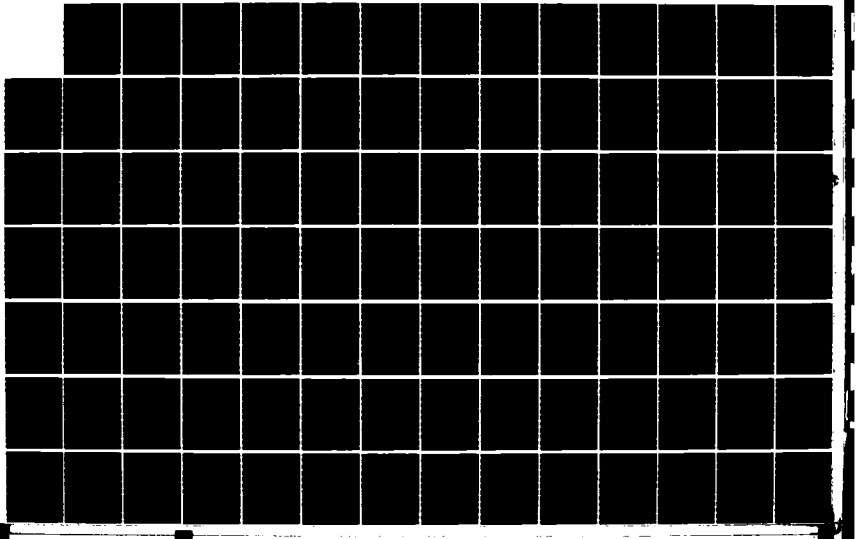
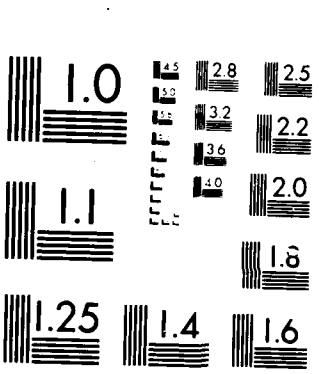
AD-A164 741 WINNING TEAMS: MOBILIZATION -- RELATED CORRELATES OF SUCCESS IN AMERICAN.. (U) ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS J S BROWN 10 MAY 85 1/3

UNCLASSIFIED F/G 15/5 NL





MICROCOPY RESOLUTION TEST CHART

(2)

WINNING TEAMS. MOBILIZATION-RELATED CORRELATES OF SUCCESS IN AMERICAN WORLD WAR II INFANTRY DIVISIONS

A thesis presented to the Faculty of the U. S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE

by

JOHN S. BROWN, MAJ, USA
B. S., United States Military Academy, 1971
M. A., Indiana University, 1977
Ph. D., Indiana University, 1983

Fort Leavenworth, Kansas
1985

Approved for public release; distribution unlimited.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER	2. GOVT ACCESSION NO. AD-A164741 / 3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) WINNING TEAMS: MOBILIZATION -- RELATED CORRELATES OF SUCCESS IN AMERICAN WORLD WAR II INFANTRY DIVISIONS	5. TYPE OF REPORT & PERIOD COVERED Master's Thesis
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Major John Sloan Brown	8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Command and General Staff College ATTN: ATZL - SWD - GD Fort Leavenworth, Kansas, 66027-6900	12. REPORT DATE 10 May, 1985
	13. NUMBER OF PAGE 195
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	15. SECURITY CLASS. (of this report)
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution is unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Mobilization	Reconstitution	Infantry Divisions
Retraining	First Battles	Rehabilitation
Combat Performance	Personnel Stability	

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

See Reverse

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

ABSTRACT

Winning Teams: Mobilization-Related Correlates of Success in American World War II Infantry Divisions identifies characteristics successful American infantry divisions had in common during World War II and the extent to which those characteristics were unique. The study discusses stateside training, overseas deployment and first major battle, and sustaining effectiveness for prolonged periods. Winning Teams addresses the full range of personnel, operational, training and logistical issues, yet finds personnel stability, retraining overseas, preliminary combat prior to major combat, the resemblance of combat to training, and an episodic pace of combat the most significant factors distinguishing successful infantry divisions from those that fared less well.

WINNING TEAMS: MOBILIZATION-RELATED CORRELATES OF SUCCESS IN AMERICAN WORLD WAR II INFANTRY DIVISIONS

A thesis presented to the Faculty of the
U. S. Army Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

JOHN S. BROWN, MAJ, USA
B. S., United States Military Academy, 1971
M. A., Indiana University, 1977
Ph.D., Indiana University, 1983

Fort Leavenworth, Kansas
1985

Approved for public release; distribution unlimited.

MASTERS OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of candidate: Major John Sloan Brown

Title of Thesis: Winning Teams - - Correlates of Success in American World War II Infantry Divisions

Approved by:

Dr. Larry A. Yates, Thesis Committee Chairman

Ltc. Michael T. Chase, Member, Graduate Faculty

Dr, John W. Partin, Member, Consulting Faculty

Accepted this 7th day of June 1985 by:

Philip J. Brookes, Ph.D., Director, Graduate Degree Programs

The opinions and conclusions expressed herin are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

WINNING TEAMS: MOBILIZATION-RELATED CORRELATES OF SUCCESS IN AMERICAN WORLD WAR II INFANTRY DIVISIONS by Major John Sloan Brown, USA, 195 pages.

Winning Teams identifies characteristics successful American infantry divisions had in common during World War II and the extent to which those characteristics were unique. The study discusses stateside training, overseas deployment and first major battle, and sustaining effectiveness for prolonged periods. Winning Teams addresses the full range of personnel, operational, training and logistical issues, yet finds personnel stability, retraining overseas, preliminary combat prior to major combat, the resemblance of combat to training, and an episodic pace of combat the most significant factors distinguishing successful infantry divisions from those that fared less well.

ACKNOWLEDGEMENTS

Throughout this project I have enjoyed the thoughtful and comprehensive editorial comments of Dr. John Partin, Dr. Larry Yates, and Lieutenant Colonel Michael Chase, an outstanding committee from Fort Leavenworth's Combat Studies Institute. To their invaluable mentorship I would add helpful comments from many of their colleagues in the Combat Studies Institute, in particular the chairman of the editorial board, Lieutenant Colonel Gary Bounds. A number of my classmates in the Command and General Staff College have added their critiques to the development of the project; Major John Bond and Major Gregg Morton were particularly helpful and attentive. Beyond the circle of scholars directly involved in this project, I would like to also recognize the doctoral dissertation committee that led me to write Draftee Division, the study that suggested many of the ideas in this follow-on work. These distinguished and patient scholars are Professors John E. Wilz, David M. Pletcher, George Juergens, and John P. Lovell, all of Indiana University.

I would like to thank my wife Mary Beth, daughter Amy, and son Todd for their indulgence while I labored through this project. They took up my slack in many ways and patiently endured those occasions when I was not the companion I might otherwise have been. Another cheerful in adversity has been Darla Rutledge, my typist. Without her this study could not have appeared.

During the course of my research the library staff of the Combined Arms Research Library at Fort Leavenworth has been most helpful. They are all true professionals and have been extraordinarily dedicated in their help and assistance. In my bibliographical essay I cite the full array of my sources, but think I would be remiss if I did not mention here some personal correspondents that have proven particularly valuable: Colonel Dixie Beggs, Major Harvey R. Cook, Colonel Robert J. Karrer, Brigadier General John J. King, Major General John M. Lentz, Mr. William N. Partin, Dr. Paul Richmond, Colonel Peter L. Topic, and Mr. C. Doc Waters. Finally, I would like to recognize my father, Colonel Horace M. Brown, a superb partner in this and much else. With his extraordinary personal knowledge of the officers of his and earlier generations he is that most invaluable of historical assets, a source of sources.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF CHARTS

CHAPTER I

INTRODUCTION AND HISTORICAL CONTEXT

The time was 0530 hours 16 December 1944. The Ardennes forest reverberated with the thunder of massed German guns and rocket artillery. Within hours, tanks and grey-clad infantry emerged from the mists to assail American defenders thinly strung along the length of a forty-mile front. Nazi planners had done their work well; in several places attacking infantrymen infiltrated deeply before coming under fire, and GI's found themselves attacked from several sides at close range before they fully realized what was afoot. For most of its length the string of outposts loosely characterized as the American "line" was manned by two green draftee divisions. Their first real taste of battle would be uncommonly harsh. Each stood directly in the path of a panzer army in Hitler's last bid to end his war on tolerable terms.[1]

The Fifth Panzer Army soon had something to celebrate. With little more than a reinforced Volksgrenadier Division it punched through the American line in two places and neatly trapped most of the 106th Infantry Division. The 106th's resistance, never timely nor telling, collapsed in the course of ill-coordinated efforts to extricate surrounded units. On the 19th of December, two regiments of the 106th and their attached troops marched off to Prisoner of War cages. Perhaps worse, the Fifth Panzer

Army stood poised to exploit the gap it had made with the full weight of four panzer divisions.[2]

Fortunately for the Allies, the Sixth Panzer Army fared less well than the Fifth. Surprised initially, the battalions of the 99th Infantry Division fought back fiercely, first from one position, then from another. Spirited counterattacks swept German infiltrators out of rear areas, forcing the Nazis to resort to costly frontal assaults. Unit by unit, the Sixth Panzer Army became totally involved in indecisive efforts to shove the 99th back. Ultimately, the American division engaged elements of one paratroop, two panzer, and three infantry divisions. Each new wave of Germans left a residue of grey-clad corpses in front of hotly contested positions. Even when surrounded, the draftees extricated themselves -- sometimes as units, sometimes by twos and threes -- and generally brought out their heavy weapons with them. By 19 December, two regiments had collapsed back into the relative security of hastily redeployed reinforcing divisions, and the third, after repeated attacks, still clung to its original position. In three days of savage fighting, the soldiers of the 99th earned four distinguished unit citations, two medals of honor, three distinguished service crosses, and the grudgingly conceded respect of their Nazi opponents. Perhaps even more important, the Sixth Panzer Army -- the German main effort -- had not achieved the breakthrough it

sought. It deflected southwards into the now perilously narrow corridor opening in the Fifth Panzer Army sector.[3]

Why did the 99th Infantry Division fare so well and the 106th so poorly? To ask a larger question, why did some World War II divisions emerge as winning teams and others as losers? Neither the 99th nor the 106th were born in the Ardennes, both were the products of a lengthy mobilization -- as were all of our World War II divisions. Even divisions that had existed before the war were, in essence, rebuilt after 1940.[4] There is nothing new or mysterious in the basic principles of unit mobilization. For over two thousand years, as far back as one can interpret doctrine with any confidence, professional soldiers have recognized the significance of cadre selection, recruitment, organization, logistical support, training, deployment, and commitment to combat when raising new units.[5] They have also recognized the hazards of carelessly conducting any step. The architects of America's World War II divisional mobilization consciously examined the historical record and designed a program unprecedented in its sophistication.[6] Yet, for all the planner's thoroughness, divisions differed markedly in their mobilization-related experiences. The purpose of this paper is to examine the mobilization-related experiences of selected World War II divisions and to suggest why some were winning teams and others were not.

Given an intent to identify mobilization-related correlates of success and failure, one faces a major conceptual problem. World War II divisions experienced three distinct phases when developing their reputations, and the standards whereby they were judged varied in each. First, units trained in the United States to the point of being declared deployable by Army Ground Forces, the World War II agency responsible for activating and training ground combat units. Deployable status was coveted recognition for having achieved specified standards on unit proficiency tests.[7] Since these standards were the same for all infantry divisions, the best measurable indicators of success were the speed and efficiency with which units achieved them. Once declared deployable, a division entered a second phase of development that continued through its first major battle. During this phase the division packed up, shipped overseas, deployed, and committed to combat.[8] No one considered a division veteran until it had participated in a major battle -- significant casualties, significant risks, most or all subordinate units engaged -- so it retained something of an apprentice status until it actually fought a "big one." Finally, divisions that had fought a major battle continued from that point through the rest of the war with engagements great and small, interspersed with periods of rest, rehabilitation, retraining, or strategic redeployment. Each of these three

phases in the divisional experience -- stateside training, deployment and commitment, and long-term operations -- were different enough to merit different approaches and separate discussion.

Chapter II focuses on the stateside training of the World War II infantry divisions. In particular, it addresses the apparent tardiness of the United States in having divisions prepared for combat, and the fact that some units prepared much more quickly than others. As an organizing principle, Chapter II draws upon Army Ground Forces' own criticism of its unit mobilization and training program.[9] An analysis of this self-critique permits, as we shall see, the discussion of a full range of mobilization-related headings: training, logistical support, organization, cadre selection, and manning.

Chapter III carries the search for correlates of success through deployment, commitment to combat, and first major battles. In effect each unit started this phase with a clean slate, since all were alleged to have achieved a common standard upon being declared deployable.[10] Whatever the expectation of standardization, some divisions performed well in their first battles and others did not. Chapter III selects ten divisions that did well and ten that fared poorly in first battles, then compares the mobilization-related experiences of the two groups. Its discussion addresses such factors as pre-embarkation

personnel stability, time in transit, logistical support, retraining overseas, preliminary combat prior to major combat, and the extent to which organization and training suited the peculiar circumstances of divisional first combats.

Chapter IV carries six divisions from Chapter III -- three that did well and three that fared poorly in first major battles -- from the conclusion of their first major battles through the end of the war. Chapter IV assumes that mobilization is a continuing process and that units fighting overseas must refurbish cadres, absorb replacements, reorganize, rehabilitate, retrain, re-equip, redeploy, and sustain themselves logistically.[11] What are the working mechanics involved in doing all those things well over the long haul?

Taken as a whole, Chapters II, III, and IV should provide useful insights. Divisions that moved quickly through the Army Ground Forces training program differed in important respects from those that did not.[12] Divisions that did well in their first major battles had mobilization-related experiences that distinguished them from those that fared poorly.[13] Divisions that sustained excellence over the long haul shared common approaches in pursuing that achievement.[14] This paper analyses successful World War II infantry divisions and the factors that made them unique, and thus is a study of winning teams.

ENDNOTES

1. Hugh M. Cole, The Ardennes: Battle of the Bulge (Washington, D. C.; Office of the Chief of Military History, Department of the Army, 1965), 1-172.

2. Ibid., 132-172.

3. Ibid., 75-119. See also the appropriate entries in The Medal of Honor of the United States Army (Washington, D. C.; Government Printing Office, 1984).

4. Kent Roberts Greenfield and Robert R. Palmer, The Organization of Ground Combat Troops (Washington, D. C.; Department of the Army Historical Division, 1947), 32-55, 128-142; Robert R. Palmer, Bell I. Wiley, and William R. Keast, The Procurement and Training of Ground Combat Troops (Washington, D. C.; Department of the Army Historical Division, 1948), 429-494.

5. See, for examples, Note 4, above; and Xenophon's Hellenica in Xenophon: Hellenica, Anabases, Apology, and Symposium, translated by C. L. Brounson and O. J. Todd (Cambridge, Massachusetts; Harvard University Press, 1956); Michael Grant, The Army of the Caesars (New York, Clark Scribner's Sons, 1974), 55-102; Tacitus, Annals I xvii-xxxv, in Tacitus: Histories and Annals, translated by C. H. Moore and J. Jackson (Cambridge, Massachusetts; Harvard University Press, 1968); C. Warren Hollister, Anglo-Saxon Military Institutions on the Eve of the Norman Conquest (Oxford; Clarendon Press, 1962), 25-58; Flavius Vegetius Renatus, The Military Instutition of the Romans, translated by John Clark (Harrisburg, Pennsylvania; Military Publishing Company, 1944), 1-33; Richard D. McCreight, The Mongol Warrior Epic: Masters of Thirteenth Century Maneuver Warfare (Fort Leavenworth, Kansas, Unpublished Thesis for the degree Master of Military Art and Science, 1983), 29-58; and Richard H. Kohn, The Eagle and Sword: The Federalists and the Creation of a Military Establishment in America, 1783-1802 (New York, The Free Press, 1975).

6. Collectively, the Army's World War II mobilization planners were products of an educational system that emphasized military history. See Historical Illustrations and References (Fort Leavenworth, Kansas; The Command and General Staff College, 1944); Instruction Circular Number 1, 1923-1945 (Fort Leavenworth, Kansas; The Command and General Staff College, 1946); and appropriate entries in Webster's

American Military Biographies (Springfield, Massachusetts; G. and C. Merriam Company, 1978). If one picked a handful of names to associate with the unit mobilization plans the United States took to war, one might well cite John McAuley Palmer, Douglas MacArthur, Malin Craig, George C. Marshall, Leslie J. McNair, and John M. Lentz. John McAuley Palmer was a historian. His General Von Steuben (New Haven, Yale University Press, 1937) not only is a case study of a successful mobilizer, it also ranges so widely as to have a chapter named "Belisarius", a reference to a sixth century Byzantine leader. Douglas MacArthur's sense of history, and of his place in it, is almost legendary. It certainly comes through in his Reminiscences (New York; McGraw-Hill, 1964). In his younger years Malin Craig edited an historical effort Organization and Tactics (Kansas City, Missouri; F. Hudson Publishers, 1906). This survey came to be recommended reading for officers subject to examination for promotion. The Papers of George Catlett Marshall (Baltimore; John Hopkins University Press, 1981), edited by Larry I. Bland, are heavily laced with historical references, in particular with references to the World War I experience. E. J. Kahn's McNair: Educator of an Army (Washington; The Infantry Journal, 1945) sees a strong sense of history in Leslie J. McNair. Major General John M. Lentz (then the training officer of Army Ground Forces) revealed his consciousness of historical precedents in letters to the author in response to the author's inquiries, September 18 and September 30, 1977. Indeed, it is fair to say these men were all historians in the broad sense of that term.

7. Army Ground Forces Endorsement (Subject: Mobilization Training Programs) to G-3, War Department, October 30, 1942, National Archives (461); Army Ground Forces Letter (Subject: Training Directive Effective November 1, 1942) to Commanding Generals, October 19, 1942, National Archives, MMRB (320.2); Bell I. Wiley, "The Building and Training of Infantry Divisions," in The Army Ground Forces, the Procurement and Training of Ground Combat Troops (Washington; Historical Division of the Army, 1948).

8. For an example of the overseas movement process, see John Sloan Brown, Draftee Division: A Study of the 88th Infantry, First All Selective Service Division Into Combat in World War II (Ann Arbor, Michigan; University Microfilms International, 1983), 148-183.

9. Wiley, 463.

10. See Note 7, above.

11. Lieutenant Colonel Marvin A. Kriedberg and First Lieutenant Merton G. Henry, History of Military Mobilization in the United States Army, 1775-1945 (Washington, D. C.; Department of the Army Pamphlet 20-212, 1955); R. Elberton Smith, The Army and Economic Mobilization (Washington, D. C., Office of the Chief of Military History, Department of the Army, 1959); Robert W. Coakley and Richard M. Leighton, Global Logistics and Strategy, 1943-1945 (Washington, D. C., Office of the Chief of Military History, United States Army, 1968); and Richard M. Leighton and Robert W. Coakley, Global Logistics and Strategy, 1940-1943 (Washington, D. C.; Office of the Chief of Military History, Department of the Army, 1955).

12. See Chapter II.

13. See Chapter III.

14. See Chapter IV.

CHAPTER II

FROM ACTIVATION TO EMBARKATION: THE SOURCES OF DELAY

From 1942 until the end of World War II in Europe, the most important strategic consideration facing the western Allies was the rate at which American divisions became available for combat.[1] Successive American plans for an early re-entry into France fell by the wayside for lack of means, and the artful British maneuvered what resources there were into less decisive theaters.[2] OVERLORD, the Allied invasion of France, was finally launched on June 6, 1944, two and one-half years after the United States entered the war. Modern warfare is complex and demanding, but an analyst of American mobilization cannot escape an impression of tardiness, nevertheless. The United States seems to have taken too long to deploy adequate numbers of combat divisions overseas.

On December 20, 1941, Lieutenant General Lesley J. McNair, then Chief of Staff of General Headquarters and, later, after March 1942, the Commander of Army Ground Forces, identified 17 divisions as combat ready and 17 others to be ready by April 1, 1942.[3] Divisions activated after Pearl Harbor -- the "new" divisions -- were to supplement these "old" divisions after a 52-week training cycle.[4] Contrary to its expectations, the United States Army did not have 34 divisions overseas or en route until

March 1944,[5] and, between activation and embarkation the new divisions averaged 21 months, not 12.[6] Table 1 compares the actual and "ideal" numbers of divisions that should have been overseas or en route overseas by given months. It allows each division the wartime average of four months between attaining combat readiness and actual embarkation. This time was generally given over to administrative requirements, preparations for overseas movement, and travel time.[7] Thus, "ideal" would have been four months after Pearl Harbor for pre-1941 divisions, 16 months after activation for 1941 and 1942 divisions, and 14 months after activation for 1943 divisions. In 1943 the War Department shortened the training of newly activated divisions from twelve to ten months.[8]

One may speculate concerning the ultimate historical result if the Western Allies had been capable of OVERLORD in 1943, if they had had twenty-four more divisions overseas in the summer of 1944, or if they had had sixteen extra divisions prior to the Battle of the Ardennes. Why did it take the United States so long to deploy divisions overseas? One traditional, and convenient, explanation has been the "shipping bottleneck." Limitations with respect to sealift do explain a fraction of the delay, but only a fraction.[9] The rude fact is that by and large American divisions were not ready to embark within reasonable periods of time. Army Ground Forces, from March 2, 1942 the headquarters

TABLE 1

DIVISIONS OVERSEAS OR EN ROUTE

	IDEAL	ACTUAL
JUNE 1942	27	8
JANUARY 1943	34	15
JUNE 1943	38	20
JANUARY 1944	63	32
JUNE 1944	73	49
JANUARY 1945	90	74

reponsible for raising and training divisions, recognized this unpleasant truth and suggested several explanations: deficiencies in its own supervision, shortages of equipment, administrative burdens posed by non-divisional units, scarcity and inexperience of officers, irregularities in cadre selection, and "fluctuation and depletions" of enlisted personnel.[10] These problems fit neatly under such mobilization-related headings as training, logistical support, organization, cadre selection, and manning. It should prove instructive to examine the collective experience of the World War II infantry divisions with respect to the explanations for delay suggested by Army Ground Forces, then to assess the relative consequences of each upon divisional mobilization.

1.

The leadership of Army Ground Forces magnanimously faulted itself for certain "initial" deficiencies in supervision. Except insofar as it could have influenced personnel turbulence, the supervision afforded by Army Ground Forces seems more deserving of praise than condemnation. Certainly divisions never lacked for guidance from or inspections by Army Ground Forces and intervening headquarters. A search through files, records, and unit histories for deficiencies with respect to supervision for the most part surface matters of detail, or wrangles

concerning whose prerogative it was to appoint whom.[11] The most significant supervisory mission of Army Ground Forces was to define the tasks divisions were to train towards, the conditions under which they were to train, and the standards they were to measure their training against.[12] In this, Army Ground Forces succeeded. Divisions in the United States knew the training status Army Ground Forces expected of them, and the steps they were to take in achieving that level of preparedness.

American commanders made imaginative and unprecedented use of the latest technology to run their training programs.[13] Airplanes criss-crossed the country carrying commanders, staff officers, and inspection teams from one training camp to another. Tables of Organization featured liaison planes down to the division level, and command vehicles were an ever present means to whisk visitors from airfields to training sites.[14] A new division could reasonably expect visits by its corps commander, army commander and service command commander monthly, as well as by the Commanding General of Army Ground Forces quarterly. This is not to mention an even more frequent presence of senior staff officers. Sophisticated inspection teams became routine. Army Ground Forces visits typically required two large planes. One planeload of senior officers gathered general impressions and attended ceremonies while a second planeload of more junior personnel meticulously

analyzed the working details of a division's activities. No lack of supervision there.[15]

Commanders and senior staff did not have to be physically present in a division to influence its training. Communications included telephones and radios at every level of command.[16] Officers in geographically dispersed training cantonments readily exchanged information, and the time necessary to transmit training guidance from one headquarters to another was negligible. Telephone conferences, in which officers at a number of different locations participated simultaneously, often replaced the tedium of gathering officers in the same place for a command and staff meeting.[17] The details of decisions, plans, and training programs communicated themselves through the company level in a variety of guises. Training films, in effect an innovation during World War II, provided uniform instruction at a time when qualified instructors were hard to come by.[18] Training publications were even more pervasive. During World War II titles of field manuals and similar publications tripled, and the total of pages in print dwarfed prewar inventories by several orders of magnitude.[19] Indeed, the wartime complaint was more often that there was too much training guidance, not too little. This was particularly true when several different echelons of headquarters each felt obligated to produce their own publications on a given subject.[20]

Commanders may occasionally have thought themselves overwhelmed by the volume of the guidance they received. For the division commander there was one document that took precedence above all others, however. The Army Ground Forces training directive applicable to his division detailed the training program it was to undergo -- and the criteria whereby "success" would be judged.[21] This directive broke training into three phases -- individual training, unit training, and combined arms training -- and specified the events associated with each. Fold out charts defined a week-by-week routine for component units, to include the hours of instruction and appropriate references for individual subjects or events.

