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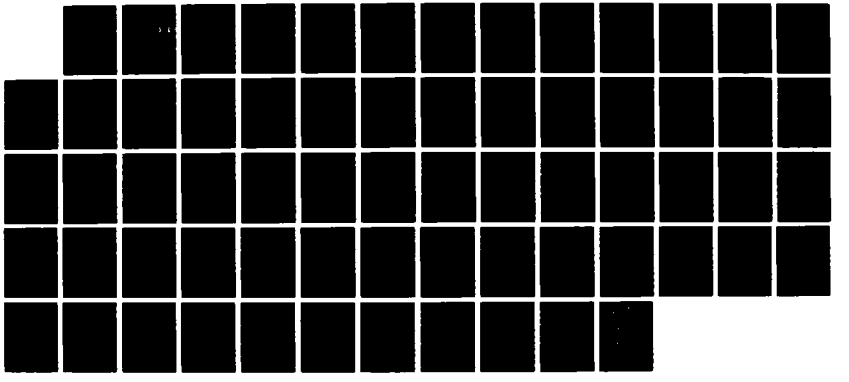

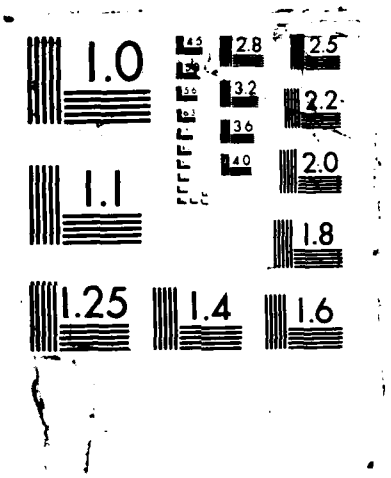
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NOT LIGHT ENOUGH TO GET THERE, NOT HEAVY ENOUGH TO WIN: THE CASE OF US LIGHT INFANTRY

by

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The purpose of this paper is to develop an understanding of the concept for employment of our light infantry forces. Since 1979 there have been numerous articles and studies written on this subject. There is little agreement, however, as to how the light forces should be employed across the spectrum of conflict. Their primary orientation is toward low intensity conflict, but, in fact, the emphasis is on the mid to high intensity spectrum.

This paper begins with a discussion of previous efforts to create light infantry divisions. It then addresses our ability to deploy light forces, their augmentation, tactical employment, and training. Once these points are established, an analysis is made of the decision logic which added light infantry divisions to the force structure.

The conclusion of the paper is that our light infantry divisions were not designed

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Our light division appears to be regarded as a general purpose force. This role requires a force that can survive in a wide range of environments. It should have the organic components of combat power, mobility, survivability, firepower and the sustainability to allow it to get there and win. We need to recognize the rationale that led to the design of the light division and view the present organization as the planning base for an evolutionary process of change.

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ABSTRACT

NOT LIGHT ENOUGH TO GET THERE, NOT HEAVY ENOUGH TO WIN: THE CASE OF US LIGHT INFANTRY, by Major William B. Caldwell, IV, USA, 57 pages.

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INTRODUCTION

> It is high time we got on with structuring our forces to meet the Army's foreign, rather than political requirements.(1)
> Sam Damon and Ben Krisler (pseudonyms)

In May and June of 1940 the Germans astonished the world by their swift and thorough defeat of the French Army, previously regarded as a model of preparedness and modernization. It is important that we understand the reasons why such a large and powerful army was defeated in less than two months in order to insure that our Army today does not make these same errors. According to Colonel R. A. Doughty, professor of history at the United States Military Academy, "France committed the glaring error of trying to impose her way of war on the enemy without having a suitable recourse should this attempt fail."(2) If this statement is correct we need to understand where our Army has been and where it is headed, in terms of its ability to conduct war.

In 1983 the Army announced that it planned to form five light infantry divisions that would be rapidly deployable for use in low intensity conflict, but have utility across the spectrum of warfare.(3) Have we, however, due to political and budgetary realities, committed an error with the fielding of our light infantry divisions? Will we find that

> [t]here simply are no contingency spots on earth in which a LID (light infantry division) could safely be deployed . . ., that the LID is neither organized nor equipped to fight a low-intensity war effectively.(4)

The Department of Defense Authorization Act of 1984 stated "low intensity conflict may be the most likely challenge to US military forces" and that the Third World "is becoming more

heavily and lethally armed."(5) In 1979 the Army recognized this area as the greatest potential threat when it directed the creation and experimentation of a rapidly deployable high technology light division. Then, less than four years later, we created even lighter divisions. Had the threat changed, or had other reasons dictated a need for five light infantry divisions that are not organically structured for a "heavily and lethally armed" environment?

In April 1984 the Army Chief of Staff published his White Paper providing direction for the development of the light divisions. Four years later there remains considerable controversy and indecision on how to best employ light infantry forces. Although from WW II to 1979 very little had been written on the subject, the idea of light infantry is not a new concept. In 1938 and again in 1943 serious consideration was given to establishing light infantry divisions. Yet, they were never added to our force structure. They lacked the firepower and mobility for utility across the spectrum of conflict. These concerns appear to have had little impact on the recent decision to create light forces.

The primary reason given for the formation of our light infantry divisions was a need for highly trained, rapidly deployable forces. The light division was designed to conform to airlift and manpower constraints which limited the force to no more than 500 sorties and 10,000 men. Two other reasons cited in news articles for the decision to create light infantry divisions were political concerns and budgetary constraints. These are two powerful and influential concerns

that affect all areas of the military force structure. It is because of these reasons that the need for an austere divisional force structure was identified. The light infantry division concept was politically acceptable due to its strategic deployability and minimal requirement for budgetary resources.

We need to examine closely the necessity for almost one-fourth of the active duty force structure being light infantry. There is no doubt that the most probable threat in the years ahead is in the low intensity spectrum. But does such a threat require five light infantry divisions, or are there other forces more suitable for this environment? With the present emphasis on increasing special operations forces and the activation of the U.S. Special Operations Command there may be even less utility for a light infantry division in the low intensity spectrum than had originally been envisioned.

The purpose of this paper is to understand the concept for employment of our light infantry forces. To do this we must examine the operational requirement which led to the creation of light divisions. From analysis of numerous studies and articles on light infantry it does not appear the requirement was born of operational logic, and without such a concept, the "cart may have been put before the horse". What we may now have is a force that is neither small enough to be strategically deployable nor heavy enough, even if "properly augmented", to fight and win in the mid to high intensity spectrum.

This paper will begin with a discussion of previous efforts to create light infantry divisions and then examine the present need for light forces. We will address our ability to deploy light forces, their augmentation, tactical employment and training. Once these points are established we can analyze the decision logic which added light infantry divisions to the present force structure.

We may find that our light infantry divisions were not designed to fulfill an operational requirement, which would explain the resulting confusion over their proper employment. In 1983 it was possible that political and budgetary realities did influence the decision to create light infantry divisions. If so, we need to understand this and insure we do not commit our light forces to situations which could have disastrous consequences for our nation.

HISTORY OF THE LIGHT INFANTRY DIVISION

> . . . the light division, both motor and pack, are not properly organized and equipped . . . (and) should be returned to a standard division.(6) MGen. J. Milliken
> Maneuver director and III Corps Commander, 1944

While the Army Ground Forces were reviewing their mobilization plans for 1943 they were notified by the War Department on 25 October 1942 that

> . . . shipping considerations may dictate a considerable change in our strategic concept with a consequent change in the basic structure of our Army. Since from the shipping capabilities indicated . . . it follows that the trend must be toward light, easily transportable units.(7)

This situation is similar to the one confronted by our Army in 1983. Our triad of strategic mobility, airlift, sealift and pre-positioning, was seriously deficient in its ability to support rapid movement of forces and conduct their resupply in a contingency area. In an effort to retain a viable strategic posture the Army reconfigured its force structure to enhance its rapid deployment capability.(8) This restructuring became part of the Army of Excellence study which produced organizations considerably different from those of the Army Ground Forces in 1943.

