRET)
3666 Combat in Environmental Extremes
3671 Tactical Lessons of 20th Century Wars
3676 Tactical Lessons of the Civil War

*One of the following:*

1602 Advanced Staff Operations in Combat
4640 Logistics for Commanders
6501 Planning and Employment of Joint Forces
6640 Advanced Airborne Operations
9630 Case Studies in Leadership

Having with his faculty advisor selected these six electives, the student with a Tactics major could round out his year with five more chosen from all departments (the twelfth elective would be a forty-hour research paper of the student's choice); some 89 total

[39]By Captain E.D. Swinton, British Army, after serving in the Boer War, 1899-1902. Inventor of the tank and largely responsible for its introduction and development, Major General Swinton was considered by Field Marshall Earl Wavell as one of the most far-sighted officers the British Army has produced.

[40]Integrated into the last two subjects were additional common curriculum hours of the Departments of Command and Logistics -- staff procedures, intelligence, electronic warfare, logistics, etc..

were offered.[41] With the College's permission, the student could also choose from a variety of 40-hour courses offered in the College classrooms by participating universities -- Kansas University, Kansas State University, and the University of Missouri at Kansas City; these had for several years been a feature of the Regular Course.

For the College to offer 90 or so electives, even though many of them would have few applicants, was quite a lot for the faculty to bear. Perhaps half of them were newly prepared in 1974-75. However, as the department directors assessed their needs and capabilities, they concluded that they were up to the load, the teaching part of which would be in the second and third terms.

We considered the combination of six mandatory electives and six choices, on top of the common curriculum, to be a suitably varied, and for each student an extraordinarily rich, year-long purposeful learning experience.[42]

## Trouble with TRADOC

Much alike in our mental capacities, work ethic, and mission-mindedness, General DePuy and I were very different people, each a product of his own experience and outlook, each of whom could see the same situation quite differently. Commanding the Combined Arms Center, I was critical to his achieving his purposes. On February 19, 1974, after observing my performance for several months, he wrote me an "eyes only" letter. Revealed by me to no one before this, it is at Inclosure 1 of Annex E, the remaining inclosures of which are documents that flowed from it for the next eighteen months.

Writing "I have developed some concerns which I want to get off my chest and out of my mind as they now constitute a kind of low-level background worry," General DePuy said that his first concern was about "the depth and the quality of the work being done at Leavenworth." His second was about "the quality of work... on the scenarios."

He opened his letter with: "Our conversation on the phone Thursday has prompted me to write this letter," writing that in that conversation I had mentioned an elective on sys-

[41]The Department of Tactics offered 19 electives and the Department of Logistics 6. Within the Department of Command, the Staff Committee offered 6 electives, the Management Committee 9, and the Profession of Arms Committee 7. Within the Department of Strategy, the Strategic Studies Committee offered 18 electives (many of these being military history), the Joint and Combined Operations Committee 11, and the Security Assistance Committee 13.

[42]For several years the College had been offering highly qualified students the opportunity to complete the requirements for a Master of Military Art and Science (MMAS) degree that would reflect mastery of that discipline, as shown by achievement of high standing in the Regular Course plus extended research in an area of professional concern as displayed in a scholarly thesis. During my time as Commandant, Congress approved our award of this MMAS, whereupon I awarded it to those graduates, including all those of former years who had completed its requirements.

tems acquisition. Telling me why Leavenworth had no business offering such an elective, he wrote: "I am concerned that the electives which are being offered for the next school year may fall below the acceptable quality level. I say this hoping very much that I will be proved wrong. However, when I think about the difficulty in the tactics electives alone, it raises my level of concern. If they are not excellent they will be counter-productive and bring down on Leavenworth much opprobrium from officers throughout the Army."

He then wrote that he was sending Lt. Gen. Orwin C. Talbott, the Deputy Commanding General of TRADOC, to Leavenworth to "conduct a comprehensive review of your next year's elective courses sometime in May or June."

I could have done without General DePuy's initiative, which I thought reflected an unjustified lack of confidence. It would be a distraction for my faculty at a time when they were very busy. But we got ready.

The offending elective was "Materiel Acquisition Management," and there was another, "Advanced Materiel Acquisition Management." Looking at about 250 Army students coming from the logistics community, the Department of Logistics had come up with six electives, in addition to its 115 hours in the common curriculum.

Including the two just named, they were:

Logistics for Commanders (primarily for combat and combat support officers)
Advanced Logistics Management--Supply
Advanced Logistics Management--Maintenance
Advanced Logistics Management--Transportation

With a team that included Brigadier General Paul Gorman, Director of Training at TRADOC, General Talbott visited us 3-6 June. A selection of my briefing charts is at Incl 2, Annex E. My department directors and their committee team chiefs did very well. Incl 3, Trip Highlights, which was left behind as the Team departed, had a number of useful suggestions, some of them simply reminders for what we were already doing. But the Talbott team changed no electives.[43] Those on Materiel Acquisition Management, which had triggered the visit, remained intact (except that the TRADOC team said that "management" should be changed to "process").

[43]On June 5, General Talbott told Ben that that the Strategic Studies and Security Assistance majors would be eliminated, but early in the morning of the 6th I sent him a handwritten message, Incl 4, and he changed his mind.

I had thought that this would be the end of it.[44] But in about January-February of 1975, after our new course had been underway some six months, we learned that General Talbott and a team would be revisiting us that April as a follow-up, which he did.

This time after his visit General Talbott signed off a letter to me; dated 22 April 1975, it is at Încl 5, Annex E. He addressed the matter of student grades, which was a subject into which we had put a lot of thought and in which we had carried out a comprehensive overhaul.[45] He said that we should cut electives. He had other suggestions. And he attached a Summary of Team Findings; it is at Incl 6.

Dismayed at this detailed list of things we were told to do, I made a 2 May appointment with General DePuy. My memorandum for record of that meeting is at Incl 7. Its outcome: We would consider General Talbott's letter a useful and important TRADOC document but would not be bound by it.

Incl 8 is my personal letter to General DePuy that reports on General Talbott's displeasure when, on a visit 24 July for another purpose, I told him what we had done, which was essentially nothing, following his April visit. That was the end of the matter.[46]

## Conflicting Ideas

My, and General DePuy's and to certain extent my faculty's, problem was that I had what could be called an unconventional, nonstandard, approach to the teaching of tactics (among other things). It derived from what I had read over the years (Infantry in Bat-

[44]Confirming our 1974 judgment, in 2000-2001 the College offered these electives (now called called "advanced application courses") for officers in the materiel acquisition specialty: Contracting Fundamentals, Contract Pricing, Intermediate Systems Acquisition, Intermediate Information System Acquisitions, all at 81 hours, and Intermediate Pricing, Introduction to Simulation Based Acquisition; and Advanced Acquisition Seminar at 54 hours, requiring them to take at least 81 hours, but "they may choose more."

[45]Among other things, the College had for some time been practicing grade inflation by turning in academic reports on some 1000 students in which far more than half were given a "superior" which the Army's regulations defined as "well above average." In my mind this was akin to a false official statement by the CGSC. Over student and some faculty opposition, we had established a new grading system in which, in any given grading situation, roughly 30 percent of a student section would get an "A," most of the remainder a "B" (or B+ or B-) and a poor performer in a given subject and section would receive a "C "or "D," or even an "F." We called the "Leavenworth B" a mark of solid accomplishment. It was here that General Talbott focused.

In testifying before a delegation of the North Central Association of colleges and schools that was reviewing our curriculum's suitability for award of the MMAS (footnote 42), I successfully defended our "Leavenworth B."

[46]In January 1976 General Fred Weyand, Army Chief of Staff, called me in to be interviewed after he had told me that I was to have three stars and command the I Corps (ROK/US) Group in Korea. As I left his office he asked me if I had read the efficiency report rendered on me by Orwin Talbott when he retired in August 1975. It had two blistering pages of remarks, to include "General Cushman is a very strong minded individual. It is very difficult to make him truly responsive to guidance, to make him a true member of the team." I next saw Orwin upon moving to Annapolis in 1989, where he lived. In glowing words he seconded my nomination to a "gentlemen's luncheon club," which I joined. We became friendly as if nothing untoward had ever happened between us. Last year he and his wife Nell showed us their apartment in the Knollwood retirement home in Washington where we will join them in due time, under amiable circumstances I am sure.

tle, the writings of B.H. Liddell Hart, and so on) but also from my experience. My first infantry duty, in 1952, had been as S-3 to Major Sam Carter, commanding the 1st Battalion, 22d Infantry, in Germany. A practical man who had been through two years of combat as a company commander in the 1st Infantry Division in World War II, he was also an exceptional, thinking man's, tactician and innovator. I learned a lot from him.

On the Leavenworth faculty in 1958 I discovered a manuscript that had a profound effect on me. I caused it then to be issued widely to instructors and students, and did so again in 1973. Its title was The Command Decision.[47] Describing in detail a German division's combat experience on the Russian front in World War II, its author wrote...

> "Clausewitz makes a statement to the effect that war is the realm of uncertainty, and that the only known quantities are the character and ability of the commander. As we have seen, this applies particularly to the making of decisions.
>
> "A decision is not a problem of simple arithmetic, but a creative act... Intuition and a keen sense of perception play a considerable role. Even if the commander has a large quantity of reference material at his disposal, and even if he has sufficient time for careful evaluation of all known factors, it still remains true that the process by which a decision is reached is, in the final analysis, nearly always a secret, which in most instances, remains insoluble to the person who has arrived at the decision." (emphasis in the original)

Three Vietnam tours further developed my thinking and my confidence in my judgment. In 1963-64 I had been senior advisor to a division/division tactical area commander in the southernmost Delta region. There our advisory team and our counterparts in the division and in four provinces had developed and put into effect a, then unique, civil/military campaign with which we began to take back the countryside one hamlet at a time. Years later, people who had worked for and with me helped the White House and Ambassador Robert Komer translate much of our concept into the pacification program that he took charge of in Vietnam and that in 1967-68 began to succeed, but too late.[48]

In that tour I found the little red book, Selected Military Writings of Mao Tse-Tung, four pages of which particularly impressed me; I issued them to the 1974-75 class. Key paragraphs read...

> "To learn is no easy matter and to apply what one has learned is even harder. Many people appear impressive when discoursing on military science in classrooms or in books, but when it comes to actual fighting, some win battles and others lose them...

---

[47]By Generaloberst Dr. Luther Rendulic, published by the Office of the Chief of Military History, undated.
[48]See "Pacification Operations in the 21st Infantry Division," Army, March 1966. These people with Komer were my deputy senior advisor, Lt Col Robert M. Montague, and Richard Holbrooke, the later Ambassador, who was with us on his first tour as a foreign service officer. Our division commander was Colonel Cao Hao Hon, later major general and chief of pacification under President Thieu of the Republic of Vietnam.

"Why are subjective mistakes made? Because the way the forces in a war are disposed or directed does not fit the conditions of the given time or place, because the subjective direction does not correspond to, or is at variance with, the objective conditions, in other words, because the contradiction between the subjective and the objective has not been resolved... Here the crux is to bring the subjective and the objective into proper correspondence with each other."

I translated this into a saying, "If you don't understand the situation, anything you do will be right only by accident."

In my second Vietnam tour, 1967-68, I commanded the 2d Brigade, 101st Airborne Division in the heavy fighting north of Hue during Tet 1968 and its aftermath. Using unique and unconventional tactics we drove the NVA deep into the hills.[49] Three principles governed our operations: *Work closely with the Vietnamese. Maintain unrelenting pressure on the enemy. At every opportunity surround the enemy and destroy him.*

The brigade's trademark was the cordon operation: *When an enemy force is located, surround it before nightfall. When the enemy is surrounded, seal off all avenues of escape. When the enemy is penned in, turn night into day with constant illumination from flare ships and artillery.*

In a dozen cordon operations in March-June 1968, we broke the back of the NVA. The most spectacular such battle took place in April at Phuoc Yen, where in a bend of the Song Bo River with a mix of brigade, ARVN, province, and local forces we trapped an NVA battalion. Under heavy artillery and tactical air pounding, for five days it tried to escape. In the end some 400 enemy were dead, 107 had surrendered, and a great quantity of equipment, including the battalion's radios and code books, was taken.[50] For its efforts in Thua Thien the brigade received the Vietnamese Cross of Gallantry with Palm.

My third tour was in 1970-72, when I was Deputy, then Senior Advisor, to the Commander of IV Corps and Military Region 4. In my tour-end report I wrote this...

**2. (U) <u>The Need for Insight</u>. "Insight" is mentioned above. All too often insight is gained too late, and through adverse experience. I believe that great costs could have been saved in the Vietnam experience if our individual and collective insight had been better as things were developing. I claim no particular insight, but I do have some views on how insight can be gained.**

**Insight - or the ability to see the situation as it really is - is the most valuable asset an advisor can have. Intellect alone does not guarantee insight. Soldierly virtues such as integrity, courage, loyalty, and stead-**

[49]See my "How We Did It in Thua Thien," <u>Army</u>, May 1970

[50]At very small cost in US and RVN lives, illustrating a conviction of mine that if you fight smart you accomplish the mission and at the same time save lives, a message that deserves emphasis in instruction.

> fastness are valuable indeed, but they are often not accompanied by insight. Insight comes from a willing openness to a variety of stimuli, from intellectual curiosity, from observation and reflection, from continuous evaluation and testing, from conversations and discussions, from review of assumptions, from listening to the views of outsiders, and from the indispensable ingredient of humility. Self-doubt is essential equipment for a responsible officer in this environment; the man who believes he has the situation entirely figured out is a danger to himself and to his mission.
>
> I dwell on this because, while insight is the secret of good generalship in any situation, it is even more a requirement among the intangibles, nuances, and obscurities of a situation like Vietnam. Certainly the responsible officer must be a man of decision, willing to settle on a course of action and to follow it through. But the reflective, testing, and tentative manner in which insight is sought does not mean indecisiveness. It simply raises the likelihood that the decided course of action will be successful, because it is in harmony with the real situation that exists. I am convinced that the subjective insight into the conditions which actually prevail comes about only in the way I describe.

I reminded my faculty more than once of these words.

To conclude this treatment of where I was coming from, at Annex F is the latter half of my lecture introducing the Tactics curriculum; its first half consisted of some definitions, various aphorisms, an historical example (Alexander the Great at the Hydaspes) and among other slides on versions of the Principles of War, the Commandant's: (1) Outsmart the SOB, and (2) Outfight the SOB.

General DePuy, brilliant thinker, masterful expositor, and driving leader, came from a different direction. The story is well known of how his experience in the 90th Infantry Division in Normandy and later influenced his thought and convictions. The division arrived poorly trained. Its top leadership was abysmal; two division and two regimental commanders were relieved. Learning on the job, the division became highly competent. General DePuy, as battalion and regimental operations officer and then as battalion commander, absorbed combat lessons on leadership, maneuver, fire support, and troop leading that he never forgot. On becoming TRADOC's commander, he resolved that his command would train leaders and soldiers, and would write doctrine by which commanders could train their units, to his standards so that the Army would be ready.