One particularly significant feature of the Army Ground Forces program was a week of standardized proficiency tests following each major block of instruction.[22] Basic and individual training concluded with tests administered by a division's corps and army headquarters. At the conclusion of unit training, the division administered a platoon combat firing test, the corps administered a physical training test, and the army administered artillery battery and battalion firing tests. Combined arms training concluded with corps and army administered battalion field exercises and combat firing tests. When a division completed its combined arms training, it normally gave over as many as eight weeks to preparations for and participation in major

maneuvers. Army Ground Forces observed major maneuvers. McNair ultimately identified divisions as "deployable" after they demonstrated satisfactory performance in maneuvers and on proficiency tests. This elaborate hierarchy of tests and training inspections guaranteed common standards. It would have been impossible had Army Ground Forces not made imaginative use of the transportation and communications assets newly available in World War II.

Inspection teams were not the only personnel flying or driving extended distances for training purposes. Students travelled to and from special training programs at Army schools or other installations.[23] Officer cadres for new divisions scattered to branch schools or to Fort Leavenworth for a month of pre-activation instruction concerning the positions they actually were preparing to fill.[24] After activation, specialists from the division travelled to and from Army schools for individual training.[25] This specialist training developed skills beyond the normal expertise of a division's cadre, such as certain ordnance functions. It also quickly disseminated knowledge of new equipment and doctrine (crash courses in anti-tank warfare would be an example).[26] This use of the Army school system for pre-activation and specialist training furthered the standardization of training overall.

Taken as a whole, the Army Ground Forces program was well thought out and systematically applied. After January

1942, the substance of basic divisional training directives changed little. In November 1942, the time allowed for blocks of instruction stabilized as well.[27] Divisions were to make orderly progress along a training continuum from the time soldiers learned individual skills through exercises involving ever larger units and, finally, to sweeping maneuvers pitting several divisions against each other.

The detail and structure of the Army Ground Forces training program greatly increased the ability of a few experienced men to direct the training of a much larger mass. It is true that the program neglected some subjects that later haunted divisions in combat and that in its standardization it did not prepare units for unique environments. These are subjects best saved for another chapter, however.[28] Here it need only be said that Army Ground Forces effectively communicated what a division had to do in order to be declared "deployable."

It should be noted that not all divisions benefitted equally from the Army Ground Forces training directives. Army Ground Forces was the product of a major War Department reorganization in March 1942. It inherited the training schedules designed earlier by the G-3 Section of General Headquarters. By February 1942 these featured the general substance and pace Army Ground Forces was to perpetuate throughout the war.[29] Training plans prior to this time had not included preactivation training, specified periods for

each block of instruction, or clear distinctions between training focused on individual skills and training designed for units as a whole.[30] "Old" divisions of the Regular Army and National Guard had filled out and trained in peacetime. By 1942, they were supposed to be sustaining readiness through virtually continuous unit training -- during which individual training allegedly also occurred -- rather than training themselves from the basic level up. Indeed, divisional records from these old divisions during 1941 seem like an endless ramble from one field exercise to the next.[31] By the time of Pearl Harbor, an Army-wide system of Replacement Training Centers was far enough along that recruits received basic and individual training in them before being assigned to an old division.[32] After Pearl Harbor, Replacement Training Centers accommodated old divisions only, and the new divisions trained enlisted components "from the ground up."[33] All this having been said, however, relatively few infantry divisions escaped a year or more of supervision by Army Ground Forces. Of the 27 infantry divisions activated prior to Pearl Harbor, only twelve embarked prior to March 1943.[34] The remainder, for reasons to be discussed, retrained under Army Ground Forces auspices through much or most of its standardized program.

If Army Ground Forces supervision had handicapped the preparation of divisions for deployment, one might expect differences in the rate of deployment among those divisions

that spent all, some, or none of their first (training) year under Army Ground Forces supervision. Assume that infantry divisions should have been prepared to embark within four months of Pearl Harbor or 16 months of activation, whichever came last. Then refer to Table 2 and compare the "tardiness" of the several generations of divisions.

Army Ground Forces supervision seems to have represented improvement over what had existed before. Certainly it increased the rate at which units achieved combat readiness.[35] One may find flaws with respect to details of the Army Ground Forces' training program. If one is to identify major causes for America's delay deploying divisions overseas, however, one must seek reasons elsewhere.

2.

In citing shortages of equipment and "administrative burdens posed by non-divisional units" as factors delaying the deployment of divisions, Army Ground Forces raised the spectre feared most by prewar mobilization planners -- inadequate logistics.[36] Americans have a poor record of preparing for war while still at peace. Prior to 1939 Army planners assumed their initial materiel means would be slender at best. Even if great masses of men were summarily levied, of what use would they be in modern warfare if poorly supplied and ill-equipped?

TABLE 2

NUMBER TARDY BY...

	0-6 Months	7-12 Months	13-18 Months	19 Months or More
Pre-1941 Divisions (17)	8	2	3	6
1941 Divisions (8)	4	1	3	0
1942 Divisions (26)	3	21	2	0
1943 Divisions (10)	9	1	0	0

Contrary to gloomy prewar expectations, the American army was reasonably well supplied throughout the war, despite its rapid growth from 269,023 in 1940 to 8,267,958 in 1945. No division was delayed in its training cycle or in its deployment overseas because of supply shortages per se.[37] Three classes of supply -- rations, clothing and personal equipment, and petroleum products -- never seem to have posed significant problems for divisions training in the United States. Some ammunition and Table of Organization equipment -- i.e., items neither expendable nor uniformly available for personal use such as vehicles, weapons, tools, auxiliary powered equipment, or communications equipment -- were in short supply for important periods. As we shall see, even these shortages did not much affect the training of units.

American logisticians benefitted from two years of quasi-mobilization prior to Pearl Harbor. Subsistence Branch, responsible for rationing the Army, smoothly expanded its capabilities. In this expansion it followed long standing plans that had already been exercised to support the Civilian Conservation Corps.[38] Within the United States, Subsistence Branch stockpiled against a forty-five day demand, so it was unlikely to fall short.[39] Rationing seems to have been, if anything, too lavish.[40]

Petroleum products were less efficiently handled, yet supplies were generally adequate.[41] Problems with respect

to distribution did prompt the War Department to establish the Fuel and Lubricants Division as an integrated commodity organization handling all aspects of Army petroleum use.[42] Fortunately, early problems with respect to fuel were more a matter of accounting and distribution than of supply. Two measures of the quasi-mobilization period prior to Pearl Harbor enabled commanders to muddle through. In 1941 the Army standardized all vehicle fuel in such a manner that it could be readily transferred between vehicles, units, dispensing systems, and branches without contamination.[43] The Army also adopted the five gallon "Jerry Can" during the same period.[44] This ubiquitous item offered a virtually unlimited means for shuffling fuel about.

Clothing and personal equipment changed greatly during the early war years, yet male troops training in the United States were seldom short these items, except for a few of the odd sizes.[45] Belated changes from the basic service shoe with leggings to the combat boot with overshoes, and from sleeping blankets to sleeping bags with ponchos did contribute to cold weather injuries overseas.[46] Units training in the United States, for the most part in the southern states, did not suffer similarly.

America's service as the "Arsenal of Democracy" after Dunkerque so expanded government-owned, contract-operated ammunition production that ammunition supply posed few problems for the mobilizing Army after Pearl Harbor.

Indeed, the Chief of Ordnances' Industrial Service claimed the Army had ammunition "running out its ears." He cut back small arms ammunition production in June 1941 and artillery ammunition production in August 1943.[47] Some special rounds, in particular anti-tank rounds, were not readily available for training. These shortages in training would later embarrass some units overseas, but they did not delay progress through the Army Ground Forces training program as it stood.[48]

Unlike rations, clothing and personal equipment, petroleum products and ammunition, Table of Organization equipment involved mobilizing divisions with real shortages. This equipment is more complex than the other classes of supply and requires more lead time for research and development, tooling, and production. Priorities established by the War Department favored units overseas, units embarking and lend-lease shipments to allies over units in training, so American divisions still in the United States were generally the last supplied.[49] Table 3 features selected items and provides some idea of the extent of the Table of Organization shortages.[50]

At first glance one might consider such shortages crippling to a division in training. In fact these shortages proved less troubling because the "percentages of allowance on hand" were computed relative to Tables of Organization rather than need. American Tables of

Organization were generally lavish, and certainly provided for more equipment than was essential to train a unit.[51] The Army Ground Forces divisional training program started at the individual level and built through increasingly larger units. Cadre could rotate such personnel as gun crews or switchboard operators through equipment during individual or small unit training. As the scale of training expanded, a division needed a larger percentage of its Table of Organization equipment on hand. Fortunately, the production of most Table of Organization items peaked in 1943.[52] New equipment dribbled into divisions while they were training, and most had what they needed as they needed it.

The 88th Infantry Division, activated in July 1942, was representative of the "new divisions" and demonstrated the pattern of receiving Tables of Organization equipment just before actually needing it for training.[53] The 88th began with enough rifles for all its riflemen, so they went through basic and individual training unimpaired. Artillerymen and mortarmen rotated on their equipment for the first several months, yet there were sufficient artillery pieces and mortars for everyone by the time battalions as a whole took to the field. The divisional truck fleet started with a fraction of its authorized vehicles on hand. For the first several months transportation requirements were modest as well. When the

TABLE 3

T/O EQUIPMENT ON HAND FOR NEW DIVISIONS
APRIL 1943

Item	Percentage of Allowance on Hand
Flame Thrower, M-1	15.4
Binoculars, M-3	52.2
Light Armored Car, M-8	6.8
Submachine Gun, cal .45	67.2
Howitzer, 105 mm	71.5
Mortar, 60 mm, M-2	54.9
Mortar, 81 mm, M-1	52.9
Rifles and Carbines, all types	46.7
Rifles, BAR	30.1
Truck, 2 1/2 Ton, 6 x 6	48.3
Radio Set, SCR-510	35.1
Switchboard, BD-71	48.2
Vehicle Medical Kit	100.0

division as a whole took to the field for major maneuvers it had its full Table of Organization and easily met radically increased transportation requirements. This pattern of having what was actually needed for training despite being short Table of Organization authorizations repeated itself with respect to one item after another. Soldiers in the 88th never had to simulate their own weapons, equipment, or vehicles.[54] The same should have been true of most of the 1942 and 1943 divisions.[55]

Divisions activated prior to Pearl Harbor were somewhat less fortunate. In 1940 equipment shortages did impede effective training and extensive simulation did occur.[56] The United States was not at war in 1940, however. The situation improved for the old divisions during 1941, and by the time of Pearl Harbor, they were for the most part reasonably equipped.[57] Equipment shortages did reduce the efficiency of the old divisions' training programs, but the pace of events gave them two years to accomplish what the new divisions hoped to do in one.

If shortages of Table of Organization equipment had had much effect on deployment rates, one would expect units with similar shortages to have been similarly delayed. This was not the case. Of the nineteen pre-1941 infantry divisions, eight embarked within six months of Pearl Harbor, yet three took twenty-five months or longer. Insofar as supply status during training was concerned, there seems to

have been no appreciable difference between the divisions that embarked early and those that embarked late.[58]

It should be noted that shortages with respect to certain Table of Organization items led to training deficiencies even if they did not delay the progress of a division through its training cycle. In a number of divisions, crews received "bazookas," 57 mm anti-tank guns, or latest vintage communications gear only when they were en route overseas.[59] Air and tank assets were generally not available to support the training of infantry divisions in the United States.[60] Although these ommissions did not delay the embarkation of infantry divisions, they did render some less then fully prepared for their first battles. That is the subject of another chapter, however.

"Administrative burdens posed by non-divisional units" involved some divisions in logistical and organizational complications of another sort. The pace of activations after Pearl Harbor was frenzied, so non-divisional units often ended up attached to divisions for administration, supervision, and logistical support.[61] A worst case seems to have been reached with the 6th Infantry Division, which once found itself responsible for its own organic assets and, additionally, an artillery brigade, two tank destroyer battalions, five quartermaster battalions, two engineer battalions, an engineer company, three ordnance companies, three headquarters detachments,

and a signal photo company detachment.[62] No doubt these units distracted the division staff from supervising subordinate organic units. Training in these subordinate units went on despite reduced supervision, however. There is no evidence that the extraordinary workload on the division staff significantly impaired the training activity of its units. Moreover, the burden of non-divisional units proved temporary. The Services of Supply, newly organized in March 1942, assumed responsibility for many non-divisional units.[63] In May 1942 Army Ground Forces organized headquarters and headquarters detachments, special troops, to supervise the remainder.[64] Thus, the burden of non-divisional units weighed on the division staffs of a relatively few units for a period of about four months. It certainly cannot explain much of the delay in pushing divisions through their training cycle.

Logistics were not a significant factor delaying the preparation of World War II infantry divisions. After Pearl Harbor divisions in the United States had the rations, clothing and personal equipment, petroleum products, and ammunition that they needed. Table of Organization equipment was often short, albeit sufficient for the needs of training. Divisions generally stood at their full Table of Organization before training schedules called for large-scale maneuvers. Non-divisional units imposed a brief, not particularly consequential, logistical and

administrative burden on some divisions. Insofar as logistics were concerned, World War II infantry divisions could have been prepared for embarkation in accordance with the schedule originally anticipated by the War Department.

3.

One-half the six factors cited by Army Ground Forces as delaying the preparation of infantry divisions involved personnel problems: scarcity and inexperience of officers, irregularities in cadre selection, and fluctuations in enlisted strength. The scarcity and inexperience of officers was one of the most obvious consequences of the Army's runaway expansion during 1942 and 1943. In 1940 the Army had about 14,000 professional officers on active duty. By the end of 1943 these professionals were outnumbered forty to one by officers drawn from civilian sources.[65] These erstwhile civilians included 19,000 from the National Guard; 180,000 from the Officers' Reserve Corps and Reserve Officers' Training Corps; 100,000 commissioned directly as doctors, dentists, chaplains, technicians, and administrators; and 300,000 graduates of officer candidate or aviation cadet schools.[66] Some 18,000 National Guard and 80,000 Reserve officers received a modicum of military experience in the limited mobilization preceding Pearl Harbor.[67] The rest were as new to the Army as the privates they were called upon to lead.

A new division's cadre consisted of 172 officers and 1,190 enlisted men.[68] A further complement of 624 officers, for the most part Officer's Candidate School (OCS) graduates, filled out the leadership positions of the division.[69] A typical infantry regiment seems to have been lead by a Regular Army commander with a Regular Army executive officer; an even mix of regular, reserve, and National Guard battalion commanders; and company commanders of whom almost two-thirds were Officer's Candidate School graduates and one-third National Guard, with a sprinkling of company-level reservists and West Pointers.[70] Staff officers reflected a composition comparable to that of commanders holding the same rank. Clearly the experienced were greatly outnumbered by the inexperienced. The success of the Army Ground Forces training program depended upon the effectiveness of a few professionals in making their presence felt.

War Department policies with respect to the Army General Classification Test did give the Army Service Forces and the Army Air Forces a larger selection of measurably intelligent inductees than the Army Ground Forces.[71] It was also true that, in the initial rush to produce Officer Candidate School graduates, a sizeable number of men unsuitable for commissions received them.[72] These shortcomings were less consequential then one might suppose, however. Army Ground Forces' Tables of Organization called

for a far smaller ratio of officer to enlisted than those of the Army Service Forces and Army Air Forces.[73] This is not to mention unresolved debates concerning whether or not ground combat officers needed less in the way of literacy and intellectual sophistication than officers in other branches.[74] The numbers of commissions given to officers who were unfit could have posed a serious problem. Fortunately, cutbacks from the 140 divisions originally planned to the 90 divisions finally mobilized left Army Ground Forces with a surplus of junior officers.[75] Indeed, of the 624 non-cadre officers, 172 were characterized as the division's "overstrength."[76] It proved relatively easy to fill all officer billets and to shuffle the unfit into jobs where they could do little damage. The majority of the new officers were bright, consumed with a sense of mission, and quick to learn. The Army of 1942 had the largest and most qualified slice of America's junior executive talent the Army had ever had. This phenomenon did not go unnoticed at the time.[77]

If the junior officers of the new divisions were likely to be apt pupils, the senior officers were extremely qualified as mentors. Promotions came slowly in the interwar Army, so officers between the wars acquired a breadth of experience in the lower ranks.[78] Virtually all saw troop duty for extended periods and attended the Army schools appropriate to their rank and branch. Most also

served as instructors in ROTC, the Military Academy, branch and service schools, or the Command and General Staff College. These tours as instructors proved invaluable preparation for mobilization. They provided the opportunity to reflect upon and truly absorb doctrinal principles -- it is almost tautological that teachers learn more from teaching than their students do from listening.[79] More important, the combination of troop duty and instructorship developed "cadre instincts." The ethos of command is to draw the best out of units. The ethos of teaching is to draw the best out of individuals. Veterans of the interwar Army were well prepared both to train their units as units and to develop their immediate subordinates through mentorship.[80] It takes a somewhat different array of skills to develop junior officers and cadets than it does to train units as a whole.

The savvy of senior officers in handling the newly commissioned manifested itself in several ways. The Officer's Candidate Schools, 13 weeks in length, left graduates with a general branch preparation and an apprentice status. Further instruction in the details of their actual jobs was essential. The cadre officers of a new division had about three weeks to work with the new officers before the enlisted troops arrived. This time was largely given over to a crash program of instruction. The divisional cadre knew how much junior officers could retain

at a sitting, so they did not give them too much before they made them apply it. After the enlisted filler arrived, a common formula in the new divisions was night courses, wherein junior officers received instruction they in turn passed on to their soldiers the following day.[81] This demonstrated yet another aspect of mentorship. No matter how inexperienced an officer was, his superiors expected him to supervise training personally.[82] This reinforced leadership and built confidence at the same time.

Cadre officers knew their juniors would grasp technical details more readily than they would master tactics or "leading men in the mass," so they stressed the technical first and addressed more complex subjects as training progressed.[83] This fit in nicely with Army Ground Forces divisional training programs, which called for such training as marksmanship, weapons maintenance, and gunnery early on, and combined arms exercises only after the division was several months into its training. In many cases, training material for the new officers had been lifted bodily from ROTC or service and branch schools. Indeed, a number of the divisional training files included lesson plans that originated in Texas A and M, Virginia Military Institute, or West Point.[84] Clearly, cadre officers borrowed directly upon their earlier experiences as instructors.

The most important benefits of experience were probably intangibles. Developing subordinates is a type of parenting in a way that leading units is not. All lieutenants will fall short at times; supervisors must decide who has the capabilities to redeem himself. A combination of inspiration, exhortation, advice, and example -- an art, not a science -- shepherds young men into the right jobs and teaches them to cope. Good cadre instincts with respect to junior officers is a valuable characteristic during mobilization. Few of World War II's successful officers were without their mentors -- or their proteges.[85]

Experience in the Army school system facilitated officer personnel management in yet another way. The interwar Army was small enough that the officers of a given rank within a branch or service generally knew each other. The branch and service schools, Command and General Staff College, and Army War College brought them together for important periods of time under the instruction of officers senior to them. Virtually every professional officer had a reputation within his branch or service. The most senior officers of an infantry division, thirteen including commanders and primary staff, invariably included an officer or two who had taught at the infantry school and usually one who had taught at the artillery school as well.[86] These senior officers influenced the selection and internal assignment of the remaining cadre officers. Former infantry

and artillery school faculty members contributed considerably to discussions concerning the organization of division cadre. Some divisions were systematic about this process, assigning school faculty veterans the specific mission of interviewing cadre nominees within their branch and making recommendations concerning their assignments.[87]

The process of cadre selection was of recurrent concern to General Headquarters and later to Army Ground Forces. "Irregularities in cadre selection" numbered among the factors Army Ground Forces cited as delaying the preparation of divisions. The selection of the most senior officers in a division was the product of a rigorous review of records -- and reputations -- involving George C. Marshall, the Chief of Staff of the Army, and Lesley J. McNair, the Commander of Army Ground Forces.[88] A further forty-six officers in each division were chosen by the branches and services from the Army at large.[89] The breadth of this canvas encouraged fairness, as did the fact that positions in question were career enhancing and aspirants assured their qualifications were known. One hundred thirteen cadre officers, generally in the lower field grades and senior company grades, came from a "parent" Army. In most cases an older division or staff nominated these men from its ranks. Here the greatest potential for irregularities emerged -- no commander wants to give up good men. Concern for the good of the Army as a whole weighed

against the desire to have the best possible unit. Too often a tasking to provide a cadre became the occasion for a "housecleaning," in which a division gave up its less highly reputed officers.[90]

In the first several months Marshall and McNair both worked vigorously to assure cadre quality.[91] They knew that the success of their mobilization program depended upon the quality of the cadremen -- a scarce resource in each of the new divisions. Stinging letters went out to commanders who had provided substandard cadremen, and more than a few careers were threatened.[92] Parent division commanders found it prudent not only to be fair in choosing cadremen, but also to assure that the appearance of fairness was beyond question. One favorite tactic was to direct subordinate commanders to submit two lists, an "A" list and a "B" list, nominating candidates for each of the cadre positions his unit was to fill. Generally these cadre lists were too large to stock both with duds. Commanders were best advised to balance the lists and make both respectable, since they did not know which list would be chosen. Someone, generally the division commander, arbitrarily chose one of the lists. This system, coupled with interviews conducted by the receiving command, did a reasonable job of spreading leadership talent throughout the Army.[93] It is true that the quality of intermediate rank officers -- not the quality of the "brass" or the quality of the "butterbars" -- was the

most persistent officer management wrangle during mobilization,[94] and that some divisions appeared to have cadres more qualified than others. The spread of officer talent across divisions was probably as equable as could have been hoped for, however; it certainly was more equable than that of any other army in World War II.[95]

It proved tougher to insure an equable spread of enlisted cadre talent. A new division required 1,190 such cadremen, the bulk of who came from a single parent division.[96] The numbers involved and the pace at which cadres formed rendered quality control difficult. Fortunately, more than two-thirds of the enlisted cadremen filled "housekeeping" logistical tasks designed to support the division until the training of organic units left it able to support itself. Such cadremen as cooks, mechanics, truck drivers, and clerks often had relatively little military experience themselves and generally lost their separate identity as the division matured.[97] If these men were inadequate a division faced temporary hardship, but could overcome it by drawing suitable replacements from the enlisted "filler," the great mass of recruits that filled out a new division's rank and file. Often replacement was not necessary. The division merely endured substandard cooks, truck drivers, and clerks for the several months of basic and individual training. The new divisions were fortunate in that the draftees of the enlisted filler

included large numbers of men qualified for the types of jobs the housekeeping cadre filled.[98]

Something less than 400 of the enlisted cadremen were to be non-commissioned officers of appreciable experience. These men could not readily be replaced from the filler, and there was no formal or informal system for gauging their qualifications Army wide. The use of "A" lists and "B" lists did something to insure equable distribution, as did a policy of interviews for key enlisted positions. The senior enlisted ranks were probably the least equably distributed by quality across the Army, however.[99] This led officers, even recent CCS graduates, to assume a larger role than they otherwise might have in many units. Company commanders exercised the authority to elevate or "bust" any enlisted man in their unit, to include the First Sergeant. This authority, used with discretion, gave them the flexibility to make the best use of the senior enlisted talent they did have on hand.[100]

All factors considered, the varying quality of cadres must have made a difference insofar as the training progress of divisions was concerned. War Department efforts to assure equable distributions of talent and compensating actions within divisions did much to reduce imbalances without ever eliminating them entirely. There is no reliable way to compare the cadre qualities of divisions, however. Complaints concerning the personal qualities of

peers or subordinates seldom became a matter of record, except in cases of relief. A few division commanders are on record as having considered their cadres inadequate, and these divisions did do poorly in progressing through their training cycles.[101] A few division commanders clearly were satisfied with their cadres, and these divisions did do well.[102] The status of the rest remains unclear and the overall effect of "irregularities in cadre selection" immeasurable. Perhaps it explains much of the delay not accounted for by a more tangible problem -- personnel turbulence.

4.