In that year the War Department was confronted with the need to provide units for offensive operations in the Southwest Pacific. This requirement was complicated by the problem of limited ship space for ground troops and cargo, which necessitated "light, easily transportable units." The War Department realized the standard infantry division was too heavy in weapons and vehicles to operate effectively in either the jungle or mountainous terrain. The War Department, therefore, proposed the creation of lightly equipped jungle divisions of some 10,000 men. General Marshall was reluctant to approve the concept for a light division because it was an "untested concept that lacked not only a firm organization but also an established mission."(9) However, since manpower resources were limited he did give his consent.

The Army Ground Forces assumed the task of developing a light division. The unique characteristics of this division were:

> [i]t would be shipped overseas in greater numbers than the standard division, would be easier to supply and maintain, and like all divisions could be reinforced (augmented) as needed from non-divisional pools.(10)

These are the same characteristics desired of our present light infantry divisions -- rapidly deployable, requiring minimal logistical support and a capability for augmentation.

The design objectives listed in the Army of Excellence, Light Infantry Division, Final Report are similar to those the Army Ground Forces desired in the light division they were developing. As with our present light units, the light division in 1943 had basically the same elements as a regular infantry division, only smaller. The emphasis was on less equipment and not on the elimination of any units. The concept of "light" equated to strategic mobility. Unfortunately, this "lightness" left the units unable to conduct sustained operations.

In June 1943, the War Department authorized the formation of three light divisions: the 89th Light Division (Truck), the 10th Light Division (Pack, Alpine) and the 71st Light Division (Pack, Jungle). These divisions were activated to undergo training and evaluation before any further units would be formed. As with our force structure today, the three light divisions did not require an increase in the end strength of the Army. There was, however, considerable controversy as to their utility.(11)

General MacArthur stated that the light divisions were too short of firepower and logistics for employment in his theater. Col F. D. Merrill, representing General J. W. Stilwell, had the

opposite view and believed they would have considerable utility in the China-Burma-India Theater. Since the Southwest Pacific theater was unwilling to accept any light divisions, LtGen. L. J. McNair, Commander of Army Ground Forces, recommended against forming additional units until the evaluations of the first three light divisions were completed.(12)

Eight months after activation, the 71st and the 89th Light Divisions reported they "did not have sufficient communications equipment, cooking facilities, vehicular transportation, or reconnaissance elements. The handcart was unsuitable. The engineer battalion was inadequate."(13) These observations were confirmed during the evaluation of the divisions.

The evaluation of the 71st and the 89th culminated with maneuvers against each other. The results of these maneuvers were unfavorable. Neither division could support itself in rough or difficult terrain. At any given time, one-third of the division's combat power was required to build roads and bring up supplies. The divisions were incapable of sustaining offensive operations. The senior evaluator, MGen. J. Milliken, recommended a return to the organization and equipment of a standard infantry division. These recommendations were accepted by LtGen. L. J. McNair and both the 71st and 89th became regular infantry divisions before being deployed to the European Theater.(14)

The evaluation of the 10th Light Division was never conducted. However, based on the evaluations of the 71st and the 89th, the 10th Division underwent significant reorganization. It eventually increased in strength to over

14,000 men and 6,000 mules and horses before being deployed to the Mediterranean Theater to participate in the final four months of combat in Italy. Although the division strength had been increased by some 3,500 men, in terms of firepower and mobility it remained essentially a light division. The 10th Division "suffered brutally for its short period in combat, 992 killed in action and 4,154 wounded."(15)

Within the United States Army there is no historical precedent to draw upon with which to make sound judgments as to the light divisions' utility across the spectrum of warfare. There are numerous cases when we have employed lightly equipped forces, but never as a divisional size element. Regardless of this lack of historical precedent we appear to be intent on making the light infantry division concept work. We seem more concerned with validating the concept of the light division, rather than with objectively assessing its utility. In the Spring of 1985, the Army Chief of Staff sent a letter to every Light Infantry Division commander and told them,

> [d]uring World War II, our experimental light divisions were abandoned, largely because deficiencies were considered signs of failure rather than challenges to be overcome. We will not allow that to happen this time.(16)

A year later during a briefing to the Army Chief of Staff on the 7ID(L) certification this same emphasis on making the light division concept work was evident. The Chief of Staff stated that "the certification process is not to validate the wisdom of the O&O (operational and organizational) concept but to fine tune concept, doctrine, organizational structure and institutional training."(17)

The operational and organizational concept for our light infantry divisions will probably not be challenged in the near future. At this point in time, survival of our light units appears to be the primary concern, even though there does seem to be reasonable justification to examine their O&O concept. There is nothing in our own history to support the feasibility of light divisions as presently configured, yet we have identified a need for five of them. Hopefully, we are giving thoughtful consideration as to the utility of the light infantry division and have not been biased by the statements of the Army Chief of Staff.

DEPLOYMENT OF LIGHT FORCES

> The Army of the late 1980's has a problem -- it literally can't get there from here when it comes to strategic mobility.(18) BGen John C. Bahnsen, Jr.

Our military strategy of forward defense is designed to deter aggression by having forces deployed in a theater or having the capability to project forces before hostilities commence. The rapid deployability of our light forces is supposed to "enable them to arrive in a crisis area before a conflict begins. By demonstrating US resolve and capability, they may well prevent the outbreak of war."(19)

Should deterrence fail we must also have the ability to rapidly deploy forces of sufficient strength to blunt the enemy aggression and create the conditions for the eventual return to pre-hostility conditions. Strategic mobility -- "our ability

to deploy and sustain our forces over great distances" -- is the cornerstone of this strategy.(20)

The Army is totally dependent on the Navy and Air Force to provide rapid, flexible, strategic lift to project its forces into a crisis area. The Army is initially dependent on airlift to deploy and sustain its ground forces until sealift assets become available to move additional forces and supplies into the theater.(21) Regardless of how well trained the Army contingency forces are, it is to no avail if they can not be moved rapidly in sufficient strength to the crisis area.

The "cornerstone" of our military strategy , strategic mobility, should be thought of in terms of a triad: sealift, airlift and pre-positioned equipment. This mobility triad suffered severe neglect until 1981 when the Congressionally Mandated Mobility Study (CMMS) was prepared by the Pentagon. This study provided mobility objectives for the Navy and the Air Force to attain in the years ahead. Based on the CMMS the Air Force must be able to move 66 million ton-miles/day. It presently can move only two-thirds of this amount using its own assets and the Civil Reserve Airline Fleet (CRAF).

The Air Force is making an attempt to eliminate this shortfall by establishing higher utilization rates, increasing its number of aircraft and improving the CRAF. Even with all of these efforts the Air Force is not projected to alleviate this shortfall until the late 1990's. Another difficulty is that 50% of all air crews and 40% of maintenance support for strategic airlift is provided by the Air Reserve Associate units.(22) Not only do we have a significant shortfall in the

amount of airlift available, we also have almost half of our strategic crew lift capability in the Reserves.

The Army has sought to help alleviate the airlift shortfall by reducing overall mobility requirements with the creation of the light infantry divisions.(23) This emphasis on reducing mobility requirements has in essence dictated what forces will be available in a contingency. The force planners did not develop a concept of what was needed for various contingency missions, but rather let the availability of aircraft dictate the design of the force. "Thus it has come to pass that the strategic mobility tail is wagging the landpower dog -- a very unhealthy situation."(24)

Appendix A lists the number of strategic mobility aircraft in the Air Force inventory and the number of C141 equivalent sorties required to move each Army division. The total number of aircraft, however, is but one important aspect in the strategic airlift calculations. Other important factors are competing operational requirements, operational readiness rates, availability of airfields and the limited capacity of the airfields. Underestimation of the amount of support lift required can also be disastrous. Who would ever have thought it would require "42 aircraft to deploy 12 F-15's to Saudi Arabia . . . and 293 personnel to support the F-15's in country."(25) Airlift is fast and flexible but it is necessary to have a balanced strategic mobility plan.

Vice Admiral Piotti, the commander of Military Sealift Command (MSC), recently stated that the Navy does not "have sufficient sealift today to lift what the Army has."(26) The

sealift capability of the Navy has seriously declined over the past thirty years, from 574 ships in 1953 to 61 ships today (Appendix A). MSC is now totally dependent on the activation of the Ready Reserve Force (RRF) for additional transport during major contingencies or sustained operations.