General DePuy was determined to teach the Army in the field, and Leavenworth students, "how to fight." I wanted to teach the students "how to think about how to fight." We never quite connected.[51]

[51] In one visit to Leavenworth, speaking to the Regular Course students in Eisenhower Hall, General DePuy told them and my faculty something like this: "All I want from this class is ten battalion commanders."

My "Shenandoah" at his December 1973 conference (which presentation I do not remember at all) clearly got me off on the wrong track with General DePuy. About it, he wrote: "There was no substance to the presentation -- in fact the concept had never gotten beyond what I would call the romantic stage." I do know that Jackson's Valley Campaign, although of limited value to the Army in Europe which was then becoming TRADOC's primary interest, is replete with lessons on "how to fight outnumbered and win."

## Field Manual 100-5

I first encountered FM 100-5, Field Service Regulations -- Operations, in 1953, when as S-3 of the 22d Infantry I would read the 1949 edition simply for pleasure. It was the distilled product of the US Army's experience in World War II. Written by Leavenworth instructors who had been in that war, it spelled out in spare language, without paragraph headings, clear statements of doctrine derived from their experience.

The 1954 revision, written post-Korean War in the early Eisenhower era of "massive retaliation" policy, said that "land forces are the decisive component of the military structure by virtue of their unique ability to close with and destroy the organized and irregular forces of an enemy power or coalition of powers..."

On the Leavenworth faculty in 1957-58, I was part of a committee formed to produce a revision to the 1954 version. That manual appeared in 1962; it was followed by another version in 1968.

General DePuy told us to write a new FM 100-5 as the capstone in a series of field manuals through which TRADOC was to change the Army. I told the Tactics Department to write a manual in the style of the 1949 version, of which these were paragraphs...

137. Orders must be clear and explicit and as brief as is consistent with clarity. Short sentences are easily understood. Clarity is more important than technique. The more urgent the situation, the greater is the need of conciseness in the order. Any statement of reasons for measures adopted should be limited to what is necessary to obtain intelligent cooperation from subordinates. Detailed instructions for a variety of contingencies or prescriptions that are a matter of training impair confidence and have no place in an order.

541. The defense, no less than the offense, must effect surprise. The organization of a defensive system must not betray the defensive dispositions. Every available means must be employed not only to mislead the attacker as to the location of the position but also as to the strength and disposition of the defending force. These means include shifting, during lulls, those weapons whose positions were disclosed in repelling attacks. Deception, delay, and security are obtained through the use of covering forces.

b. A penetration depends for success on coordinated power. The more important conditions favorable to success are surprise, adequate fire power, especially artillery, to neutralize the area of penetration, favorable terrain within the hostile position for the advance of the attacking troops, and strength to carry the attack through to its objective. An integral part of the plans for the penetration of a defensive position should be the pinning down of hostile reserves by the action of artillery fire and the tactical air force.

I did some of the drafting myself, and edited every page. But, frustrated by our inability to produce a draft that met the TRADOC staff's expectations, I finally told Paul Gorman, TRADOC's staff chief for Training, that the only solution was for TRADOC to take over its authorship. The manual, written largely by a team of officers working directly for General DePuy, went in July 1976 to the field to have a major effect.

Six years after I retired from the Army in 1978, I received a call at my home in Bronxville, NY, from Major Paul H. Herbert of the History Department at West Point. He told me that, at the suggestion of Colonel Doughty, his department head, he was about to write the story of the 1976 revision of FM-100-5, which itself had been revised in 1982, and that he would like to interview me. I told Major Herbert that my experience with that revision had been very painful and that I wanted nothing to do with his project. He urged me to cooperate with him, saying that he had a copy of the draft we had completed at Leavenworth before we turned the writing over to TRADOC, that he had been researching the matter, and that both he and Colonel Doughty believed that it was essential that I be interviewed by him so that the full story could be told.

I agreed to be interviewed, and in July 1988 Herbert's 130-page book appeared as Leavenworth Papers Number 16 of the CGSC, titled Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations. I thought it well written, complete and accurate, and the objective product of thorough research.[52] It was informative to me beyond my own knowledge. I encourage anyone who wants to understand what went on at Leavenworth and TRADOC during my time there to read it. It can be obtained by writing Combat Studies Institute, CGSC, Fort Leavenworth, KS 66027, or by calling 913-684-2810. CSI's web site is http://www.cgsc.army.mil/csi.

## Other Initiatives

Simulation. Command post exercises (CPXs) with scenarios written in advance and events played out according to a script had been a feature of field and school training in the Army for generations; their purpose was to exercise staffs and often communications. "War games" fought by opposing sides in which umpires using rules determined outcomes in real time had likewise long been in use, both by actual forces on the ground and in classroom settings; their purpose was to shed light on tactics and decision making. By the 1960s computer simulations, in which engagements were played out according to algorithms developed by humans but with no further human involvement, had begun to multiply, leading to combinations of the old and the new.

[52] A less generous appraisal of our FM 100-5 effort appears in "AirLand Battle" by Richard M. Swain, which is an essay in Camp Colt to Desert Storm: The History of U.S. Armored Forces, edited by George F. Hoffman and Donn A. Starry, University Press of Kentucky, Lexington 1999; pp 370-373.

My first experience with simulation occurred in 1952, when in the 22d Infantry I was detailed to be a regimental controller in a CPX in the neighboring 1st Infantry Division. Armed with the script together with its written messages I reported to the regimental command post in the field. It was evident that its members were prepared to be bored. So I decided that rather than using "canned" written messages I would use my radio and on the regimental net would extemporaneously act the parts of each of the battalion commanders, using their call signs and inventing messages while adhering to the established scenario. Increasing message traffic by a factor of five or more, and creating urgent situations requiring a response, I added some excitement to the drill, and afterwards received a very nice commendation from the regimental commander.

Seeking in 1974 to give the student a realistic experience in combat command, we did something like that. We built a mockup armored personnel carrier command post with hatch where the student "battalion commander" could station himself to view the sand table "battlefield," with his S-3 and artillery liaison officer seated inside, each with their battle maps and each using intercoms that would replicate the voice radio suites. In a darkened room the commander could peer across a barely lit landscape, seeing artillery flashes and hearing the sounds of battle. On simulated radio nets controllers would act the parts of company commanders, forward observers, the division artillery fire direction center, and the brigade commander and staff. After placing the student team into the situation, we would take them through an hour or so of battle, with controllers adjusting their responses to reflect orders received. The Tactics Department appropriately called this simulation "White Knuckles."

In early 1974 a faculty-student team began to develop a war game that the Tactics Department would use in the final periods of its 48-hour lesson, "Forward Deployed Force Operations (European Setting)," to be presented in the common curriculum that September. Adapting the routines of a manual war game already in existence, this simulation allowed the defending corps, division, and brigade commanders, played by students, to fight the opening half day of a war in which Soviet forces, played by the faculty, attacked into West Germany. Student player-controllers who could see both sides decided battle outcomes at the battalion level and gave reports of the outcomes in the language of combat to brigade level players, triggering decisions by the chain of command as it coped with the attack. Called "First Battle," this war game gave students and faculty valuable insights into the conduct of the defense and became useful not only in instruction but in the development of doctrine.

In a special project in the 1974-75 year two students, Captains Hilton Dunn and Steve Kempf, created a war game which on a Mideast terrain model portrayed a U.S. tank-infantry platoon with artillery support defending against a Soviet-style armor-mechanized infantry attack. They carved the terrain from styrofoam blocks and painted it sand colored, made model tanks and TOW vehicles that students could place on the ground, replicated called-in artillery with cotton balls, and erected a screen that prevented each side from seeing the other's dispositions. Using their invention,[53] and dividing each classroom's four 13 to 14 student work groups into defenders, attackers, and controllers, we gave each side its mission and took each of the four separate battles from start to outcome, and then into a critique. In the 1975-76 class we subjected the students to this war game early in the Tactics curriculum, to great interest and effect.

Organization of Command Posts. The Army's thinking on command post organization and operations had stagnated during the Vietnam war with its large command posts at brigade and higher which rarely displaced. Steadfast had given Leavenworth responsibility for the tables of organization and equipment (TO&Es) of the division and corps headquarters company, as well as for FM 101-5, Staff Organization and Procedures. We began forthwith to address command post organization and doctrine.

Fortunately, division and corps commanders out in the Army had already begun to think about those matters. At Fort Hood, Texas, particularly, Major General Bob Shoemaker, commanding the 1st Cavalry Division, was experimenting with a three-part command post system that set up a division main, a division tactical (or forward), and a division rear. We moved in that same direction at Leavenworth.

I had long favored smaller staffs. For a few months in 1954 I had been a liaison officer with the I Belgian Corps, a NATO force with its command post in Cologne. The corps staff, organized along British lines, was smaller, and often swifter, than that of the US 4th Infantry Division, one of whose regiments I had just left. In 1974 I traveled to Germany, where I visited the headquarters of the 4th Infantry Division (yes) of the British Army of the Rhine, which not only had a tactical responsibility but also responsibility for housekeeping, which in the US forces was in the hands of a different chain of command. Nonetheless it was small compared to its American counterparts.

I had always found telling the remarks of General W.T. Sherman in his Memoirs:

> "A bulky staff implies a division of responsibility, slowness of action, and indecision, whereas a small staff implies activity and concentration of purpose. The smallness of General Grant's staff

[53]Named after its authors the Dunn-Kempf War Game, it and First Battle were reproduced in quantity by TRADOC for the use of the Army everywhere.

throughout the Civil War forms the best model for future imitation. An army is efficient for action and motion exactly in the inverse ratio of its impediments."

Fortunately for the College, Colonel Jess Hendricks, who opened his Staff Operations course to the 1975-76 class with a lecture "The Commander and his Staff," in which this quote appears, was head of the Department of Command, and responsible for writing staff organization and procedures. As a captain, he had been an operations officer in the headquarters of the revered General Creighton Abrams, then commanding the 3d Armored Division, who had told him to write a division SOP of not more than one page.[54] In April 1976 the College published Training Circular 101-5, Control and Coordination of Division Operations, Leavenworth's first "how to fight" manual, reflecting this enlightened approach.

Computers. In previous assignments I had used the computer effectively in installation management. On reporting to the 101st Airborne Division in 1965 to wait in line to command a brigade, I had been detailed as Fort Campbell's installation Director of Supply. A General Accounting Office and an Army Audit Agency audit of Consolidated Supply had revealed its desperate condition. Two months after my taking charge it was functioning adequately, and the division's repair parts readiness condition had gone from "4" to "1." Six months later Consolidated Supply was fully recovered. One secret lay in the SOPs we built to use with our punch card routines and the installation's rudimentary Univac 1004 computers (the programs for which in those days were modified by hand-wiring them from behind).

A year later I became Chief of Staff of the division and post, in which capacity I was Chief of the computer-dependent Program and Budget Committee. After taking the 2d Brigade to Vietnam and fighting it there, I took command of Fort Devens, Massachusetts. There I offered to buy from our budget one of the new IBM 300 computers then being issued to installations, if I could get it earlier that way. We got one and, programming it ourselves, within a year we were running an exemplary computer-using installation.[55]

[54]He was able to write one of five pages, which he adapted into the College SOP for the 52d Armored Division. This has been a losing battle. A perusal of the current CGSC web site reveals the appalling amount of matrix and other documentation considered to be necessary references today for the production of orders (e.g., the Joint and Agency Mission Essential Task Lists, or JMETL/AMETL), and the lengthy sample operations plans/orders deemed necessary for the conduct of operations. Erwin Rommel would not approve.

[55]1969 while at Fort Devens, I visited Bill DePuy, then a major general in the Army Chief of Staff's office, in a position in which he was in charge of automating the Army. I told him of our success with computers at Fort Devens. He commented to the effect that "We're tired of you commanders using your own programs. We are going to standardize all the programs." My reply was, "That's OK by me, if you use Fort Devens' software." Returning to Fort Campbell in 1972 after my third tour in Vietnam, I called in the Director of Supply, who had been my deputy in 1965 and asked him the percentage of stock fund excess, which by 1967 we had reduced to 2% (the Third Army goal was 10%). When he replied that it was at 10%, I asked him why. He said that we had been ordered to use the standard Army software.

In 1972-73, we recruited and manned the 101st, tracked its materiel from depot to unit, and managed and trained its soldiers, making awesome use of the computer.[56]

In my early guidance to the faculty (Annex B) I had told the faculty: "We must greatly increase the student's immersion in the world of computers."[57] To facilitate this we equipped a classroom with a host of computers and made it available to students, with help, night and day. Major Ed McGushin, of the faculty team writing instruction on the Mideast contingency force, invented and built an unclassified version of the Joint Chiefs of Staff program JOPS (Joint Operations and Planning System) using which students could calculate the aircraft requirements for various troop lists in a quick-response deployment. It was easier to use than was JOPS.

## TOS

Soon after arriving at Leavenworth in August 1973, I learned that the Combined Arms Center was the proponent for TOS, the Tactical Operations System, the purpose of which was to automate the command posts at division and corps.

The November 1969 Army magazine, in reporting on the meeting of the Association of the US Army a month before, had quoted Army Chief of Staff General William C. Westmoreland: "(We) are on the threshold of an entirely new battlefield concept... I see an army and an integrated area control system that exploits the advanced technology of communications, sensors, fire direction and... automatic data processing." He said that "...no more than 10 years should separate us from the automated battlefield."

TOS in 1973 was one product of the effort that General Westmoreland announced that day. TRADOC was TOS's "user" according to the Army's materiel development system, and CACDA had been working on TOS's "required operational capability" (ROC) for two or three years. Brigadier General Al Crawford at Fort Monmouth, NJ, was the TOS project manager; he had worked for General DePuy in the Chief of Staff's office in 1970-71 and remained in close touch with him in 1973. I immediately became immersed in the effort to place a working TOS at Fort Hood for testing in 1975.

[56]Just one example: As soon as our NCO canvassers out with the recruiting stations signed up a volunteer for the 101st under the Unit of Choice recruiting program, the man's name and the MOS for which he volunteered were entered into the division data base. When the soldier arrived at the division after basic or advanced training (we did our own AIT for infantry, artillery, engineers, etc.), he either went into the duty for which he had signed up, or he was interviewed to see if he would take another duty. The result: zero Congressional inquiries about a soldier whose commitment was not honored.

[57]While visiting my son Jack, a freshman at Dartmouth, that fall I met with its president, Dr. John Kemeny, inventor of the Basic language. He had made computer instruction and use mandatory for all students and had equipped a computer center with time-sharing terminals available to all. When Jack came home for Christmas vacation, I had him describe to the Faculty Board how Dartmouth exploited the computer, and then said, "That's what we want to do at Leavenworth." (That overstatement caused some alarm in the faculty, as Major Doughty reported in his paper for me.)