"Fluctuations and depletions" with respect to Army personnel in World War II were staggering. McNair himself remarked that out of an Army of eight million only six million counted because two million were somewhere en route between units.[103] Unfortunately, the mechanics of personnel turnover worked in such a manner that these six million were not stable in their positions either. For divisions in training, personnel turbulence was, unquestionably, the leading obstacle to the development of proficient combat organizations. The composition of all but a relative few divisions changed even as their commanders attempted to train them. In the absence of personnel stability, unit

training was as difficult as painting a mural on the side of a moving train.

For the most part, personnel turbulence within divisions training resulted from competing demands upon Army Ground Forces manpower. It is true that there were losses due to injury, disciplinary action, and disease, but the most crippling losses resulted from decisions to reassign men elsewhere. Inattention to the merits of maintaining embryonic fighting teams together was a chronic feature of the World War II personnel system. The competing demand, and thus the damage, came in great surges as the Army "stripped" selected divisions of partially trained personnel. The worst of these surges were those associated with Officer's Candidate School, from Pearl Harbor through November 1942;[104] those associated with preparations for the North African combat, during the autumn of 1942;[105] those associated with the Army Specialized Training Program, from May through October 1943;[106] and those associated with replacements for overseas combat losses, from September 1943 through September 1944.[107] Unlike such factors as logistical support, officer shortages, and officer inexperience, manpower stripping wore upon different divisions unevenly. Differences in the rate at which divisions were prepared to embark correlated directly to the amount of stripping they had undergone. Let us briefly examine the stripping surges, then evaluate the relative

luck of World War II Infantry Divisions in avoiding their consequences.

In the 18 months after Pearl Harbor the Army expanded from 1,462,315 to 6,994,472, and its officer complement from 99,536 to 579,576.[108] Most of the new officers -- 300,000 of them -- came from the enlisted ranks through Officer's Candidate Schools.[109] The War Department wanted its officer candidates to have demonstrated a modicum of potential, so it defined eligibility requirements as six months in service, a good record, and an Army General Classification Test score of 110 or higher. Soldiers who had been in the Army six months were usually already in units. Those with a mixture of intelligence and good character were often in junior supervisory positions within those units. A division giving up OCS candidates lost quality personnel it could ill afford to lose.[110]

Divisions that had been active for six months or more gave up OCS candidates through November 1942. In that month the War Department cut fourteen divisions from its mobilization plans.[111] Six months later it cut twelve more and settled on a total of ninety divisions.[112] Suddenly the Army had a junior officer surplus. This surplus increased when unnecessary anti-aircraft units yielded up yet another 10,000 officers.[113] Whereas commanders were relieved for failing to fill OCS quotas in 1942, by 1943 they were no longer under much pressure.[114] Divisions activated after

May 1942 never came under pressure to provide OCS candidates. By the time their soldiers had been in the Army six months, the pressing need for junior officers had passed.

The fall of 1942 may have brought commanders relief with respect to OCS quotas, but it brought some units even more damaging personnel turbulence instead. Throughout 1942 the United States pressed itself to make a showing against the German and Italians.[115] Frenetic preparations for TORCH, the debut against the European Axis, dominated the late summer and early fall. Calls for individual replacements from divisions already overseas, those preparing to embark, and units well along in their training dwarfed the capacity of Replacement Training Centers. Despite having observed the British experience, the War Department had not made adequate provisions for training individual replacements. Caught in a manpower crisis, the War Department gave to some and took away from others. Mass transfers brought the twelve infantry divisions that embarked during 1942 up to strength.[116] Other "old" divisions gave up the personnel that filled these selected divisions; new divisions remained untouched since their personnel were not yet far enough along in training to be of use. Old divisions remaining in the United States also provided cadres for new units. All of the old divisions not fortunate enough to have been selected for a 1942 deployment

suffered delays in preparation. Indeed, during the seven months from September 1942 to April 1943 not a single division embarked.[117] Six of eighteen National Guard divisions suffered extraordinary losses.[118] Five of these fell so far behind in their training that newly activated divisions beat them overseas.

From November 1942 until May 1943 the personnel situation within Army Ground Forces remained reasonably stable. Then divisions in training once again found themselves hamstrung, this time by one of the United States Army's most incomprehensible initiatives. The Army Special Training Program (ASTP) was a type of college deferment whereby "soldiers" went to civilian schools for a civilian education rather than to immediate military service.[119] In the event of an extended war, it was to ensure a steady flow of college trained men into the armed forces, especially men with technical or medical expertise. It also promised to foster a more favorable attitude towards the War Department in the academic community -- the principal immediate beneficiaries.[120] ASTP candidates were to have Army General Classification scores above 115, to have completed high school and basic training, and if over 21, to have completed a year of college as well.[121] Units on major maneuvers or already alerted for overseas movement were exempt from requirements to provide candidates.[122]

Division commanders had few favorable comments concerning the Army Special Training Program. The ASTP targeted on precisely the young men commanders needed most for logistical and supervisory positions. Quotas -- 3,096 for Army Ground Forces in May 1943, 5,079 in June, 12,626 in July, and a total of 150,000 men in ASTP by January 1944 -- were bad enough. The fact that candidates were the most intelligent soldiers made matters worse.[123] To commanders the "payoff" of ASTP, if it came at all, seemed vague and far away. The notion of courting academicians, arguably the most unstable of allies, was not much of a selling point either. Division commanders proved so dilatory in designating men for ASTP that General Marshall issued a stinging memorandum, insisting that they support the program.[124] Interestingly enough, Marshall ultimately reversed his opinion of ASTP and cut the program by eighty percent in February 1944.[125]

The Army Special Training Program did not touch units that were into the major maneuvers phase of their training cycle or alerted for overseas movement.[126] A number of divisions still in the United States, new and old, avoided its worst effects for this reason. The new divisions activated in July, August, and September 1942 were in a "window" of sorts. Their troops were too new to the Army for the OCS or North African strippings of 1942; yet, if their training progressed undelayed -- a comment on the

quality of their cadre -- they should have been into major maneuvers before the Army Special Training Program made itself felt. Of twenty-six infantry divisions activated in 1942, four embarked within twenty months of activation. All four activated in the narrow window between July and September 1942.[127]

Even as the weight of the Army Special Training Program shifted from divisions in training to raw inductees, another personnel stripping for individual replacements took its place. Beginning in September 1943, the severity of combat overseas led to demands that again exceeded the capacities of replacement training centers. From September 1943 until September 1944 a cycle of almost continuous stripping paralyzed divisions still in the United States.[128] One division suffered a cumulative loss of 22,235 enlisted men.[129] Another, the ill-starred 106th, underwent stripping fourteen separate times in twelve months.[130] Two divisions served directly as replacement training centers for a matter of months.[131] All told, twenty divisions training in the United States lost more than 120,000 men between September 1943 and September 1944.[132] In August 1944 replacement training center output finally exceeded 50,000 in a month, and the need to strip divisions for replacements passed.[133]

One might have thought that the personnel strippings from the fall of 1943 through the fall of 1944 would have delayed embarkation, as did similar personnel turbulence in

divisions activated earlier. Army Ground Forces, responding to desperate calls for more divisions overseas, rushed its newest divisions overseas unprepared. The relatively high standards of preparedness that characterized the departure of 1942 vintage divisions were abandoned. Of ten infantry divisions activated during 1943, nine embarked within twenty months of activation. Of these, only three had completed unit training with more than 90 percent of their personnel, only two completed combined arms training with over 90 percent of their personnel, and none participated in major maneuvers with over two-thirds of its personnel.[134] Army Ground Forces considered the last of its divisions to embark -- through no fault of its own -- the least prepared of all.[135]

Sources of personnel turbulence varied and were not altogether comparable in effect from one division to another. It is possible to develop a rough estimate of their consequences to training, however. General McNair recognized the erosive effects of pulling individuals away from units in which they had been trained. His response was to direct the retraining of entire divisions in accordance with formulae calculated to allow for unit training at a pace dictated by the individual proficiency of the new men who replaced losses and by the ability of a division to train at several levels simultaneously.[136] His calculations were the complex results of an analysis of divisional

training programs. His results are summarized in Table 4. In Table 4, "Percent" represents the percentage of men pulled out of a division on a given occasion; "Retraining if RTC" represents the number of weeks of further training required if their replacements had already received basic and individual training through replacement training centers; and "Retraining if Inductees" represents the number of weeks of retraining required if the replacements had had no training at all.

As it stands, Table 4 represents an ideal of sorts. It does not account for the fact that fillers for newly activated units and replacements for stripped units usually came in driblets rather than all at once. The notion of a firm start date for training or retraining was often fictional.[137] Percentages alone do not capture the quality of the personnel stripped out of a division. If Army General Classification Test Scores or rank were a basis for stripping, damage would be even more severe. Finally, calls for individuals to replace combat losses overseas drew disproportionately on riflemen.[138] Thus, an infantry division's rifle battalions might be far worse off after a stripping than the division as a whole. The actual damage of personnel turbulence to a unit in training might well be greater than McNair's figures would suggest.

Charts I through IV depict the major sources of personnel turbulence within each of the World War II

TABLE 4

RETRAINING REQUIRED BY DIVISIONS STRIPPED OF PERSONNEL

PERCENT	RETRAINING IF RTC (Number of Weeks)	RETRAINING IF INDUCTEES (Number of Weeks)
100	32	49
90	29	46
80	26	43
70	23	40
60	20	37
50	17	34
40	14	31
30	11	28
20	8	25

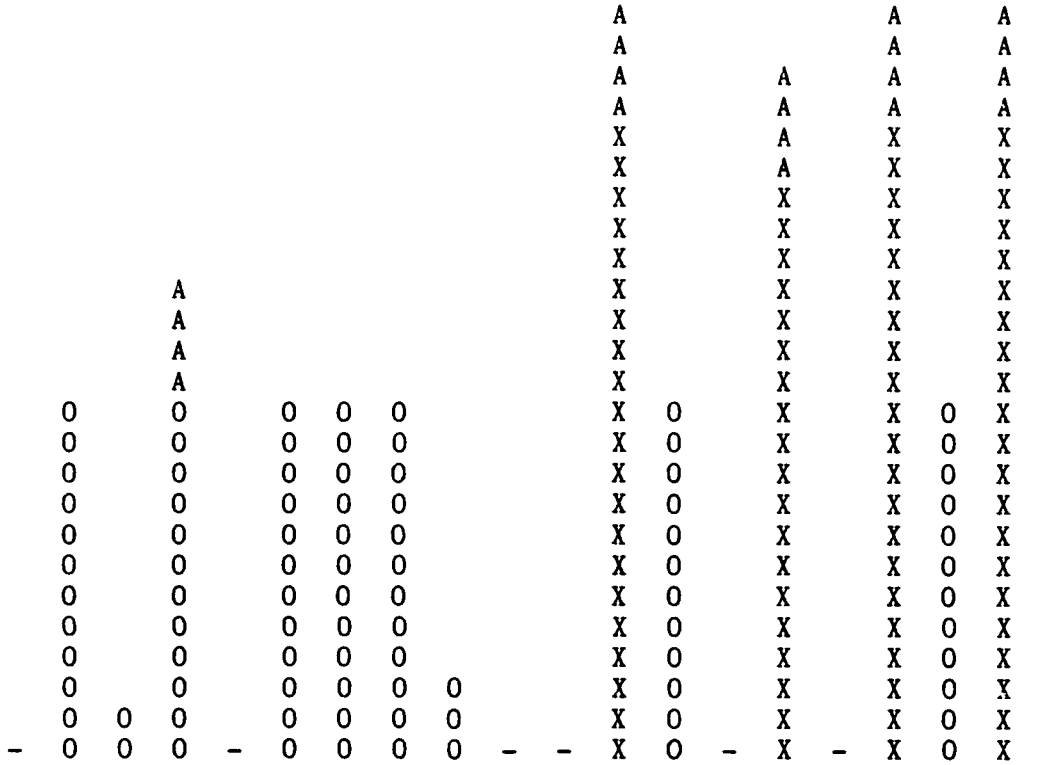


CHART I

PRE-1941 DIVISIONS

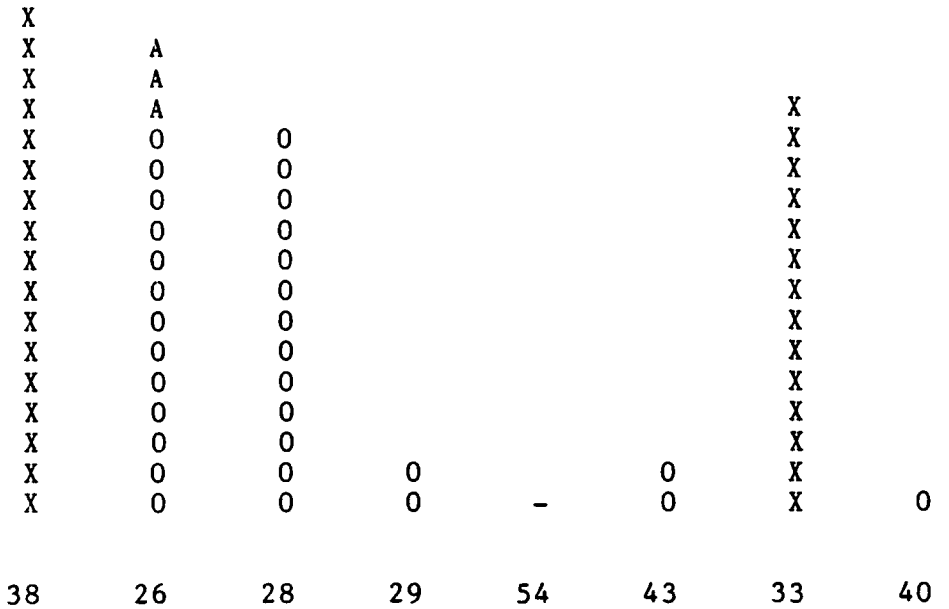


CHART II

1941 DIVISIONS

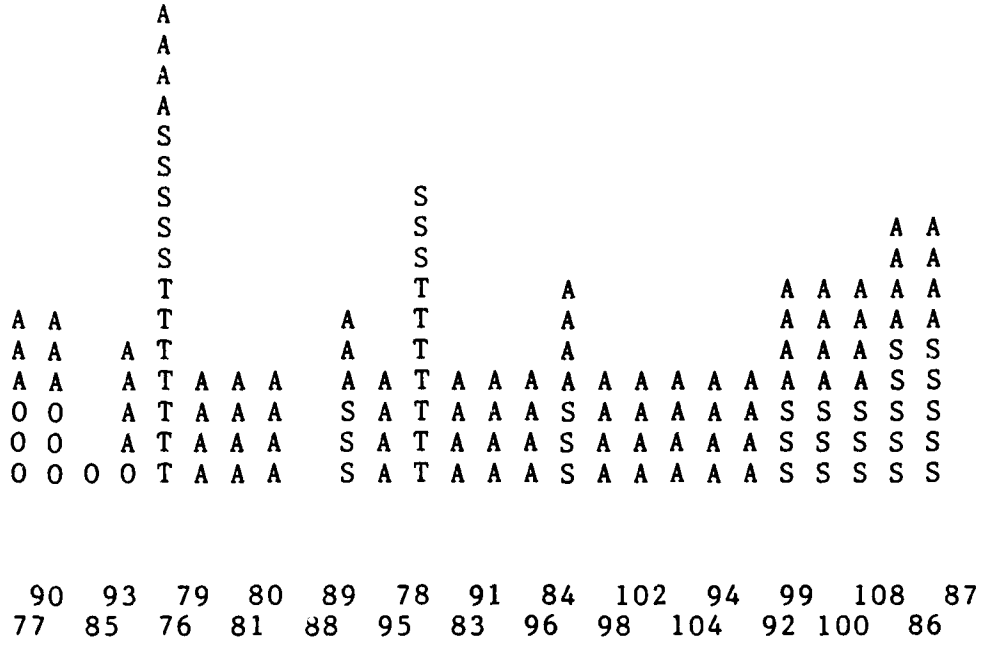


CHART III

1942 DIVISIONS

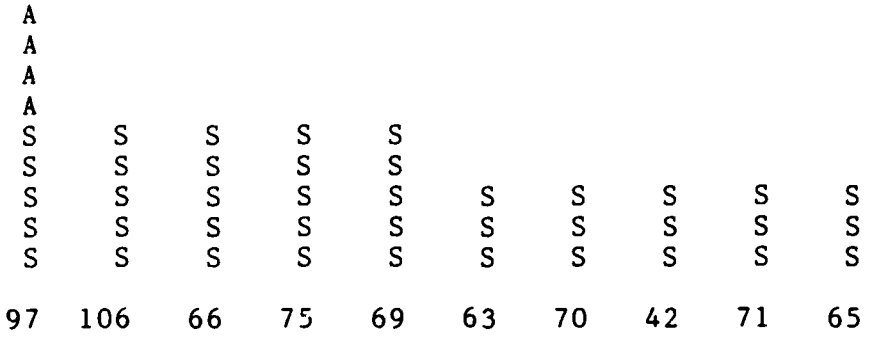


CHART IV

1943 DIVISIONS

infantry divisions.[139] In the column for a given division, an "X" represents a month of training lost -- calculated using McNairs formulae -- because of a one time stripping of personnel for individual replacements greater than fifty percent of its junior enlisted strength. One such stripping would generate a great many months lost, and a great many "Xs", since the division virtually started its training over. A "S" represents a month of training lost due to a one time stripping for individual replacements greater than twenty percent yet less than fifty percent. A "T" represents each month in which a division served solely as a replacement training center and thus was not moving through a division training program. An "O" represents each month in which a division was exposed to quotas for Officer's Candidate Schools and cadre, and an "A" represents each month in which a division was exposed to quotas for the Army Specialized Training Program. Calculations for the months lost to "O" and "A" are based on an assumption that the loss of a soldier of that calibre, generally in a logistical or supervisory position, was twice as damaging as the loss of a soldier who would not have qualified for such programs. This weighting is untestable. Those unsatisfied with it are encouraged to replace it with a weighting of their own. All estimates are rounded to the nearest month.

Charts I through IV each represent a distinct period of activation. Within each chart divisions progress from left to right in the order of their activation, with those activated in the same month numerically ordered. The base of a division's column represents the point at which a division should have been fully trained -- Pearl Harbor for the pre-1941 divisions, within a year of activation for 1941 and 1942 divisions, and within ten months of activation for 1943 divisions -- added to the four months for travel time, administrative requirements, and preparations for overseas movement. A " --- " marks the months before or after this "ideal" point that the division actually embarked. Thus, the distance between the base line and the " --- " with respect to each division represents delay in preparing a division to embark. This is the delay we are trying to explain.

Charts I through IV suggest some striking conclusions. First, personnel turbulence alone accounts for over eighty-seven percent of the delay in getting divisions overseas. Even if one considered the loss of OCS or ASTP calibre personnel as no more damaging than the loss of personnel unqualified for those programs, it would still account for over sixty-one percent of the delay. Pre-1941 divisions and 1941 divisions fall into two groups: those that went overseas early, and those gutted of personnel in order to bring embarking units up to strength and meet

demands for officer candidates and divisional cadre. Divisions activated early in 1942 lost some time to OCS stripping, and those activated late in 1942 suffered significant stripping for individual replacements. Two 1942 divisions served solely as replacement training centers for important periods of time. The bulk of the 1942 divisions suffered from ASTP alone, and some went through their training cycles quickly enough to avoid even this hazard. A number of divisions, including most of the 1943 divisions, suffered personnel turbulence accounting for even more delay than what they actually experienced getting overseas. This suggests they left before their reconstruction was complete; concerning which, more later.

Who were the "winning teams" among World War II divisions training in the United States? If the criterion for success is deployment within six months of Pearl Harbor or activation, whichever came later, with personnel that had for the most part been intact long enough to train them, competitors include the 1st, 3rd, 5th, and 9th Infantry Divisions from the Regular Army; the 29th, 37th, 40th, and 41st Divisions from the National Guard; and the 79th, 83rd, 85th, 88th, 91st, and 98th of the draftee divisions. Many of these unit designations will reappear in later chapters. The record holder for getting overseas intact was the 88th Infantry Division, with sixteen months between activation and embarkation. These quickly deployed divisions had many

things in common, but only one factor distinguished them from the much greater number that took longer to train or embarked untrained. The personnel composition of the successful divisions was, fortuitously, relatively stable throughout their training process.

An analysis of World War II infantry divisions with respect to Army Ground Forces supervision, equipment shortages, administrative burdens posed by non-divisional units, scarcity and inexperience of officers, cadre qualifications, and personnel turbulence leads to a single conclusion. Personnel turbulence was, far and away, the leading cause for delays in preparing proficient combat units. Delays for other reasons hardly seem of the same order of magnitude. Nothing was more destructive to the development of winning teams than the chronic tendency to reassign men already partly trained within them.

Did World War II mobilization planners realize the damage haphazard personnel shufflings produced? The evidence is that they knew damage was being done without ever realizing how much.[140] Division commanders lamented the recurrent decimation of their units, but they spoke one at a time and were not heard collectively.[141] Mobilization planners believed in building winning teams through prolonged unit training, so they must have regarded

personnel turbulence as corrosive. One officer recommended that some divisions be stripped entirely rather than having so many divisions hamstrung so much of the time -- better to annihilate the few rather than decimate the many.[143] This in effect would have meant fewer combat divisions and more replacement training centers, with some divisions serving as de facto replacement training centers. This recommendation came close to the eventual solution, increased replacement center training capacity.

The sad fact is that no single person or agency came to grips with personnel turbulence, and no one seems to have been fully cognizant of the damage it caused. Personnel turbulence seldom created a dramatic crisis. Contingents bled out of units in driblets. No one fully counted the cost, even though personnel turbulence alone distinguished successful and unsuccessful divisions during stateside training. There was drama enough to engage the attention of World War II leaders. The tedium of personnel accounting lost in the competition for emphasis. Yet personnel turbulence in the United States delayed divisional deployment -- and probably the war as well -- at least a year. No battlefield development was likely to have had such consequences.

ENDNOTES

1. Maurice Matloff, Strategic Planning for Coalition Warfare 1943-1944, (Washington, D. C.; Office of the Chief of Military History, Department of the Army, 1959), 111-120.

2. Ibid, 1-42; see also Gordon A. Harrison, Cross-Channel Attack, (Washington, D. C.; Office of the Chief of Military History, United States Army, 1951), 1-45.

3. Memorandum (Subject: "Readiness of Divisions for Combat") from General Leslie McNair to the Assistant Chief of Staff G-3, 20 December 1941, National Archives, MMRB (314.7).

4. Army Ground Forces Letter (Subject: Training Directive Effective November 1, 1942) to Commanding Generals, October 19, 1942, National Archives, MMRB (353/52); see also Bell I. Wiley, "The Building and Training of Infantry Divisions," in The Army Ground Forces, The Procurement and Training of Ground Combat Troops (Washington, D. C.; Historical Division of the Department of the Army, 1948).

5. Wiley, 489-493.

6. Ibid.

7. Army Ground Forces Memorandum (Subject: Processing of Task Forces), 31 October 1942, National Archives, MMRB (AGF 320.2/133); Preparation for Overseas Movement (Washington, D. C.; War Department, 1 February 1943), National Archives, MMRB (WD 370.5); Wiley, 434-441.

8. Army Ground Forces letter to Commanding Generals (Subject: Training Directive Effective 1 November 1942), 19 October 1942, National Archives, MMRB (353/52).

9. Richard M. Leighton and Robert W. Coakley, Global Logistics and Strategy 1940-1943 (Washington, D. C.; Office of the Chief of Military History, Department of the Army, 1955), 195-212, 356-360, 601-631.

10. Wiley, 463.

11. Interview with Major General John M. Lentz (then the Training Officer of Army Ground Forces), September 27,

1977. This impression is confirmed by such examples of minor editing as embodied in Replacement and School Command letter (Subject: Revision of Mobilization Training Plans 7-3, 6-3, 2-2, 17-1, 18-2) to Commanding Generals of Army Ground Forces, National Archives, MMRB (461-121); and by such examples of minor wrangles over prerogatives as Army Ground Forces Memorandum (Subject: Decentralization of Officer Cadre Selection), with indorsements, to Chiefs of Administrative and Supply Agencies, Services of Supply, National Archives, MMRB (210.31).

12. Memorandum for the Chief of Staff, U. S. Army (Subject: Report of Army Ground Forces Activities) from the Commanding General Army Ground Forces, January 10, 1946. J. E. Sloan Papers (author's possession).

13. For a more detailed discussion of the relationships between Army Ground Forces and a single division in training, read John Sloan Brown, Draftee Division: A Study of the 88th Infantry Division, First All Selective Service Division into Combat in World War II (Indiana University, University Microfilms International, 1983), 52-82.

14. E.g., see TO's 100-1, 200-1, 70-1, 7-12, and 7-17 in Tables of Organization of Infantry Units (Washington, the Infantry Journal, 1941), now in the Infantry School Library, Fort Benning, Georgia.