Although the Navy has only 61 ships for lift, eight of these are Fast Sealift Ships (FSS), SL-7's, which have been converted to roll-on/roll-off configuration for rapid deployment of Army units. These eight ships provide enough lift to move a mechanized division and some of its non-divisional equipment. They require only five days of sailing time to arrive in Europe and twelve days to arrive in Southwest Asia via the Suez Canal.(27)

The third leg of the mobility triad, pre-positioning, can be thought of as pre-emptive lift or forward deployment of combat sustainability. The prepositioning of equipment by the Army has consisted of adding a sixth pre-positioning of material configured to unit sets (POMCUS) in Europe. This has been done to increase our ability to close ten divisions in ten days into Europe. It would seem logical that since the light infantry divisions are so strategically deployable and have "utility" in every level of conflict that there would be POMCUS for one or two light infantry divisions in Europe. None of these contingency sets are for the light infantry divisions, nor is there designated POMCUS for them anywhere in the world.

The Marines have taken a different approach to increase their rapid deployment capability. They are not totally dependent on strategic airlift but instead have established

maritime prepositioning ship (MPS) squadrons in the Atlantic, Pacific and Indian Oceans to support Marine contingency operations. Each of these MPS squadrons has the combat equipment, vehicles and supplies to sustain a Marine Amphibious Brigade (MAB) for thirty days. Their concept of deployment is for the Marines comprising the brigade to be airlifted to the objective area to link up with the MPS squadron. The Marines require substantially less airlift than a light infantry division, yet they still possess greater firepower, mobility and protection.(28)

Using a combination of strategic air and sealift the Marines are perhaps more flexible and responsive than the Army's light infantry divisions. It would seem logical for all of the armed forces contingency units to be able to use the items in the MPS squadrons. The light infantry divisions, however, are not equipped or organized as the Marines and are therefore unable to deploy and use these military assets.

The triad of strategic mobility is critical to our military strategy which requires forward defense and force projection. The light division was configured to conform to just one leg of this strategic mobility triad. Since each leg of the triad is characterized by unique advantages and disadvantages, a mixture of these capabilities that would capitalize on the advantages of each appears to be the most effective approach we should have followed.

Given the availability of assets, the question remains, what exactly can be moved? In the design of the light division a conscious decision was made to maintain an austere

organization to minimize airlift requirements. The concept is for the division to be augmented by corps level independent units as required. Although the light infantry division requires only 497 C141 equivalent sorties for deployment it may need considerable augmentation which could greatly increase its sortie requirement.

AUGMENTATION OF LIGHT FORCES

With the limited number of strategic airlift assets available (Appendix A), it is questionable whether we can rapidly deploy a light infantry division, much less one that requires substantial augmentation. There are some who think the true strategic mobility requirements for the light division have been concealed by using the concept of augmentation.(29) In WW II the infantry divisions in the Pacific and in Europe felt that they needed tank, antitank, antiaircraft and additional engineer support in virtually every circumstance when they were heavily engaged. This probably would be true today.(30) It seems we have designed a force which is not light enough to get there, and not heavy enough to win.

The light infantry divisions are faced with the predicament of having to be task organized for almost any contingency. The Army Chief of Staff realized this deficiency in the organization when he said the light units would be augmented with corps assets "to strengthen their combat power and sustainability."(31) The light forces have no sustainment capability and lack sufficient organic firepower. These are

the same reasons why General MacArthur did not want light forces in his theater during WW II. They would have required too many of his assets to make them a viable fighting force. The concept of pooling assets at corps instead of making an element a viable fighting force has been a continual debate since WW II.

In 1979 the Army Chief of Staff, General Meyer, stated that force packaging or pooling of assets at the corps level was not an acceptable solution for designing units which should possess the capabilities they need. Historical evidence from WW II showed the concept of pooling assets at corps and providing them as needed to weigh the main effort did not work.(32) "Interchangeability broke down" and corps elements established habitual relationships with divisions, working full time with one division instead of being pooled and attached as needed. Had the corps attempted to keep nondivisional assets pooled, shifting them as the situation dictated, they would have done so "only at the cost of much confusion and inefficiency."(33) The design of the light division was not influenced by this evidence. The pooling of assets at corps was one of the design objectives for the light forces.(34)

A major problem with augmentation is the lack of habitual association. Since most of the augmentation assets for the light infantry divisions in a low intensity conflict come from reserve units, there will be a real problem with procedures, personalities and responsiveness for deployment. Even in a mid to high intensity conflict there will be difficulties in

forming ad hoc "task organized" units which have had a different orientation in their training.

The Israeli attack on Suez City in the 1973 war is a good indication of the difficulties in task organizing two elements which have never worked together. The Israeli's plan for the capture of Suez city called for the armor elements to burst into the city firing all around to produce a shock effect while the infantry commenced to clear the buildings. They had used this same technique successfully in the 1956 and 1967 wars.

The operation was a failure, the Israelis did not seize the city. The major reason for this

> . . . lay in the infantry . . . neither their equipment nor their vehicles, neither their training nor their inclination fitted them for armored action . . . the faulty cooperation between these two elements only detracted from the effectiveness of the forces.(35)

This incident is an indication of the many problems that can occur when task organizing light infantry with forces that have such different tactical modes of operation and have never worked together.

The results of the Celtic Cross IV exercise in August, 1986 identified some of these same problems. The heavy forces have a different vocabulary than infantry forces and now the light forces have a different vocabulary than regular infantry forces. Terminology such as "seamless web," "expanding torrent," and others added confusion to the exercise. There were also graphics used by both which were unfamiliar to the other. The most serious problem was with concepts of employment. Light and heavy forces think differently in terms

of tank proof terrain, link-up points and time-space factors.(36)

The concept of force packaging or pooling of resources at corps also presents some definite concerns which need to be addressed. The Army may have been driven by budgetary and political issues to pool assets at corps, but it is now time for us to look seriously at what is the most optimal method of using our limited resources. Every time another element augments the light infantry division the overall lift requirements for deployment and sustainability increase accordingly. Hopefully, we have looked at its true mobility requirements when its augmentation from the United States is counted.

The issues of strategic mobility and augmentation are deployment concerns. "Just arriving in a distant theater of operations, however, is not enough to ensure victory."(37) Once the force is deployed it is essential to ensure we know how our light forces will be employed.

EMPLOYMENT OF LIGHT FORCES

> Operation Sutton, the plan for the amphibious invasion (of the Falklands), suffered from one grievous fault. It was designed to get the land forces ashore, but was remarkably silent on what they were to do once the beachhead had been established.(38) Bruce W. Watson and Peter M. Dunn

We need to ask ourselves if we have made the same error as the British in making a plan to get the forces there, but not clearly envisioning how thereafter they would be employed. The initial criteria the Army Chief of Staff gave for the development of the light infantry divisions addressed their structure and deployment requirements but omitted exactly how they would be employed.(39) It appears "more thought needs to be given to what happens when we get on the playing field."(40)

In his White Paper, the Army Chief of Staff states the light infantry divisions "will help reassure our friends and allies--and deter our adversaries . . . (and once deployed) demonstrate US resolve and capability . . . "(41) To do these missions well, the light units must have the capability to operate effectively against a multitude of threat forces. General Wickham realized the need for this requirement when he said, "light infantry divisions must be able to fight -- anytime, anywhere, and against any opponent."(42)

The mission of the light division is "to rapidly deploy as a Light Infantry Combined Arms Force, defeat enemy forces in a low intensity conflict, and when properly augmented, fight and win in a mid to high intensity conflict."(43) In their primary mission, light forces are not intended to combat regular forces. This appears to be an anomaly when in a mid to high

intensity conflict they are expected to combat regular forces. It surfaces the debate whether light forces can be used across the spectrum of conflict. There are some who advocate their use as regular infantry, primarily because of their inherent shortcomings in terms of combat power (Appendix C). What these critics fail to realize are the unique characteristics of light infantry.

General Wickham suggests there is a distinction between light and regular infantry.

> Light infantry forces will be high performance units, capable of bold, aggressive action under conditions of great hardship and risk. (They will be) the world's finest infantry units.(44)

To attain this performance level the training of the light fighter must concentrate on developing mental, physical and tactical skills far beyond that required of regular infantry.

The light infantry divisions believe there is a difference between themselves and regular infantry. In a paper prepared by the 7ID(L) on the Operational Employment of Light Infantry Divisions emphasis was placed on this.