To relate, even to remember, the back-and-forth complexities of our trying to describe the ROC for something that would automate a division command post is too much for me. Suffice it to say that I thought it to be an impossible task. Few if any of the responsible CACDA staff had served in a division command post, it was operating on theory alone. I could not spare the experts in the College, busy with instruction and doctrine.

I had read that the Chief of Police of Kansas City, Missouri, one William J. Flynn who had been chosen to replace the deceased J. Edgar Hoover as Director of the FBI, had pioneered the use of computers in the Kansas City Police Department. So I visited that department.

I was shown its large computer, connected to the nationwide law enforcement computer system. In the dispatchers' room sat a dozen men, each with a computer terminal keyboard and an overhead display. Police sergeants much like the operations staff in the 101st Airborne Division command post, they were talking by radio to police patrol cars. A typical message from a squad car might be.. "I have a car improperly parked (or speeding, or such), car type and license number is... driver inside." The dispatcher then punched his keyboard, looked at his screen, and might say... "Car belongs to (name). Has police record (e.g., larceny)." That was combat intelligence! I noted that no one had to convince these dispatchers or police patrols of the value of the computer and its data links; their value was obvious. The system was in a process of evolution; the next step was to place a terminal in the squad car so that police could query the computer directly. General DePuy later joked at my citing the Kansas City Police Department, but my visit there convinced me that the right way to automate command posts was to put a modest capability in the hands of the troops and then improve it.

An August 1974 General Officer Review decided that TOS was a "test bed," not a "development," that we should seek alternatives, that TOS, being costly, should go slowly, that "hands on" testing was called for, and that milestones were guides only. At the annual AUSA meeting that October, in his hotel room in Washington's Sheraton Hotel, speaking from butcher paper charts that I made from my notes at Annex G, I made a presentation to General DePuy. Its gist:

**CGSC instruction is designed to get faculty and student in a "hands on" mode, comfortable and familiar with ADP.**

**Nature of the computer: powerful, rapid, fantastic memory, does only what it is told.**

**Nature of command and control in land combat: chain of command direction; staff and command judgment; uncertainties; precision is desirable, is sometimes inherent, sometimes not.**

**Issues of interoperability with: army systems, joint systems, commo systems.**

**Experience with corporate and large systems: History is "written in advance." Clarity of vision is hard to achieve. Mistakes made early are costly. Hardware and software decisions are often binding. Development takes time, so History slips. Lack of alternatives ties you down. Computer generations are quickly overtaken.**

**Cultural problems: unfamiliarity, complexity, hesitancy, unhappy experiences, suspicion, overzealous salesmen. The result: very little out the end of the pipe.**

**Issues: "large central" vs "mini" computers, "near real time" reporting of data vs "hierarchical review," "computer to computer" vs "TOC to TOC" commo, digital input "at source" vs "at ops center," large system vs incremental growth, "wait for big system" vs "get something into the field."**

**CAC's combat developments approach: embrace ADP; keep in touch with the schools, troops, developers, ARTADS (Army Tactical Data System), logistic applications, personnel applications, Computer Systems Command (CSC), the other Services; involve CAC and the troops in software (including the rewrite of FM 101-5); get a CSC element at Leavenworth; keep options open, but get something to the troops ASAP.**

**Our criteria for a new ROC: incremental application; use (militarized) general-purpose ADP, TOC to TOC data transmission; early and incremental availability to the troops; let real time data links, large screen displays, and low level input systems be fitted in later; keep options open; orient and indoctrinate the schools; be cost effective, step by step.**

I told General DePuy that it was essential to station a detachment of the Computer Systems Command, the software developer for TOS and the rest of ARTADS, at Leavenworth. There they could interact with our TOS team on a daily basis, rather than, upon finishing a software segment at Fort Monmouth, "throwing it over the wall" for us to apply and comment on.

General DePuy listened to me but as it turned out he was too far committed to the current approach to buy into my proposal and things went on in about the same pattern, although we did get a CSC detachment. But at Fort Hood, in a demonstration of a truck-mounted test bed TOS, all that the provider could do was (as I too sarcastically pointed out) make the machine light up. In due time the Army cut back on the scale of TOS, now aiming to put into the field only its jeep-mounted terminal, but by then the technology was obsolete and even that did not work out. It would be years before the Army adopted an evolutionary approach to computerizing the command and control system with off-the-shelf hardware. General Westmoreland's vision still suffers from "stovepipe" development of computerized systems that have not been interoperable from the outset, as they would have been if the troops had had a hand in them.

## Engaging the Students

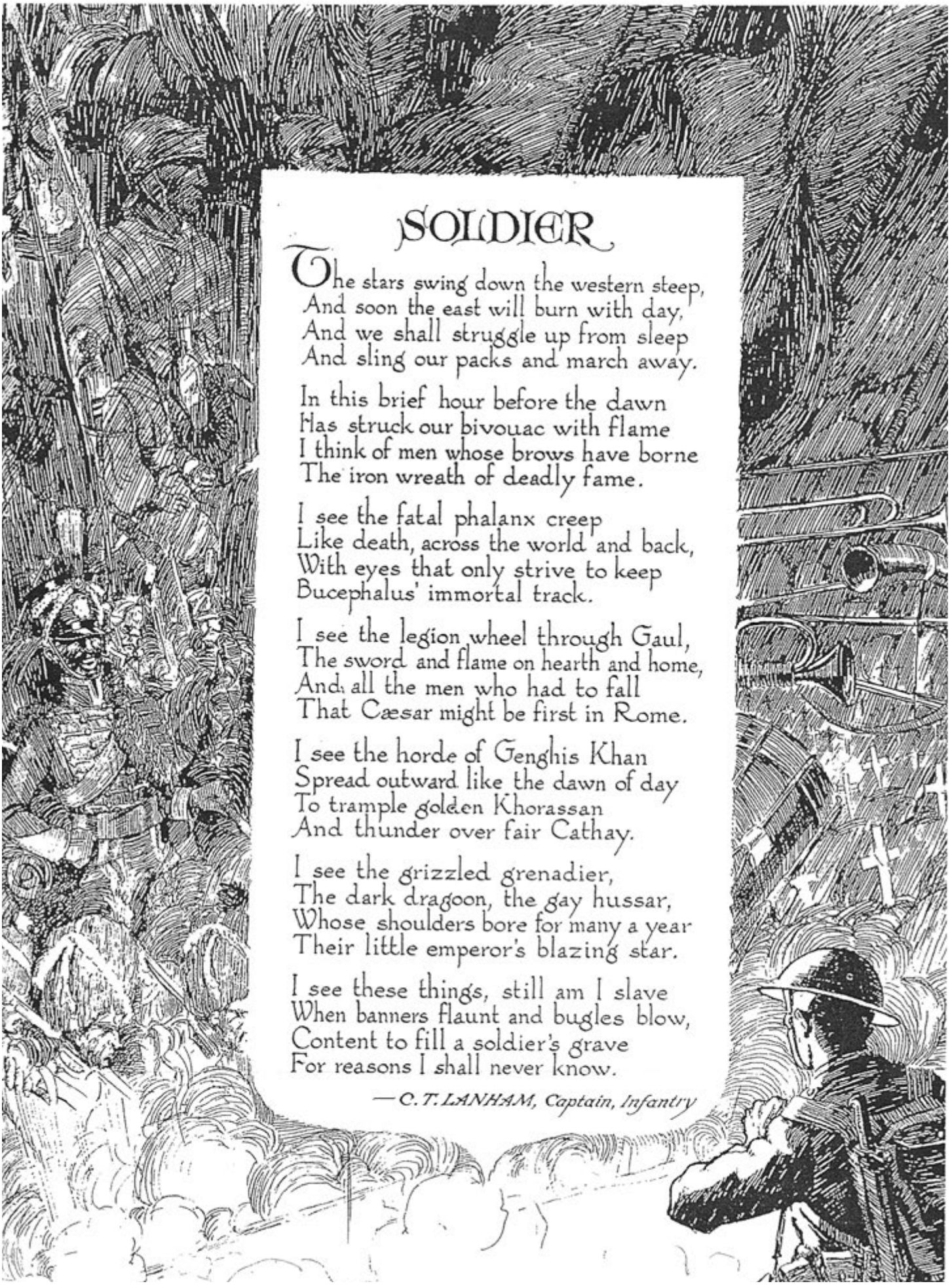
Our students were a remarkably experienced and lively group, among whom I enjoyed mingling. At roughly the 10th-15th year of their service, virtually all had served in Vietnam and half of them twice. I resolved to use their backgrounds and skills as a resource not only in the work group discussions that would be a large part of their instruction, but some of them in research projects that, without unduly interfering with their curriculum, could assist both the College and CACDA. Each student was mailed a questionnaire that asked him to describe his experience, education, and interests. Compiling student responses into a data base called SAFE (Student and Faculty Expertise), we were then able to find talents and combinations of talents to suit requirements.

Calling myself the "Senior Instructor" of the College, I taught many a class -- in work groups, in 60-man classrooms, and in both Marshall (a quarter of the class) and Eisenhower (the full class) Auditoriums. I often wandered down into the classrooms to get a feel of how the instruction was going. I read the issue material for class after class, and commented on it to the instructor or department director. Students shared their thoughts with me in writing, although I, to my later regret, all too often did not reply.

One objective announced in my September 12 meeting with the Faculty Board was Develop Fiber and Depth. I did not know exactly how to do that,[58] but although the 1973-74 year was set in concrete, I thought I would liven it up with an optional "Commandant's Requirement." Ivan Birrer seized on the idea and prepared this memo for me...

> In my opening remarks to the 1973-74 class, I asked students to dedicate themselves to making the Army as ready as the resources provided will permit. Among other "charges," I said:
>
> - Take the year seriously.
> - Study and master the Army as it is.
> - Gain a historical perspective of at least some part of the Army.
> - Improve your ability to solve a problem.
> - Improve your ability to write.
> - Participate with the faculty as we help move the Army from "A to B."
>
> Toward these and other ends, from time to time I will place a Commandant's Requirement on the student body.
>
> The purpose of a Commandant's Requirement is to invite the members of the class to engage in reflective thinking about military problems and to put their thoughts in written form for examination and discussion. Response is optional, but encouraged.

[58]Toward fostering student thought on "professional values," at about this time I placed a large poster (a part of which is on the next page) in every classroom. Maj Gen "Buck" Lanham, who commanded the 22d Infantry in Europe in WWII, was an editor of Infantry in Battle in 1934. When General Lanham visited the College to advise us on preparing a similar compendium on "Combined Arms Actions Since 1939," he presented me with an autographed reproduction of the poster that in 1993 I gave to the College's School of Advanced Military Studies where it may well still be hanging on a hallway wall.



# SOLDIER

The stars swing down the western steep,
And soon the east will burn with day,
And we shall struggle up from sleep
And sling our packs and march away.

In this brief hour before the dawn
Has struck our bivouac with flame
I think of men whose brows have borne
The iron wreath of deadly fame.

I see the fatal phalanx creep
Like death, across the world and back,
With eyes that only strive to keep
Bucephalus' immortal track.

I see the legion wheel through Gaul,
The sword and flame on hearth and home,
And all the men who had to fall
That Cæsar might be first in Rome.

I see the horde of Genghis Khan
Spread outward like the dawn of day
To trample golden Khorassan
And thunder over fair Cathay.

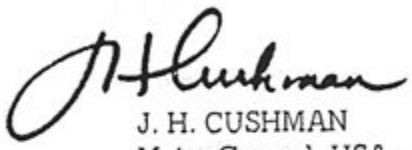
I see the grizzled grenadier,
The dark dragoon, the gay hussar,
Whose shoulders bore for many a year
Their little emperor's blazing star.

I see these things, still am I slave
When banners flaunt and bugles blow,
Content to fill a soldier's grave
For reasons I shall never know.

*—C. T. LANHAM, Captain, Infantry*

Each Commandant's Requirement is intended to be an intellectual challenge to the class. I invite students to accept the challenge. For those who do, I assure you that your papers will be read with care. I would expect to read most of them personally and to conduct roundtable discussions with some of the authors. Some of the papers will be reproduced; all will be available for review by any interested party. In short, we intend to recognize the efforts of those who participate.

You should understand that the Commandant's Requirements are not a part of our formal student evaluation program. You are not obligated to participate in the program. Nonparticipation will in no way affect your academic report and will not be made a matter of record. Although a decision to participate does offer an opportunity for recognition, recognition is not what you should be seeking. The goal is reflective military thought; careful expression; the discussion that follows; and, through these, intellectual growth.



J. H. CUSHMAN
Major General, USA
Commandant

Reproducing an article titled "The Experimental Armored Force, 1927-28," that told of the British Army's experiments in armored warfare -- the lessons of which it had ignored but the German army had applied all too well -- I asked the students to assess the article in about 500 words.

Something less than a hundred students responded; there were many good papers. I met with most of those who responded -- revealing only then that I had written the article for Army magazine in 1965 while a student at the National War College. We had some lively discussions.

I followed this with a second Commandant's Requirement, also optional. Sharing an article on the subject by Lieutenant General Bruce Palmer, I asked them for a paper on "how to attract young Americans to join a Volunteer Army, as infantrymen." These are about the hardest volunteers to get, but there are more infantrymen in the Army than anything else. About the same number responded, and again we had good papers and lively discussions.

By now something unexpected was happening. The students were beginning to bring up issues of "ethics" and "integrity." The Commandant's Requirements were clearly troublesome materiel for them. With regard to the experimental armored force, for example -- when does an officer speak his mind, stand his ground, or even resign? And with regard to recruiting -- is not the Army deceiving itself by putting the face of success on what seems to be a failure? It was clear that the students were interested in tackling basic questions such as honesty, candor, and the freedom to fail without committing career suicide.

So the third Commandant's Requirement would be mandatory for all US students. It consisted of two cases, on each of which the student was required to comment "in 25 words or less." The first case told of a company commander sorely tempted to lie about two AWOL (absent without leave) soldiers. In the second case a chief of staff, rank of colonel, had to decide what to do about a case of misappropriation of government property by his commanding general.

These two cases touched the students' nerve ends. Heated discussion ensued, not simply about these particular cases, but about a range of issues as to lying, honesty, and integrity, and especially about integrity in the face of command pressures.

So I decided to have, in March 1974, a "Symposium on Officer Responsibility."