15. Army Ground Forces Memoranda (Subject: Report of G-4 Inspection Trip) from the G-4 to the Chief of Staff, Army Ground Forces dated 5 August 1942 and 8 September 1942, National Archives, MMRB (333.1); Wiley, 452-453.

16. Army Ground Forces Memoranda (Subject: Inspections by AGF Staff Officers) recording telephone conversations among Staff Officers of the Army Ground Forces, Second Army, Fourth Army, and XXII Corps, August 21, 1944, National Archives, MMRB (333.1); Muskogee Daily Phoenix (a newspaper from a town just outside Camp Gruber, one of the major World War II training cantonments), July 19, 1942; Interview with Colonel Horace M. Brown (then Captain Horace M. Brown, Aide-de-Camp to Major General John E. Sloan, Commander of the 88th Infantry Division), July 2, 1977.

17. Ibid.

18. See Note 12, above.

19. Ibid.

20. Army Ground Forces letter (Subject: Conduct of Training) to Commanding Generals, 1 January 1943, National Archives, MMRB (319.22); Letter from Colonel Robert J. Karrer (then Inspector General of the 88th Infantry Division) to the author in reponse to the author's inquiries, December 13, 1977.

21. General Headquarters Letter (Subject: Training of Newly Activated Infantry Divisions), with inclosures, to Commanding Generals, National Archives, MMRB (353/21). See also Note 4, above.

22. Ibid; see also Wiley, 442-455.

23. E.g., see Army Ground Forces Letter (Subject: Training in Operations Against Permanent Land Fortifications) to Commanding Generals, January 5, 1943, National Archives, MMRB (353/2); or Special Orders Number 20, Headquarters 88th Infantry Division, January 23, 1943, J. E. Sloan Papers.

24. E.g., see War Department Letter (Subject: Commissioned Personnel of the 77th, 82nd, and 90th Infantry Divisions) to Commanding Generals, January 6, 1942; and War Department Letter (Subject: Commissioned Personnel for the 80th, 88th, and 89th Divisions) to Commanding Generals, April 8, 1942, both National Archives, MMRB (AG 320.2 and AG 210.31).

25. See Note 23, above.

26. Ibid.

27. See Notes 4, 11, and 21, above.

28. The congruence between the Army Training Program and the actual demands of combat overseas is to be the subject of Chapter 3; see also John S. Brown, 184-244, 237-274.

29. See Note 21, above.

30. Ibid; see also Wiley 434-436; and Note 24, above.

31. E.g., see The Sixth Infantry Division in World War II 1939-1945 (Washington, Infantry Journal Press, 1947), 13-34; Jean R. Moenk, A History of Large Scale Maneuvers in the United States, 1935-1964 (Fort Monroe,

Virginia; United States Army Continental Army Command, 1969).

32. War Department Memorandum (Subject: Detailed Troop Unit Basis) G-3 for Chief of Staff, United States Army, 3 January 1942, National Archives, MMRB (381); War Department Letter (Subject: Schedule of Allotments and Movements of Enlisted Men to Replacement Training Centers and Units) to Commanding Generals, May 27, 1942, National Archives, MMRB (324.71); William R. Keast, "The Training of Enlisted Replacements"; in The Army Ground Forces, The Procurement and Training of Ground Combat Troops (Washington, D. C.; Historical Division of the Department of the Army, 1948).

33. Ibid.

34. Wiley, 487-493.

35. Ibid, 442-455.

36. Hearings before the Committee on Appropriations on H.R. 9209, United States House of Representatives, 76th Congress, 3rd Session, 1940; Lieutenant Colonel Marvin A. Kriedberg and Lieutenant Merton G. Henry, History of Military Mobilization in the United States Army 1775-1945 (Department of the Army Pamphlet 20-212, 1955), 141-213, 310-343, 377-677. See also Elias Huzar, The Purse and the Sword (Cornell University Press, 1950); Brevet Major General Emory Upton, The Military Policy of the United States (Washington, D. C.; Government Printing Office, 1911); and Mark S. Watson, Chief of Staff: Prewar Plans and Preparations (Washington, D. C., Historical Division, Department of the Army, 1950).

37. At least, there is no division for which I can find a record of logistical shortages having been identified as a cause of delay. See also Notes 1, 3, 7, and 9, above. For the benefit of the layman and the purposes of this paper, the five classes of supply are here defined as rations, clothing and personal equipment, petroleum products, Table of Organization Equipment, and ammunition. This classification corresponds to the classification used during World War II insofar as divisions were concerned. See Leighton and Coakley, 318-319.

38. Erna Risch, The Quartermaster Corps: Organization, Supply, and Services, Volume I (Washington, D. C.; Office of the Chief of Military History, 1953), 35-38;

Report (Subject: Army Subsistence and PX Requirements, July 1942 - August 1945) from the Requirements Branch of the Office of the Quartermaster General, undated, National Archives, MMRB.

39. Office of the Quartermaster General letter (Subject: Stockage Levels) to all Depots, 11 May 1942, National Archives, MMRB (400.291).

40. Memorandum (Subject: First Report of Requirements Study 18) from the Office of the Quartermaster General to the Director of the Requirements Division, Army Service Forces, 17 May 1944, National Archives, MMRB (430). This study estimated that the Army wasted $117,000,000 worth of food in one year.

41. Letter from Colonel Robert J. Karrer; letter from Mr. William N. Partin (then an officer in the 88th Quartermaster Company) to the author in response to the author's inquiries, December 13, 1977; Erna Risch, Fuels for Global Conflict (Washington, D. C.; QMC Historical Studies, 1952), United States Army Historical Research Center, Carlisle Barracks, Carlise, Pennsylvania.

42. Letter (Subject: Establishment of Fuel and Lubricants Division) from the Office of the Quartermaster General, 29 May 1943, National Archives, MMRB (00 25-37).

43. Quartermaster General Letter (Subject: Liquid Fuels) from the Quartermaster General to the Adjutant General, 25 February 1941, National Archives, MMRB (463).

44. Report from the Office of the Quartermaster General (Subject: History of the Gas and Water Can Procurement Program), 27 October 1941, National Archives, MMRB (463).

45. Letter from Colonel Robert J. Karrer; Office of the Quartermaster General letter (Subject: Reassignment of Quartermaster Corps Functions), 31 July 1942, National Archives, MMRB (00184); Erna Risch, The Quartermaster Corps: Organization, Supply and Services (Washington, D. C.; Office of the Chief of Military History, 1953).

46. Letter from Doctor Paul C. Richmond (then Surgeon General of the 88th Infantry Division) to the author in response to the author's inquiries, December 3, 1977. See also Note 46, above.

47. Memorandum (Subject: Production and Requirements of Small Arms Materiel) to the Chief of the Industrial Service, 3 June 1942, National Archives, MMRB (T676A); Letter (Subject: Review of Production Plans) from Small Arms Branch of the Ordnance Corps, 16 December 1942, National Archives, MMRB (T676A); Report of War Department Equipment Review Board to the Chief of Staff of the United States Army, 31 August 1943, National Archives, MMRB (ASF 334); Report of the War Department Procurement Review Board to the Chief of Staff of the United States Army, 31 August 1943, National Archives, MMRB (ASF 334).

48. Army Ground Forces Board Letter (Subject: Report 82, Army Ground Forces Board, AFHQ-NATO) to the Commanding General of Army Ground Forces, 21 November 1943, National Archives, MMRB (319.1).

49. Memorandum (Subject: Equipment for the 84th, 88th, and 102nd Infantry Divisions) from the Assistant Chief of Staff, Operations, Services of Supply, to the Commanding General of the VIII Service Corps, National Archives, MMRB (SP475); Memorandum (Subject: Authorized Allowance of Status Report Items for the 85th and 88th Infantry Divisions) from the Director of the Service of Supply to the Adjutant General, 27 April 1944, National Archives, MMRB (AG400); Lieutenant Colonel Marvin A. Kriedberg and Lieutenant Merton G. Henry, History of Military Mobilization in the United States Army 1775-1945 (Department of the Army Pamphlet 20-212, 1955), 677-679.

50. Army Ground Forces Letter (Subject: Equipment for Army Ground Forces) to Commanding General, Army Service Forces, 6 April 1943, National Archives, MMRB (AGF 401-1).

51. See Note 14, above. See also Winston S. Churchill, Closing the Ring (Boston; Houghton Mifflin, 1951), 487-488.

52. John S. Brown, 139.

53. Ibid, 104-108.

54. Letter from Colonel Robert J. Karrer.

55. Memorandum from the Assistant Chief of Staff, Operations, Services of Supply to the Commanding General, Army Ground Forces, 30 December 1942, National Archives, MMRB (SP475). See also Note 50, above.

56. Kriedberg and Henry, 654-679; Wiley, 456-469.

57. Army Ground Forces Memorandum (Subject: Report of G-4 In- spection Trip, 26 July - 1 August 1942) for Chief of Staff, 5 August 1942, National Archives, MMRB (333.1/1250).

58. See Notes 51, 56, and 57, above.

59. Ibid.

60. Army Ground Forces Memorandum from General Leslie J. McNair to Brigadier General John M. Lentz (then the Training Officer of Army Ground Forces), 10 March 1943, National Archives, MMRB (353.02/103); Letters from Major General John M. Lentz to the author in response to the author's inquiries, September 20 and September 28, 1977.

61. Interview with Colonel Horace M. Brown; John S. Brown, 332-333; Wiley, 460-461.

62. Memorandum (Subject: Visit to Fort Leonard Wood, Missouri -- the 6th Division and the 72nd Field Artillery Brigade) from the Assistant G-3, Army Ground Forces to the Chief of Staff, Army Ground Forces, 7 April 1942, National Archives, MMRB (333.1).

63. John D. Millett, The Organization and Role of the Army Service Forces (Washington, D. C.; Office of the Chief of Military History, Department of the Army, 1954), 11-44.

64. Army Ground Forces Memorandum (Subject: Administration in Army Corps) from the Chief of Staff to the G-3, Army Ground Forces, 23 April 1942, National Archives, MMRB (322/1); Wiley, 510-526.

65. Report of the Statistics Branch, War Department General Staff (Subject: Status of Personnel), 15 December 1943, National Archives, MMRB (320.2/351).

66. Ibid.

67. Ibid; see also Robert R. Palmer and William R. Keast, "The Procurement of Officers," in The Army Ground Forces, The Procurement and Training of Ground Combat Troops (Washington, D. C.; Historical Division of the Army, 1948), 92-103.

68. Memorandum (Subject: Report of Army Ground Forces Activities) from Commanding General Army Ground Forces to Chief of Staff, United States Army, 10 January 1946, J. E. Sloan Papers; Wiley, 434-436.

69. Ibid.

70. See Note 67, above.

71. Robert R. Palmer, "The Procurement of Enlisted Personnel: The Problem of Quality", in The Army Ground Forces, The Procurement and Training of Ground Combat Troops (Washington, D. C.; Historical Division of the Army, 1948), 1-86.

72. Robert R. Palmer and William R. Keast, 91-168.

73. Ibid, 93.

74. Memorandum (Subject: Troop Basis, 1943) from General Leslie J. McNair to the Deputy Chief of Staff, United States Army, 22 June 1942, National Archives, MMRB (320.2/31); John S. Brown, 31-34.

75. See Notes 32 and 68, above.

76. See Note 24, above; See also Wiley, 434-436.

77. War Department Letter (Subject: Candidates Selected to Attend Officers Candidate Schools) to Commanding Generals, 24 December 1942, National Archives, MMRB (352/18); War Department Memorandum (Subject: Acceptance and Selection of Applicants for OCS's) 1 September 1943, National Archives, MMRB (352,471); Robert R. Palmer and William R. Keast, 91-163.

78. John S. Brown, 40-43; see Note 80, below.

79. This reflects an almost timeless tautology. I most recently saw it manifested in the arguments used by Department of the Army Military Personnel Center representatives to convince Command and General Staff College Graduates of the virtues of an ROTC assignment, 30 October 1984.

80. Review, for example, the interwar teaching experience of this generation of officers in Association of Graduates U.S.M.A. Register of Graduates and Former Cadets (West Point, New York, Association of Graduates, 1981).

81. Group Headquarters Letter (Subject: Training of Newly Activated Infantry Divisions) to Commanding Generals, 16 February 1942, National Archives, MMRB (353/21); Interview with Colonel H. M. Brown.

82. Memorandum for the Chief of Staff, U. S. Army (Subject: Report of Army Ground Forces Activities) from the Commanding General, Army Ground Forces, January 10, 1946, J. E. Sloan Papers.

83. Infantry School Pamphlet (Subject: The Selection System of the OC Course, the Infantry School, and an Analysis of OC Failures), undated but assumed 1943, National Archives, MMRB (314.7).

84. This comment emerges from a perusal of divisional G-3 files in the Modern Military Records Branch of the National Archives and of personal papers related to training in the United States Army Historical Research Center at Carlisle Barracks, Pennsylvania. An example would be Training Memorandum Number 10, Headquarters, 76th Field Artillery, Fort Ord, California, September 6, 1940, J. E. Sloan Papers.

85. See Note 80, above; also interview with Colonel Horace M. Brown, Jr., who was Alumnae Secretary at West Point from 1966 through 1970. In that capacity and as a member of the Association of Graduates U.S.M.A., he has had an excellent opportunity to observe the process of mentorship on the broad scale.

86. See Note 80, above; see also The Army Register (Washington, D. C., War Department, 1945).

87. John S. Brown, 37-40; Letter from Major General J. M. Swing (Commanding General, 11th Airborne Division) to Major General John E. Sloan (Commanding General, 88th Infantry Division), 11 March 1943, J. E. Sloan Papers.

88. See Note 24, above. See also Wiley, 434-441.

89. Ibid.

90. Memorandum from the Assistant G-3 Army Ground Forces for the G-3 Army Ground Forces, 2 April 1943, National Archives, MMRB (333.1); Letter from Colonel F. W. Farrell (Chief of Staff, 11th Airborne Division) to Major General John E. Sloan (Commanding General, 88th Infantry Division), 23 February 1943; Army Ground Forces Memorandum (Subject: Observations During Visit to Camp Atterbury, Indiana, 10-11 March 1943) from the

Army Ground Forces G-3 to the Army Ground Forces Chief of Staff, 13 March 1943, National Archives, MMRB (353.02/119).

91. Ibid.

92. See Notes 87 and 90, above.

93. Interview with Colonel Horace M. Brown; see also Note 90, above.

94. Wiley, 466-469.

95. The British Regimental System virtually guarantees an uneven distribution of talent. The Russians, French, and Germans were all prone to raise elite "guards" units or the like, concentrating talent in these formations. The Germans in particular showed an enormous variance between their best and worst units. See John S. Brown, 341-347.

96. See Notes 24 and 68, above.

97. Army Ground Forces Letters (Subject: Cadre Personnel for New Divisions) to Commanding Generals, 23 April 1942, 2 July 1942, 10 September 1942, and 9 November 1942, all National Archives, MMRB (320.2).

98. John S. Brown, 33-37, 118-127.

99. Army Ground Forces Memorandum (Subject: Inspection Trip to Camp Carson and Camp McCoy, 6-8 July 1944) from the G-1 Army Ground Forces to the G-3 Army Ground Forces, 10 July 1944, National Archives, MMRB (333.1); Wiley, 475-479.

100. Interview with Colonel Horace M. Brown.

101. Memorandum from the Assistant G-3, Army Ground Forces to the G-3, Army Ground Forces, 2 April 1943, National Archives, MMRB (333.1); Third Army Letter (Subject: Report of Inspection, 28th Infantry Division) to Army Ground Forces, National Archives, MMRB (333.1); Army Ground Forces Memorandum (Subject: Inspection Trip to Fort Jackson and Camp Forrest) from the Assistant G-3 to the Assistant Chief of Staff G-3, Army Ground Forces, 25 May 1943, National Archives, MMRB (333.1); Wiley, 458-459, 463-479.

102. Letter from Major General John E. Sloan (Commanding General of the 88th Infantry Division) to Captain

Horace M. Brown (then his Aide-de-camp), 17 May 1942, J. E. Sloan Papers; Letter from Major General J. M. Swing (Commanding General of the 11th Airborne Division) to Major General John E. Sloan, 11 March 1943, J. E. Sloan Papers; Robert R. Palmer and William R. Keast, 91-163; John S. Brown 37-40, 52-82.

103. Russell F. Weigley, History of the United States Army (New York, MacMillan Publishing Company, Inc., 1967), 440.

104. Robert R. Palmer and William R. Keast, 103-107.

105. Wiley, 457.

106. Joint Statement of the Secretaries of War and Navy Department, 17 December 1942, National Archives, MMRB (353); Palmer, 29.

107. Wiley, 472-474.

108. See Note 65, above.

109. Robert R. Palmer and William R. Keast, 92.

110. Memorandum (Subject: Selection of Trainees for OCS) from the Adjutant General of the War Department to the G-1 of the War Department, 6 June 1943, National Archives, MMRB (352); War Department Circular Number 48, 19 February 1942, National Archives, MMRB (352).

111. Memorandum (Subject: Troop Basis, 1943) from the War Department to Commanding Generals of Army Ground Forces and the Services of Supply, 24 November 1942, National Archives, MMRB (320.2).

112. Memorandum (Subject: Troop Basis 1943) from General Leslie J. McNair to the Deputy Chief of Staff, United States Army, 22 June 1942, National Archives, MMRB (320.2/31).

113. Memorandum (Subject: Surplus AA Officers) from G-1 Army Ground Forces to Chief of Staff Army Ground Forces, 29 January 1944, National Archives, MMRB (353).

114. Army Ground Forces Letter (Subject: Officers Candidate Quotas) to Commanding Generals, 4 September 1942, National Archives, MMRB (320.2); War Department Memorandum (Subject: Quarterly Capacities of OCS for AGF to Commanding General Army Ground Forces, 28 December 1942, National Archives, MMRB (352).

115. See Notes 1, 2, and 3, above.

116. Letter (Subject: Replacement Pools) from Army Ground Forces to Commanding Generals, 2 October 1942, National Archives, MMRB (320.12/105); Wiley, 457.

117. Wiley, 489-493.

118. Ibid, 457.

119. Manuscript (Subject: Training in Medicine, Dentistry, and Veterinary Medicine and in Preparation Therefor [sic], Under the Army Specialized Training) from the Office of the Director of Military Training, CARL (3-4-BA-C2)(632/2-1); History (Subject: Office of the Director of Personnel, Army Service Forces), CARL (3-3-AA-C2)(627/2); "History of Military Training, Army Specialized Training Program, Army Service Forces from its Beginning to 31 December 1944, with Supplement to 30 June 1945," from Curricula Branch, Military Training School Division, Army Service Forces, 26 June 1945, CARL (3-4.1A-AA-C2)(308.3). Captain John S. Diekhoff, "History of Army Specialized Training Reserve Program from its Beginning to 31 December 1944," School Division Army Service Forces, 15 May 1945, CARL (3-4.1A1-AA-1-C2) (3-8.3AR).

120. See Notes 106 and 119, above; see also Robert R. Palmer and William R. Keast, 26.

121. War Department Memorandum W350-198-43 (Subject: General Qualifications for ASTP), 17 July 1943, National Archives, MMRB (353/81).

122. Ibid.

123. Memorandum (Subject: ASTP) from General Marshall to Commanding General, Army Ground Forces, 1 April 1943, National Archives, MMRB (353/31).

124. Ibid.

125. Memorandum (Subject: Service Personnel Shortages) from General Marshall to the Secretary of War, 10 February 1944, National Archives, MMRB (353/100).

126. See Note 121, above.

127. Wiley, 489-493.

128. Ibid, 472-474.

129. Ibid, 474.

130. Army Ground Forces G-3 "Division Book" (Subject: 106th Infantry Division), undated, National Archives, MMRB (353/992).

131. Letter (Subject: Replacement Pools) from Army Ground Forces to Commanding Generals, 2 October 1942, National Archives, MMRB (320.12/105).

132. Wiley, 471-475.

133. Robert R. Palmer and William R. Keast, 194-201.

134. Army Ground Forces Final Status Reports for the 42nd, 63rd, 65th, 66th, 69th, 70th, 71st, 75th, 76th, 78th, 86th, 87th, 89th, 97th, 100th, 103rd, and 106th Infantry Divisions, Army Ground Forces G-3 Shipment Records, National Archives, MMRB (370.1).

135. Army Ground Forces Memorandum (Subject: Personnel Status of Certain Divisions) Army Ground Forces G-3 for Army Ground Forces Chief of Staff, 17 October 1944, National Archives, MMRB (320.2/760).

136. Army Ground Forces Memorandum (Subject: Retraining of Divisions Stripped for Personnel Replacements) from Commanding General Army Ground Forces to Chief of Staff Army Ground Forces, 7 March 1944, National Archives, MMRB (353/206).

137. War Department Memorandum (Subject: Replacement Training Centers) for the Adjutant General, 27 September 1941, National Archives, MMRB (341); Memorandum from Brigadier General H. R. Bull for G-3 Army Ground Forces, 3 January 1942, National Archives, MMRB (381).

138. Memorandum (Subject: Report of Army Ground Forces Activities) from Commanding General Army Ground Forces to Chief of Staff, United States Army, 10 January 1946, J. E. Sloan Papers.

139. See also John S. Brown, 50-51.

140. Bell J. Wiley, the official historian of the Army Ground Forces Divisional Activation and Training Program, certainly indicates a retroactive consciousness that damage had been done. Wiley, 471-479.

141. Ibid, 458, 471-479.

142. John S. Brown, 52-82.

143. Wiley, 458.

CHAPTER III

FIRST BATTLE: THE CORRELATES OF SUCCESS AND FAILURE

Army Ground Forces alleged that the American divisions deploying overseas during World War II were equally ready for combat. They may have prepared at greatly varied rates, but the product was to be the same. Organized programs for training, observation, inspection and accreditation were designed to establish a common standard.[1] Actual results varied widely from this expectation. Some divisions did very well in their first major battles; others did not. What factors correlate with these disparate results?

A useful analytic device might be to pick ten divisions that fared well in their first major battles and ten that fared poorly, then to compare and contrast the experiences of the two groups. The hazards of such an exercise are the necessarily subjective nature of the choices and the risk one might compare types of divisions (Regular Army, National Guard, or draftee), theaters (Pacific, Mediterranean, or European), or phases in the war rather than divisional performances per se. One cannot avoid a subjective element in evaluating divisions, but one can consider such tangible indicators as casualties sustained, casualties inflicted, relative force ratios, and

the physical difficulty of the mission. A good definition of first major battle will assist in screening against the inevitable differences in the tasks divisions were asked to undertake. Here we define a first major battle as one in which all or virtually all of the division was engaged, there was significant opposition, and there was a significant risk that the division might not achieve its objective. One can rather neatly avoid comparing division types or theaters by assuring there is a balanced representation of each among the best and worst first battles considered. For example, identify the best and worst Regular Army division first battle performances in the Mediterranean, the best and worst Regular Army division first battle performances in the Pacific, and so on. The result yields eighteen division first battles for analysis: two Regular, two National Guard, and two draftee divisions each in the Pacific, Mediterranean, and European theaters.

The system described above does provide nine triumphs and nine embarrassments for analysis. It is not without its anomalies, but it does provide first battle triumphs and embarrassments for each type of division within each theater. One has more confidence comparing performances within a theater than one has comparing performances across theaters, so a relative ranking of division first battles within theaters seems defensible. To bring the total to twenty divisions, we choose an additional best and worst

first major battle for the draftee divisions in Europe. This makes sense, both because of the relatively large numbers of such divisions and because it allows choices in addition to the truly extraordinary circumstances of the 99th and 106th Infantry Divisions. In the following pages we will first justify choices of ten good and ten disappointing divisional first battles, then compare and contrast the experiences of the two groups.