> The design and training of the Light Infantry Division causes it to be much different from other US Army Divisions. Although the light division can be extensively augmented by a Corps to resemble regular infantry and committed on the FLOT, such employment would not capitalize on the unique capabilities that the light division provides to the Corps.(45)

These "unique capabilities" are characterized by the style in which the light infantry fights. They make "extensive use of offensive, decentralized, irregular type operations by highly trained small units to disrupt the enemy force."(46) Foul weather and night operations are his forte, wherein his

unique skills enable him "to be offensively-oriented . . . to seek out and destroy the enemy on his terrain using initiative, stealth, and surprise."(47)

The assertion is that there is a certain physical predatory intent and state of mind not necessarily required by regular infantry. This emphasis highlights the distinction between light and regular infantry, a fact to bear in mind when considering their employment (Appendix B). To augment these divisions would require them to execute a different style of warfare.

In a mid to high intensity conflict their mission statement says they can fight and win when properly augmented. Does this mean they can not win if they are not augmented, or are they supposed to be employed as regular infantry? In a mid to high intensity conflict there probably will be immense pressure to "augment" the light infantry and, in fact, make them regular infantry by increasing their firepower, mobility and protection. "The danger then becomes one of creating an impotent hybrid, too encumbered to be mobile in the forest and too vulnerable to survive in the open."(48)

B. H. Liddell Hart explains that the light fighter must not be burdened by equipment, but must be "light of foot" and "quick of thought", capable of acting on his own or as part of an independent team.(49) For the light fighter to be successful General W. E. DePuy states that we must resist the "temptation to fix the light infantry by beefing it up."(50) Edward N. Luttwak in his report on the Strategic Utility of US Light Divisions states,

> . . . to add heavier extra-divisional reinforcements, would have no logical stopping point until full equipment parity is attained with the standard formations -- which would entail the re-emergence of the original deployability and operational limitations.(51)

In the mid to high intensity spectrum we must question whether the correct method of employment for our light forces is as regular infantry. Are we sure that light forces "when properly augmented, (can) fight and win in a mid to high intensity conflict?" Several monographs written by students at the School of Advanced Military Studies have discussed the employment of light infantry in Europe. The consensus is that augmentation does not make light infantry become regular infantry. In fact, the recommended method of employment is to use them as light infantry. To do otherwise could be fatal. "If we persist in our belief that the light divisions are just general purpose forces we may pay with the lives of our soldiers on the battlefield of the future."(52)

This warning as to what can happen if we employ light forces as regular infantry is in contradiction to their mission statement. It perhaps illustrates the necessity for our Army to closely examine the operational concept for our light forces, and address their proper method of employment across the spectrum of conflict. LtGen. James F. Hollingsworth advocates the need to make our "light formations mobile enough to survive and lethal enough to prevail."(53) Is he correct or is Major Edward E. E. Thurman correct when he says the light division "is too heavy to adequately perform light infantry missions(?)"(54)

We can say with assurance that both are correct since there is no clearly articulated operational concept for light forces. Both officers have identified logical concepts for the employment of light forces. If we closely examine the decision logic used to create our light forces we may find the reason for such different statements. The operational and organization concept for our light forces needs to be questioned. Otherwise our error may be paid "with the lives of our soldiers on the battlefield of the future."

This is not to suggest that our light forces do not have utility in the mid to high intensity spectrum. History provides numerous examples where light units of brigade size and below were an indispensable element of a larger force. The use of 5th Ranger Battalion by the XX Corps during 23-27 February 1945 was an excellent method for the employment of light forces. On 22 February 1945, XX Corps had crossed the Saar River and was expanding its bridgeheads. In an effort to expedite the enlargement of the bridgehead it was necessary to force a German withdrawal. The Corps Commander directed the 5th Ranger Battalion to infiltrate into the enemy's rear and cut the road leading to his rear, thus making the German position untenable.

This mission required the Rangers to infiltrate three miles behind enemy forces and establish a blocking position. Moving stealthily at night, making maximum use of the terrain, the 5th Ranger battalion infiltrated to the enemy's rear and occupied their blocking position along the Irsch-Zerf road early on the second day. In spite of several skirmishes the Ranger

Battalion remained undetected. During the next five days the Rangers fought with diligence and stamina. They made skillful use of artillery fire from the Corps to intercept German movement and turn back local counter-attacks. During this operation the Rangers suffered only 90 casualties while killing 299 and capturing another 328 prisoners. Their actions contributed directly to the collapse of the enemy front.(55)

This operation exhibits an optimal method of employing light forces in support of a Corps. The actions of the light forces were synchronized to support the heavy forces. XX Corps did not attempt to augment the light forces with heavy equipment but instead used them as they had been trained. B. H. Liddell Hart says the "way to success in war is strategically along the line of least expectation and tactically along the line of least resistance."(56) This was evident in the aforementioned example. The Ranger insertion was tactically along the line of least resistance. It allowed the Rangers to capitalize on their unique capabilities; an offensive orientation using stealth, surprise and shock to overcome the inherent disadvantages of light forces. They were able to maintain the initiative by being "light of foot" and "quick of thought".

The disastrous results, however, of forgetting about the unique characteristics of light infantry and employing them as regular infantry is vividly clear. In Italy

> . . . the decline in the Ranger's combat skills was an unfortunate result of misusing the Rangers. From North Africa through Italy, Rangers had been too frequently used as conventional infantry, and most of their casualties were suffered in these actions.(57)

Historical evidence shows the enormous benefits which can be derived from employing light forces in situations where they can capitalize on their unique characteristics. There is still, however, considerable controversy as to how light forces should be employed. In the lower spectrum of conflict they are not expected to combat regular forces, yet in the mid to high spectrum they are. This debate over whether light forces should be used as regular infantry or light infantry across the spectrum of conflict is bound to have an impact on their training program.

TRAINING LIGHT FORCES

The light infantry division mission states that light forces must rapidly deploy to defeat enemy forces in low intensity conflict. Since this is their primary orientation, light forces must train to fight in this spectrum of conflict. A thorough analysis of FC 100-20, Low Intensity Conflict, must be conducted to provide the battle focus for training. This focus enables commanders to "consciously reduce the number of vital tasks to allow subordinates to train on only those tasks critical to mission accomplishment."(58)

Our doctrine recognizes the need to provide a battle focus for our units, yet in the case of our light forces we have made this an extremely difficult task. We seem to regard them as "general purpose forces" with utility across the spectrum of conflict, able to accomplish any mission. The fact that the primary orientation for our light forces is low intensity conflict means they should train on those tasks that they will most likely employ. Conversely, if employed in a mid to high intensity conflict then these forces should be employed as they have been trained to fight.

The missions given to the light infantry divisions, as with any unit, must adhere to the principle "train as you fight" in order to capitalize on their unique capabilities.(59) Their present mission statement and concept of employment, however, may not allow them to fight according to their tactical style. They may be augmented and used as regular infantry. The question then is just how should light forces train for their

primary mission, low intensity conflict, yet have utility across the spectrum of conflict?

Since low intensity conflict is "characterized by constraints on the weaponry, tactics and level of violence," there is considerable confusion over exactly what the light forces are expected to do in this environment.(60) This was evident during the US Army Training Board's Feedback From Visits to United States Army Light Infantry Divisions in 1986.

> The LID's believe that the division's relationships with Special Operating forces is not adequately defined. They are also concerned that all the possible roles the LID could play when introduced into a country that is in some state of conflict have not been examined.(61)

These problems are compounded by the

> . . . different variations in the way Senior General Officers and DA and FORSCOM planners have articulated the employment of the LID (which) has caused some uncertainty about the primary focus for (the) LID.(62)

This uncertainty was manifested by the comments the Army Chief of Staff made during a briefing on the certification for the 7ID(L). "The tentacles of mid-high intensity technology must be evident (in the exercise) from the beginning. As the scenario unfolds, the tentacles will thicken in size, intensity and sophistication."(63) This seems to indicate a focus for training at the upper end of the spectrum of conflict.

Little has been written on the issue of using light forces in the low intensity spectrum, even though this is their primary orientation. The majority of articles and official publications have examined how best to employ light forces in mid to high intensity combat.(64) Even our war planners have fallen prey to the mid to high intensity orientation.