## Symposia on Officer Responsibility

Annex H consists of a few papers from our two Symposia on Officer Responsibility, in 1974 and 1975. I will cover it here with a posting that I made in April 2000 on the West Point Forum, which is an Internet list server open only to West Pointers on which they can exchange views on a variety of subjects. My posting follows:

> This is a very long post that I wrote a few days ago, intending to post it on the upcoming 25th anniversary of the fall of Saigon that ended the Vietnam War. But the Chief of Staff's recent announcement, on convening two blue ribbon panels at Fort Leavenworth led by brigadier generals to deal with perceived grave problems in Army officer leadership and morale, leads me to post it now.
>
> On that day, April 30, 1975, when Saigon fell, I was Commandant of the Command and General Staff College, having reported for duty in August 1973. It was one of the best jobs I ever had, putting me in touch each year with 1000 student officers of great talent, experience, and promise. It gave me scope for many ideas that I had at the time. I had a marvelous faculty, and a sterling Assistant Commandant whose name was Ben Harrison.
>
> April 30th, 1975, was the final day of our second "Symposium on Officer Responsibility," the first one having taken place in March the year before. That one had been in response to the palpable need to restore a sense of participation by my Leavenworth students in regenerating the professional ethic in an Army officer corps affected badly by Vietnam.
>
> Three or so years earlier the results of an Army War College study on Military Professionalism had become known, revealing a widespread perception of differences between what mid-level and senior officers should do and what they actually do, including... distortion of reports... selfish and ambitious behavior... lack of competence... variations in standards... condoned rationalization by the chain of command of lying, cheating, stealing...

...all of this leading to a professional climate of... pressure to remain competitive for rapid promotions... unrealistic goals or quotas, often set to enhance the reputation of the commander... no opportunity for learning, coupled with a demand for instant perfection... loyalty upward but not downward... and so on.

A series of discussion-provoking "Commandant's Requirements" that I instituted in the fall of 1973 had led me to hold the first Symposium on Officer Responsibility, March 1974. As I briefed the major generals, selected colonels, CGSC faculty members, academicians, and journalists who had been invited to sit on panels before groups of 100 students at that symposium, I had said to them...

"How do we raise our standards?

"How do we help create an environment of integrity as the routine order of things?

"How do we as general officers meet our responsibilities toward this end? How do our colonels, lieutenant colonels, and senior field grade officers contribute?

"Finally, how can we imbue our students and our faculty -- and indeed every officer everywhere -- with the need to stand his ground in terms of integrity, regardless of whatever temptation or environment might exist?

"Perhaps most important, how can we structure the environment so as to encourage them and reward them?

"On this last point, however, I want to be clear. Certainly we have to understand the officer. We have to realize the pressures that he may be under. But we have to be sure that he understands that, in the final analysis, nobody is forced to lie, or to act without integrity.

"Very many of these decisions are not easy to make. But each man is his own man. He makes his own decision to compromise. When he succumbs to pressure, he is failing himself, and failing the system as well. Our officers have to realize that it is not possible to go through life without being tested.

"At the same time, just as the officer has his responsibility to himself and to this institution that we cherish, we have our responsibility to him. I hope each of you here will help hold your, and my, and the students' feet to the fire and never let us, or him, forget our ultimate responsibility as an officer."

That 1974 Symposium attracted quite a bit of attention. Colonel Bill Dyke (Lt Gen Charles W., Retired) -- an officer I much admired then, have since, and still do -- arrived too late to hear the warning in my briefing, above, that the colonels and generals on the panels would be challenged; be ready for it. With a great combat record, including command, in Vietnam (101st Airborne Division), and having held a variety of other troop and staff jobs, he was at that time Exec to the Secretary of the Army. During one heated session, a student rose and told him, "Colonel, you're a ticket puncher!" He was livid, and I heard about it.

So did others. The following Monday morning in the staff meeting of the Army DCSPER, Lt Gen Bernie Rogers, there was talk of nothing else but "What's going on at Fort Leavenworth!?" Well, a month or so later General Abrams came out as a guest speaker, and when a student asked him what he thought of our "ethics" instruction, he gave it his OK from the platform -- and did the same later in a session with me and a dozen students in our conference room. It was cathartic, and useful.

So, in late April 1975 we had our second Symposium, and on May 11 there appeared in the Kansas City Star and Times the following commentary by one of the journalists present. It told of the last day, April 30th, on the morning of which news media carried the story of the fall of Saigon that day, halfway around the world.

By C.W. Gusewelle, "an editorial writer," it was titled "Remarkable Military Maneuver at Ft. Leavenworth." As I continued in my posting, the writer's piece read...

*******

It was not, self consciously at least, a part of the fallout from the trials and tragedy of Vietnam. Neither was it a public relations exercise -- some tasteless attempt at military image-polishing. Least of all was it that!

No, the 1,000 or so student officers at the U.S. Army Command and General Staff College at Ft. Leavenworth were about a more serious business. Their purpose, for two and one-half uninterrupted days, was to consider their several responsibilities as soldiers in the uniform of their country.

A few journalists and academics had been invited to participate in their symposium, for whatever uncertain contribution they might make. And also enough major generals and brigadiers assembled in one place, there on the old fort looking eastward from its bluff across the Missouri River, that the Russians, if they had known about it, might have been tempted to a preemptive strike. So many glittering stars that a one-time second lieutenant gone all to rumpled suits and middle age had consciously to keep his hand stuffed in a pocket lest it leap twitching up in involuntary salute.

But all of them -- the generals no less than the journalists and professors -- were outsiders. The event belonged to the students, most of them majors with a scattering of lieutenant colonels and senior captains. It was for them to ask, and if possible to answer, the questions.

Hard questions. Is the individual first a military officer, responsible to the dictates of the system, or first a human being answerable to personal conscience? What happens when professional mission and one's own value system come into conflict? What sorts of compromises can be made? And what sorts cannot?

In short, is it possible to reconcile the highest standards of moral integrity with a successful career -- or even with survival -- within the military establishment?

It had to strike any fair minded listener with astonishment to hear how freely, how fiercely, these midrank officers -- some of them the top leaders of tomorrow's armed forces -- were willing to punish themselves and challenge their superiors with that kind of introspection.

In the civilian world, our options are somewhat freer. At last resort, if a collision of values cannot be resolved, we may change jobs. Move to another newspaper. Sign on with a different bank. Apply for a position on another faculty. The career soldier cannot look for another Army to serve.

Moreover, few of our moral choices involve life and death. And most of them are made behind desks or in board rooms, not in the pressing fury of the bunker or the trench.

And yet how many of us -- in the course of our whole careers -- have ever, in so concerted, so deliberate, or so open a fashion, set about trying to define the relationship between our professional obligations and our human ones? Between principle and promotion? Between private honor and blind obedience? And how many of us will ever be called upon to pay with our livelihoods -- and possibly with our lives -- for our choices?

It was, all in all, not an especially pleasant two and one half days for anyone concerned, the participants or the observers. But it was a remarkable experience and an illuminating one.

My own military service dates back to those fine, comfortable, cocksure days before it was learned that some wars are unwinnable and that the most critical battle of all is the political one for public understanding at home. When, within the bounds of strict legality, there was no such thing as a "good" order or a "bad"order; they were all carved in stone.

I was astonished to find how generally those memories have been overtaken by change.

Amazing, first of all, is how young the majors have gotten. Nearly all of them have served a combat tour, and some of them two or three. And yet, to a man, they are in their 30s, often their very early 30s. Probably it is only the time-warp of middle age that creates the memory of an old man's Army. Maybe it never was.

Amazing, too, the level of skills and sophistication they represent. It's true the students at Leavenworth were the cream of their age and rank groups. But well over half of them owned master's degrees in some non-military discipline. Many had two.

I found them a reflective, widely informed, genuinely inspiring and relentlessly candid class of professionals, full of self-directed wit, willing to ask -- and be asked -- questions of elemental principle. Willing to say to 2-star generals not only that it is permissible to question the decency of an order but that there are in fact occasions when an order must be disobeyed because there are higher obligations even than the one to discipline and the flag.

That is strong stuff. If you have spent any time around or in the military establishment, you know just how strong. Granted that the Command and General Staff College is nominally an academic environment as opposed to a strictly military one. Granted, too, that after these students go on to their eventual assignments, every conflict between the ideal and the expe-

dient may not invariably be resolved on the side of the graces. Perfection, like piety, is a rare commodity, otherwise fewer people would have to spend their whole lives seeking it.

There was, as mentioned earlier, very little direct reference to Vietnam. But Vietnam was nevertheless the tapestry into which many of the themes and issues were woven. One heard the name of Calley mentioned. And My Lai. One heard the term "body count" used as a kind of code word for any such blind stupidity as believing that victory is measurable by corpses, even fictitious corpses.

Then, on the evening before the last morning of the symposium, the last American was plucked by helicopter off a rooftop in Saigon and the government of South Vietnam surrendered unconditionally to the invading Communists.

And on the chalk board in one of the classrooms the next day someone had written: It's all over over there.

No one referred to that epitaph to a war. None of them even acknowledged it. They simply went on talking, a while longer, about the kind of men and officers they hoped and intended to be -- the kind that they would insist that the system let them be. And then, at the appointed time, they went off to the main auditorium for the concluding session

A journalist spoke. The professors spoke, and one of the generals. And a student for his fellow officers. Finally it was the turn of the commandant of the college, a major general, who after some summarizing comments, seemed to hesitate just an instant and then asked them all to stand.

It must be a hard thing to say a public prayer from the lighted stage in an auditorium of 1,000 professional soldiers of many backgrounds and several faiths, or none at all. In the Army, praying is the chaplain's job. But this obviously was something that it had occurred to the general spontaneously at that moment to do.

The long habit of command had shaped his manner. So that when he spoke to God he still sounded a little like a man addressing his troops. But his sincerity was not to be doubted, nor the plain decency of what he asked.

He prayed for all those who had suffered in the war just ended, and those who might yet suffer after it. And for the country. And for the wisdom to understand duty. And for the courage to do it. And finally he prayed for the friends and comrades that all of them -- every single man there -- had left behind on that bloody field.

It was a moment very full of emotion.

Somehow reluctant, then, to pronounce an Amen, which seems more a preacher's word than a general's, he simply stopped saying what was in his mind.

And after a pause told them: "Now just go quietly out of here."

They did. And it was a little time before some present could speak.

(end of Gusewelle commentary)

* * * * * * *

I still have my notes. They read...

Father

Pause as soldiers to reflect on VN

Ask you to sustain those who must now bear the conqueror's yoke

Ask you to sustain us who each could have done more or better

But also to help us not to seek someone to blame... - yet to learn what we can

Remember those who died, wounded, their families

Heal our country

Let us do our duty - meet our responsibilities - be examples of the soldierly virtues.

This vignette is a little previous for the exact 25th anniversary, but since it is germane to today's conditions I post the story now -- as well as to tell how it was, at one place 25 years ago, when Saigon fell. Remember it in eleven days.

As to the problems being addressed by the blue ribbon panels, "The more things change, the more they are the same." I can only say to the Chief of Staff, and to the Vice Chief who I think may well be responsible for involving the Leavenworth students, "good for you." Let's hope that we can trust the officer corps to be sufficiently resilient and responsive that it is not too late.

Jack Cushman, '44 (end of my April 2000 posting)

Soon after I left Leavenworth for Korea in February 1976, General DePuy, who had never thought well of our Symposia, ordered the one we had been planning for April 1976 to be canceled. In its stead, Ben Harrison organized a similar assembly of senior officers to convene with the students in a like discussion on "Obstacles to Readiness," which accomplished a useful result.

## Problems of Organization

Three or four months into the 1974-75 curriculum, General DePuy, while visiting Leavenworth for another purpose, arranged to have several students meet with him so that he could hear their opinions of the tactics instruction. I did not know of this until after his departure, when one of the students reported it to me in passing, saying that the comments were uniformly positive, which I was pleased but not surprised to hear.

Getting that year's instruction on line had been quite a strain on the faculty, but we knew that the product was good and that next year would be better. Meanwhile initiatives requiring our action continued to flow from TRADOC. In the combat developments realm many of these required us to task members of the instructor faculty. From the beginning I had considered that CACDA and the College were "one faculty," but it turned out that the "subject matter experts," as they were called, in most areas were in the College.[59]

There was also duplication, for example, in the Command and Control directorate of CACDA and the Department of Command in the College. In addition, CADCA had no expertise in logistics, that field being considered by TRADOC the province of the Logistics Center, while in the College we had a Department of Logistics. I believed that, representing the interests of the division and corps commanders of the Army, we should speak our minds on logistics, as well as on personnel administration.

In mid-year 1974-75 I relocated some people of CACDA's Command and Control directorate from Sheridan Hall up on the hill down into Bell Hall, placing them with the Department of Command. At the same time I relocated the head of the Department of Logistics and his people up on the hill with CACDA where they could provide input on combat developments studies on logistics, as well as accomplish their instructional and doctrinal duties.

Another problem area was force development. The College was responsible for defining an area of expertise in the OPMS specialty of Operations and Force Development.

The doctrine for that specialty was more a matter of lore than doctrine. With its efforts in force structure, including SCORES, CACDA was working in that field but without studying its decision-making aspects. The College required a fictitious but realistic troop list, with the traditional 20th Infantry Division, 52d Armored Division and so on down into nondivisional units of every description, from which instructors could develop their map

[59]To my mind, CACDA often wasted people on unprofitable drills. After the combat development directorate at TRADOC assigned us the task of developing a new organizational structure for the air assault division, I learned that CACDA had given the action on that project to a small team in Force Development, none of whose members had any background in the subject. I proposed to Major General Robert C. McAlister, DCS for CD at TRADOC, that TRADOC assign the task instead to the commanding general, 101st Airborne Division (Air Assault), which was of course the only such division in the Army. I proposed that the current G-3 there, when the time came for him to be replaced, would remain on post to head up a small section of people who would make that study for the division commander. I said that we would help supervise, and that I would contribute from CACDA spaces equivalent to those now engaged in the study to provide for some spaces for that group. Bob McAlister's reply to me was, "If you have spaces to spare at Leavenworth, I can use them at TRADOC." Nothing came of my idea, and in due time our recommended structure was forwarded to TRADOC, only to be discarded in favor of one proposed by Forces Command; it had been prepared by the CG, 101st.

exercises. For 1974-75 we had hastily built one for each of the two corps forces (one in Europe and one in the Middle East), under the Echelons Above Division concept where corps was an administrative support as well as a tactical echelon.

The SCORES product was moving very slowly and the curriculum schedule could not wait. So I set up a faculty/student effort known as the Corps Forces Study Effort (CFSE) that would not only build the two instructional corps forces but would attempt to define how their makeup was determined (e.g., how do we know the size of the non-divisional combat engineer contingent in the corps force). The current method, when in the real world a troop list was to be determined for an operation, was to call in the corps engineer and ask him. But the sum of what the engineer, the signal officer, the quartermaster, etc., would say was necessary would make the total so large that it would not fit the force ceiling. We had to help the OPMS generalist with ways to supervise the various specialists and arrive at the tough decisions. Heretofore the method had been essentially "judgment." We wanted to know if some techniques could be found.