1

Ten Regular Army infantry divisions saw combat during World War II. Of these, the 1st, 3rd, and 9th first fought in the Mediterranean; the 2nd, 4th, 5th, and 8th first fought in Europe; and the 6th, 7th, and 24th first fought in the Pacific.[2] In the Mediterranean, the 3rd Infantry Division's operations in Sicily were the Regular Army's outstanding divisional first battle.[3] The division's previous operations around Fedala, Morocco, did not qualify as a major battle. In Sicily the 3rd assault landed amphibiously, then broke a general deadlock on the Sicilian beaches with a masterful flanking movement through Agrigento. In its first eight days of battle, the 3rd killed or captured 12,824 while losing only 676 killed, wounded, missing, or captured.[4] Building upon this success, the 3rd spearheaded General George S. Patton's drive into Palermo, then Messina. In the latter city it gained

notoriety by beating Field Marshal Sir Bernard L. Montgomery's British by a hair's breadth.[5] The commanding general of the 3rd, Major General Lucian K. Truscott, later rose to command the VI Corps in Italy and France, then the Fifth Army in Italy.[6]

The 9th Infantry Division's first major battle, near El Guettar in Tunisia, was far less successful.[7] Despite air, artillery, and ground superiority, the division proved unable to push several thousand battle-weary Germans off of commanding heights. Individual soldiers fought courageously enough,[8] but the division's self-assessments identify a catalogue of miscarriages.[9] The initial attack aborted when two of the assault battalions got lost in rough terrain. The situation improved little as confused units took heavy casualties futilely assaulting prepared positions. After ten days of stalemate, the 9th finally advanced when successful a tacks by other divisions threatened El Guettar with envelopment. El Guettar was no catastrophe, but it was certainly a disappointment. In part the 9th suffers because it must be compared with the 1st and 3rd. The 1st's participation in the campaign for Oran was clearly successful and its opposition clearly significant, if less determined than that faced by the 9th.[11] The 3rd's first battle accomplishments, as we have seen, outshined them both.

In Europe, the 4th Infantry Division's operations from Utah Beach through the capture of Cherbourg seem the best Regular Army first battle. The official historian characterizes this VII Corps victory as "brilliant."[12] The 4th Infantry Division's assault on Utah Beach and subsequent slugging through Quineville -- the heaviest enemy resistence -- clearly were key to VII Corps success. From 6 through 27 June 1944 the offensive killed or captured over 39,000 while losing 2,800 killed, and advanced more than fifty miles through staunchly defended bocage terrain.[13]

This same bocage stymied the 8th Infantry Division, the European theater's least successful Regular Army first battle.[14] From 8 to 27 July 1944 it engaged in a prolonged and oft-frustrated attack towards Coutences, taking 2,765 casualties. The 8th Infantry Division's progress was substandard even for the difficult terrain of the bocage; the division commander was relieved.[15] The 2nd Infantry Division's attack to secure Trevieres and Hill 192[16] and the 5th Infantry Division's attack at Vidouville,[17] all objectives in the vicinity of St. Lo, seem more creditable, although they did not require the sustained performance against heavy resistance demonstrated by the 4th Infantry Division in the Cotentin.

In the Pacific, the best Regular Army first battle seems to have been the 6th Infantry Division's tough fight for Lone Tree Hill, New Guinea, from 20 through 30 June,

1944. Despite ferocious resistance, tough terrain, and elaborate defenses, the 6th seized this important objective at a cost of 150 killed, 550 wounded, and 500 evacuated for medical reasons other than wounds. The 6th counted 942 dead Japanese and reliable estimates indicated 400 more entombed in caves during the course of the fighting.[18] The operations of the 24th Infantry Division in Hollandia from 22 April through 6 June were also a creditable success, but there environment was more of a challenge than the enemy, and accidents of terrain placed the bulk of the fighting on the 41st Infantry Division.[19]

Of the Pacific Regular Army first battles, that of the 7th Infantry Division to seize Attu came off least well. The soldiers fought courageously in an extraordinarily hostile environment, but a narrative of the campaign reads like a catalogue of lessons learned. From 11 through 30 May 1943, the 7th lost 589 killed, 1,148 wounded and 2,100 to nonbattle causes. It killed 2,350 Japanese and captured 29. Approximately 1,000 of these Japanese died in a single suicidal charge at the end of the campaign. In terms of relative numbers of Japanese to American casualties, Attu was second only to Iwo Jima in its costliness. Dissatifaction with the 7th's performance led to the relief of its commander during the course of the battle.[20]

Turning to National Guard Divisions, one finds eighteen that participated in World War II. Of these, the

34th, 36th, and 45th first saw combat in the Mediterranean; the 26th, 28th, 29th, 30th, 35th, and 44th first saw combat in Europe; and the 27th, 31st, 32nd, 33rd, 37th, 38th, 40th, 41st, and 43rd first saw combat in the Pacific.[21] In the Mediterranean the best National Guard first battle seems to be the campaign of the 45th Infantry Division in Sicily. From 10 July through 1 August 1943 the 45th captured 10,977 prisoners at a cost of 1,156 casualties. The division encountered particularly stubborn resistance at Motta Hill and "Bloody Ridge," resistance it overcame in a fierce four day battle.[22] The commanding general of the 45th, Major General Troy H. Middleton, later rose to the command of the VIII Corps and fame for his role in the battle of the Ardennes.[23] The least auspicious initial battle for a National Guard division in the Mediterranean was the 34th Infantry Division's debacle in the Kasserine Pass. The division less one detached regiment, the 168th, suffered 1,912 killed, wounded, or missing as the Afrika Korps' surprise offensive mauled the U. S. II Corps.[24] The 168th was cut off near Sidi Bou Zid and virtually annihilated. German losses for the entire offensive came to 989 killed, wounded or missing, considerably less than the losses in the 34th alone.[25] The 34th Infantry Division was not alone in its embarrassment; on this occasion the II Corps commander was relieved.[26] The 36th Infantry Division was another National Guard division roughly handled in its first major

battle. Landing at Salerno, it weathered severe counterattacks and lost a battalion in a tactical disaster that might have been avoided. For all of the miscarriages at Salerno, however, the troops of the 36th held on stubbornly and its overall performance falls somewhere between those of the 45th and the 34th.[27]

It is difficult to choose a best first battle among the National Guard divisions in the Pacific. Probably the most satisfying results were achieved by the 40th Infantry Division in its sixty mile drive from Lingayen Gulf through Clark Field in the Philippines.[28] From 17 January through 2 March 1945 the division counted 6,087 Japanese dead while suffering casualties a sixth as numerous. Following a successful assault landing, the 40th maneuvered forward against increasingly heavy resistance and climaxed its drive by knocking the Japanese out of formidable mountain positions overlooking Clark Field and Fort Stotsenburg. The 40th's yoke-mate in this offensive, the 37th, was similarly successful. This was the 37th's third major battle, however. In its first attack on Munda, New Georgia (25 July - 5 August 1943), the 37th achieved creditable results, albeit results less striking than those of the 40th in the Philippines.[29] The weight of the fighting in New Georgia fell on the 43rd Infantry Division, also in its first battle. The 43rd succeeded in securing its objectives, but took heavy losses, to include perhaps a thousand

"neuro-psychiatric" casualties.[30] The 38th's initial operation on Leyte was largely a mop-up, enlivened by an abortive Japanese airborne assault.[31] The 31st and 33rd's seizure of Morotai (15 September 1944) was challenging enough to qualify as a major battle without having been a particularly severely contested one.[32] The 41st's regimental combat teams acquired so much combat experience individually before the division deployed as a whole that the notion of a division first battle for the 41st is a misnomer.[33] The 33rd relieved the 43rd in the mountains of Luzon on 15 February 1945. By then the Japanese were on the ropes. All of these National Guard divisions turned in promising performances in their first major battles. Of them, the performance of the 40th seems to have accomplished the most at the least cost.

The worst National Guard first battle in the Pacific seems to be the 32d Infantry Division's attempts to seize Buna, New Guinea. From 16 November 1942 through 3 January 1943 the division suffered 1,954 casualties attempting to evict 2,200 Japanese.[34] Virtually everything that could have gone wrong seems to have gone wrong; the Buna Campaign reads like a catalogue of tactical, operational, and logistical "don'ts."[35] Frustrated with divisional inefficiencies, the Corps commander relieved the division commander and two regimental commanders about three weeks into the operation. The 27th Infantry Division's commander

was also relieved after a disappointing divisional performance on Saipan. The justification for this relief remains questionable, lost in a prolonged Army-Marine controversy.[36] Certainly, the 27th's deficiencies did not approximate those of the 32nd.

Turning to the European Theater, the best National Guard first battle is probably that of the 30th in crossing the Vire River and facilitating the drive on St. Lo. This operation involved a river crossing tough resistance, and several significant counterattacks supported by armor. Despite these challenges, the 30th made steady progress and ultimately was one of three divisions, along with the 4th and 9th, in a position to exploit the massive airstrike preceding Operation COBRA.[37] This breakthrough sealed the fate of the Wehrmacht in the Battle for France. The 35th flanked the 30th in this climactic battle and also earned a reputation for solid performance, albeit with not quite the same visibility of results.[38] The 26th, 28th, and 29th were also blooded and bloodied in the tough and often disappointing fighting in Normandy.[39] Of these, the 28th seems to have done least well in its first battle: the division went through two commanders before command finally settled on Brigadier General Norman D. Cota, a hero of Omaha Beach and the Ardennes alike.[40] The 44th first saw battle in the course of an overwhelming Allied attack towards Strasbourg. The battle proved exciting; the 44th did well

in the exploitation, almost got mauled by a Panzer Lehr division counterattack, and was rescued in the nick of time by the 4th Armored Division.[41] As an overall assessment, the 30th is probably the best and the 28th the worst of the National Guard divisional first battles in Europe.

Of the draftee divisions -- Army of the United States and Organized Reserve -- the 85th, 88th, 91st, and 92nd first fought in the Mediterranean; the 25th, 77th, 81st, 93rd, 96th, and Americal first fought in the Pacific; the 42nd, 63rd, 65th, 66th, 69th, 70th, 71st, 75th, 76th, 78th, 79th, 80th, 83rd, 84th, 86th, 87th, 89th, 90th, 94th, 95th, 97th, 99th, 100th, 102nd, 103rd, 104th, and 106th first saw combat in Europe; and the 98th never saw combat at all.[42] The Americal, raised overseas from contingents already in theater, is too much of an anomaly with respect to mobilization to consider in our analysis here. The 25th included two Regular Army regiments; its hybrid nature makes it a mobilization anomaly as well.

In the Mediterranean, the 88th Infantry Division seems the best division first battle. From 11 May through 5 June 1944 it killed or captured 12,000 Germans while losing 1,978 killed, wounded, or captured of its own. In savage fighting it penetrated the formidable Winter Line south of Anzio, then pursued the collapsing Germans with a relentlessness that outdistanced enemy and ally alike.[43] When the push on Rome became a race among competing Allied

formations, the 88th was first into the Eternal City. The 88th's yoke-mate in this offensive was the 85th. The 85th also did creditably, albeit not with the same glamorous results.[44] The 91st did well in the exploitation from Rome to the Arno, but the commitment of this unit was too piecemeal to form an overall impression of a division first battle.[45]

The 92nd Infantry Division, consisting of black enlisted men and black and white officers, had the most unpromising divisional first battle. The Germans had a low opinion of this division from their first contacts with it. On 26 December 1944 they launched a limited-objective counterattack up the Serchio Valley that rendered the 92nd combat ineffective.[46] After this debacle, the Fifth Army attempted to stiffen the 92nd with the 442nd Nisei Regiment and a regiment of white soldiers drawn from deactivated anti-aircraft units. The conventional wisdom was that the 92nd's failure reflected a complex of problems at the time associated with black divisions.[47] There were, as we shall see, other variables involved.

In the Pacific, the 77th's campaign on Guam during July and August of 1944 seems the most promising draftee first battle.[48] The defenses of Guam had been carefully prepared over months and the Japanese on the island numbered 18,500, yet two divisions and a brigade (77th, 3rd Marine Division, 1st Provisional Marine Brigade) secured the island

in less than three weeks. The 77th lost 265 killed, 876 wounded, and 5 missing. It counted over 2,000 Japanese known killed and estimated it had left half as many more buried in caves or battlefield debris.[49] The Guam battle was tough fighting well executed. The 96th Infantry Division turned in a creditable first battle on Leyte. It pushed through determined resistance in formidable positions and killed some 2,769 Japanese at a loss of 799 killed, wounded, or missing.[50] The odds against the Japanese seem to have been longer on Leyte than they were on Guam, however. Before the resistance on Leyte fell apart, the relative losses for the 96th had been 531 Japanese killed for 530 Americans killed, wounded, and missing.[51] When the defense fell apart, killing Japanese proved easy. The Japanese never collapsed in the same way on Guam. Indeed, marines on Guam still suffered losses to die-hards three months after the war was over.[52]

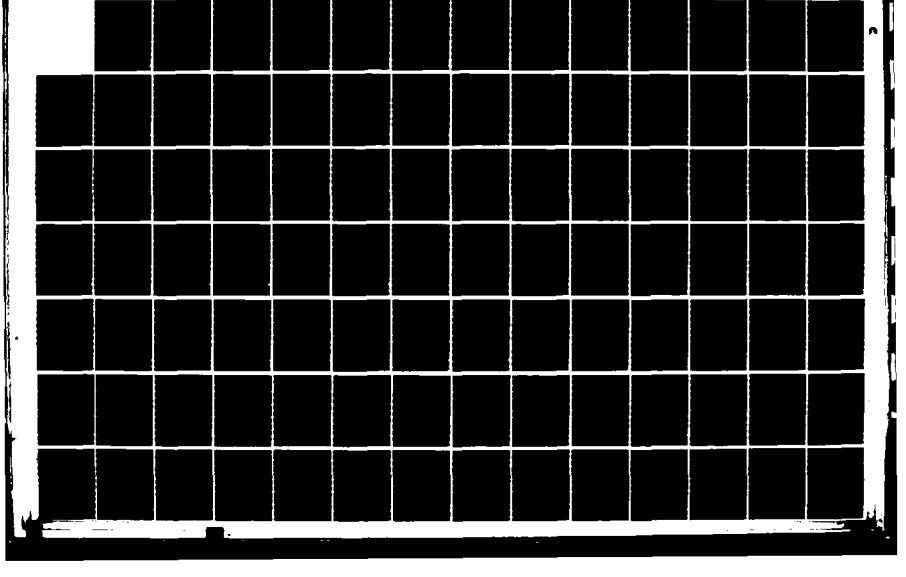
The operations of the 81st on Angaur from 10 September through 21 October 1944 were less satisfactory. Thirteen hundred Japanese defenders forced inordinate delays on the division, and official accounts of the battle describe recurrent problems with respect to coordination and the conduct of operations under fire.[53] Angaur ultimately was a victory for the Americans, but the costs were high: 1,619 Americans killed or wounded and 244 cases of "battle fatigue" to kill 1,300 Japanese and capture 45 more.[54] The

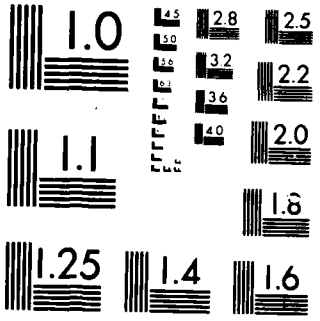
record of the 93rd Infantry Division does not allow us a division first battle. Its elements were committed piecemeal, and it never saw action as a division.[55]

The twenty-six draftee division first battles in Europe are too numerous to treat individually here.[56] For the purpose of this paper, two particularly good first battles and two particularly unsatisfying ones exist. The superb performance of the 99th and the debacle experienced by the 106th have already been discussed.[57] To these first battles, add that of the 104th as exemplary and that of the 90th as disappointing. The 104th's performance in the tough amphibious fighting to open Antwerp earned commendations from none other than Field Marshall Bernard L. Montgomery, never lavish in his praise of Americans.[58] Casualties the division inflicted were impossible to ascertain in the confused fighting, but it did capture at least 658 at a cost of 179 killed.[59] The 90th's performance in the bocage was the most roundly condemned of all the fighting in that inhospitable terrain. Indeed, the division saw two of its commanders relieved within its first two months of combat.[60]

The analysis thus far yields ten divisions with exemplary first battles and ten with disappointing first battles. The first group consists of the 3rd, 4th, 6th, 30th, 40th, 45th, 77th, 88th, 99th, and 104th Infantry divisions. The second group consists of the 7th, 8th, 9th, 28th, 32nd, 34th, 81st, 90th, 92nd, and 106th Infantry

AD-A164 741 WINNING TEAMS: MOBILIZATION -- RELATED CORRELATES OF 2/3
SUCCESS IN AMERICAN..(U) ARMY COMMAND AND GENERAL STAFF
COLL FORT LEAVENWORTH KS J S BROWN 10 MAY 85
UNCLASSIFIED F/G 15/5 NL





divisions. These are not necessarily the ten best and ten worst first battles of the war, nor are the groupings indicative of ultimate reputations. The sample is an assortment of desirable and undesirable first battles balanced by theater and type of division.

2

In Chapter II we found personnel turbulence the most significant factor delaying the stateside preparation of divisions for combat. When divisions deployed overseas, they took a certain period in transit to do so. They might or might not enjoy significant retraining when they arrived overseas. Let us examine these three variables -- personnel turbulence, time in transit, and retraining overseas -- to see if patterns emerge distinguishing our most and least promising first battles.

If one assumes pre-1941 divisions should have been ready for embarkation within four months of Pearl Harbor, 1941 and 1942 divisions should have been ready for embarkation within sixteen months of activation, and 1943 divisions should have been ready for embarkation within fourteen months of activation (Army Ground Forces cut the divisional training cycle from twelve to ten months), a surprising pattern emerges. Our first group of divisions, the best first battles, averaged 7.9 months tardy embarking overseas. Our second group of divisions, the least

promising first battles, also averaged 7.9 months tardy embarking overseas. Add to this coincidence the fact that divisions with the best first battles actually experienced more overall personnel turbulence than those with the least promising first battles. Using Leslie J. McNair's formula as discussed in Chapter II, we find the first group of divisions experienced personnel turbulence that should have accounted for 6.4 months of delay, whereas the second group of divisions experienced turbulence that should have accounted for 5.6 months of delay. This seems odd; the divisions performing best experienced the greatest personnel turbulence.[61]

Personnel turbulence was more than a mere matter of numbers, however. The correspondence in time between turbulence and embarkation dates seems to have been even more important. Take the 30th Infantry Division, for example. Of our two groups, it is the division that suffered the most overall personnel turbulence. During the initial mobilization, it was picked through repeatedly for OCS candidates. In the summer of 1942, it gave up cadres to newly activated divisions and thousands of individual replacements to divisions alerted for overseas movement. In August 1942 it mustered a mere 3,000 present for duty. When promised immunity from further stripping -- in October 1942 Army Ground Forces consciously undertook to procure individual replacements from divisions other than the 30th

-- the original 30th Infantry Division had ceased to exist.[62] The 30th embarked overseas in January 1944, sixteen months after its personnel situation finally stabilized. The 88th Infantry Division, by happy circumstances, experienced the least personnel turbulence in training of any of the World War II Infantry Divisions.[63] It embarked sixteen months after activation. Both the 30th and the 88th experienced sixteen months of personnel stability before they embarked. Why should their proficiency not have been comparable upon embarkation?

Contrast the 30th and 88th, both successful in their first combat, with the unhappy 106th. The 106th suffered considerably less overall turbulence than the 30th, but it was stripped on fourteen separate occasions between September 1943 and August 1944 for an aggregate of 12,442 personnel lost. When the 106th departed overseas in October 1944, less than half its personnel had participated in division versus division manuevers and only three-quarters had had combined arms training.[64] What was more, 3,446 new men joined the division after it was alerted for overseas movement.[65]

All divisions received such a contingent of replacements after having been alerted for overseas movement. These men replaced losses due to attrition in training, personnel transfers, and unanticipated nondeployable status. Replacement contingents were a

troubling necessity, since the men in them often had not advanced beyond individual training and certainly had not trained with the units of which they were to be members. The size of these replacement contingents are an index of the numbers of unassimilated men in a division as it deployed, and of the extent to which depletion occurred during the course of -- rather than prior to -- training. For divisions with unsuccessful first battles the post-alert replacement contingents averaged somewhat over 3,000, whereas those with successful first battles they averaged about 2,000.[66]

All of the successful divisions seem to have enjoyed relative personnel stability during the year prior to their embarkation. Only their pre-alert replacement contingents had not been through the bulk of the training process with the division. The record of the divisions with less successful first battles was more uneven. Three experienced significant turbulence in the year before they embarked. Two others, the 32nd and 34th, embarked well ahead of the schedule suggested by McNair to allow a division to compensate for personnel turbulence with further training.[67] A conclusion from all of this may be a tautology: one does not need to keep a unit together forever to train it adequately, one only needs to keep it together long enough. In World War II, "long enough" seems to have been about a year.

Divisions successful in their first battles had somewhat smaller post-alert contingents and somewhat more personnel stability in the year before embarkation than those unsuccessful in their first battles. This may not seem to have opened much of a distinction between them, but the margin widens when one considers retraining overseas. Retraining overseas represented an opportunity to acclimatize, recondition troops and units after prolonged periods of transit, and integrate post-alert contingents. Each of our ten successful divisions underwent a consciously organized retraining program of two weeks or more after arriving overseas. Of the unsuccessful divisions, only three enjoyed a comparable experience.

The 3rd, 45th, and 88th Infantry Divisions trained intensively in North Africa before embarking for Italy. The 3rd trained near Bizerte, the 45th at Arzew in Morocco, and the 88th at Magenta in Algeria.[68] The latter facility was actually a training cantonment of the French Foreign Legion. Tough mountainous terrain provided environmental conditions much like Italy, and uninhabited expanses allowed for a full range of maneuver and live-fire. Veterans characterized this training as the best they had ever had.[69] The 3rd and 45th also had amphibious training in anticipation of the landings in Sicily. The 4th, 30th, and 99th experienced the rigorous, somewhat standardized program of retraining in England before embarking for Europe.[70] The 104th shipped

directly to Cherbourg; it was the first division to do so. It spent over a month in Normandy engaged in light security duty and intensive training before moving to the front.[71] The 40th spent more than a year in Hawaii in amphibious training, jungle training, and security before shipping to the Philippines.[72] The 77th went through two months of amphibious and jungle training in Hawaii before shipping to Guam,[73] and the 6th trained at Milne Bay, New Guinea, for four months before moving into actual operations in the Toem-Wakne area.[74] Without exception, the overseas retraining programs of the successful divisions were intensive, well thought-out, and relevant to the circumstances of their first combat.

Contrast the experiences of the less successful divisions. The 7th shipped directly from the April spring of San Francisco to an assault landing, unrehearsed, on the frigid tundra of rocky Attu.[75] The 32nd was in Fort Devens, Massachussetts, en route to Ireland when diverted to Adelaide, Australia. Hardly had the division closed to Adelaide when it was rerouted to Brisbane, then New Guinea. These shifts represent no small distances. The division attempted retraining programs several times, but never got anywhere with them before moving elsewhere. Even if they had, it is doubtful that training near Adelaide or Brisbane would have much resembled the New Guinea jungle.[76] The 34th had a similar experience. Shipped originally to Ireland, it

reloaded and came ashore in Algeria -- hardly a comparable environment. Algeria is no small area; the 34th saw little combat and no training as it moved from place to place trying to catch up with the battle. It had not yet reconsolidated from transit when the battle caught up with it, at Kasserine Pass.[77] The 9th, first ashore in Morocco, also experienced prolonged transit and little training in North Africa. The 9th's trailing elements finally closed with the division only a few days before its first major battle.[78] On the other side of the planet, the 81st experienced similar complexities closing with the battle. It arrived piecemeal in Hawaii over a one month period. By the time it reconcentrated in Hawaii, it had been alerted for Angaur. The 81st was alerted for Yap and Ulithi as well; these two operations were cancelled, then the Ulithi operation was reinstated. In the midst of this confusion and hasty movement, the division enjoyed bits and pieces of Hawaii's amphibious and jungle training instead of the comprehensive program enjoyed by the 40th and 77th.[79] The 92nd and 106th fell victim to a perceived need to rush troops into the line. After the liberation of Rome, the American Fifth Army lost five divisions to the proposed invasion of southern France. It rushed the 92nd forward so quickly that one of its regiments was in the line before the rest had deployed overseas.[80] The 106th had barely offloaded in England before Dwight D. Eisenhower, alarmed by

the late 1944 deceleration of the Allied advance, rushed it to France.[81] Only the 8th, 28th, and 90th Infantry Divisions, all participants in pre-Normandy retraining in the United Kingdom, experienced retraining programs overseas.[82]

It is true that successful divisions took somewhat more time than unsuccessful divisions between embarkation and their first major combat, an average of 6.4 months as compared to 4.2 months. If one screens out the exceptional 40th Infantry Division, which spent more than a year in Hawaii, the average transit time for the successful divisions is still 4.9 months. Each division had its own peculiar deployment circumstances, but a general pattern is clear. The successful divisions took somewhat more time and paused to retrain overseas; the unsuccessful ones did not. This retraining allowed divisions to shake off the erosion coincident with transit, acclimatize, and integrate post-alert replacements. The fact that divisions unsuccessful in their first combats had somewhat larger post-alert contingents to begin with made their lack of a retraining program overseas even more damaging.