During the 1987 Infantry Conference a discussion paper was presented on the Discrepancy in Light Infantry Missions and CSA Directives. It was found that "nearly all Joint Strategic Capabilities Plan (JSCP) missions (for light forces) reflect employment in Europe, Southwest Asia or Northwest Asia in a mid to high intensity conflict."(65)

If this has been our orientation then one would assume the issue of augmentation, as the light mission requires for this environment, would have been adequately addressed. The exact opposite, however, was noted.

> The divisions . . . indicated uneasiness about the system (augmentation) because they do not know who the "plugs" are, where they are located, how long it will take them to get there, and in the case of CSS assets who has control over them when they arrive.(66)

Are these valid concerns the light divisions have raised, and if so why are such issues unresolved? In Major Gardner's monograph he states ". . . the Operational Concept for the light infantry divisions sheds no light on details of employment in mid to high intensity combat."(67) This perhaps explains why there is so much confusion over the proper employment of light forces across the spectrum of conflict.

What we need to do is closely examine the decision logic used in creating the light divisions. This should help minimize the confusion as to the operational concept for light forces. By addressing the reasons for their creation, the methods of employment should logically follow.

OPERATIONAL JUSTIFICATION

The AoE study was a search for operational justification for a political solution . . .(68) Sam Damon and Ben Krisler

During the thirty years that followed WW II, the Army only twice implemented major organizational changes to its force structure. In the mid 1950's there was the pentomic division and in the early 1960's it was the ROAD division. In contrast the past twelve years have produced numerous organizational changes in the army. There were the Division Restructuring Study, Army 86, and, now, the Army of Excellence (AoE). In every situation personality prevailed since there was no doctrinal guidance for force design. The senior officer involved had to provide his personal concept on how the Army should be organized to fight and win.(69) Since personality tends to be a major criteria in determining the design guidance this may help explain the organizational turmoil which has occurred in the Army force structure over the past ten years.

In a Program Decision Memorandum sent to the Army on 2 August 1979 the Secretary of Defense directed the budget submission for Fiscal Year (FY) 1981 to include a request for a seventeenth active, mechanized division. Since this division was to be for European, Middle East and Persian Gulf contingencies the Army was also told to request two pre-positioned sets of equipment for it. The intent was for one set to be positioned in Europe and the other aboard forward deployed logistics ships in the Indian Ocean. This would then enhance the utility of the division across the spectrum of conflict. Most importantly it would increase the end strength

of the Army at a time when the Navy's budget was growing at the expense of the Army's budget.

Unfortunately, the Army lost its bid for this division in the budget deliberations. Additional airlift and forward deployed logistic ships were authorized, but none for pre-positioning of Army equipment. The requirement, however, for a rapid deployment force to be used in the Persian Gulf still existed. It appears the role intended for the Army's seventeenth division was instead given to the Marine Corps. In 1980, the Navy created the first maritime pre-positioning with the Near Term Prepositioning Force. With this equipment the Marines were ready to assume the rapid deployment mission in the Persian Gulf.(70)

The inter-service rivalry for a greater share of the rapid deployment capability was evident in this maneuvering between the Marines for pre-positioned equipment and the Army for an additional heavy division. Since 1974 the Army had not added any additional divisions to the force structure. It now sought a force increase which would insure a greater share of the defense budget. The Army was concerned since it experienced a loss of 5.9% and 4.9% in the authorization bills for FY 79 and FY 80 respectively. Conversely, the Department of the Navy's budget these same two years was increased 3% and 9.8% respectively.(71) There was further justification for concern as Congress appeared to favor a naval solution to provide the United States with a capability to conduct a show of force and to satisfy the rapid deployment requirements.

In January 1981 the House Budget Committee was presented with a 125 page study suggesting that Congress appropriate funds to add five armored divisions to the Army. These five divisions would have accounted for over half of the proposed increase in appropriations.(72) The proposal, however, was never implemented. If anything, Congress viewed the necessity for maritime assets more critical than additional heavy divisions. In the Department of Defense Appropriation Act of 1982 Congress officially stated it was

> the sense of the Congress that- (1) A larger and stronger American navy is needed . . ., in order to fulfill its basic missions of . . . enhancing our capability to project effective American forces into regions of the world where the vital interests of the United States must be protected . . .(73)

The importance Congress attributed to the Naval Department was unquestionable. During this period the Army had created the high technology light division, but it was not rapidly deployable due to the large number of sorties it required.

In early 1980 the Army Chief of Staff, General E. C. Meyer, wrote in his White Paper that he was satisfied with the present force structure of the Army. He saw no need to increase the number of divisions despite the need for rapid deployable forces. His comment in reference to the loss of the request for a seventeenth division was "we could not have created another division within an active end strength of 780,000 . . . we're past that narrow edge - of the combat to support ratio."(74) Instead, he wanted to increase the size of the present divisional organization.

> We are now looking at an increase in the size of the division itself, which calls in to doubt whether or not

you want to add another division as opposed to just having increased capability within the divisions you have.(75)

As far as light divisions were concerned, General Meyer in his White Paper repeatedly talked about the need for "lighter, more capable forces" for commitment to contingencies worldwide while capable of incorporation in the NATO theater. During the force development process of the light division, General Meyer said he wanted the force to move more rapidly than a heavy division, but "have greater capability once they get there than the light airborne or airmobile units."(76) He clearly understood the importance of both deployment and employment of "light" forces.

General Meyer told his organizational planners that force packaging was not an acceptable substitute for giving the division organization the capabilities it needed. This concept was also evident in his desire to increase the size of the present divisional organization. This guidance resulted in a light division organization General Meyer approved that had a force of 17,773 men, equipped with high technology equipment.

When General Wickham became the Chief of Staff in 1983 the political and economic realities did not afford him the luxury to maintain the present force structure. The Army was continuing to receive less funding than the other services in the Defense Authorization bills.(77) Congress was concerned about force projection and was funding the services which would enhance this capability.

In the Defense Authorization Act of 1984 Congress defined the major missions of the Department of Defense. One of the

four worldwide missions of the Department of Defense was, "power projection superiority -- deploying superior military forces in times of crisis . . . outside the traditional system of Western alliances . . ."(78) This mission was the only one in which the Army could possibly gain a greater share of the responsibility, and thereby allocation of funds. The Army staff recognized that with the strategic airlift and sealift shortfalls a "light" division requiring over 1,400 C141 equivalent sorties was not strategically deployable.

With a fixed active end strength in manpower and paying for its largest modernization program since WW II, the Army staff appears to have sought a solution in the form of an austere divisional force structure, requiring minimal manpower and operating costs. An operational concept for their employment does not appear to have been addressed. The concern for getting a larger share of the defense budget was paramount. Obviously this approach was effective in that DoD began discussions to "shift as much as $10 billion from the Navy to the Army to help pay for five light infantry divisions ..."(79)

With the activation of Central Command there was a definite requirement for mobile, hard hitting forces that could confront the Soviets should they threaten the Persian Gulf. Army planners were quick to provide this force structure. General Wickham stated the light infantry divisions "would be almost as powerful as a regular division."(80) With a force structure proposal that would increase the Army's combat power and its strategic deployability while maintaining a constant active end

strength, it was understandable that DoD and Congress were willing to allow an increase in the number of Army divisions.

There was also the desire by the Deputy Secretary of Defense, Mr. Paul Thayer, to redress the imbalance in the defense budget between the services. During the Defense Resources Board discussions on the defense appropriations for FY 1985 through FY 1989, Mr. Thayer wanted to give the Army a larger share of the budget. In an interview he said, ". . . I do feel the Army hasn't shared in the increased budgets to the same extent as the other services."(81)

It can be inferred that one motivation for the Army planners and Mr. Thayer to create the light divisions was to get a larger share of the defense budget. In August 1983, Mr. Thayer confirmed that the Pentagon planned to organize five new light infantry divisions at the rate of one a year, an undertaking that would require budget increases. General Wickham at this time, however, was unsure of the division structure and could only state it would have between 10,000 to 12,000 troops.(82)

Later that month at the Army Commander's Conference, General Wickham "directed TRADOC to examine ways to reduce the hollowness of the Army." One item of specific guidance was the need for "a smaller, lighter (infantry) force." Ten weeks later the initial objective force designs for the Infantry Division (Light) and the Heavy Division were completed and the Army of Excellence (AoE) study was presented to the Chief. The study outlined a new design for light forces in the Army which he approved on 20 October 1983.(83)

The abbreviated manner in which Army of Excellence was developed may present problems for the Army in the future. Army 86 required over four years, 1976 - 1980, to go from a concept to an approved objective force design.(84) The Army of Excellence was done in less than three months.