Here were my guidelines for building the two corps forces:

**Austerity - Face up to accomplishing the mission with less resources.**

**Discipline - Assume a well-trained, disciplined force.**

**Skill - Assume skilled, professional commanders with lean staff organization and small headquarters.**

**State of the Art - Push to the limits those things which we can use today, e.g., ADP, improved airlift, communications.**

**USAF Teamwork - Maximize our use of USAF capabilities where feasible -- fire support, reconnaissance, airlift, air defense.**

In the 1974-75 year, the Department of Command, using some students in their electives, built a command post mockup in a former bowling alley near Bell Hall, modeling its interior spaces on the ideas favored by the 1st Cavalry Division, incorporating a division forward, a division main, and a division rear, equipping it with tables, map boards, telephones and simulated net radios, and writing a manning chart for its personnel. Toward the end of that year, we placed students in those spaces for a scripted command post exercise to see how it worked.[60] Then, using our First Battle war game rules, we put into place a Soviet-style enemy combined arms army command post with its own telephones, etc., with stations for player/controllers who could in the language of combat play the roles of the division's subordinate units as the battle unfolded. After Christ-

[60]It was a pleasure to escort General Abrams, Army Chief of Staff, who had been a Leavenworth instructor just after WWII, through this facility and to receive his understated but enthusiastic approval of its concept for teaching staff organization and procedures.

mas 1975, in a forty-hour class in the common curriculum, we would have students play the two-sided battle, then switch sides and play it again. If we did it right, this facility could also serve as a test bed for the development by the CACDA Command and Control Directorate of computer assistance devices in the command post, as I had suggested for TOS (pages 53-55).

In early May 1975, I took a briefing to General DePuy and his staff at Fort Monroe. I described the problems of integrating instruction, doctrine, and combat developments while economizing on, and making the best use of, the subject matter experts in both CACDA and the College. I spoke about our use of students. I concluded my briefing by recommending that we do away with CACDA as a separate entity, and that we spread its subject matter experts around the College faculty, while retaining a Combat Developments Directorate at the same level as the College departments. Its function would be to direct the combat developments efforts of those departments, including, with a small cadre, to direct their participation in SCORES. The College departments would be the primary engines of thought.

I introduced the briefing with a standard CAC cover chart that showed CACDA's clock tower building in the upper left corner, and the College's Bell Hall with its flagpole in the lower right; the flag was being blown left to right. At the end of the briefing General DePuy asked his staff for comment, then said to me, "Bring back that first chart," which I did. He then said, "See how that flag is blowing? From now on I want it blowing the other way." Toward CACDA, that is. My notes on General DePuy's end-of-briefing remarks:

**- Statement of the problem is correct.**

**- Applaud and encourage the use of students in research**

**- Glad to see tie-in of student research with Admin and Log Centers**

**However:**

**- CFSE duplicates SCORES; these questions should be addressed in SCORES, not outside SCORES. CFSE should be incorporated into CACDA's CFD (Concepts and Force Design Directorate). College instruction must grow from SCORES; we must get force planning "on line" through SCORES, to have an effect on the Army. SCORES is the vehicle, not the College.**

**- CGSC is now in better shape, presenting better instruction, than at any time in its history. CGSC, through CACDA, can make a great contribution to help make the Army's case.**

**- Our weakness is that the Army is perceived as not being able to make a good case for weapons. Strengthen Combat Developments; otherwise AMC (Army Materiel Command) will take over.**

**Therefore:**

- **Do not eliminate CACDA; strengthen CACDA.**
- **CACDA will be used by CG, CAC, as management control over the process of combining tactics, command and staff, resources, materiel and systems, and operations analysis capabilities to make the Army's case at DOD for materiel and forces.**

So that summer I moved my office as Commander, Combined Arms Center, from Bell Hall to Grant Hall, up on the hill, taking that of Morey Brady, now the major general Deputy Commander CACDA, who moved into the office of his departed former assistant. Ben Harrison took my Bell Hall office. Into his former office alongside it I placed the newly promoted Brigadier General Bill Louisell, former head of the Department of Tactics, whom I designated CAC SCORES Manager, responsible to Morey Brady.

## Busy Busy[61]

At Annex I is my 5 September 1975 letter reporting to General DePuy after two years as Commander, CAC. Speaking with pride of our curriculum just beginning, it also indicates the shift of my attention to CACDA. This letter, with a plethora of acronyms unexplained here, may give a sense of the combat developments agenda that was consuming us.

By now the TRADOC effort to provide training material to the Army had led to the term "training developments," an area of concentration that was equal in emphasis to combat developments. Orchestrated by Paul Gorman, now a major general, it too became a consuming mission as the various schools were driven to produce manuals, multimedia training material, and handbooks for individual soldier skills, all on a common format.

At about this time, TRADOC came out with a standard organizational concept for all its schools. Known as the "school model," and developed by Brigadier General Max Thurman, TRADOC Controller, it called for establishing at each school a separate entity which was to prepare this sort of training material; its manning would include no instructors. Some of us school commandants viewed this with alarm, because the subject matter expertise of each school resided in its teaching faculty, with the departments responsible for both instruction and the writing of doctrine. At Leavenworth we tried to maintain our concept, but began to be constrained by manpower guidance coming from the same General Thurman that eventually reduced our instructor spaces.

[61]It was at about this time that I entered Bell Hall to find just inside the door a setup manned by medical technicians that provided a blood pressure reading to anyone who desired. When I asked Ben Harrison about it he told me that he had ordered it to give an opportunity to anyone who may be feeling stressed to have his blood pressure measured as a health precaution. I took Ben's message to heart, but I'm afraid the pressure continued.

In October 1975, General DePuy gave us two new missions: The first was to prepare for the Anti-Armor System Program Review, to be held in March 1976 at Fort Leavenworth. He wrote, "I expect CACDA as the integrating center for the combined arms to conduct this important review as your number one priority project..." The second was to take over "all the TRADOC command and control simulations (naming them)... expedite (their) development... (and) design a refresher course in tactical leadership for command selected colonels and lieutenant colonels of the four combat arms." General DePuy's letters, in full, are at Annex J, October 1975 Mission Letters.

As Annex J makes clear, the Anti-Armor System Program Review (ASPR) called for "models," which were supposed to shed light on weapons questions by portraying the outcomes of many engagements in which different weapons and combinations of weapons were employed; these outcomes would lead to insights on the right mix of weapons for the Army. To the combat development community and its reigning systems analysts a "model" was generally thought to be a computer simulation into which weapons characteristics and dispositions were fed, whereupon the computer would deliver the answer. Because among other things they left out the human element I was highly skeptical about the credibility of such "models" for any important purpose.

Recalling our classroom experience the previous fall with the Dunn-Kempf war game[62] (see page 51), I decided to develop a simulation that would be more believable. I described it in a 19 January 1976 message to General DePuy:

> In order to do a proper job with the ASPR, we have had to develop a new simulation of the FM 100-5 tactics that will help us answer more credibly the various questions on systems, mixes, and tactics... Most analytical simulations break down when dealing with any but the most stereotyped tactical scenarios and do not adequately handle the unit and weapons movements of the new tactics. Our approach has been to develop a new simulation and concurrently to gain its acceptance by the analytical community. This model is called PAAM for Player-Assisted Analytical Model.
>
> PAAM is an assembly of accepted routines (ground combat, artillery, target acquisition, and so on) into a composite, computer-assisted but player-rich two-sided closed simulation. It is

[62] I was one of twenty instructors for a five classroom section. The "battlefield" was a terrain model war game board about ten feet square. The tanks, TOWs, mines, smoke, artillery, etc., were represented by little models. In one work group where I was the instructor, the defender had placed an infantry squad with LAWs (light shoulder-held antitank rockets) well forward on a terrain feature, and, at a certain stage of the battle, had called for delivery of planned artillery fire forward of the squad. The artillery timing was perfect. A strong enemy tank-infantry force was moving toward that squad when the artillery came in. The roll of the controller's dice brought the artillery concentration down on top of that force -- wiping out most of its infantry, causing the tanks to button up, and allowing the defenders to work the tanks over with their LAWs, That, plus some other good tactics (and good luck) led to a rout of the attacker and a clear win for the defender. Other defenders, with other defensive plans and other enemy schemes, had other outcomes, some of them quite bad.

essentially a brigade model which permits very high resolution and gives, we think, good authenticity... We are attempting to advance the state of the art by combining high resolution assessment, player participation, and increased responsiveness into this new simulation... Because so much of the analytical community has been involved in PAAM's development, we anticipate its acceptance.

We put this simulation in place and, setting up about six different terrain boards in some loft space over the Staff Judge Advocate's office and using as players a large contingent of students devoting several electives each, we began to exercise it. Because I left for my next assignment in early February, I was unable to see it succeed (as I fully expected it would).

## Air/Land Battle Coordination

I had long been versed in Army-Air Force matters, from battlefield doctrine to roles and missions to strategic disagreements to relationships within the Pentagon, and was convinced of the need for closeness.[63] At Annex K is a series of articles I wrote under the pen name "Pegasus" for Army magazine in 1965 while a student at the National War College. Titled "The Forty Year Split," they tell how Army and Army Air Corps/US Air Force harmony had waxed and waned in 1920 through 1960. The last installment, speaking of the early years of Vietnam, was called "The Healing Years."

In 1974, General Abrams, who became Army Chief of Staff in 1973, decided with General George S. Brown,[64] who had been Commander 7th Air Force when Abrams had recently commanded in Vietnam and who was now the Air Force Chief of Staff, that they would institutionalize the Army/Air Force harmony that developed in the Vietnam War. Abrams issued orders to General DePuy at TRADOC and Brown gave like orders to General Robert J. Dixon, commanding the Tactical Air Command nearby at Langley Field, that the two commanders, each responsible for doctrine in his own service, would work together to write doctrine to which both services would agree.[65]

General DePuy grasped the issues very well. Keeping the TAC/TRADOC working arrangements in his own hand and doing much of the conceptualizing, he tasked Leaven-

---

[63]Soon after I became Commandant I initiated action to increase the number of Air Force students in the Regular Course from 14 to 40, which would permit two per student section. It took place in 1977.
[64]George Brown, highly regarded even then, was two years ahead of me in 1934-36 when, both sons of Army officers at Fort Leavenworth, we attended Immaculata High School in nearby Leavenworth, KS. When I returned in 1973 to be Commandant, Nancy and I paid a visit to Sister Mary Baptista, the principal in those days who had retired and was living at St. Mary College in Leavenworth. As we talked about some of the students of those times, she asked me, "Whatever happened to George Brown?" I was able to tell her that he had risen to be the Air Force Chief of Staff, then Chairman of the Joint Chiefs of Staff.
[65]The Secretary of Defense had in 1962 created a unified command, known in 1973 as US Readiness Command, to do the same thing. Generals Dixon and DePuy essentially ignored what they considered the ineffectual REDCOM.

worth to get busy on the matter. General Dixon created at Leavenworth a Tactical Air Command Liaison Office (TACLO) to work with us. One early Leavenworth task was to write a draft TAC/TRADOC manual on suppression of enemy air defense; this eventually came out as the first TAC/TRADOC manual. We moved on to airspace management, which was more difficult. Other areas loomed: intelligence and reconnaissance, electronic warfare, fires both close air support and interdiction, air logistics.

The first draft of the (later superseded) new Field Manual 100-5 that we submitted to TRADOC in December 1974 expressed our thinking; it was in tune with that of TRADOC.

> More today than ever before, air and land combat is indivisible. Tactical air and land force operations are intertwined and make up a single battle. The individual capabilities of air and land forces are complementary; their combined capabilities are greater than the sum of the two operating independently... Only the commander who... can effectively mesh tactical air into his fighting scheme will realize the full benefits of the combined arms...

But the question was, how were we in practice to mesh the two kinds of capabilities? The Air Force had its doctrine in which a tactical air force was to be independently paired with a field army (which under Echelons Above Division had disappeared)[66] and would provide an Air Liaison Officer (ALO) and Direct Air Support Center (DASC)[67] at corps and ALO's with tactical air control parties (TACPs) at division, brigade and battalion. Wiping out the field army had increased the importance of corps, which all came to recognize as the key echelon at which to orchestrate air/land teamwork. Working with some Air Force students in what we called J-SCORES, we prepared a briefing for Generals Dixon and DePuy that presented a forward looking Mideast scenario in which the forces' air/land operations were directed by an air/land joint command structure, with an Air Force deputy commander, and an Army/USAF staff.

This was too much for General Dixon, hence for his partner General DePuy as well, so we sought other solutions. To make solutions easier to arrive at, in September 1975, converting an unused wooden Post Exchange "9 to 9" store with ample floor space, I established an experimental air/land battle facility. The Combined Arms Center letter of instructions is at Annex L.

The facility, which we called the Air/Land Battle Coordination Center (ALBCC), housed a combination of full-time and part-time participants from CACDA, the College, and the

---

[66]The doctrine authorities of the Air Force in the Pentagon and at TAC had been thrown off by the Army's EAD decision; they didn't know how to accommodate it and keep centralized control of tactical air in the theater, an ingrained tenet. TACLO, being a TAC office, would not help us plow new ground. But we had some bright USAF majors in the student body whom we enlisted in our study effort. Being, with the USAF faculty liaison section, under the Air University, they had no compunctions about thinking in new directions.

[67]Later renamed the Air Support Operations Center (ASOC)

TACLO that represented all the subject matter expertise, from the commander on down, that was required for orchestrating the command and control of air/land operations at the corps level. From the yellowed transparencies of that time, I can duplicate our standard briefing...

The CAC approach:

Evolutionary, from A... to B... to C

Required: Brains, organization, procedures. Not necessarily: New money, new equipment, more people.

A Common Effort.

We then showed a layout of the ALBCC, which was essentially a command post with in its center an operations portrayal managed by an Operations Coordinator and an intelligence portrayal managed by an Intel Coordinator (choosing for experimental purposes to use different names for the G-3 and G-2). Around the sides of the space were open cubicles for the specialties -- electronic warfare, fire support, reconnaissance and surveillance, and so on. We would start with maps as "portrayals" but would graduate to other means (e.g., rear screen projections) if experimentation showed they had advantages. The Direct Air Support Center with its operations, intel, and recce specialists was centered on ops/intel portrayal.

The Method:

Exercise the elements of the Center in slow motion in College and SCORES scenarios.

Coordinate with combined arms schools, Admin and Log Centers, and TAC agencies.

Identify problems and document deficiencies.

Develop SOPs to do the job better.

Test with full up manning with faculty and students.

Recommend actions to Commanders of TAC and TRADOC.

The Expected Products:

Streamlined corps headquarters; procedures for integrating the air/land battle; improved comms and ADP assistance; improved proficiency in conduct of air/land battle; benefit to both Army and Air Force combat developers.