3

Divisions successful in their first major combats had somewhat more personnel stability -- as indicated by the size of post-alert replacement contingents -- in the year

before embarkation and took somewhat longer getting into major battles. One of the reasons for delay seems to have been a pause for retraining. The successful divisions also gave over time -- by accident or design -- to fighting as divisions against minor opposition in not particularly threatening circumstances before their first major battles. None of the divisions unsuccessful in their first major battles enjoyed this preliminary combat experience, although a few had subordinate elements that experienced combat before the division did.

The 3rd Infantry Division assault landed near Fedala and fought a minor campaign in which it lost twenty killed while the Moroccan Vichy were in the process of collapsing. Given the uncertain disposition of Franco's forces in Spanish Morocco, the subsequent occupation of Morocco bore some resemblance to combat operations. When the 3rd reconsolidated to train for Sicily, it could legitimately lay claim to a baptism by fire.[83] The 6th Infantry Division moved from training in Milne Bay, New Guinea, to a week of "active patrolling" -- mopping up -- near Toem-Wakde before moving again to attack Lone Tree Hill.[84] The 30th landed across Omaha Beach nine days after D-Day and secured the Vire-et-Taute Canal for more than two weeks. During these two weeks of relative quiet it skirmished with the Germans, conducted reconnaissance, and rehearsed its anticipated attack across the Vire-et-Taute on a canal of similar size.

The 40th Infantry Division participated in the closing stages of the New Britain campaign against collapsing Japanese opposition. When it came ashore in the Philippines, it had already had a taste of jungle fighting.[86] The 45th Infantry landed in Sicily on 10 June but did not face a stiff battle before Motta Hill, on 26 June. Prior to Motta Hill the division maneuvered against light opposition while maintaining contact with flanking units more decisively engaged.[87] The 88th Infantry Division -- the first draftee division into combat and perhaps the most carefully rehearsed -- occupied a sector of the Minturno front for three weeks, withdrew to retrain and rehearse for its major attack, then returned to its original sector for DIADEM. During its first tour at Minturno virtually every infantryman and many engineers patrolled forward to the German lines, some went through them, and artillerymen engaged targets throughout the sector. In the course of this initial three weeks the 88th suffered 99 killed, 252 wounded, 36 missing, and 85 neuro-psychiatric casualties. It seems to have inflicted somewhat more losses upon the enemy, primarily through active patrolling supported by artillery. Certainly the 88th Infantry Division was combat-experienced when orders carried it out of its positions and into the enemy's.[88] The 99th prepared for combat near Aubel, Belgium during November 1944, and began a week of active patrolling near the Roer on 9

December. It had just worked through this period of preliminary combat and was considered ready for serious probing of the Siegfried Line when the Ardennes offensive struck.[89] The 104th Infantry Division spent a month securing port facilities, pipelines, and lines of communications in Normandy against threats real and imagined. One operation included a road march of thirty miles to counter exaggerated threats of a German raid from the Jersey Islands. All this motion may not have killed many Germans, but it did accustom the division to working together under combat conditions. When the 104th was committed to the operations around Antwerp, the circumstances were such that component units gained a week of experience against modest resistance before the division attempted its first set-piece battle, the seizure of Standaarbuiten.[90] The 4th and 77th Infantry Divisions seem to have been an exception to a general pattern of preliminary combat experience, but even these entered first battles at a pace gradual enough to allow for settling. The 4th's opposition on Utah Beach was light, and it encountered little serious opposition before its attempt to seize Quineville. Thus, its first major battle began with four days of combat on a modest scale.[91] The 77th had a similar experience on Guam. During the first two weeks the weight of the fighting fell on the marines and the 77th maneuvered forward against light opposition. When the 77th finally

came up against stiff opposition, it was already a veteran outfit.[92]

The pattern with respect to preliminary combat is very different in the cases of our unsuccessful divisions. The 7th Infantry Division faced severe opposition almost from the start on Attu.[93] Eisenhower threw the 8th, 28th, and 90th into the thick of the bocage fighting as soon as they came ashore.[94] The 81st enjoyed no warm-up on Angaur,[95] and the 32nd Infantry Division, "riddled with malaria, dengue fever, and tropical dysentery" from a prolonged approach march, stumbled into unexpectedly severe resistance at Buna.[96] Both the 9th and the 34th came into their first major battles after prolonged transits with little contact.[97] The 92nd and 106th were attacked after having been hurriedly rushed forward to plug holes in the line.[98] None of the divisions unsuccessful in their first major battles enjoyed anything approximating a veteran status before being thrown into them.

The advantages of a little combat experience were not simply psychological, although the psychological advantages of having been under fire seem clear enough.[99] They were also more than a matter of weeding out the unfit at low cost, although that too was a useful service.[100] Preliminary combat yielded such important advantages as exercising the chain of command, adjusting techniques learned in training, and amending the logistical apparatus.

The 88th Infantry Division, apotheosis of preliminary combat, offers useful illustrations of each of these developments.

During its first three week tour at Minturno, the 88th engaged in heavy patrolling to ascertain enemy positions and develop combat experience. When patrols identified targets, an improvised relay system reached back to the division artillery to solicit timely and effective fire. This technique ultimately exercised the entire chain of command; companies sponsored patrols, yet adequate communications originated at battalion level and artillery battalions normally associated with regiments. The full range of patrolling activities in sector came together at division level, where the G2 (Intelligence), G3 (Operations), and Division Artillery pieced their separate information into a comprehensive picture. In effect the skirmishing in no-man's land became a rehearsal for the DIADEM offensive. It is no accident that the German's particularly cited the 88th for close cooperation between infantry and artillery during DIADEM. The artillerymen had already fired 43,940 rounds supporting infantry patrols on the same ground and, in many cases, against the same targets.[101]

The 88th's experimentation in its first weeks at Minturno led the division to develop tactical solutions at variance with the Army training program. The Army training

program featured artillery forward observers at the company level and above, and envisioned artillery support as a series of massive engagements phased to keep pace with the movement of major units. In Italy a lone machine-gunner could derail elaborate plans, and the ground was often too broken for the neat maneuver of major units. A few shells in the right place quickly could be more significant than the most intense of artillery preparations. Artillery support to patrols around Minturno developed habits of discriminate support in small doses at the end of flexible communications. This capability was to prove useful in subsequent advances through the lunar landscapes of the Apennines.[102]

The fighting in the Apennines also required amendments to the 88th's logistics. Only mules -- or porters -- could get supplies forward from Minturno, and only litter bearers could get casualties back. The division's truck fleet -- an inheritance from its stateside experience -- was only useful to a point. Integrating trucks, mules, and manpower into an overall transportation establishment was no easy task. Three weeks in the line at Minturno offered the 88th sufficient time to work out the intricacies of supply under fire in the Apennines. In the advance on Rome, the achievements of the division's logisticians in torturous terrain were as remarkable as the achievements of the combat units themselves.[103]

If the 88th Infantry Division had not been in the line for three weeks at Minturno, it would have launched DIADEM with an untested chain of command, an inadequate liaison between infantry and artillery, and an inappropriate logistical apparatus. Only experience on the ground could have amended those flaws. Other units fortunate enough to have preliminary combat experience made similar adjustments, although the details differed unit by unit and theater by theater. In Europe, for example, combat experience led to an accumulation of bazooka's -- useful against bunkers and tanks -- and a shedding of M1 carbines.[104] Physicians remarked that corpses and wounded evacuees returned accompanied by disproportionate numbers of carbines. As attrition occurred, troops rid themselves of the carbines, which they distrusted, by swapping weapons with casualties going to the rear.[105] The 106th met the Fifth Panzer Army with prescribed Table of Organization equipment. More experienced divisions had informally altered their Tables of Organization, largely because of the surreptitious efforts of non-commissioned officers.[106]

Developments related to preliminary combat experience shade into a discussion of the extent to which the battle a division first fought resembled the battle it had trained to fight. The standardized Army training program focused on individual skills and on large-scale maneuvers in which the integration of the several arms and branches took place at

the company level and above. The battalion combat firing proficiency tests -- 2000 points for the attack phase and 1000 points for the defense phase -- and maneuvers pitted infantry units against each other in moderately wooded rolling terrain executing a set menu of tasks.[107] The major training exercises were a military ballet, with regimental combat teams deftly working against each other in sweeping maneuvers. Artillery integration was fair to excellent during training, but armor and air assets rarely were available.[108] Units like the 88th first trained with armor and aviation overseas.[109] The stateside training program did not put much emphasis on breaching prepared positions; "Training in Operations against Permanent Land Fortification" was a separate course selected personnel attended on temporary duty.[110] Landmine warfare and communications expedients also received cursory attention during the standardized programs.[111]

Rupturing a defensive line is perhaps the most challenging of military operations. Minefields and obstacles must be breached so that carefully integrated teams of infantry and armor can roll forward, with infantry facilitating the advance of tanks and tanks providing direct fire support to infantry. After initial bombings and shellings on a massive scale, the advance requires discriminant indirect fires -- a few carefully directed rounds into precisely the right positions. This coordinated

combination of infantry, armor, artillery, air support, and engineers is utterly dependent upon effective communications at the lowest levels of command as the battle develops.[112] Despite its battlefield importance, the Army training program did not give much attention to the intricacies of rupturing defensive positions. Indeed, some training stipulations had to be reversed in combat.[113] Once battles broke open into mobile warfare, the Army training program came to its own. Hard-marching infantry columns, almost invariably more physically fit than their adversaries,[114] outmaneuvered the opposition and swept forward to critical objectives. When they encountered opposition, one unit fixed it while another swept around a vulnerable flank supported by an overwhelming artillery preparation -- "just like maneuvers."[115] American soldiers were more experienced marksmen than their Axis counterparts;[116] in a war of movement markmanship could be used to best advantage. On the mobile battlefield tanks and planes fought on a scale that rendered deficiencies in grass-roots infantry coordination less relevant. American truck fleets sped reinforcements and supplies of all types over extended distances. Trucks also made possible the replenishment of mind-boggling expenditures of artillery ammunition over the widening gaps that separated divisions from railheads or ports.[117] No soldier was better equipped, better supported, or better able to mass firepower than the

American GI. If it did not encounter masses of armor -- there had been so little armor to train against in the Zone of the Interior and such a shortage of anti-tank ammunition to train with -- an American infantry division was optimally trained to attack across a fluid battlefield against moderate resistance.

For the most part, our successful divisions fought under conditions that optimized their training. Mountainous terrain excepted, the maneuvers of the 3rd, 45th, and the 88th after the Minturno breakthrough could have been lifted bodily from the schemes for division field exercises.[118] All three divisions had had mountain training overseas, and the 88th virtually rehearsed its initial breach of the Winter Line at Minturno. The 30th's crossing of the Vire opened an opportunity that came as close to mobile warfare as could be had in the convoluted Normandy fighting.[119] The 104th translated mobile warfare into an amphibious dimension. In this it was well served by amphibious training, by adequate amphibious lift, and by its commander's insistence that a major portion of its training be conducted at night. The combination of the Army training program with amphibious and limited-visibility training proved a happy one in the fog-shrouded November marshes of the Rhine estuary.[120] The 6th and 77th were in environments less mobile than they might have hoped for, but they did have some opportunity to maneuver and the Japanese obliged

them with banzai attacks for which the battalion defensive combat firing proficiency tests seemed an ideal preparation.[121] The 40th's campaign on Luzon was the Army training program's division manuver phase translated to a tropical environment, an environment for which the division prepared after overseas.[122] The 99th found itself fighting mobile warfare in an unanticipated direction against an enemy possessing overwhelming armor superiority. It managed to fight its major actions in terrain wherein tanks did not count for much, however, and its mixture of defenses, counterattacks, withdrawals, and successive positions would have done credit to a division assigned the defensive portion of multi-division maneuvers.[123] Only the 4th Infantry Division, called upon to slug it out toward Quineville in a narrow heavily defended sector, was involved in a first major battle that did not approximate its stateside training.[124]

The experiences of the unsuccessful divisions contrast with this pattern of having trained for the battle they first were to fight. The 8th, 9th, 28th, and 90th all attacked headlong on narrow sectors against tough positions.[125] The 7th and 81st were thrown ashore into similarly formidable defenses.[126] The 32nd was expected to blast through a series of pillboxes in a pestilential swamp without the full use of supporting arms, particularly artillery.[127] The 92nd was attacked by specially trained

mountain troops in mountainous terrain. The 34th and 106th encountered masses of armor, for which they were ill-prepared, attacking over terrain in which armor could be used.[128] When surrounded, subordinate elements lost the mobility their training had laid such an emphasis on developing. All factors considered, the divisions successful in first battles fought the first battle envisioned by their training programs, whereas those unsuccessful did not.

4

Having examined pre-embarkation personnel stability, time in transit, retraining overseas, preliminary combat prior to major combat, and the extent to which actual combat approximated the Army training program, we find no single factor that fully distinguishes the divisions successful from those unsuccessful in their first major battles. The successful divisions enjoyed relative personnel stability in the year before embarkation -- as indicated by the timing and volume of replacements and the size of pre-embarkation contingents -- but some of the unsuccessful did so as well. Successful and unsuccessful divisions had short, medium, or long periods in transit. The successful divisions all retrained overseas; a few of the unsuccessful divisions did so as well. The successful divisions all had preliminary combat, as did a few of the unsuccessful ones.

For the most part, the initial combat of the successful divisions approximated the Army training program and that of the unsuccessful did not, yet there were exceptions. The 4th and 88th initially attacked into prepared positions on a narrow front, something stateside training had not conditioned them to do. The 99th faced formidable concentrations of armor, far more formidable then it had even imagined in training. Taken alone, none of our selected mobilization-related variables seem capable of fully explaining the differences between successful and unsuccessful divisions. Taken together, the patterns they suggest are striking. See Table 5, a summary of our discussion thus far.

If one were so bold as to suggest the profile of a division successful in its first combat, one might suggest that it had fair to good levels of personnel stability in the twelve months prior to embarkation, paused in transit for retraining overseas, had preliminary combat experience, and fought a first battle that resembled its training. A division unsuccessful in its first combat generally had fair to poor levels of personnel stability in the twelve months prior to combat, did not retrain or did not retrain much overseas, had no preliminary combat experience, and fought a first battle that did not much resemble the battles it simulated in training. Seven of our successful and three of our unsuccessful divisions match these profiles outright.

TABLE 5

MOBILIZATION-RELATED VARIABLES AND
WORLD WAR II INFANTRY DIVISIONS

Division	Pre-Embarkation (12 months prior) Personnel Stability	Months Embarkation to Battle	Retraining Overseas	Preliminary Combat	Resemblance of Combat to Training
3	GOOD	8	YES	YES	YES
4	FAIR	5	YES	SOME	NO
6	FAIR	10	YES	YES	YES
30	FAIR	4	YES	YES	YES
40	GOOD	20	YES	YES	YES
45	FAIR	1	YES	YES	YES
77	FAIR	4	YES	SOME	YES[1]
88	GOOD	7	YES	YES	YES[1]
99	FAIR	3	YES	YES	SOME
104	GOOD	2	YES	YES	YES
7	FAIR	1	NO	NO	NO
8	FAIR	6	YES	NO	NO
9	FAIR	3	NO	SOME	NO
28	POOR	9	YES	NO	NO
32	POOR	6	NO	NO	NO
34	POOR	10	NO	SOME	NO
81	FAIR	2	SOME	NO	SOME
90	FAIR	2	YES	NO	NO
92	POOR	2	NO	NO	SOME
106	POOR	1	NO	NO	NO

[1]After the first three days.

The rest come close. These profiles do not define cause and effect and they do not address all possible variables. They do address mobilization-related variables we have identified as important, however, and the patterns they suggest are striking.

It is interesting to note that the correlates of success in first combat seem somewhat more diffuse than the correlates of success in completing the Army training program. Personnel turbulence alone explained four-fifths of the delay getting divisions declared deployable. No single variable seems to correlate so completely with success or failure once overseas.

Discussion of success or failure in achieving deployable status or in divisional first battles whets an appetite for a discussion of subsequent performance. How did divisions gain or sustain excellence? How did some, like the 9th, rebound from embarrassing first battles to achieve enviable reputations? Did the good initial performers have subsequent poor performance? The next chapter draws upon the divisions we have already introduced to develop a discussion of divisional correlates of success over the long haul.

Endnotes

1. Army Ground Forces Endorsement (Subject: Mobilization Training Programs) to G-3, War Department, October 30, 1942, National Archives (461); Army Ground Forces Letter (Subject: Training Directive Effective November 1, 1942) to Commanding Generals, October 19, 1942, National Archives, MMRB (320.2); Bell I. Wiley, "The Building and Training of Infantry Divisions," in The Army Ground Forces, the Procurement and Training of Ground Combat Troops (Washington; Historical Division of the Army, 1948).

2. Track divisional after action reports after identifying the appropriate engagements in The Army Almanac, a Book of Facts Concerning the Army of the United States (Washington; Government Printing Office, 1950).

3. Lieutenant Colonel Albert N. Garland and Howard McGaw Smyth, Sicily and the Surrender of Italy, (Washington; Ofice of the Chief of Military History, United States Army, 1965), 147-257, 300-424.

4. Third Infantry Division Operations Report (Subject: Participation of 3rd Infantry Division in Sicilian Operation) to the Adjutant General, 10 September 1943, p. 44, CARL (N-6528-A).

5. Garland and Smyth, 406-417.

6. Webster's American Military Biographies, Robert McHenry, editor, (Springfield, Massachusetts; G & C Merriam Company, 1978), 441-442.

7. Reports on Operations, 9th Infantry Division, Southern Tunisia, Northern Tunisia and Sicily (Headquarters Ninth Infantry Division, APO #9, % Postmaster, New York, N. Y., 22 September 1943); George F. Howe, Northwest Africa: Seizing the Initiative in the West (Washington; Office of the Chief of Military History, Department of the Army, 1957), 564-577.

8. Ibid.

9. JICA Memorandum (Subject: Operations Order of the 9th Division) to Chief MIS, 16 July 1943, CARL (N-6412).

10. Howe, 568.

11. Howe, 172-228.

12. Gordon A. Harrison, Cross - Channel Attack (Washington; Office of the Chief of Military History, Department of the Army, 1951), 386-447.

13. Mission Accomplished: The Story of the VII Corps United States Army in the War Against Germany 1944 -1945 (Leissiz, Germany: J. J. Weber, 1945), p. 21.

14. Martin Blumenson, Breakout and Pursuit (Washington; Office of the Chief of Military History, Department of the Army, 1961), 123-128.

15. 8th Infantry Division Report (Subject: Report After Action Against Enemy) to the Adjutant General, 5 August 1944, Annex 2, CARL (R-12524.1).

16. Blumenson, 149-156.

17. Ibid., 284-295.

18. Robert Ross Smith, The Approach to the Philippines (Washington; Office of the Chief of Military History, United States Army, 1953), 263-279; The Sixth Infantry Division in World War II 1939-1945 (Washington; Infantry Journal Press, 1947), 41-51.

19. Smith, 53-83.

20. Stetson Conn, Rose C. Engleman, and Byron Fairchild, Guarding the United States and its Outposts (Washington; Office of the Chief of Military History, United States Army, 1964), 279-294.

21. The Army Almanac, 528-545.

22. Garland and Smyth, 147-162, 185-238, 300-323; 45th Infantry Division G-3 Journal for the Period July 10, 1943 - August 22, 1943, CARL (N-13370).

23. Hugh M. Cole, The Ardennes: Battle of the Bulge (Washington; Office of the Chief of Military History, 1965), 75-172.

24. 34th Infantry Division Report (Subject: Historical Record of 34th Division, less 2nd Battalion 133rd Infantry, in the Tunisian Campaign) to the War Department, 13 December 1943, CARL (N-20037.1); Howe, 401-481.

25. Howe, 477.

26. Ibid., 487.

27. Martin Blumenson, Salerno to Cassino (Washington; Office of the Chief of Military History, United States Army, 1967), 73-151.

28. Robert Rose Smith, Triumph in the Philippines (Washington; Office of the Chief of Military History, United States Army, 1963), 139-210; The 40th Infantry Division, December 10, 1947, (CARL BM 94050 H6); 40th Infantry Division Report (Subject: Assault Operations by the 40th Infantry Division...) 21 September 1945 (CARL N-10460).

29. John Miller, Jr., Cartwheel: The Reduction of Rabaul (Washington; Office of the Chief of Military History, United States Army, 1959), 67-164; Stanley Frankel, The 37th Infantry Division in World War II (Washington; Infantry Journal Press, 1949), 69-73.

30. Miller, 67-164; Joseph E. Zimmer, The History of the 43rd Infantry Division 1941-1945 (Baton Rouge, Louisiana; The Army and Navy Publishing Company, 1947).

31. M. Hamlin Cannon, Leyte: The Return to the Philippines (Washington; Office of the Chief of Military History, Department of the Army, 1954), 300-305; The Army Almanac, 539.

32. Smith, The Approach to the Philippines, 480-493; History of the 31st Infantry Division in Training and Combat, 1940-1945, May 5, 1947, CARL (BM94050H6); The 33rd Infantry Division Historical Committee, The Golden Cross: A History of the 33rd Infantry Division in World War II, (Washington; Infantry Journal Press, 1954).

33. The Army Almanac, 541-542.

34. Samuel Milner, Victory in Papua (Washington; Office of the Chief of Military History, U. S. Army, 1957), 323.

35. Ibid., 169-327.

36. Philip A. Crowl, The Campaign in the Marianas (Washington; The Office of the Chief of Military History, Department of the Army, 1960), 191-202.

37. Blumenson, 90-145; see also Russell F. Weigley, Eisenhower's Lieutenants (Bloomington; Indiana University Press, 1981).

38. Blumenson, 286-297.

39. Blumenson, 153-174, 296-304.

40. Ibid., 511.

41. Weigley, 467-476.

42. The Army Almanac, 542-572.

43. Ernest F. Fisher, Jr., Cassino to the Alps (Washington; Center of Military History, 1977), 42-102, 163-226; Statistical Data (daily rates) on Opposing Forces, U. S. II Corps Offensive into Itri, Italy, May 1944, Operations Research Office (CARL N-17851).

44. Ibid.

45. Fisher, 236-296.

46. Fisher, 406-413.

47. Ibid., also interview with Colonel Horace M. Brown, then an artillery officer with the 88th Infantry Division, 23 July 1977.

48. Crowl, 339-440; Guam (Washington: Historical Division, *United States War Department*, 1946).

49. Guam, 133-134.

50. M. Hamlin Cannon, Leyte: The Return to the Philippines (Washington; Office of the Chief of Military History, Department of the Army, 1954), 103-123.

51. Ibid., 114.

52. Guam, 132.

53. Smith, 494-531.

54. Ibid., 530.

55. The Army Almanac, 563-564.

56. For details concerning individual first battles, track the appropriate entries in The Army Almanac into the divisional after action reports filed in CARL under "Infantry Division..."

57. See Chapter I.

58. Leo A. Hoegh and Howard J. Doyle, Timberwolf Tracks, The History of the 104th Infantry Division 1942-1945 (Washington; Infantry Journal Press, 1947), 34-50.

59. Ibid.

60. Blumenson, 63-72, 126-130, 201-204; see also Weigley.

61. See Wiley, 489-493, and Chapter II.

62. Report (Subject: Division Book) from the Deputy Chief of Staff of Army Ground Forces, undated, National Archives (320.2/283); Bell I. Wiley, "The Building and Training of Infantry Divisions," in The Procurement and Training of Ground Combat Troops (Washington; Historical Division, Department of the Army, 1948), 456-458.

63. John S. Brown, Draftee Division: A Study of the 88th Infantry Division, First All Selective Service Division into Combat in World War II (Ann Arbor; University Microfilm International, 1983).

64. See Note 62, above and Wiley, 480-481.

65. Ibid.

66. See Notes 62 and 64, above. See also Milner, 132-135, for a discussion of the direct results of unassimilated replacements on division proficiency.

67. Army Ground Forces Memorandum from the Commanding General to the Chief of Staff, 7 March 1944, National Archives (353/206); Wiley, 489-493.

68. COHQ Bulletin (Subject: Notes on Operation Husky - Sicilian Invasion), October 1943 (CARL N6530.2); 3rd Infantry Division Field Order Number 5 (Operation Husky), 26 June 1943 (CARL R12187-A); 3rd Infantry Division Final Report (Subject: Torch Operation, Invasion of North Africa, Western Task Force) (CARL M-N 1048.5); Interview of Major General Troy Middleton, Commanding General, 45th Infantry Division, by Colonel J. Stovall, 30 December 1943 (CARL S6875); Movement Orders, Shipment 5929 (Preparation of 45th Division for Foreign Service), April 1943 (CARL N2042); John P. Delaney, The Blue Devils in Italy -- A History of the 88th Infantry Division in World War II (Washington; D. C., Infantry Journal Press, 1947), 35-37.