In the normal process of designing a new force the requirement is generated by an analysis of threats and construction of a Battlefield Development Plan. In this case, General Wickham directed the design of the light division. The concept based requirement methodology used in the force design process was "compressed and accelerated." Since there was no operational concept, the concept development process had to be conducted concurrently with the force design process. The abbreviated time period did not allow for any analytical assessment of the design.(85) There may be circumstances when our senior leadership should circumvent the force design methodology. However, the cost and benefits of such actions must be carefully weighed.

While it appears the Army of Excellence did have some positive effects, such as realigning the corps echelon to better support AirLand Battle doctrine, one must question whether AoE increases the Army's combat punch and strategic mobility. If AoE is really an "ambitious program" that essentially trimmed the overall strength of every division in the Army and pooled more assets at corps to allow for the buildup of the light infantry divisions, then we may not have produced the most optimal force structure for our Army.(86)

In addition to the force design process being severely "compressed and accelerated", DoD reacted eagerly to allocate funds for the Army's seventeenth division. According to the Washington Post the Deputy Secretary of Defense, Mr. Thayer secretly approved the plan for the Army to create a new "light" division in 1985. In his eagerness to help the Army he "shortcircuited the normal budget process." There is no question that he believed the Army was being short changed routinely at the expense of the other services. Mr. Thayer disregarded the normal budgetary processes to gain the approval for the concept which he and possibly General Wickham had developed. Not until Secretary of Defense Caspar W. Weinberger approved the plan was the Army assured it would be allocated the funds to add the new light division in 1985.(87)

Our central concern, however, is with the light infantry divisions. Given the fact that they are now a part of our force structure we must ask the tough question, "were they designed to fulfill an operational requirement?" If not, have we then determined the best method for their employment. We need to be careful we have not labeled them as a force that is supposed to be able to respond rapidly to a "wide range of missions worldwide." We may instead find that

> all-purpose forces are unlikely to perform well on any given mission . . . that attempts to combine great versatility in repertories with rapid responses may simply foster operational dilettantism - with the appearance, but not the reality of economies of force.(88)

Hopefully, by having studied the past, we are better prepared for the future and will not allow ourselves to err as did the French in WW II.

CONCLUSION

COUP D'OEIL

> . . . the quick recognition of a truth that the mind would . . . perceive only after long study and reflection.(89)
>
> Carl Von Clausewitz

The ability to recognize truth is a difficult task at best. This would apply in trying to make a critical assessment as to the utility of our light forces without having a greater insight into the rationale for their creation. As the Army Command and Management: Theory and Practice booklet from the Army War College states, "[f]orce development begins with requirements for new material or organizations generated by . . . guidance interjected from time-to-time by the Army's senior leadership, . . ."(90) The impetus for the development of the light division appears to have come from our senior leadership, the Army Chief of Staff, General John A. Wickham.

To second guess his decision would be a futile effort. His knowledge and experience far exceeds the majority of us who have examined the light infantry concept. Instead, what we should do is carefully review the facts surrounding the creation of our light forces. With this knowledge we may then better understand where our Army has been and where it is headed, in terms of its ability to conduct war.

This paper began by asking if we have committed an error with the fielding of our light divisions due to political and budgetary constraints? What we found was the realization that organizational decisions in the Army are not made in a vacuum. Instead, it is clearly evident that political and economic

realities have had a significant impact upon our force structure. Our five light divisions are vivid proof of this influence. This is not to say the decision to field our light forces was incorrect. Given the available resources and constraints, it may have been the optimal choice.

What we now understand is that our light infantry divisions were not designed to fulfill an operational requirement. The requirement for our light organization was identified by the Chief of Staff, not by the Concept Based Requirements System (CBRS). It is, normally, from the CBRS that the doctrine, training, organization and material needs of the Army evolve. This did not occur in the evolution of our light divisions. Consequently, the debate over the proper employment of these forces will continue.

There is no historical precedent within the US Army to draw upon for the answers. The utility of the infantryman, however, is unquestioned. As General F. J. Kroesen stated "the infantryman continues to be the ultimate weapon of war."(91) He is an indispensable element which we can not afford to do without. How we employ him will have serious implications for the future. The excellent use of the Rangers by XX Corps in contrast to their use in Italy illustrates the necessity to employ light forces properly. The question to ask is whether the Ranger Regiment or even one light division can fulfill the "light" missions in the future, and if there a need for five light divisions?

The United States has commitments worldwide which we must be prepared to honor, possibly with the employment of military

force. The strategic mobility triad imposes resource constraints which we must recognize and work with in developing the appropriate force for deployment. Light forces are available for this effort. They are a compromise between combat power, sustainability, and strategic lift. In developing the appropriate response we need to select the proper balance between these three items. Clearly, light forces have strategic mobility, but only at the expense of combat power and sustainability. Have we selected the optimal mix in our light organization?

The question of augmentation also needs to be seriously considered. If our light forces are to operate in an austere theater should they not possess the capabilities necessary to sustain themselves? Are we not accepting greater risk by augmenting them just prior to deployment? We need to remember that our policies, decisions and plans can be traced through the system to the men who fight on the ground. The mistakes we make in the employment of our forces, errors in weapon procurement and poor judgment will be paid for by the lives of our soldiers in combat. They make the ultimate sacrifice for our mistakes.

This leads us to the question of employment. Since there was no operational concept for our light forces we need to develop a realistic one which is not constrained by what has been said in the past, but by what is needed in the future. Should low intensity conflict be the primary orientation for our light forces, or is the US Special Operations Command a more suitable organization to handle this spectrum of conflict?

In the high intensity spectrum there is a generally accepted view that our light forces do have utility when their actions supplement or complement heavy forces.(92) The more pertinent question is do they have utility as a rapid deployment force? Congressional records, the Army's Annual Report to Congress, and most periodicals recognize that there is a proliferation of weapons in the Third World. Our light forces "could expect to be outgunned by enemy forces organized and equipped on the Soviet model. (Did) Army planners seemingly compromise too much on firepower as well as tactical mobility"?(93) In a contingency operation we may find the airfield in the undeveloped theater where we commit light forces over 250 miles from where they have to be employed. With limited mobility, lethality, and an austere support capability are our light forces the appropriate response? Do we need to, as LtGen. J. F. Hollingsworth and others have suggested, increase the mobility and lethality of our light divisions?

If we wanted a force that was rapidly deployable and designed for low intensity conflict then the light division should have been made "lighter". But if we wanted a force that had utility in the mid-high intensity spectrum, which could function as regular infantry, then the light division should have been made heavier. Unfortunately, due to political and budgetary constraints we are in fact not able to do either and instead have light divisions which are not light enough to get there and not heavy enough to win.

So where is the Army headed in terms of its ability to conduct war? It appears our light division is supposed to be a general purpose force. This role requires a force that is designed to survive in a wide range of environments. It should have the organic components of combat power, mobility, survivability, firepower and the sustainability to allow it to get there and win. Knowing these things, what should be done with the present light division? We should recognize the rationale that led to its design and view the present organization as the planning base for an evolutionary process of change.

Hopefully we are giving thoughtful consideration as to the utility of the light infantry division and are not creating situations to validate its existence. We can not afford to do like the French did in WW II and "try to impose our way of war on the enemy." This will only lead to disastrous consequences for our nation.