At the ALBCC we established a battle simulation facility that could support slow motion and real time exercises in the ALBCC using College troop lists and scenarios. When up and running we had in mind making the facility available to the active corps headquarters of the Army and their associated Air Force elements.

In the winter of 1975-76 I had great hopes for the ALBCC. The full-time CACDA/College staff under the leadership of Colonel Sanders of the Department of Command was exploring the issues and periodically calling in people of the part-time staff. With Colonel Clyde Tate of the Department of Tactics and Colonel C. H. Carter, the TACLO, they

were getting into substantive discussions on how to improve air/land coordination. Wargamers were getting established. When Lieutenant General Hank Emerson, XVIII Airborne Corps Commander, visited Leavenworth I showed him around the ALBCC; he expressed an interest in using it.

* * * * * * *

I had been struggling to manage the combination of the College and CACDA as we adjusted to TRADOC's steadily rising demands of combat and training developments. In December I rearranged the roles of my three generals. Ben Harrison, who would still be titled Deputy Commandant of the College, would be fully responsible for the Training Developments function, described by General DePuy as a "factory" for turning out training material for the Army. I named as Assistant Commandant Bill Louisell, who had headed the Tactics Department before taking the assistant deputy slot in CACDA; he would run the College's resident instruction. In addition he would be my CAC Deputy for Battle Analysis and, as I put it to General DePuy, "will see that there is consistency in tactical thought and orderly experimentation in CAC, including SCORES." That put him squarely in the middle of our wargaming for the Anti-Armor Systems Program Review. Morey Brady remained Deputy Commander of CACDA where he would have tasking authority for the combat development work done by the College; he would no longer have a general officer assistant.

Meanwhile the resident course was going very well and we were planning for the year 1976-77. Manpower cuts in the faculty had yet to take place, and I thought that we were giving the class of 1975-76 the best instruction in the history of the College.

In early January I received a telephone call from General Weyand, Army Chief of Staff. He told me that he was going to nominate me for promotion to lieutenant general and to take command of I Corps (ROK/US) Group in Korea.[68]

With less than a month before I would depart for Korea, I could only hope that my temporary successor as the commander of the Combined Arms Center, Morey Brady, would, while meeting the demands of TRADOC, take good care of my cherished College. With Ben Harrison and Bill Louisell on the scene I felt good about that.[69]

---

[68] I was getting ready to give up on ever being promoted. Bob McAlister and Donn Starry of TRADOC, both junior to me, had gone on to three stars. In my interview with General Weyand he told me that General DePuy had recommended another TRADOC major general for my new job. I then thought about an invitation that General Weyand had extended to Nancy and me in December, inviting us to attend a dinner party at his Fort Myer quarters and to spend the night. We did. At breakfast Nancy charmed him when she left a gift of a box of marzipan, telling a story about it. That visit must have satisfied him that I was all right.

[69] A few months after I left for Korea, Jess Hendricks wrote to tell me that Morey Brady's successor had closed down the ALBCC, saying that he needed the space for another purpose.

Having among other things learned the names of the students who would be sent to Korea on graduation, and having organized an elective on Korea for them to be presented in Term 3, in early February I flew off to my new assignment.[70]

[70]Nancy would remain on post, in quarters on Doniphan Avenue, while our two children still living at home finished their school year.

# Epilogue

## Korea

In Korea I made good use of what I had done and learned at Leavenworth.

My command was the ROK/US field-army-size formation that, with three ROK corps and eleven ROK divisions plus the US 2d Infantry Division, defended the Western Sector of the Demilitarized Zone and the approaches to Seoul. North Korea's army, deployed in attack formation, outnumbered and outgunned the defenders. Should it be ordered to attack, it would surely seek surprise. The defender, with only one chance to not be surprised, would require a prepared-to-fight superior application of airpower working with the ground forces to defend successfully against a massive attack, especially one aimed at Seoul which lay only 25 miles from the frontier. My overriding aim was to insure that Kim Il Sung, the North Korean dictator, whenever he asked himself, "Is this the time to attack?", would answer to himself, "Too dangerous. Too uncertain. Not now."

In those days nuclear weapons were part of the United Nations Command's defense scheme, with procedures in place for U.S. stockpile agents in Korea to deliver nuclear munitions when ordered to South Korean field artillery units. Skeptical of our ability to use these munitions effectively, and mindful of the urgent need not to confront the United States President with a decision for their use, I resolved to improve the defense of the Western Sector to the point where none would be required.

In Korea, 1976-78 -- A Memoir,[71] a 60-page paper with twenty appendices, I wrote in 1998 about those two years, which were marked by wargaming of actual defense plans using an adaptation of First Battle built in large part by former Leavenworth students who joined me. In a series of Caper Crown exercises, with commanders and their staffs from corps through regiment in command posts linked by simulated communications, we played in real time the opening day or two of a North Korean attack in which the enemy with his own attack scheme was independently played. Our last such exercise played two corps with full associated theater tactical air. These were the first such simulations conducted by fielded combined arms formations anywhere.

In two years we made great progress in air/land battle coordination. The Commander, Air Forces Korea, who in war would command the ROK/US tactical air forces in support of my force, and I developed and wargamed mechanisms for bringing in tactical air harmoniously with my forces, not only in close support but in "battlefield interdiction" (a new

[71] A copy, plus the briefing with its slides, is in the US Army Military History Institute, Carlisle Barracks, PA. Two copies are now in the Combined Arms Research Library, Fort Leavenworth. With an assurance of its return I will lend one of my remaining two copies on request to 4 Revell Street, Annapolis, MD 21401.

term for close-in, but not "close," air support), thus making it possible for us to hold our positions -- provided however that his tactical air forces, employed under the direction of the overall Korea commander, General John W. Vessey, also targeted and sufficiently devastated the reinforcing echelons of the North's armies. At I Corps(ROK/US) Group, we called our part of the defense the "air/land battle."[72]

When I returned to the United States in February 1978, I visited TRADOC, then commanded by General Donn Starry, who in 1975 had gone from Fort Knox to command V Corps in Germany, where he had further developed the "active defense" ideas of FM 100-5. Using a couple of cassettes of slides, I presented a two-hour briefing to him and his staff, titled "Defense of the Western Sector." I described what we in I Corps (ROK/US) Group had done in harmony with Air Forces Korea, labeling that notion as "air/land battle," and telling of the Vessey combination of deep attack on the enemy's reinforcing echelons together with close air/land teamwork in the zone of contact.[73]

## Retirement

I retired from the Army on March 1, 1978 and went to work as a consultant and writer on the organization and employment of theater forces and their command and control -- and on battle simulation of air/land forces. This led me into developing an expertise in the fields of joint and combined organization and doctrine, which became a principal focus of mine.[74]

In the first ten years or so of retirement I stayed close to Leavenworth, which I thought beginning in 1979, when Lieutenant General Bill Richardson took command, entered an age of especially enlightened management. For one thing, in 1981 Bill took posses-

[72]When I left Korea MG Bob Taylor, Commander AFK, presented me with a brass replica of a fighter pilot's hand grip; on it were the words "Mr. Air/Land Battle."

[73]In 1980 I began hearing of something called "AirLand Battle," which with its deep attack features seemed very like prescribing for Central Europe's air/land forces what the Korea command had been doing for three years. It was coming from briefings by BG Donald R. Morelli, who in December 1979 had became TRADOC's Deputy Chief of Staff for Doctrine. With its unorthodox spelling, the concept was introduced by TRADOC's General Donn Starry and LTG Bill Richardson of Leavenworth in articles in early 1981 and was incorporated into the 1982 edition of FM 100-5 and into the 1986 version after that, but disappeared in the 1993 version. When I first heard of Morelli's pitch I thought it was more public relations than doctrine, but it took hold for about ten years as a useful rallying cry.

[74]A partial list of my writings: For the Center for Information Policy Research, Harvard University, a series of four books on Command and Control of Theater Forces: Adequacy, 1983 (published in 1985 as a book by the Armed Forces Communications and Electronic Association), The Korea Command and Other Cases, 1986, Issues in Mideast Coalition Command, 1991, and The Future of Force Projection Operations, 1995. For the Army War College, a 1983-1984 text, Organization and Operational Employment of Air/Land Forces. For the Command and Control Research Program, National Defense University, Five Lessons in Command and Control of Joint Force Operations presented at the School of Advanced Military Studies, 1989. Pamphlet, Thoughts for Joint Commanders, self-published in Annapolis, MD in 1993, and used until out of print as a text at the Army War College. Since moving to Annapolis in 1989, I have written a dozen or so articles for the U.S. Naval Institute Proceedings.

sion of the idea of SAMS (the School of Advanced Military Studies) in which selected graduates of the one year Regular Course stayed on for another year.[75] As Army DCS-OPS, then Commander, TRADOC, Bill saw SAMS through to fruition in 1984, when the first 48-student class began. It has proved most beneficial to the College and the Army.

In 1983, soon after Lieutenant General Carl Vuono took command of the Combined Arms Center, I asked him for an appointment at which I could brief him on what we had done with the Air/Land Battle Coordination Center (pages 70-73). I took him and a handful of his key people through its rationale and the stage of development reached when I had left Leavenworth. I told him what I had expected of it, including its use with a wargaming capability to exercise corps commanders and their staffs. Not long after that, the imaginative Carl Vuono began the development of what later would become the Battle Command Training Program, which -- by exercising division and corps commanders and staffs at home station with a traveling team of wargame controllers, enemy players, and retired senior officer advisors -- would in due time revolutionize the training of Army forces and lead to their astounding performance in Desert Storm.[76]

Through the early 1990s, in visits to Leavenworth and by other means, I kept myself abreast of the evolution of Army doctrine, observing the successive editions of FM 100-5.[77] When Paul Herbert's Leavenworth Paper, Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations, appeared, the reaction in the pages of Leavenworth's Military Review in November and December 1989[78] was useful in describing that doctrinal evolution and the impact thereon of the 1976 manual. Points made included:

- The 1976 manual, written by a small group of men responsive to General DePuy and dealing with the tactical level of war in "the only theater conceivable in the late 1970s" (Europe), galvanized a productive, professional debate throughout the Army, stimulating doctrinal ferment unique in US military experience.

- FM 100-5's 1982 version, drafted at Leavenworth, edited by TRADOC, and introducing "AirLand Battle doctrine," benefitted from this debate, refining and modifying the 1976 tactical doctrine, and treated at length the operational level of war.

[75] In 1977 the position of Commander, Combined Arms Center, had been made Deputy Commander, TRADOC, as well, and a three star billet.

[76] Along with the National Training Center at Fort Irwin, CA, which idea had originated in the fertile brain of Paul Gorman.

[77] I also tracked the abortive effort by Army Chief of Staff Edward C. Meyer to create in the 9th Infantry Division at Fort Lewis, WA, a powerful, yet rapidly deployable, "light division" through experimentation directly under the Army Staff. (See "Transformation: Let's Get it Right this Time," Parameters, Spring 2001.)

[78] Where comments were by William S. Lind, "longtime critic of the 'active defense' doctrine espoused in the 1976 FM 100-5," and Leonard D. Holder and Richard M. Swain, two students and writers of Army basic doctrine at Leavenworth and practitioners in the field.

- The 1986 version, in the words of Don Holder, an author of it, presented "a far broader view of war in its stress on historical experience, on worldwide contingencies and varying force mixes, on human strengths and weaknesses, and on the dynamic effects of tempo, maneuver, and action in depth. These features and its attention to the operational level of war -- entirely absent in the 1976 document -- result in AirLand Battle doctrine's having more in common with pre-1976 versions of FM 100-5 than with the Active Defense formulation (of the 1976 version)."

In 1982 I was asked by the Army War College to write a text for its 1983-84 curriculum, which the College Commandant then "widely distributed throughout the Army." Titled Organization and Operational Employment of Air/Land Forces, in its Foreword I wrote:

The charge to the author was to produce "the best available thought which can be defended by reason, regarding air/land operations... (at) brigade through unified and combined command."

This work had its origin in a desire by doctrinal authorities at the U.S. Army War College for something which would fill a perceived void in the literature at "echelons above corps." The product reflects the real-world situation: There is little uniformity in air/land field organizations, as they now exist, at echelons above (or even below) corps. Nor can there be, given the variety of conditions where U.S. air/land forces are, or may be, deployed.

Any search for principles, or for the best available thought, must take that lack of uniformity into account, and also the practical reality that U.S. Army forces will always be employed in a multiservice or multinational framework in which the multiservice/multinational commander's needs and perspectives should govern.

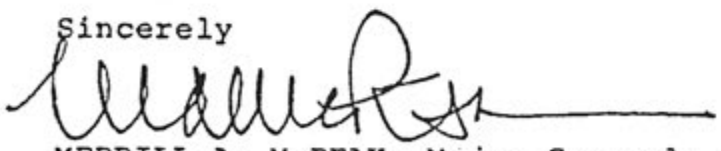
In March 1984 the College faculty member who monitored my effort received this letter:

Dear Colonel Stewart

I have recently had the occasion to review your reference text, Organization and Operational Employment of Air/Land Forces, written by Lt Gen Cushman. I am enormously impressed with this document. I wonder if it is possible to get 10 copies or so for distribution here at TAC Headquarters.

Thanks very much for publishing an outstanding text.

Sincerely



MERRILL A. McPEAK, Major General, USAF
Deputy Chief of Staff, Plans
Tactical Air Command

General McPeak later became Chief of Staff, U.S. Air Force.

During the 1980's, at a time when military simulation projects were mushrooming, I was quite active writing and briefing on the simulation of air/land warfare. My involvements were manifold, sometimes helpful, sometimes not.[79]

In 1989, having moved to Annapolis, I began writing for the United States Naval Institute Proceedings, where I found a forum ready and willing to publish articles reflecting and building on the ideas on joint matters that I had developed over the years. When the Gulf War erupted, this kind of writing became even more germane to Proceedings, and in 1994 I was named the USNI "Author of the Year."

By 1984 the School of Advanced Military Studies, which had in 1982-83 run its first 12-student pilot class under the talented Colonel Huba Wass de Czega, was in business with a 48-student class. Huba, who had been the primary author of the 1982 FM 100-5 and had originally conceived the idea of a SAMS, remained its director until 1985. I began lecturing there annually. By 1991, the Director, SAMS, the admirable James R. McDonough (whom I had come to know when in 1986-88 he was a SAMS advanced studies fellow in lieu of attending a war college), had been tasked with drafting the next version of FM 100-5.

I had long advocated expanding the treatment of joint operations in the Army's basic doctrinal manual, and making its treatment of joint operations useful to senior Army officers who might command joint formations. I asked the Commander, CAC, LTG Wilson A. Shoffner, for an opportunity to brief the Director, SAMS, and the manual's principal author on my views. I did so at length, but became so discouraged about the prospect of influencing the new draft along those lines that I wrote a letter to General Shoffner telling him that I would not be back to lecture at SAMS, but giving him my ideas on how FM 100-5 should be developed. My nine-page letter to General Shoffner is at Annex M. When a new CAC commander was named, I changed my mind and accepted an invitation to speak to the next SAMS class.