69. Letters to the author in response to the author's inquiries, from Colonel Horace M. Brown, Jr., Colonel Robert J. Karrer, Dr. Paul C. Richmond, and Colonel Peter L. Topic.

70. 4th Infantry Division Special Operations Report (Subject: Pre-Assault Plans, Operation Overlord), May 1944 (CARLM-N 1067.1); 30th Infantry Division After Action Report, June 1944 - May 1945, 4 May 1945 (CARL R 12139); 30th Infantry Division After Battle Report, 15 June 1944 - April 1945 (CARL R12422); 99th Infantry Division Action Against Enemy Report, November 1944 - May 1945 (CARL N -12553).

71. Hoegh and Doyle, 34-50.

72. 40th Infantry Division, Lessons Learned in Northern and Southern Philippines Campaigns, January-April 1945 (CARL N12227); Order of Battle of the United States Army Ground Forces in World War II, Pacific Theater of Operations (Washington, D. C.; Chief of Military History, 1959) (CARL N16436.80).

73. Ours to Hold it High; the History of the 77th Infantry Division in World War II (Washington, Infantry Journal Press, 1948), 41-43.

74. The Sixth Infantry Division in World War II (Washington; Infantry Journal Press, 1947), 37-40.

75. Conn, Engleman, and Fairchild, 279-294.

76. 32nd Infantry Division Report of Activities, Papuan Campaign, New Guinea, September 1942-January 1943 (CARL M-N1034.1); Milner, 132-137.

77. Army Ground Forces Board Report (Subject: 34th Infantry Division, Lessons Learned in Combat), September 1944, (CARL MF-N4118); 34th Infantry Division Historical Record (Subject: The Tunisian Campaign, 13 December 1943 (CARL N 20039.1); 34th Infantry Division Report of Signal Communication (Subject: Experiences in the Tunisian Campaign, 8 June 1943 (CARL N6446).

78. Report on the Operations Conducted by the 9th Infantry Division U. S. A. in Southern Tunisia, 26 March - 8 April 1943, 25 August 1943 (CARL M9405 H6C73); Howe, 564-567.

79. Army Ground Forces Observers Report, 81st Infantry Division, 30 August - 25 September 1944 (CARL -3610),

The 81st Infantry Wildcat Division in World War II (Washington; Infantry Journal Press, 1948), 44-45.

80. With the 92nd Infantry Division (MTOUSA, Historical Committee, 92nd Infantry Division, 1945), 31-37; Fisher, 408-410.

81. 106th Infantry Division After Action Report, for December 1944 through May 1945, 1 June 1945 (CARL N-12572); The Battle of the Bulge, Disaster in Battle: Account of Events in 106th Division and 14th Cavalry Group Sectors, Ardennes, 16-26 December 1944 (The John Hopkins University, ORO-T-202, 25 August 1952) (CARL R 16454.160).

82. The Army Almanac, 525-526, 530-531, 561-562.

83. Army Ground Forces Observers Report (Subject: Task Force Brushwood, Torch Operation) 22 December, 1942 (CARL N6189), Howe, 116-146.

84. The Sixth Infantry Division in World War II, 41-51.

85. 30th Infantry Division After Action Report, June 1944 - May 1945, 4 May 1945 (CARL R12139); 30th Infantry Division After Battle Report, 15 June 1944 - April 1945 (CARL R12422).

86. 40th Infantry Division, Lessons Learned in Northern and Southern Philippine Campaigns, January-April 1945 (CARL N12227); The 40th Infantry Division, The Years of World War II, December 10, 1947 (CARL M9405-H6-073-G40), 100-104.

87. 45th Infantry Division Report (Subject: The Sicilian Campaign, Operation Husky, 22 August 1943) (CARL N13370); Interview of Major General Troy Middleton, Commanding General, 45th Infantry Division, by Colonel J. Stovall, 30 December 1943 (CARL 56.875); Garland and Smyth, 147-162, 185-238, 300-323.

88. Entries for the period 5-19 March 1944 in The History of the 349th Infantry Regiment; The History of the 350th Infantry Regiment; and the History of the 351st Infantry Regiment, all regimental logs from the National Archives, Suitland, Maryland, republished by the 88th Infantry Division Association, Kensington, Maryland; Brown, 184-224.

89. 99th Infantry Division Action Against Enemy Report, November 1944 - May 1945 (CARL N-12550).

90. 104th Infantry Division After Action Report for October 1944 - April 1945 (CARL N12682); Hoegh and Doyle, 39-48.

91. 4th Infantry Division After Action Report (Subject: France, June 1944) 21 June 1944 (CARL N3345); Weigley, 207-211.

92. 77th Infantry Division G3 Journal (Subject: Forager Operation: Guam, 6 June - 10 August 1944) (CARL N-12233); Ours to Hold it High, 55-125; Crowl, 339-440.

93. Conn, Engleman, and Fairchild, 279-294.

94. 8th Infantry Division Report After Action Against Enemy from 8 July 1944 to 9 May 1945 (CARL N12524); 28th Infantry Division Unit Report, July 1944- April 1945 (CARL N-112232); After Action Report, 90th Infantry Division, July 1944 - May 1945.

95. See Note 79, above; see also Smith 494-531.

96. See Note 76, above.

97. See Notes 77 and 78, above; see also Howe 229-256, 427-428, 463-492.

98. See Notes 80 and 81, above. See also Fisher, 407-410.

99. S. L. A. Marshall, Men Againt Fire, The Problem of Battle Command in Future War (Gloucester, Massachussetts; Peter Smith, 1978), 64-84.

100. Captain John W. Appel "Prevention of Manpower Loss from Psychiatric Disorders" (undated study for the Chief of the Mental Hygiene Branch) in the J. E. Sloan Papers, USAHRC, Carlisle Barracks, Pennsylvania.

101. The History of the 349th Infantry Regiment, 2.

102. Direct Support (History of the 338th Field Artillery Battalion; Publisher Unknown, 1945); We Left Home (History of the 337th Field Artillery Battalion, Milan, S. A. Grafitalia, 1945); Brown, 186-174.

103. Brown, 204-210, 261-267, 294-303.

104. Cole, 136-145; Twelfth Army Group Immediate Report Number 40 (Subject: Comments on the Carbine). Submitted by Colonel H. A. Triblet, Combat Observers with XV Corps, 28 August 1944 (CARL IR-40).

105. Ibid.

106. See, for example, the discussion of the newly arrived 106th in Charles B. MacDonald, Company Commander (Washington, Infantry Journal Press, 1947), 78.

107. Army Ground Forces Letter (Subject: Training Directive Effective November 1, 1942) from Army Ground Forces to Commanding Generals, October 19, 1942, LTC King Papers, USAARMS Library, Fort Knox, KY, 40121.

108. Letters from Major General John M. Lentz (then the Training Officer of Army Ground Forces) to the author in response to the author's inquiries, September 28 and September 30, 1977.

109. History of the 351st Infantry Regiment, entry for 19 April 1944.

110. Army Ground Forces Letter (Subject: Training in Operations Against Permanent Land Fortifications) to Commanding Generals, January 5, 1943, National Archives, MMRB (353/2).

111. See Note 107, above; see also Brown, 52-82.

112. An example of the state of the art with respect to a combined arms breach of prepared positions is provided by the 1st Armored Division's attack out of Anzio; see Fisher, 120-141.

113. E.g., see the discussion in section 2 of Chapter IV and, for example, Robert E. Gensler, et.at., Landmine and Countermine Warfare, Italy 1943-1944 (Washington; Engineer Agency for Resources Inventories, 1972), Appendices A, B, and C.

114. Professor Doctor Ernst Schram, "The German Wehrmacht in the Last Days of the War," Manuscript C-020, World War II German Military Studies (New York; Garland Publishing Inc., 1979), Volume II.

115. Fortuitously preserved transmissions of an anonymous artillery observer recounted in Major James C. Fry, Combat Soldier (Washington; National Press, 1968), 34.

116. See Note 107, above. Also note that a general largesse of small arms ammunition for training increased radically when high inventories of steel-cased ammunition were consigned to training only since brass was more weather-proof. Interview with Mr. Will

Piznak, small arms consultant to the United States Military Academy Military Affairs Club, September 29, 1982.

117. See TO's 100-1, 200-1, 70-1, 7-12, and 7-17 in Tables of Organization of Infantry Units (Washington; The Infantry Journal, 1941).

118. See Notes 4, 68, 87, and 88, above. See also Brown.

119. See Note 85, above.

120. Hoegh and Doyle, 51-105.

121. The Sixth Infantry Division in World War II, 41-51; Theirs to Hold it High, 83-124; see also Note 116, above.

122. See Note 86, above.

123. See Note 89, above.

124. See Note 91, above.

125. See Notes 7, 19, 88, and 94, above.

126. See Notes 93 and 95, above.

127. See Notes 76 and 96, above.

128. See Notes 77, 80, 81, 97, and 98, above.

CHAPTER IV

The Long Haul: Sustaining the Edge

The reputations of some World War II Infantry divisions were solely the products of their first battles. More often reputations were the results of extended performance with a number of battles and operations involved. The last chapter examined the first battles of twenty divisions, ten of which did well and ten of which fared poorly. This chapter continues with an analysis of the subsequent performances of six of those divisions. The choice of six allows few enough for reasonably detailed analysis while lending enough breadth to represent a Regular Army, National Guard, and draftee division each from our sample that did well and our sample that did poorly. The six divisions here chosen all emerged from the war with good combat reputations.

The divisions -- 3rd, 4th, 6th, 30th, 40th, 45th, 77th, 88th, 99th, and 104th -- we have studied as exemplars of good first battles continued with outstanding performances throughout the war.[1] After their initial successes, they built reputations for competence only occasionally marred by battlefield embarrassment. It is impossible to choose the divisions most worth studying out of this group. For reasons that have more to do with the

accessibility of primary sources to the author than with the intrinsic merits of a given division, this study follows up on the careers of the 3rd, 30th, and 88th Infantry Divisions.

The divisions that fared poorly in their first major battles could redeem their reputations over time. The 9th Infantry Division turned its reputation around while still in Tunisia, and emerged from World War II with more distinguished unit citations than any other division.[2] The 32nd recovered from Buna with creditable performances in New Guinea and the Philippines; it won more distinguished unit citations than any other National Guard division.[3] The 90th Infantry Division ultimately lived up to its nickname, "Tough Hombres," and ended the war with a good reputation and solid battlefield victories to its credit.[4] Other divisions from our sample that initially fared poorly also did well overall, but the identification of the 9th, 32nd, and 90th is sufficient for our purposes here.

It should be instructive to identify common characteristics in the experiences of the 3rd, 30th, and 88th Infantry Divisions -- sustainers of good reputations -- and the 9th, 32nd, and 90th Infantry Divisions -- attainers of good reputations. Was there any particular experience that characterized the 9th, 32nd, and 90th Divisions as they turned their reputations around? If common characteristics do exist among these six divisions, some comment should be

made concerning the extent to which these characteristics were unusual. This would enhance our identification of the correlates of divisional success over the long haul.

1

If one examines the operational experiences of the 3rd, 9th, 30th, 32nd, 88th, and 90th Divisions, one may well be struck by the extent to which their combat was episodic. These divisions tended not to grind themselves away in the line indefinitely. By accident or design, they alternated periods of intense combat activity with periods of little or none. Chart I, which requires some explanation, depicts this phenomenon graphically.

In Chart I, each block, read from left to right, represents a week of operations. The blocks are coded with letters that represent the dominant activity of the division during that week. The sequence of weeks begins at a different point for each division, in all cases except that of the 30th, with the beginning of the division's first major battle. In the case of the 30th, the sequence begins with the Normandy Invasion of 6 June 1944, for which the 30th was a follow-up division. Each line on the chart contains fifty-two blocks, so one can read from left to right through a division's entire operational experience, covering a year with every line.

3rd Infantry Division, 10 July 1943 - 10 July 1945

10 Jul 43 (Sicily) 18 Sep 43 (Salvrno) 22 Jan 44 (Anzio)

S A S A O R T T T M O E E S A E O S S R T T T T T T T M A D

22 May 44 (DIADEM) 15 Aug 44 (Dragoon)

S S S S S S R T T T S S T T T A O R T T T T T T T T T O E E

23 Jan 45 (Colmar)

A O O O A O R A O T T A S S T S S T T S A A S T T T S A O O

E E E E E

9th Infantry Division, 27 March 1943 - 27 March 1945

27 Mar 43 (El Guettar) 6 Aug 43 (Sicily)

A A T S A O R R T T T T T T T M M O O R T T T T M M M T T T

T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T

10 Jun 44 (Normandy) 10 Dec 44 (Roer)

T M M A A T T A A A E E O O O O O O S S S S T T S A D S S S

T S A O O E E O E E E

30th Infantry Divsion, 6 June 1944 - 6 June 1945

7 Jul 44 (Vire) 16 Nov 44 (Aachen)

M S S S A A A T D O E E E E E A T T A A S R T T A A S S S A A

24 Mar 45 (Rhine)

O S T T S A S T T T A O O E E E

32nd Infantry Division, 15 November 1942-15 November 1945

15 Nov 42
(Buna)
A A S A S A A A O O R T T T T T T T T T T T T T T T T T T
2 Jan 44
(Saidor)
T T T T T T T T M M T T T T T T T T T T M M T T T T T M M A
10 Jul 44
(Drinumor)
S S S S S S S S S S S S T T M S S S S S S S S S S D D D S
14 Nov 44
(Leyte)
27 Jan 45
(Luzon)
O O S S R T T T T T T T M M A O S A S A M T T T M O O A A S

S A S A S A S A S D S O A S S S R R T T T T T T T

88th Infantry Division, 11 May 1944 - 11 May 1945

11 May 44
(DIADEM)
8 Jul 44
(Arno)
21 Sep 44
(Gothic Line)
A O S O T T T A O O O S S S S S S S A A A A A A S S S S S S
15 Apr 45
(Po)
S S S S S S S S S S S S R T T T T S A O E E

90th Infantry Division, 6 June 1944 - 6 June 1945

6 Jun 44
(Normandy)
9 Nov 44
(Metz)
A A A A A A A T O O T M T A A T A T A S T T A A S S A M T T

S O O S A S R O T T O E E O O E E E

CHART 1: DIVISION HISTORIES

A = Attack
O = Offensive (Low Risk)
E = Exploitation
M = Movement (Strategic)
D = Defense (High Risk)
S = Security
R = Rehabilitation
T = Train

The letters in Chart I give a rough summary of the division's activities during a given week. An "A" means the division was committed to a major attack against a prepared opponent sufficiently numerous to make the success of the attack uncertain. An "O" indicates a division committed to offensive action under circumstances so favcrable the best the enemy could have hoped for was to delay progress and perhaps win local successes. "A" tends to represent set-piece battles and "O" generally represents mobile warfare. An "E" indicates exploitation, rapid advance against light or negligible resistance or "mopping up." A "D" represents a defense in which attackers were numerous enough to threaten the destruction of the division. An "S" represents security responsibilities wherein a division held a line, position, or facility without having to fight seriously to retain it. An "M" represents time lost to strategic movement, generally with some higher headquarters providing the lift to shuttle the division around. An "R" represents a period consciously given over to rest and rehabilitation, and a "T" represents a period consciously given over to training -- or, more properly, retraining. The characterizations of divisional activities these letters represent are subjective, based upon the author's examination of Division G-3 (Operations) logs. These logs do provide such tangible information as casualties, relative

force ratios, tactical situation, and terrain analysis to assist in the characterization.[5]

In addition to the letters themselves, Chart I also has a shading, white, light, or dark. This represents the extent to which the division was consumed by its predominant activity and thus unable to attend to other things. "A's" and "D's" are dark; a division engaged in a major attack or desperate defense can focus on little else. "O's", "E's", "S's", and "M's" are light since divisions thus engaged can be doing other things at the same time. It was not unusual to have a regiment in the rear training or resting when securing a line, for example. These four activities are also characterized by fewer casualties and thus less wear and tear on the division than major attacks or defenses. Finally, "R's" and "T's" are white (not shaded) since divisions thus engaged can attend to several things at once.

Perhaps Chart I would be clearer if one were to work through a single division as an example. Take the 88th Infantry Division.[6] On 11 May 1944, it attacked into the formidable Winter Line defenses around Minturno in accordance with overall plans for Operation DIADEM. After somewhat less than a week of fierce fighting (one "A"), it penetrated the main German defenses. The Germans tried to extricate themselves with the 88th and others in hot pursuit. During the following weeks, the 88th gets an "O" for its first week of pursuit, an "S" for a week during

which the movement of other units pinched it into a security role, and another "O" for the week in which it was once again committed to the drive on Rome. After the Eternal City fell, on 5 June 1944, the 88th pulled out of the line and began three weeks of rigorous training (three "T's") under the supervision of its relentless pedagogue of a commander, Major General John E. Sloan. On 8 July, the 88th, once again committed, launched an attack that smashed through German defenses south of the Arno in less than a week (another "A"), then methodically knocked German toeholds back across the Arno (three "O's"). For about seven weeks (seven "S's"), the 88th held the easily defensible Arno while Fifth Army shuttled other divisions off to southern France and prepared for an offensive into the North Apennines. On 21 September, the 88th spearheaded this drive into the North Apennines, or Gothic Line, and remained committed to the attack for somewhat more than six grueling weeks (six "A's"). When the North Apennines offensive exhausted itself, the 88th settled into seventeen weeks (seventeen "S's") securing a sector of the front while rotating subordinate units to other purposes. In early March, the 88th pulled out of the line altogether for a week of rest and rehabilitation (one "R") followed by almost four weeks of intensive training (four "T's"). It was once again committed to the line for a week (an "S") before launching into the Po Valley Offensive on 15 April. Somewhat less

than a week of fierce fighting (an "A") was followed by a week of pursuit across the Po (an "O"), after which German resistance collapsed, and the 88th exploited (two "E's") through the Brenner Pass to link up with American forces moving southwards from Germany. By reading across Chart I, we have summarized the operational experiences of the 88th. We can do the same with each of the other divisions.

The exertions of the 3rd, 9th, 30th, 32nd, 88th, and 90th Infantry Divisions were clearly episodic. These divisions rarely committed themselves to intense combat for a period greater than three weeks. A general review of division histories suggests our six were unusual in the extent to which they alternated periods of intense combat with periods of relative rest.[7] One tangible indication that this was the case emerges when one compares division "days of combat" with the total number of days separating a division's first combat from the end of the war in its theater. The War Department accredited World War II divisions with days of combat for the period they were actually under hostile fire. The 88th Infantry Division, for example, was accredited 307 days of combat.[8] From the time the 88th first entered combat on 5 March 1944 until the end of the war in Europe, 429 days elapsed. Thus, the ratio between the total days of combat and the total period after its first combat was 307/429, or .72. At one extreme with respect to this ratio, we find the 3rd Infantry Division.

The 3rd first entered combat on 8 November 1942 and logged 233 days of combat in the 913 days that separated that date from VE Day[9]; the ratio 233/913 is .26. At another extreme, we find such divisions as the 69th, 71st, 76th, 87th, 89th, and 97th, all of which never saw a day out of combat after they were first committed to it, a ratio of 1.00.[10] The 87th Infantry Division was in combat for 154 continuous days.[11] For our six chosen examples -- the 3rd, 9th, 30th, 32nd, 88th, and 90th -- the average ratio of days in combat to days in the war stands at .54. The overall average for the forty-two infantry divisions that fought in Europe was .87. Of our six divisions, the highest ratio was that of the 30th (.75), followed by the 88th (.72), the 90th (.71), the 32nd (.48), the 9th (.33), and the 3rd (.26).[12]

It is clear that the divisions we have chosen to analyze spent less of their overseas time in combat than most divisions. What they lacked in quantity, they seem to have made up in quality. Taken together, they averaged a distinguished unit citation for every twenty-seven days of combat.[13] The average for Europe, the most profusely decorated theater, was a distinguished unit citation for every forty-seven days of combat.[14] The success of our six chosen divisions correlates with the episodic nature of their intense combat activity. This encourages detailed attention to the activities of these divisions during their

less stressful periods. Let us examine what they did during periods of rest, rehabilitation, and retraining.

2

Reading through the operations files of the 3rd, 9th, 30th, 32nd, 88th, and 90th Infantry Divisions, one may well be struck by how much training these high performance divisions did once overseas. For them, relief from frontline action brought a few days of rest and rehabilitation, but this very quickly shaded into training as rigorous as that they had experienced in the United States.[15] This retraining served several purposes at once. It allowed units to regain proficiencies that had eroded in combat, effectively integrate individual replacements, improve on tactical techniques and doctrine, incorporate new units or equipment, and rehearse specific operations. Let us consider each of these in turn.

A division in combat tended to lose important proficiencies as the battle wore on. This could be the result of combat losses or the result of too long pursuing a given type of mission to the exclusion of others. The most recurrent example of the former seems to have been a general deterioration of patrolling skills as combat progressed.[16] Intelligence officers expressed increasing concern about the quality of the information they received from the front, and generally sought retraining with respect to patrolling at

every practical opportunity. Effective patrolling is a complex process that demands planning and supervision at the lowest levels of leadership.[17] A few casualties among key personnel seriously damaged a platoon's capability to gather information. When fatigue became a factor as well, units often found themselves buying belated information with blood rather than sweat. The retraining programs of our six chosen divisions all placed a heavy emphasis on regenerating patrolling skills.[18] Platoons were hardly out of the line before they were involved in this refurbishment.

Divisions also lost proficiency with respect to one type of mission when they were engaged in another. The most obvious examples of such deterioration involved units securing frontline positions for prolonged periods suddenly called upon to conduct general attacks. While engaged in sedentary defensive activities, troops got little exercise, or marksmanship training, and rarely maneuvered on a scale larger than a patrol.[19] The capability to cover ground quickly, accurately engage targets of opportunity, and effectively combine the efforts of major units of several arms withered in the dull inertia of positional warfare. Our chosen six divisions addressed this deterioration by pulling out of the line for rigorous retraining several weeks before a major attack. When it proved impractical to pull the division out as a whole, a division rotated regiments to the rear for retraining. Often these

pre-assault training exercises reworked a miniature version of the stateside Army Training Program, beginning with individual marksmanship and progressing through maneuvers involving ever-larger units.[20] The most celebrated battlefield victories followed these periods of intense retraining. Cases in point include the 9th's role in the St. Lo breakout,[21] the 30th's isolation of Aachen,[22] the 32nd's campaigns on Leyte and Luzon,[23] the 88th's push to the Arno and its drive across the Po,[24] and the 90th's battle for Metz.[25] The 3rd Infantry Division, ever the master at pacing itself, managed to secure three weeks of training inside the Anzio Beachead before the breakout,[26] and managed to secure another two weeks of retraining before smashing the Colmar Pocket.[27]

It should be noted that divisions not doing things well stood to gain even more from retraining than those that were. It seems no accident that the 9th, 32nd, and 90th each turned their reputations around after a period of retraining. Given a break in his Tunisian action, Major General Manton Eddy drummed the "lessons of El Guettar" -- accurate map-reading, following one's artillery closely, seizing the military crest of terrain features -- into his subordinate units.[28] These "lessons" seem obvious enough, but the 9th did poorly with respect to them before Eddy's retraining and well afterwards. The 32nd performed in a mediocre fashion throughout the Buna Campaign. When that

sanguinary contest ended, Major General William H. Gill took ten months and retrained the division from the ground up.[29] When the 32nd saw combat again, it was a new unit -- as its subsequent performance demonstrated. The 90th saw a break in its Normandy action during the closing days of July 1944 and went into a crash program of retraining.[30] From that point its performance improved; during the period 16 through 20 August, it covered itself with glory, closing the Falaise Pocket, killing 8,000 Germans, and capturing 13,000 prisoners, 220 tanks, 160 self-propelled artillery, and 700 towed artillery while suffering only 600 casualties of its own.[31] Carefully considered retraining had a striking effect on these erstwhile mediocre performers.

Another useful function of retraining was the integration of individual replacements into their new units. Experience suggested that the individual replacement system could work on the "buddy plan" if losses were few enough to allow for the pairing of newcomers with veterans and combat was moderate enough to give veterans time to absorb the new men.[32] In a period of intense combat, casualties were too heavy and time too precious for such a technique to work. Prolonged periods of intense combat left divisions hopelessly inefficient. In the disastrous battle of the Seves, for example, the 90th Infantry Division attacked with a regiment in which more than half of the personnel were replacements newly arrived from the United States.[33]

Casualties in an offensive could be heavy. In Operation DIADEM, for example, the 88th lost 134 officers and 1,844 enlisted men.[34] In its drive to the Arno, it lost another 142 officers and 2,257 enlisted men.[35] Losses on this scale suggested the need for retraining entire units. Personnel turbulence was even greater than losses indicated, because men changed positions within units to replace leadership casualties or weapons crew personnel.