APPENDIX A

STRATEGIC MOBILITY

AIRLIFT

The following divisions require the listed amount of C141 equivalent sorties to move the division.(94)

DIVISION	C141 EQUIVALENTS*
Light Infantry Division	496
82d Airborne Division	535
101st Air Assault	819
9th Infantry Division (Motorized)	1445
Current Infantry Division	1502
Mechanized Division	2911

*Although shown as C141 equivalent sorties, each of these divisions have some equipment (outsized cargo), which only C5 aircraft can carry. In the mechanized division 41% of its equipment is outsized, 6% in the 101st, and 4% in the 82d.(95) The light infantry division does not require the use of any C5 aircraft.(96)

The following aircraft are available for strategic mobility requirements.(97)

TYPE A/C	NUMBER
C-5A	66
C-5B	14
C-141	234
KC-10A	48
C-17	0
CRAF (All types)	368

SEALIFT

The following ships are available:(98)

TYPE	NUMBER
Tankers	20
Cargo	41
Reserve (NDRF & RRF)	135

APPENDIX B

TACTICAL DIFFERENCES BETWEEN LIGHT AND REGULAR INFANTRY

Regular Infantry	Light Infantry
Employs conventional tactics	Employs unusual tactics, uses the environment
Mass and firepower are the primary tactical principles	Surprise is the primary tactical principle
Weapons and equipment oriented	People and terrain oriented
Low mobility in close terrain	Excellent mobility in close terrain
Frequently conducts frontal assaults	Infiltrates in order to attack the enemy's flank and rear
Patrols to maintain contact	Patrols relentlessly in all situations
Engages the enemy at maximum range	Engages the enemy at close range
Follows the path of least resistance	Chooses the path of least resistance
Achieves shock through mass	Achieves shock through surprise, speed and violence
Normally emphasizes firepower over maneuver	Emphasizes maneuver over firepower
Defends from forward slope	Defends from reverse slope
Tactics conform to a general pattern	Tactics have an unpredictable form, time and space
Adjusts tactics to available technology	Adjusts technology to available tactics (99)

APPENDIX C

LIGHT INFANTRY SHORTCOMINGS

- Soldier load is excessive
- Inadequate casualty evacuation capability
- Inadequate NBC capability
- Lacks effective antitank system
  (vulnerable/ penetration/ signature)
- Inappropriate antitank systems for use in MOUT
  (unable to breach walls/minimum arming range)
- ATGM's require excessive storage space
- Vehicles are not survivable
- CL I, III, IV, V transport inadequate
- Time intensive to dig in & employ obstacles
- Minefield clearing/ breaching capability manpower intensive
  (ineffective light mine detector)
- Excessive weight of AT mines
  (mine laying capability limited by time/weight)
- Weight of commo systems excessive
- Surveillance systems limited by range/terrain
- Number and type of batteries is excessive
- Lacks capability to move more than one battalion
- Responsive indirect fire is inadequate

ENDNOTES

1. Major General Sam Damon and Brigader General Ben Krisler, "Army of Excellence, A Time to take Stock," Armed Forces Journal, 122 (May 1985), 94. These names are pseudonyms for officers who both served two tours in Vietnam commanding light and heavy US forces.

2. Lieutenant Colonel Robert Allan Doughty, The Seeds of Disaster: The Development of French Army Doctrine 1919-1939 (Connecticut: Archon Book, 1985), p. 189.

3. U.S. Department of the Army, Army White Paper, Light Infantry (Washington, D.C., 16 April 1984), p. 1. Hereafter cited as White Paper.

4. Lieutenant Colonel David Eshel, "The U.S. Army Light Division, Right or Wrong?" National Defense, LXXI (May-June 1987), 58.

5. U.S. Congress, Department of Defense Authorization Act, 1984, P. L. 98-94, 98th Cong., 1st Sess., 1983, p. 1087. The 1988 Annual Report to Congress also emphasizes the increased lethality of Third World countries. "The Marine Corps also has modernized in the face of worldwide proliferation of modern weapons."(p. 73)

6. DR. Robert R. Palmer, Reorganization of Ground Troops For Combat, Study No. 8 (Washington, D.C., 1946), p. 47.

7. Palmer, p. 15.

8. Caspar W. Weinberger, Annual Report to the Congress, Fiscal Year 1988 (Washington, D.C., 1987), p. 38. Brigader General Bahnsen states this was the wrong approach to take. "Clearly the Army approach, streamlining force structure at the expense of capability to better fit a clearly inadequate airlift picture, is the wrong approach." (p. 114, Bahnsen)

9. "A Perspective on the Light Division: The U.S. Army's Experience, 1942-1945." (Historical Analysis Series, January 1984), p. 13. Hereafter cited as "A Perspective on the Light Division . . ."

10. Palmer, p. 44.

11. Palmer, p. 45.

12. Palmer, p. 46.

13. "A Perspective on the Light Division . . .", pp. 33-34.

14. Palmer, p. 47. The inability of the light divisions to conduct sustained operations was a major reason for their poor performance during the training and evaluation period in 1944.

15. "A Perspective on the Light Division . . .", p. 51. The 10th Division fought against the German LI Mountain Corps. During its 114 days in combat it advanced only 60 miles, form the Reno River to the foot of the Alps.(p. 51)

16. Major Ben Harvey, "Feedback from Visits and Conversations with United States Army Light Infantry Divisions." (Memorandum for the Commanding General, 15 October 1986), p. A1.

17. Harvey, p. B1. This briefing was given to the Chief, General Wickham, on 9 May 1986. Operational concepts are critical because they describe how the Army will fight and support. They evolve from a refinement of broad concepts, and discuss the long and short term operation of the Army.

18. Brigader General John C. Bahnsen, Jr., "Mr. President, We Can't Go," Armed Forces Journal, 124 (October 1987), 112.

19. White Paper, p. 1.

20. Weinberger, p. 50 & 221.

21. In 1984, Lieutenant General F. K. Mahaffey, Army Deputy Chief of Staff for Operations and Plans, stated in congressional hearings that "airlift is the cornerstone of force projection during the early days of deployment . . ." This quote is from Deborah G. Meyer's article, "You Can't Be There Till You Get There!" Armed Forces Journal, 121 (July 1984), 77.

22. "Military Airlift Command," Air Force, 69 (May 1986), 92.

23. Major General Vincent M. Russo, "Army Perspectives on Strategic Mobility," Defense Transportation Journal, 41 (August 1985), 14.

24. Bahnsen, p. 114.

25. William J. Olson, "The Light Force Initiative," Military Review, 65 (June 1985), 13.

26. Glenn W. Goodman and Scott C. Truver, "Interview with Vice Admiral Walter T. Piotti," Armed Forces Journal, 124 (July 1987), 49. The importance of sealift can not be emphasized enough. In moving any significant Army force . . . [s]ealift must move 95% of all dry cargo and 99% of all fuel products in a future war." (p. 114, Bahnsen)

27. William Highlander, "Strategic Air and Sealift for the U.S. Army," NATO's Sixteen Nations, 28 (Feb-Mar 1983), 88. It is important to note "there are only 18 RO/RO vessels under US flags, eight of which are under contract to MSC. (There are more than 500 RO/RO vessels in the free world.)"(p. 88, Meyer)

28. U.S. Marine Corps. The Marine Air-Ground Task Force. Operational Handbook 2 (Quantico, Va., 2 March 1987), p. 5-23. A MAB, that is to link up with its MPS squadron, requires approximately 241 C141 equivalent sorties. The MAB has more personnel than a light division. The MAB is comprised of a tank company, light armored vehicle company, assault amphibian company, recon company, engineer company, TOW platoon and 2-5 infantry battalions. It also has a brigade service support group (BSSG) with 30 days of supplies.

29. Damon and Krisler, p. 92.

30. Captain Jonathan M. House, "Designing the Light Division," Military Review, LXIV (May 1984), 45.

31. White Paper, p. 2. The inability of the 71st and the 89th Light Divisions to conduct sustained operations was a major reason for their poor performance during their evaluation period in 1944.

32. "Virtually all available tank battalions (at corps) became more or less permanently attached to infantry divisions." (p. 37, Palmer).

33. House, p. 45.

34. Captain Timothy B. Hassell, Army of Excellence Final Report, Volume II, The Light Infantry Division (Fort Leavenworth, KS: Force Design Directorate, 1 October 1984), p. 2-6.

35. Avraham (Bren) Adan, On the Banks of the Suez (New York: Presido Press, 1980), p. 430.

36. U.S. Department of the Army. "Celtic Cross IV After Action Report," (Headquarters, 2d Brigade, 10th MTN DIV (LT), 20 October 1986), p. 8. Refer also to Major Dunn's article. His unit conducted heavy-light training with the 82d Airborne Division at the National Training Center in 1985. These same problems were noted a year before the 7ID(L) certification.

37. Bahnsen, p. 116.

38. Bruce W. Watson and Peter M. Dunn, Military Lessons of the Falkland Islands War (Colorado: Westview Press, Inc., 1984), p. 68.

39. Lieutenant Colonel Jim Montano, "Operational Employment of Light Infantry Divisions." (Fort Ord, Calif., 6 July 1987), p. 2.