[79]In April 1983 while on a trip to Europe I briefed General Billy M. Minter, CINC US Air Forces Europe, on the air/land battle wargaming we had done in Korea in 1976-78. The USAF colonel, Moody Suter, who had been instrumental in developing the Red Flag fighter pilot training for the Air Force at Nellis AFB, NV, was in the audience. Along with other USAFE staffers, Moody had, for General Minter, been considering ways to develop the "warrior spirit" in USAFE wings and squadrons. Immediately after my briefing General Minter directed Moody to get busy on a "Warrior Preparation Center" that would among other things feature simulation that would exercise army and air force commanders. General Minter directed that the nearby Einsiedlerhof barracks be used for the WPC, displacing the Glenn Miller USAFE band, and Moody Suter was off to the races. The Air Force officially activated the WPC on 15 August 1983 and ran its first rudimentary exercise some six months later, focusing on electronic warfare. In 1984 USAFE and USAREUR signed a memorandum of understanding that called for shared manning and funding of the Warrior Preparation Center. It has been running US and NATO operational level exercises ever since.

Although from the viewpoint of Army operations the FM 100-5 that came out in June 1993 (which discarded the term AirLand Battle) was an improvement over its predecessor, it was a disappointment with respect to a joint approach. But by then I was writing (desktop composing) a 56-page handbook/pamphlet of my own, Thoughts for Joint Commanders, which I had privately printed in Annapolis in August 1993 in 6,000 copies. These were sold widely (at $5.00 each, less than that in bulk) around the military establishment. Until copies ran out three or four years ago, the pamphlet was issued to students each year at the Army War College.[80]

[80] I appreciated Donn Starry's generous review In Military Review (November 1993) of what he called "this superb little book," with its "masterful discussion of the difficulties of coordinating air power" and its "brilliant laydown of problems stemming from the glut created by modern information technology." "The joint force commander who does not have a dog-eared copy of Cushman's little book close at hand... is missing the best advice he can ever get on the subject."

## Assessment

I have had a satisfying life, with never an unrewarding assignment. Fort Leavenworth has been very important, even central, in it.

My most satisfying memory of Leavenworth is getting to know three classes of vital and accomplished Regular Course students whom I aimed to influence; except for Bob Doughty, all are out of the Army. From the Bell, the yearbook of the 1974-75 Class[81]...

# 1975 Class Profile

### Composition,

| | |
|---|---|
| Army | 980 |
| Air Force | 14 |
| Marines | 10 |
| Navy | 4 |
| Allies* | 97 |
| Total | 1105 |

*representing 52 countries

### Grade

5% Lieutenant Colonel
in grade 1 yr. 5 mos.
70% Major
in grade 4 yr. 6 mos.
25% Captain
in grade 6 yr. 8 mos.

. . . . and one Colonel who didn't achieve a percentage point in the statistics

### Awards And Decorations

| | |
|---|---|
| Distinguished Service Cross | 5 |
| Silver Star | 142 |
| Legion of Merit | 27 |
| Distinguished Flying Cross | 151 |
| Soldiers Medal | 21 |
| Bronze Star V | 225 |
| Bronze Star | 1748 |
| Meritorious Service Medal | 270 |
| Air Medal V | 106 |
| Air Medal | 3924 |
| Joint Service Commendation | 132 |
| Commendation V | 104 |
| Commendation Medal | 1012 |
| Purple Heart | 261 |

### Age

Average 34 yrs. 5 mos.
Youngest 28 yrs. 8 mos.
Oldest 47 yrs. 10 mos.

### Average Service

11 yrs. 5 mos.

### Marital Status

| | |
|---|---|
| Married | 947 |
| Unmarried | 61 |
| Dependents | 3105 |

### Command

870 (86%) had
Company/Battery Command
An average of 15 Months.

### Source Of Commission

| | | |
|---|---|---|
| ROTC | 556 | 55% |
| OCS | 210 | 21% |
| USMA | 162 | 16% |
| Direct | 59 | 6% |
| Other | 21 | 2% |

### Civilian Education

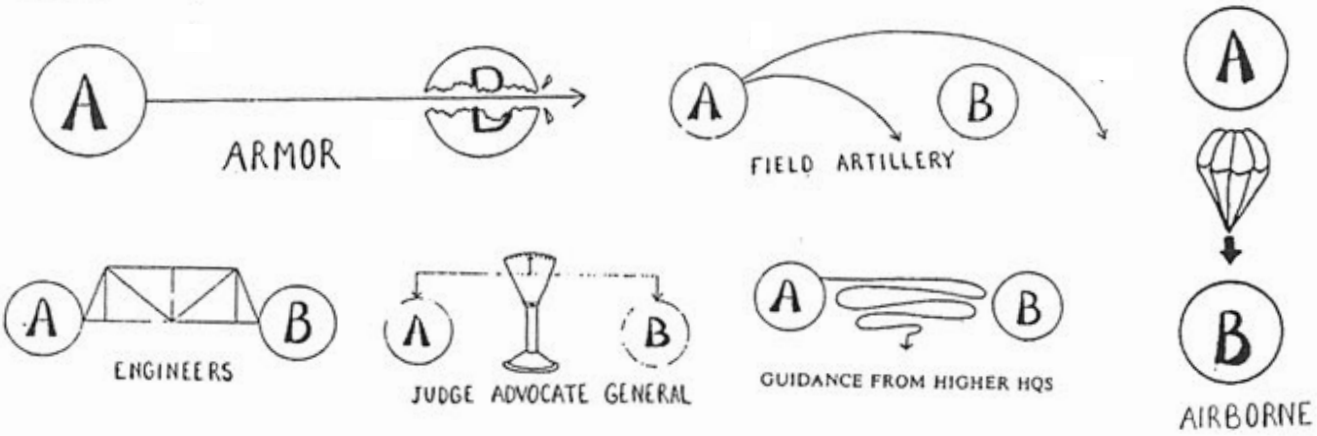
| | | |
|---|---|---|
| PhD | 4 | - |
| Professional | 25 | 3% |
| Masters | 487 | 48% |
| Baccalauerate | 483 | 48% |
| Some College | 9 | 1% |

In my opening address (Annex A, page 3) I had said to the 1973-74 class...

"Imagine two points. Point 'A' is where we are. Point 'B' is where we want to be. Controlled adaptation is the systematic program that moves us from point 'A' to Point 'B'... We intend to put your minds to work vigorously on the current Army problems that are pressing us for solution -- so that the Army as a whole can move from 'A' to 'B'."

[81]This class celebrated the bicentennial of the American Revolution which we marked on April 19, 1975, with a reenactment by the post's youngsters of the Battle of Lexington, in the park at Sumner Place. As the "Redcoats" marched toward the battle scene to encounter the waiting sturdy patriots, their column passed the quarters of the British liaison officer, Colonel A.T.P. Millen, where he had displayed the Union Jack.

In its Bell, that Class seized on my A to B notion to add some humor to its back pages; some examples...




When I left in February 1976, Ben Harrison, for the faculty, presented to me the standard "Leavenworth Lamp" given to each departing faculty member. On its base was inscribed "Senior Instructor." Under that was the letter "A" with an arrow pointing to "B." I treasure that gift in all its meaning.

The story of my second tour at Fort Leavenworth is in large part a tale of differences in viewpoint between myself and my boss, General DePuy, who had his own vision of "B." In time I found that I was fundamentally unable to promote key features of his vision; I thus failed to serve him. Painful as our relationship made my job, I loved it and gave no thought to asking to be relieved; nor did General DePuy, however provoked, decide to relieve me. Each of us managed as best he could.

I am proud of what I did in the College. Our changes were good, especially: making instruction realistic, going to the small group instruction mode, modifying the student evaluation system, emphasizing joint Army/Air Force operations, learning through simulations/wargaming, introducing computers into the mainstream, increasing elective choices, introducing Schmidt as a case study, using students in real-world problem solving, our Symposia on Officer Responsibility, and the Air/Land Battle Simulation Center. I am proud of my personal involvement both in teaching and in what was being taught.

I could have done some things better. For example, my insistent tinkering with the instructional material (an example is cited by Bob Doughty, page 40) was probably not worth the anguish it caused the faculty, which must have in turn had an effect on the students. And I know I drove people too hard, brooking little disagreement from time to time, and too often without the human touch and with guidance insufficiently clear.

At the end of a balanced assessment in his paper, Bob Doughty wrote, "One of (General Cushman's) most important reforms has been the reintroduction of the real Army into the classroom... The abstract, academic version that previously existed only in the classrooms of Bell Hall has hopefully disappeared for good. In the truest sense, Leavenworth reached a higher level of excellence as a result of the driving leadership of General Cushman."

In a 268 page transcript of an oral history, Ivan Birrer, who had known every CGSC commandant from 1946 to when he retired in 1978, said, "On my personal scale of Commandants -- the scale is in terms of personal effect over the long term -- (Jack Cushman) stands with the top three. Perhaps twenty years from now, my successor will put him at the top. I wouldn't be surprised."

I take some comfort in hearing now and then favorable remarks from people who were with me at Leavenworth in those days. None have pleased me more than this from an officer who read my posting beginning on page 59 above...

> I recently downloaded your posting about the Symposium on Officer Responsibility at CGSC on 30 April 1975. I wanted to respond as one of the captains in the audience with my great admiration for the moral and ethical stature you showed on that sad day. I was too bitter and too immature at that time to appreciate what you were doing. I believe I appreciate it now. Your personal association and leadership of the students at CGSC was not carried on by your successors and the College is poorer for it. "Commandant" has became almost an honorific title (Deputy Commandant is tending the same way) as Commandants moved up the hill to CAC, then were given wider responsibilities outside Fort Leavenworth that absorbed more and more of their energies. Your vision of what the Staff College was and could be, I am glad to say, lived on for almost a decade, maybe a decade and a half more. It is hard to find today, but your example inspired many of us for a long time to come to believe that war was a thinking man's business and CGSC was its principal college. CGSC was an important period of my professional and intellectual life and I appreciate your role in making the College what it then was.[82]

Upon reading my April 2001 draft of this memoir, John L. Romjue, former TRADOC historian, had this to say...

> The great fact that comes out of this memoir is that Cushman appears not to have fully appreciated that sense of urgent Army reform, root and branch, that DePuy personified, power-

[82]The writer was Rick Swain, whose name I have mentioned in footnotes twice. When writing, he may not have known that LTG William M. Steele, then CAC Commander and CGSC Commandant, with a multitude of responsibilities to meet and but two brigadier generals to assist him, was freeing up one of them, the Deputy Commandant then burdened with many other concerns, to take care full time of the College. (Well before General Steele's time, the organization known as "CACDA" had disappeared from Fort Leavenworth, although some of its former functions remained in other parts of the Combined Arms Center.)

fully prosecuted, and expected Leavenworth to participate aggressively in. The author appears not to have fully bought into the reality that the new animal that was TRADOC was not only a teaching and training command but more primarily a new, unitary and focused development command to meet the Army's crisis now... (I)t must be noted that DePuy was for all who encountered him, in agreement or in conflict, a force of nature.[83]

John Romjue may well be at least partly right. A participant in these events at Leavenworth has written:

To a degree, John Romjue is correct. At Leavenworth we did a great deal of studies and simulations in the Combat Development area dealing with "the Army's crisis now." In the College we modified instructional material and held special symposiums dealing with "the Army's crisis now." We did not, however, change the College's primary purpose of education of future military leaders to one of piecemeal problem solving for "the Army's crisis now." Apparently in John Romjue's estimation, this was not what General Depuy wanted from Leavenworth at the time--Depuy wanted total focus on "the Army's crisis now."

The reader can judge for himself. So ends my story.

**Dedicated with gratitude to the staff, faculty, and students of the Command and General Staff College and to the other members of the Combined Arms Center, all of whom served me so faithfully from August 12, 1973, to February 10, 1976.**

**John H. Cushman**
**Lt. Gen., US Army, Ret.**

**4 Revell Street**
**Annapolis, MD 21401**
**Ph: 410-268-5152**
**Fax: 410-268-5315**
**Email: JackCushSr@aol.com**

[83]At the web site of the CGSC (http://www-cgsc.army.mil/) one can see General DePuy's lasting imprint on the College through memorialization instituted after his death in 1992. From time to time students of the the Regular Course meet in the new Eisenhower Hall's DePuy Auditorium, which has joined Marshall and Eisenhower Auditoriums in old Bell Hall, and Grant Auditorium in Grant Hall which was used by students in the 1920s and '30s. And there is an annual General William E. DePuy Award for outstanding original thought by a student in the areas of military doctrine, training, organization, materiel, or leadership.

What I am about to say to you this morning is for everyone -- the instructional faculty, the combat developments faculty, and the students. Because these three groups must be, and are, interdependent; each one needs the other two. And further, each of us is part student, part teacher, and part idea man for the future. In the next year, each of us, in every group, will contribute to a common effort.

What is that common effort?

I say that we can call it "controlled adaptation," to meet the challenge of our times.

Out in the La Brea tar pits, near Los Angeles, was uncovered the remains of a magnificent and fearsome animal, the saber-tooth tiger. Thousands of years ago he was King of the Beasts. He is now extinct. Why? Because he failed to adapt! He was a classic example of overspecialization. This saber-tooth tiger preyed on the mastodon, to which his long saber-like fangs were adapted. The mastodon disappeared; the tiger was vulnerable to smaller animals, and he, too, disappeared.

Now an Army is a living thing, and the US Army is no exception. Like all living things, it obeys one of the fundamental laws of nature -- the law of survival of the fittest. Our Army is confronted with the problem faced by living things since the dawn of time -- the problem of evolution, of adapting itself to changing conditions. At stake here is not simply the survival of our Army but the security of our country, the reason our Army exists.

The requirement, therefore, is adaptation. Controlled, intelligent adaptation.

To what purpose? My answer is: "So that our Army will be ready when called upon."

I believe that out there in the student body there are captains and majors and lieutenant colonels just in from the field with useful ideas on these matters. We intend to put your minds to work vigorously on the current Army problems that are pressing us for solutions -- so that the Army as a whole can move from "A" to "B".

We want to hear what you have to say. I am a great believer in listening to captains, majors, and lieutenant colonels. They always have something useful to say, whether you buy the idea or not. But you have to come forward with your views. Stand your ground if you are rebuffed. And if the decision does not go your way, go back, rethink your idea, and come back again if you think it is justified.

All of our planning must be directed toward a few characteristics or objectives. I have discussed some of these with some of you. They are:

Real - Our instruction must be real, and deal with real matters and real issues. The student must sense from the very first day that the College is operating in an environment of reality. The manner in which every subject is approached must relate to the real world and must be relevant and meaningful in its own right. A theory or a doctrine we can put out, but those theories or doctrine should be perceived by the student as being derived from observations of reality and from practical and actual experiences, and applicable to the real world. I do not object to our problems using fictitious divisions, but all our instruction must deal with real-type situations.