40. Colonel Dale K. Brudvig, "The Division May Be Light, But Can It Fight?" Army Times, 10 September 1984, p. 21.

41. White Paper, p. 1.

42. White Paper, p. 1.

43. Montano, p. 1. How light forces will be employed in the future may be further complicated by the recent decision of the Army Chief of Staff, General C. E. Vuono, to field a new light tank for the light divisions. Is the intent to make them able to function as regular infantry? (p. 24, Schemmer, "Army Decides to Push for Light Tank,. . . ")

44. White Paper, p. 4.

45. Montano, p. 1.

46. Montano, p. 2. Light division manuals recognize the unique skills required of the light infantry soldier. The light fighter must have the "survival skills of a woodsman, the saviness of the street fighter, and the sharpshooting skills of the hunter." FC 7-13, p. 1.

47. White Paper, p. 1.

48. General William E. DePuy, "The Light Infantry: Indispensable Element of a Balanced Force," Army, (June 1985), 29.

49. John A. English, On Infantry (New York: Praeger Publishers, 1984), p. 221.

50. DePuy, p. 63.

51. Edward N. Luttwak, "Final Report: Strategic Utility of US Light Divisions, A Systematic Evaluation." (Final Report, Contract No. DABT60-84-C-0099, 1 August 1985), p. 2.

52. Major Gregory C. Gardner, "A Concept for the Tactical Employment of Light Infantry in Central Europe." (Monograph, School of Advanced Military Studies, US Army Command and General Staff College, 5 December 1986), p. 36. Also refer to the theses and papers in the bibliography.

53. Lieutenant General James F. Hollingsworth, "The Light Division," Armed Forces Journal, (October 1983), 85. Also refer to the articles by Colonel Brudvig, Mr. Besch, Mr. Lopez and Mr. Olson.

54. Major Edward E. E. Thurman, "The Light Infantry Division, An Operational Force." (Monograph, School of Advanced Military Studies, US Army Command and General Staff College, 3 June 1985), p. 35. Major Thurman advocates the elimination of selected headquarters from the light structure. "Specifically, the division artillery headquarters, the air defense battalion headquarters, and the engineer battalion headquarters . . ." (p. 39)

55. DR. Michael J. King, Rangers: Selected Combat Operations in World War II, Leavenworth Paper # 11. (FT Leavenworth, KS: Combat Studies Institute, June 1985), pp. 43-53. This example is not intended to imply only Rangers can execute this type of mission. Any well trained infantry unit has this capability.

56. English, p. 289.

57. King. p. 40.

58. U.S. Department of the Army, Army Forces Training, AR 350-41 (Washington, D.C.: US Government Printing Office, 1986), p. 3.

59. U.S. Department of the Army, Training, Field Manual 25-1 (Washington, D.C.: US Government Printing Office, 1985), p. 9.

60. U.S. Department of the Army, Low Intensity Conflict, Field Circular 100-20 (US Army Combined Arms Center, Fort Leavenworth, KS, 1985), p. V.

61. Harvey, p. 3.

62. Harvey, p. 1.

63. Harvey, p. B1.

64. A quick review of the titles of the articles and papers in the enclosed bibliography will provide ample evidence of the trend to analyze the employment of light forces in the mid-high intensity spectrum.

65. Major Godwin, "Discrepancy in Light Infantry Missions and CSA Directives." in the Infantry Conference Booklet, Fort Benning, Ga., 1987.

66. Harvey, p. 2.

67. Gardner, p. 1.

68. Damon and Krisler, p. 94.

69. Major Glenn M. Harned, "The Principles of Tactical Organization and Their Impact on Force Design in the US Army." (Monograph, School of Advanced Military Studies, US Army Command and General Staff College, 2 December 1985), p. 1.

70. Benjamin F. Schemmer, "Army Losses 17th Active Division Sought for Need Rapid Reaction Force," Armed Forces Journal, 117 (January 1980), 14.

71. Deborah M. Kyle, "Army Lags Behind Other Services in Past Six Defense Authorization Bills," Armed Forces Journal, 121 (September 1983), 9.

72. Richard Halloran, "Congress Urged in Study to Add 5 More Divisions and 3 Carriers," New York Times, 23 January 1981, p. 15:5.

73. U.S. Congress, Department of Defense Appropriation Act, 1982, P.L. 97-114, 97th Cong., 1st Sess., 1981, p. 95 STAT. 1593.

74. Benjamin F. Schemmer and LuAnne K. Levens, "Interview with General E. C. Meyer," Armed Forces Journal, 117 (March 1980), 46. Hereafter cited as Schemmer.

75. Schemmer, p. 46.

76. Schemmer, p. 46.

77. Lyle, p. 9. Since FY 79 ". . . the Army got cut 83% of the time, the Navy roughly 50% of the time and the Air Force only 33% of the time."

78. P.L. 98-94, p. 1085.

79. George C. Wilson, "Reallocation: Pentagon Studies Shifting $10 Billion from Navy to Army," Washington Post, 9 August 1983, pp. A1b & A7a.

80. Wilson, p. A7a.

81. Wilson, p. A7a.

82. Wilson. p. A7a.

83. Hassell, p. 1 & 1-3.

84. Major Raymond D. Barrett, "Coherence between AirLand Battle and Contemporary Force Structure at Corps, Division and Brigade Level." (Thesis, US Army Command and General Staff College, 1985), p. 47.

85. Hassell, p. 1-3.

86. Jim Tice, "Army of Excellence Conversion Just Weeks Away," Army Times, 14 September 1987, p. 3.

87. "Reagan Approves Army Plan for a Light Division," Washington Post, 20 January 1984, p. A10a.

88. Kaufman, p. 21.

89. Carl Von Clausewitz, On War. ed. Howard, Michael and Peter Paret, (Princeton University Press: Pa., 1984), p. 102. As Vice Chief of Staff, General Wickham was the high-level proponent for the light infantry concept. He continued his support when he became Army Chief of Staff. (p. 96, JANES)

90. U.S. Department of the Army, Army Command and Management: Theory and Practice, 1986-1987 (Carlisle Barracks, Pa.: US Army War College, 19 August 1986), p. 11-1.

91. General Frederick J. Kroesen, "The Ultimate Weapon in War," RUSI Journal, (December 1980), 64. "The light infantry soldier is the most powerful combat weapon on the modern battlefield." By focusing on the offensive spirit, stealth, surprise and shock the light infantryman will overcome his inherent disadvantage of being light. "He is unique; not in what he does, but how he does it." FC 7-13, p. 1.

92. "Although the heavy division is clearly the dominant formation for high-intensity continental warfare there is significant scope for complementary light-infantry forces ...", (p. 20, Luttwak, Volume 2) The 1987 Infantry Conference Booklet discuss' the use of light forces predominately in the mid-high intensity spectrum. Also refer to the monographs in the bibliography.

93. Edwin W. Besch, "Are Our Light Divisions Too Light?" Army, 35 (February 1985), 44. General DePuy, Major Drummond, Major Campbell, Major Thurman and Major Gardner would probably argue the light division should not be made heavier. That when employed in their preferred environment they are the "force of choice."

94. The tabulated information is from slides provided by CACDA, FT Leavenworth, KS, August 1987.

95. Meyer, p. 77.

96. David C. Isby, "The US Army's New Light Infantry Divisions," Jane's Military Review, ed. I.V. Hogg, London: Jane's Publishing Company Limited, 1986, p. 97.

97. Weinberger, p. 337. What is not portrayed in this tabulation is the issue of pilots. Since many airline pilots fly in the Reserve and the Guard there may be a "problem of generating enough pilots in wartime when both MAC and CRAF fully mobilize. There may not be enough pilots to go around." (p. 114, Bahnsen)

98. Weinberger, p. 337. What is not portrayed here is the fact that the "US commercial fleet has declined to the point that surge deployment requirements can no longer be met." (p. 114, Bahnsen) "Since 1946 the US merchant marine has dropped from more than 3,000 ships actively engaged in US ooceanborne foreign trade to only about 460 in mid-1987." Scott C. Truver, "Sealift Manning: Critical Period, Critical Choices," Armed Forces Journal, (July 1987), p. 34.

99. Gardner, pp. 37 & 38. An excellent discussion on light infantry is given by Major McMichael in his article, "Proverbs of the Light Infantry," Military Review, September 1985.

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