Hard Work - Our profession is unique. We have a responsibility for the lives of men - and of noncombatants as well. In combat we are directed, even obligated, to take life. Life, including that of the enemy, is sacred. This is a most serious business we are in. The nation's security rests on what we do. This deserves our hard work and the hard work of our students. So this must not be a "gentleman's course," but one in which we daily challenge the student and make him work hard. Not the kind of useless work that seems like a rock pile, making little ones out of big ones, but relevant, meaningful hard work - work that the student instinctively recognizes as relevant and meaningful, and worth his hardest efforts.

Make Them Think - The student must think as he works toward these real and useful ends. Sure, he will have to memorize certain things, but he must also think, and we must critique his thinking. Having thought, we must make him communicate his thinking effectively, both orally and in writing.

Develop Fiber and Depth - We want to turn out a graduate who is a man of character and depth, who has been convinced by his exposure in the classrooms of Leavenworth as to the dead seriousness of his profession, and who is willing to make up his mind, do his duty, and stand his ground.

The above is what I would like every graduate to encounter, and to leave with - the type of exposure I want each student to have.

Now let me turn to some ideas on doctrine -- food for thought.

First, what is doctrine? That which is taught? That's one definition. Here is another definition:

"Doctrine is an enlightened exposition of what usually works best."

It tells you how things should normally be done. That's why we teach it. Let me try another definition:

"Doctrine is an enlightened exposition of what has usually worked best."

Is that what we should teach in changing times, or should we follow this definition?

"Doctrine is an enlightened, tentative, exposition of what will usually work best."

Selection of the one to use is an individual decision. The word enlightened is used in all three for a reason -- to keep it from being sterile dogma.

The current Army and Joint Dictionaries define doctrine as follows:

"Doctrine is fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application."

Something is missing in this one -- the thought process.

I for one think we went backwards from the definition of the Army Dictionary of 1953 which was as follows:

"Principles and policies applicable to a subject which have been developed through experience or by theory, that represent the best available thought, and indicate and guide but do not bind in practice. Essentially, doctrine is that which is taught. A doctrine is basically a truth, a fact, or a theory that can be defended by reason. Doctrine refers to those principles and policies which have been developed by experience or by theory which represent the best available thought on the subject in question, and which should be taught or accepted as basic truths."

This is how I would define doctrine in one long sentence:

"Principles and policies applicable to a subject, developed through experience or by theory, that represent the best available thought that can be defended by reason, which indicate and guide but do not bind in practice, and which require judgment in application."

This is the short sentence that I would generally use:

"Doctrine is an enlightened exposition of what usually works best."

How do you know what usually works best, especially when new equipment is being fielded?

Military doctrine consists of the fundamental truths of the military art. The search for valid doctrine is, at its root, a search for the truth. Doctrine is developed through experience or by theory; it results from intelligent evaluation of the past and the logical and creative application of lessons of the past to present and future projected conditions. It comes from the interaction between, on one hand, the practical experience gained from battle, exercises, tests, and war games; and on the other, the intellectual activity of the military professional at his desk and in the clash of ideas with other professionals.

Doctrine comes from either inductive reasoning, deductive reasoning, or both. Inductive reasoning considers a great number of specific cases and draws conclusions that apply in general, i.e., what usually works. Deductive reasoning goes from fairly well established principles or truths and derives conclusions that apply under specific conditions, from the general to the specific, as to what usually works. Which is best for developing doctrine?

The best kind is a mixture but with a stronger emphasis on detailed analysis of specific cases, and hence inductive reasoning. So we must figure out what usually works best, or what we tentatively believe will usually work best, by a practical detailed examination of all the actual or realistically contrived cases we can find or set up.

What we seek is doctrine that can stand the test of actual combat and that gives the Army, in the best way we know how, "an enlightened statement of what usually works best."

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
OFFICE OF THE DEPUTY COMMANDING GENERAL
FORT MONROE, VIRGINIA 23651

ATTNG-SC-C

22 APR 1975

Dear Jack,

The purpose of this letter is to provide you some of the principal findings of our group, some of which I discussed in my debrief of Ben and your staff at the conclusion of my 8-10 April 1975 visit. The inclosure should indicate those areas of principal concern. Additional findings and recommendations were identified to your staff by team members during the course of visiting the respective academic departments. Several points concerning policy and administration, however, require your own early attention, and I highlight these below.

The first concerns grades. There is clear agreement among all of the visiting group that the College has not found the solution to the proper way to grade the students. A major revision is necessary. I ask that you give this very close scrutiny, since the grading system is very important in the eyes of your students, and, in fact, too many are becoming obsessed with it. I questioned the advisability of providing grades to HQDA and asked Ben to look into this and give me a recommendation. His recent letter to Stan McClellan carried the recommendation that the grades not be forwarded. We shall act on that recommendation promptly.

At the conclusion of last year's visit, I did not direct the elimination of any electives. However, I am now convinced the College has spread itself too thinly by offering too many electives. The numerous electives not only add to scheduling difficulties and instructor loads, but also strain your quality control mechanisms to the point that some offerings are of questionable merit. (I might add they perhaps contribute to your printing plant backlog problem as well.) A substantial reduction, on the order of ten to twenty percent, will improve the quality of instruction overall. I leave to you to determine which electives to eliminate, or if appropriate, consolidate.

I understand and sympathize with your desire to move the College toward the syndicate method of instruction -- small groups, instructor led. But it is plain that having 50% or so of your curriculum in this format taxes your faculty -- especially your tactics department -- beyond the point of reasonable return. Moreover, we heard repeatedly that such a teaching

strategy was often inappropriate for those topics on which few, including faculty, were well versed, e.g., EAD tactics. The perception of students is that they are "a mile wide, an inch deep." I do not believe we can afford to go all the way to a syndicate system; you probably should cut back the current work group exercises from ten to twenty-five percent.

No department has made greater progress or is trying harder than the Tactics Department. Much good work is going on and I would urge that you reinforce that success. The whole tactical area is so dynamic these days, however, and the pressure on the tactics instructors is so great, that you must take special care with this department. The grade and experience of instructors to be assigned (captains are of little use), the necessity for a better than average cut on quality of instructors, the overall work-load, to include the writing of field manuals, all constitute a special challenge for the College. Above all, the College absolutely has to be the Army's prime source of expertise on tactics, especially weapons-oriented tactics, and on general staff procedures. Other subject areas, no matter how important, have to be subordinated to these two. And of these two, weapons-oriented tactics has to be number one. The quality of such expertise must be obvious to all. Therefore, no department should be supported better or receive more of the Commandant's and the Assistant Commandant's time and support. The members of this department should not be over-extended, or some of the tactics instruction will be in danger of degenerating into "the blind leading the blind."

I expressed at the College reservations about Course 3141 (Contingency Force Operations - Middle East). My concern is that the portrayal of a light corps force to the Middle East is not consistent with our HLC Middle East Scenario results. It may tend to implant in the minds of the students the erroneous judgment that this somehow is the preferred corps. As long as students are going to spend two and a half weeks on a Mid-East operation, it would seem sensible to exercise them on some variation of the recommended corps. A further example of divergence from the HLC Mid-East Study is the selection of an armored brigade as a component of the force. Your department feels it is a more effective force considering strategic deployment requirements versus fire power availability. Our HLC Mid-East Scenario came to a different conclusion and employed an armored cavalry regiment. We have stopped looking at heavy corps and light corps as such, but rather corps that are tailored for the task. I have discussed this with General DePuy and we are agreeable to leaving the course stand for this coming year, but want to see it adjusted to the Scenario version in subsequent offerings.

On behalf of the team members and myself, let me again express my appreciation for the courtesies and support provided us by you, Ben, and your staff. The completely frank and open discussions were most helpful.

I trust our visit and subsequent recommendations will prove beneficial to the College. I am prepared to help in any way that I can.

Warm regards.

Sincerely,

1 Inclosure
As stated

ORWIN C. TALBOTT
Lieutenant General, USA
Deputy Commanding General

Major General John H. Cushman
Commandant
US Army Command and General Staff College
Fort Leavenworth, Kansas 66027

ATSW 5 May 1975

MEMORANDUM FOR RECORD

SUBJECT: Action on Lieutenant General Talbott's Letter of 22 April 1975

1. Friday morning, 2 May 1975, I discussed Lieutenant General Talbott's letter of 22 April (inclosed) with General DePuy in his office in the Pentagon.

2. My first subject was the second paragraph of Lieutenant General Talbott's letter, as to grades. I told General DePuy that I wanted to be sure that I was operating with a correct understanding of what he wanted. He read Brigadier General Harrison's 18 April memorandum to the faculty (Inclosure 2). He asked what Lieutenant General Talbott's letter meant about forwarding grades to the Department of the Army. I explained what we had done and why, and he understood. I went through the same series of charts that I used with the students in my Symposium remarks on 30 April (Inclosures 3 through 7). I showed him part 14 of the academic report form, and the description of "superior" from Army Regulation 623-1. I showed him the distribution of Section 14 grades for last year's class; he took note of the "superior" percentage figures and understood my point. I said that the students did not like to be told they were not superior, that Lieutenant General Talbott had received his impressions primarily from talking to students, and that he was sympathetic to them. I told General DePuy my policy for the grading system and that I was going to hold to it but that I wanted to be sure that I would be supported by TRADOC. We discussed how the departments would administer 31-35 percent "A's," and whether any one section of more than the usual number of gifted students might not get a good deal more than 35 percent, with the department making up for it in other sections which got less. I said that was the concept of the grading system and a matter for departments to administer, but on the whole, the average would be

about a third "superior" or "A" for this year. He got the picture. He told me to go ahead and I would have no difficulty with him on the matter of grades. He will support me, I am certain, and therefore we will not concern ourselves further with Lieutenant General Talbott's statement that a "major revision is necessary." We will use the same grading policy next year, except that we may drop it to 26-30 percent "A's."

3. I then took up electives. General DePuy asked whether we had too many. I told him that I did not know. I said I was fairly sure we needed to reduce the number of electives in Tactics. I said that this year there had been a complete rewrite of our Tactics instruction and a number of electives didn't work out as we had hoped. I told him that, notwithstanding this, the Tactics instruction this year had been far superior to last year, and that we had finally gotten the College into the real world in comparison to the Alice in Wonderland tactics of previous years. I said that next year's Tactics instruction would be of surpassing excellence, but that we would probably have fewer tactics electives. On the other hand, I said that the total number of electives in the College might be about the same as this year. I said I objected to any requirement to make a particular percentage cut as stated in Lieutenant General Talbott's letter. I said I would require each department to analyze its own situation, see what was needed to do a good job within resources, and then we'd see how many electives that amounted to. He said that was all right with him, do it that way. So we will.

4. I then spoke about the percent of instruction spent in work groups, and we had the same kind of discussion. I commented that Lieutenant General Talbott's letter recommended a cut in work group exercises of 10 to 25 percent. I said I objected to that kind of guidance, that I would rather analyze our own problems and see how it came out, rather than decide in advance on a specific percent cut in work groups. I said I was satisfied with the present rough percentage, and that I thought we knew what we were doing.

5. I told General DePuy that I preferred not to answer Lieutenant General Talbott's letter. I said that last year I had answered it, and he had then answered me back, and I had decided not to continue the correspondence. I said that I would consider the letter as a useful and important TRADOC document, but that I did not want to be bound by it. General DePuy said that was all right with him and that I would have no problem with the Commander, TRADOC.

6. The net result is that we go ahead and do our best job to run the College and will not consider Lieutenant General Talbott's letter binding. We will certainly not discuss my conversation with General DePuy further with anyone except the DRI, DER, and department directors. They will keep this memo completely to themselves, no further discussion of it with anyone. We will retain the best of working relationships with Lieutenant General Talbott and the TRADOC people who come to see us. There will be no hint of a confrontation. We will simply do our job as best we know how and let the grading system, numbers of electives, and percentage of effort in work groups come out of that. I therefore want to show Lieutenant General Talbott's letter and this memorandum to each department director, the DER and the DRI, but to make no copies or further distribution outside my office, except one copy to the Deputy Commandant.

Incls

J. H. CUSHMAN
Major General, USA
Commandant

24 July 1975

General W. E. DePuy
Commander
USA Training and Doctrine Command
Fort Monroe, Virginia 23651

PERSONAL

Dear General DePuy:

General Talbott visited Leavenworth today for our contract signing, and then spent an additional two hours being briefed on the College curriculum. He had requested that we inform him as to the action taken by us in response to his visit in April. We therefore dealt with the grade system, the electives, and the amount of instructor-led small group activity. In the latter two - electives and small group work - General Talbott had established some percentage goals for reduction.

We satisfied him, I think, on our approach to grades. As to electives, we had reduced tactics electives considerably, kept logistics electives unchanged in number, and increased in other departments for a net increase overall. As to instructor-led small group work, we cut both tactics and logistics; other courses either stayed the same or increased, with a net "no change" overall.

I explained to General Talbott that we understood his guidance and the logic behind it. I said that I believed that, notwithstanding the statistics, which of themselves do not tell the full story, we have accomplished his intent and have organized the most effective instruction toward mission accomplishment, carefully considering the resources. In other words, we are not spread too thin and are teaching only what needs to be taught, using the most effective methods possible.

Frankly, I don't believe that General Talbott sees it that way. Rather he may well see it that we have not followed guidance. If so, I very much regret that this is his perception. Leavenworth is determined

to follow TRADOC guidance, and we are determined to use the means available to us in the most effective way toward achieving the mission in accordance with the TRADOC intent.

I concluded the briefing by summarizing the ways in which the Leavenworth curriculum would be better in the 1975-76 school year. As I mentioned to you in your last visit, I visualize a highly successful year which builds on the progress made last year and improves over last year in every aspect. We have worked hard, and I believe well, to do so. I hope that by visiting often and making your own objective assessments, you and the TRADOC staff will, over the next year, conclude this is the case.

General Talbott also expressed doubts as to whether we are properly following your guidance as to emphasizing the battalion and brigade level of tactics instruction. I am convinced that we are, and will be ready to brief you on this and any other part of the curriculum when you visit in September.

On other subjects - Major General Cooper will visit us on 1 August and we will brief him on SCORES, Defensive Tactics, Command and Control, and other subjects relative to Europe. Also, Tuesday, 29 July, on the way to Fort Benning for a leadership conference, I will visit the Air Command and Staff College at Maxwell and will brief our curriculum. Specifically, I will describe our integrated tactics instructional scenarios (Middle East and Europe) with the idea that the Air Staff College and we can both make use of the same tactical scenario to our mutual benefit.

Sincerely,

J. H. CUSHMAN
Major General, USA
Commanding