It should be noted that nine out of ten casualties were infantrymen, so retraining efforts necessarily focused on reconstructing infantry companies.[36] The in-theater retraining programs of our six chosen divisions placed a heavy emphasis on infantry maneuvers through the battalion level.[37] This served to weld replacements and veterans into a single team while exercising the new chains of command. The battalions that rotated back into the line after a major battle and subsequent retraining were, in essence, new battalions. Artillery and other arms did not require reconstruction along the same lines as infantry. Typically, these arms took a few casualties at a time, so their retraining efforts were a matter of improving themselves rather than replacing their former selves. This consistent accumulation of experience without significant losses accounts in part for American artillery's superb reputation as a branch during World War II.[38]

During retraining divisions amended their battlefield doctrines in the light of practical experience. Commanders may have been able to conceptualize necessary changes while involved in combat, but only the hiatus of a break in the action gave them the opportunity to drill new techniques into their men. Our six chosen divisions all experimented with tank doctrine, for example. For infantry divisions during World War II the integration of tanks into the infantry battle could be crucial. Tank enthusiasts had long recognized that circumstances would occasionally force tanks to operate in support of and at the pace of infantry, but they had not reached agreement concerning the best technique for that unsavory task. The oldest technique was simply to lead with tanks as a kind of mobile pillbox while infantry followed along in the shielding the tank afforded.[39] This could work in an urban environment, in close terrain, or against an unsophisticated opponent, but an alert defender with a little space could stop the procession with an anti-tank round or mine, then blast the infantry out from behind with well-directed artillery. Another technique was to integrate tanks and infantry accordian-like.[40] In difficult terrain, infantry would lead, suppressing anti-tank weapons, identifying targets, and providing security. Close to their rear tankers overwatched this activity, ready to rush forward and engage an appropriate opponent. Under mobile conditions tanks could lead,

supported by the trailing infantrymen as necessary. This accordian-like technique worked well in France and has evolved into our present doctrine. It did have the disadvantage of tying a great many tanks into the infantry battle, leaving them less available for other missions. A third technique was to keep tanks well to the rear -- a kilometer or so -- ready to rush forward on call.[41] This divorced the infantry from immediate tank support but provided a consolidated armor reserve. No one technique was right for all circumstances, during retraining divisions applied the lessons of combat to their own perceived situation. Experimentation overseas proved particularly valuable since infantry divisions had no organic tanks and had not had much practical experience training with them in the United States.[42] Armor support came from one or more independent tank battalions attached for an operation.[43] Different divisions came to emphasize different techniques. The 32nd found the mobile pillbox technique useful against lightly armed Japanese in the jungle.[44] The 88th rarely had extensive tank assets, and thus preferred the Italian Theater's solution of keeping them to the rear on call.[45] The divisions in France found armored divisions readily available to provide tank reserves, so it made more sense to push their own attached tanks forward to leap-frog with the infantry.[46]

Another example of a doctrinal topic that required experimentation concerned minefields. The Army Training Program had emphasized maneuver and suggested a company encountering a minefield should attempt to by-pass it.[47] In many cases, companies attacked in a narrow sector and by-passing meant crossing into some other company's zone of advance. This implied confusion, mistaken identities, masked lines of fire, and milling around in the face of the enemy. A better answer seemed to be training a few infantrymen in each platoon in breaching techniques, in addition to engineers already trained to neutralize known obstacles. If a company encountered a minefield, it laid down a base of fire and attempted a straightforward breach.[48] If gaps existed to the flanks, flanking companies would find them and trailing companies would exploit them. Breaching requires coordination, skill, and sophistication; divisional retraining programs offered the opportunity to develop these.

During retraining periods divisions incorporated new equipment as well as new doctrine. Equipment modifications could be very simple. During the hedgerow fighting the infantrymen of the 90th Division found they couldn't get their light machine-guns into action quickly enough; they fumbled with the tripods as they emerged from the brush and attempted to set up. Firing from the hip was dangerous and inaccurate and firing from the ground without a mount

sprayed bullets too high to do any harm. The answer was a simple four-inch ground spike attached to the tripod fixture. When in a hurry, a gunner simply fell in such a manner as to imbed the spike and then fired from this somewhat stable platform.[49] Another item of "new" equipment was the flame thrower; divisions had not trained with flame throwers in the United States because the devices were in such short supply.[50] Flame thrower training occurred overseas, if divisions provided themselves the time to conduct it.[51]

A division might actually rehearse an operation it was about to undertake. This proved particularly useful in the cases of amphibious landings, river crossings, night attacks, or assaults on known enemy positions. Somewhere to the rear terrain approximating to be seized became a surrogate for training. Units painstakingly reproduced their anticipated actions from start to finish. Cases in point were the 3rd's preparations for the DRAGOON landings,[52] the 9th's preparations for the Roer crossings,[53] the 90th's preparations for a night attack through the Seigfried Line,[54] and the 88th's preparations for the assaults on Mount Damiano and Mount Monterumici.[55] Rehearsals provided general tactical training while preparing for a specific task at hand.

It may be useful to describe an example of a divisional retraining period to illustrate the material thus

far discussed. On 10 June 1944 the 88th Infantry Division was relieved by the 6th South African Armored Division somewhat north of Rome. The 88th consolidated into a bivouac area near Albano and emphasized rest, reorganization, resupply, and medical rehabilitation until 19 June. On 19 June the division began a detailed program of retraining in accordance with its own Training Memorandum Number 11, exhaustively entitled "Training in the 88th During Reorganization Period Subsequent to the Close of the Minturno Through Rome Drive." This training program was no shabby affair; each battalion held to a rigorous schedule accounting for a training day from 0700-1500 and featuring solid doses of night training as well. Recognizing the numbers of new men, Training Memorandum Number 11 dictated half-hour blocks of close-order drill and platoon size classes of orientation training. Building upon this basis, the division reworked a minature version of the Army Training Program, progressing in maneuvers from squad through battalion scale. During the same period ten hours a week were given over to physical training, including a road march of five hours at least once a week. If men did not integrate quickly enough they fell into a special program for "backward men." This intense activity featured additional training, the denial of pass privileges, and a slight punitive cast. Since a unit's veterans had to teach it, veteran and recruit alike had a incentive for

integrating new men quickly and achieving satisfactory performances on the various field exercises.

The 88th's commander, Major General John E. Sloan, thought his division had eroded during combat with respect to patrolling, night operations, care and cleaning of weapons, and communications techniques. He attributed the erosion to fatiuge, carelessness, and casualties among junior leaders. To reverse these trends he prescribed complex and demanding night patrols, weapons maintenance training, and a day without telephones. The night patrols quickly honed Sloan's infantry squads back into the condition he wanted them in. Sloan insisted that weapons maintenance be personally supervised by an officer and as carefully planned as other training, and made the point that it was in fact training. Sloan's day without telephones forced communications over radio nets carefully monitored by the 88th's signal battalion commander. Careful scrutiny polished the net while reinforcing command emphasis upon improved communications.

General Sloan correctly guessed that his next major operation would involve breaching obstacles, so he developed an elaborate program of assault training. Division engineers constructed a defensive complex for each regiment, through which units of up to battalion size maneuvered. These exercises featured live fire and the facilities took up about ten square kilometers per regiment -- not including

range fans. The commitment of construction, training ammunition, ranges, supervision, equipment, and time was comparable to any training the division had experienced in the United States. During this assault training the 88th consciously developed a carefully organized breaching team in each infantry platoon -- in effect a new unit with new equipment rehearsing an anticipated operation. From that point platoons of the 88th encountering obstacles quickly threw forward a breaching team consisting of:

1 team leader

1 assistant team leader and radio operator

2 bazooka teams of two men each

2 flame throwers

3 *demolition men (pole and satchel)*

5 support and wire cutting specialists

Sloan conducted breaching drills from platoon through battalion level. He also conducted infantry-tank-artillery battle drills at the battalion level, borrowing tanks from the oft-associated 760th Tank Battalion. Officer classes within the 88th focused on areas wherein problems had emerged during the previous offensive: reorganization upon the objective, the employment of attached units, the use of the no fire line as a control measure, and "soft spot tactics" -- a contemporary term for locating and exploiting enemy weaknesses. When the 88th rotated back into combat on 6 July 1944, it benefitted from three weeks of training as

rigorous and carefully organized at all levels as any it had ever experienced. This training regained proficiencies that had eroded in combat, integrated replacements, improved on tactical techniques and doctrine, incorporated new units and equipment, and rehearsed specific operations. The 88th went through this type of elabaorate retraining at least four times during its year and a half overseas, and other high performance divisions did so as well -- although the details of the retraining varied by division and occasion of course.

If interludes of rest and retraining were so valuable and served so many purposes, one might expect unfavorable consequences from not having them. We have already established that our chosen six high performance divisions spent far more time out of combat than average, and we have also suggested that the three of them that recovered from unhappy first battles did so after a retraining period. Examining Chart I, the only period of intense combat of greater than three weeks duration -- other than the battles that preceded the renovations of the 32nd and 90th -- was the 88th's attack into the North Apennines, or Gothic Line. In this attack a superb division was rendered inefficient over time.[57] The 88th's offensive began auspiciously on 21 September 1944 with a brilliant flanking penetration past Mount Frena. With the Germans on the run, the 88th policed up one hilltop after another and drove deeper into the North Apennines. On 28 September the Germans hurled four

divisions into a counterattack against the 88th's exposed holdings on Mount Battaglia. In seven days of fierce fighting the division scored a striking victory -- at a cost of fifty percent casualties in its rifle regiments, to include all but one of the company commanders in the 350th Infantry Regiment.[58] From this point replacements could not keep up with losses as the division dutifully, albeit clumsily, attacked one hill after another at appalling cost. The 88th's offensive ground on through snow, fog, mud, and rain until its leading company was surrounded near Vedriano and annihilated.[59] At that point even General Mark W. Clark, the commander of Fifth Army, realized he was sending patchwork units forward to be slaughtered. On 25 October he called off the offensive. Swallowing their disappointment, American commanders settled into defensive positions for the winter and rotated units to the rear for rest and retraining. When the 88th attacked again it was once again in good form and achieved striking success.[60] The lesson seems obvious: divisions in combat wear out and need rest and retraining.

There seems to be a strong correlation between the retraining efforts of our six chosen divisions and their subsequent battlefield successes. The rest and retraining we have discussed thus far has been on a division scale. Let us next examine the opportunities for rest and retraining that developed when divisions were in combat of

moderate intensity. Then let us determine what "rest and rehabilitation" on the unit level actually meant.

3

At levels lower than a division, the rotation of subordinate units allowed respites for rest, rehabilitation, and retraining on a modest scale. Division commanders could influence decisions to relieve their divisions as a whole; they could direct the rotation and relief of subordinate units. The combination of major breaks granted by corps and army commanders and the minor rotations decided upon by division and regimental commanders could add up to a great deal of time. Our six chosen divisions -- the 3rd, 9th, 30th, 32nd, 88th, and 90th Infantry Divisions -- seem to have been particularly systematic in securing these respites. Typically they emphasized retraining during major breaks and rest and rehabilitation during minor ones.[61]

At all levels, the accidents of combat could grant some units a hiatus while others were hotly engaged. Tactical doctrine called for a sizeable reserve in either the offense or the defense,[62] and units in reserve enjoyed relative calm. As units maneuvered, their sectors could pinch one another out due to terrain or the relative configuration of forces. Units pinched out enjoyed a period of rest. Upon closing to a major obstacle -- the Rhine, for example -- a division might well fall into security duties

of the least dangerous sort. With or without a major obstacle, diversion of the main effort elsewhere or a general lapse in combat activity could leave units posting security and licking their wounds. Someone had to mop up areas seized from the enemy, and someone had to secure lines of communication and installations. Units in these light tasks got a rest of sorts. Finally, units redeploying had to wait their turn for rail, marine, or amphibious lift.[63]

Fortuitous breaks may have been matters of chance, but an attentive commander could assure that they affected his subordinate units in turn. Our chosen divisions all had clearly conceived policies for rotating subordinate units to the rear as circumstances permitted. General Sloan of the 88th carried a paper entitled "Prevention of Manpower Loss from Psychiatric Disorders" with him throughout the Italian Campaign.[64] In this paper a Captain John W. Appel of the Mental Hygiene Branch marshalled impressive data to establish that a soldier should not spend more than twelve days in combat without spending at least six days away from it. One suspects Sloan kept this study handy as scientific "proof" of a notion he already was disposed to believe in. Other division commanders shared his convictions, if not his documentation. Take the experience of the 3rd Infantry Division from 21 September through 16 November 1943.[65] During this two month advance by surges and spurts, the division accumulated fifty-seven days of combat and suffered

3,147 battle casualties, 4,504 non-battle casualties, and 105 missing in action. This adds up to formidable attrition, but regiments were not all suffering at the same time. In Table 6, a breakout of regimental activities -- "light," "moderate," and "heavy" -- indicate levels of offensive combat; "trailing" means the regiment was moving but in reserve, "security" indicates a defensive situation in which a battalion or more could be out of the line, and "bivouac" indicates a stationary unit well clear of combat. Table 6 has also been shaded: dark indicates periods of significant casualties, light indicates periods of light casualties, and white indicates periods virtually without casualties.

Table 6 suggests that the 3rd Infantry Division habitually of rotated regiments through periods of rest and exposure during moderate combat. Similar analysis suggests that other divisions had the same practice. Examples include the 9th, 30th, and 90th in the two months after St. Lo,[66] the 32nd on Leyte[67] and Luzon,[68] and the 88th after DIADEM[69] or when closing to the Arno.[70] One may be surprised to see some regiments well to the rear and in bivouac when others were attacking. During World War II American commanders could allow distances to develop between units in contact and reserves because trucks provided the internal mobility to speed reserves forward. Generally infantry, even reserves, marched to get from one place to

TABLE 6

3RD INFANTRY DIVISION
21 SEPTEMBER - 16 NOVEMBER 1943

Sep	21	T	T	M	Oct	20	L	S	B
	22	T	T	M		21	L	S	B
	23	L	L	T		22	L	S	B
	24	M	L	T		23	L	S	B
	25	M	L	T		24	L	S	B
	26	L	L	T		25	L	S	B
	27	L	L	T		26	T	M	M
	28	L	L	T		27	T	M	S
	29	L	L	T		28	T	M	S
	30	L	L	T		29	S	B	S
Oct	1	T	L	L		30	S	B	S
	2	T	L	M		31	M	B	S
	3	T	M	L	Nov	1	M	M	T
	4	T	L	L		2	M	M	T
	5	T	L	L		3	M	M	T
	6	T	L	L		4	M	M	T
	7	S	S	S		5	M	M	T
	8	S	S	S		6	M	M	M
	9	S	S	S		7	M	M	H
	10	S	S	S		8	S	H	H
	11	S	S	S		9	S	H	H
	12	S	S	S		10	S	S	S
	13	H	H	M		11	H	S	S
	14	M	M	M		12	H	S	S
	15	M	M	M		13	S	S	S
	16	L	L	L		14	S	S	S
	17	L	L	L		15	S	S	S
	18	L	L	L		16	B	S	B
	19	L	L	L					

KEY: L = Light Offensive Combat
M = Moderate Offensive Combat
H = Heavy Offensive Combat
T = Trailing an Offensive, In Reserve
S = Security or Defense
B = Bivouac

another, but trucks did allow for the extension of a rehabilitation hiatus on occasion.

Even during intense combat, regiments found the opportunity to rotate companies. The fighting to break though the Winter Line was particularly savage during the first three days of Operation DIADEM. Consider Table 7's breakout of the maneuver companies of the 88th Division's 350th and 351st Infantry Regiments;[71] the 349th Infantry Regiment was not committed at all during the period in question. To make Table 7's point in another way, on 11 May six of the division's twenty-seven maneuver companies were involved in intense combat, on 12 May nine companies, and on 13 May eleven companies. Only two companies fought throughout the three-day period, and one additional company was destroyed during the fighting. A steady commitment of fresh companies -- not individual replacements -- cracked the Winter Line.

Our six chosen divisions made a practice of rotating subordinate units through the worst of the fighting. Generally they called upon companies and platoons for intense efforts for a few days at a time. This practice was not unique to the 3rd, 9th, 30th, 32nd, 88th, and 90th Infantry Divisions, but these divisions do seem to have excelled in assuring that rotations occurred.[72] Rotation at these lower levels allowed for rest and rehabilitation. This allowed commanders to concentrate on training when

TABLE 7

88TH INFANTRY, 11 - 15 MAY 1944

350th	11 May	12 May	13 May
A Co	Attacking	Reorganizing	Attacking
B Co	Attacking	Attacking	Attacking
C Co	Reserve	Attacking	Attacking
E Co	Committed	Reorganizing	Support by Fire
F Co	Attacking	Attacking	Support by Fire
G Co	Attacking	Reorganizing	Support by Fire
I Co	Reserve	Attacking	Reorganizing
K Co	Reserve	Attacking	Attacking
L Co	Reserve	Reserve	Reserve

351st	11 May	12 May	13 May
A Co	Reserve	Reserve	Reserve
B Co	Reserve	Reserve	Attacking
C Co	Reserve	Reserve	Attacking
E Co	Attacking	Attacking	Attacking
F Co	Attacking	Defending	Eliminated
G Co	Reserve	Attacking	Attacking
I Co	Screening	Attacking	Attacking
K Co	Screening	Attacking	Support by Fire
L Co	Screening	Reserve	Attacking

larger units or entire divisions were out of the line. We have already examined the purposes served by retraining overseas; now let us examine unit activities during rest and rehabilitation.

4

The most pressing physical need of soldiers just out of combat was usually sleep. Veterans often comment on their state of fatigue, of feeling tired for days in a row. Given the opportunity, the average GI could sleep for the better part of several days before his personal priorities changed.[73] During this period of physical recovery, time was also given over to hot meals, warm baths or showers, and procuring clean dry clothes.[74] Division logisticians made meals, baths, showers, and dry clothes available, but soldiers supplemented such programs themselves. "Deluxe dugouts" featuring pilfered or fabricated chairs, tables, and beds proliferated, as often as not in abandoned houses. Soldiers could be imaginative. In Italy and France, mine detectors located buried wine casks which, with their contents consumed, were cut apart into bath tubs.[75] As soldiers recovered physically, they became ever more energetic in improving their domestic arrangements.

While soldiers worked their way back from exhaustion, medical personnel assessed the health of the unit. Shower and bath sites became an ideal location for medical

inspection. For every malingerer in the Army, there were other soldiers who avoided medical attention -- for whatever reason. Given the time to look them over, medical personnel policed out the worst for special attention. Treatment could include evacuation, but often it was merely large and diverse injections of the newly discovered and not yet completely understood "wonder drugs." Soldiers swore and cursed about the number of needle punctures, but generally got better.[76] Perhaps the most pathetic requirements for medical inspection concerned hospital returnees who had slipped back into their original units. Frightened by theater policies that those hospitalized beyond a certain period would become general replacements liable to assignment anywhere, these men often returned to their original units prematurely. In the 9th Infantry Division, for example, a third of the hospital returnees during the battle of France were unfit for combat.[77] Fortunately, hospitalization time started over again for a man who had made it back into his unit. In high morale units, hospital returns could be something of a game, with division surgeons bouncing men back into evacuation channels until they truly recovered.

Neuro-psychiatric casualties -- a term that at the time covered a host of ills -- presented medical personnel with special concerns. These men, variously labelled "shell-shocked," "anxiety neurotics," or "battle fatigued,"

accumulated in medical channels as combat progressed or came through medical channels upon a unit's rotation to the rear. For reasons that are not altogether clear, divisions performing well by other measures tended to have fewer such casualties.[78] A favored treatment in our chosen divisions seems to have been a program of rigorous training emphasizing strenuous physical exercise and strictly enforced standards for "lights out," cleanliness, and diet.[79] Classroom instruction and physical labor rounded out the program. Patients were either busy or asleep twenty-four hours a day, leaving them little time to dwell on their misfortunes. This type of program had a better than 50 percent success rate within a week of the patient's arrival.[80] Many of the patients were probably exhaustion cases or malingerers rather than genuine psychiatric casualties. Exhaustion cases did get the rest they needed, and malingerers found conditions more arduous than those of their units, albeit less dangerous. The success of rest and enforced health conditions in resolving "anxiety neurosis" may illustrate similarity between the neuro-psychiatric casualty and the common soldier; both needed breaks in combat for about the same reasons.

It should be noted that most neuro-psychiatric casualties occurred among newly assigned personnel with insufficient training and little indoctrination.[81] For this reason our six chosen divisions all developed formulae for

integrating new men into units rotated out of combat. Given a few days hiatus, commanders could orient new men on unit missions, activities, and procedures, then pair them up with battle-wise veterans. Old soldiers tended to take their new charges seriously, and not a few saved lives because of their experience. Important lessons included staying low, digging deep, taking cover, and attacking on the run through enemy artillery.[82] If time existed for unit retraining, the integration of new men progressed even further. If not, the combination of orientations and the buddy-system was far more efficient than herding frightened, green troops forward to fall in with units actually in combat.[83]

At some point during their recovery from combat, troops took an interest in mail, pay, and news. Mail from home was generally regarded as the most important troop morale factor, beyond physical needs.[84] In combat it often proved impossible to deliver; in rear areas, troops repeatedly read letters and, as importantly, replied to them. This link with other times and places influenced them not to fall victim to the careless fatalism so common in combat.[85] Another link was the weighty deliberations they made concerning the disposition of their pay. Troops liked to look at and "feel" their pay before they committed it to such financial devices as bonds, soldiers deposits, or money orders home. Even if nine out of ten ultimately committed their money to transactions that could have been handled

automatically, many were unwilling to forego the pleasure of making financial decisions.[86] Another pleasure was reading the Stars and Stripes and catching up on the news. Those so inclined wrote letters to the editor to vent frustrations or exercise creative inclinations.[87]

News of a less happy sort also was important to newly recovered soldiers. They wanted to know who had been killed or wounded, where the wounded were, and details concerning the dead.[88] They often went to great lengths to visit wounded buddies, particularly those unlikely to recover. They could become obsessed with the dead, wanting to recognize their passing in an appropriate manner and to know details that seem curious -- at times even morbid -- in retrospect. They were concerned that the dead be treated respectfully, and became upset if vehicles evacuating bodies were used for more than a single purpose. Commanders found it useful to employ captured vehicles to evacuate corpses, thus freeing their own vehicles for a variety of tasks.[89] A break in combat gave soldiers time to come to terms with the loss of comrades and to rededicate themselves to those still living. For many, chaplains and impromptu personal advisors proved invaluable during this process.[90]

Commanders had to be attentive when handling the dead and wounded, in part to reassure survivors of their personal concern for them. They also had to be careful when replacing losses. We have already discussed replacements

for private soldiers. Key personnel had to be replaced as well. New lieutenants were regarded with suspicion, particularly after the War Department abandoned its policy that they serve with troops for three months before being shipped overseas.[91] Non-commissioned officers from outside the regiment also came in under a cloud; they had to overcome the suspicion that their former unit had released them because of substandard performance.[92] This is not to mention the resentment emergent leaders and their supporters within a unit might feel at being displaced by an outsider. It took a little time and talking for a new leader to get a grip upon his men. If a commander chose to replace leadership losses from within, he had to identify his new leaders and, in most cases, to promote them. This rolled into larger issues of awards, decorations, citations, and other honors. Commanders found the recognition they could give in front of an impromptu formation shortly after a break in the action valuable because of its immediate impact. For this reason, they often considered the stripes and awards they themselves could approve more useful in maintaining morale than more exalted recognition.[93] The conbination of promotions, awards, and reassignments of key personnel reconstructed the prestige structure in a unit out of combat. It once again gave commanders hierarchial teams and the expectation their orders would be executed in an orderly manner.

Logistical activities were another important aspect of operations in rear areas. Supervisors carefully inspected unit and personal equipment. This could become complex if the unit had been involved in heavy fighting or a battle of movement. Soldiers marched under a full load and dropped most of it when they actually started fighting. Given notice, commanders designated drop off sites at which unit or quartermaster vehicles could rendevous to pick up the gear. In a fluid situation, field packs and other baggage might end up randomly scattered around the battlefield. Some unfortunate non-commissioned officer -- generally a supply sergeant -- had to make sense out of this mess and get gear back to units that had moved too far to retrieve it themselves.[94]

Maintenance also developed most efficiently when units were in the rear. Our chosen six divisions were all infantry divisions, so the maneuver elements had relatively little equipment to repair, and the support elements had opportunities for repair even while in combat.[95] Some items, particularly Browning automatic rifles (BAR's) and communications equipment, routinely presented problems, however. BAR repair parts were in short supply and ordnance personnel hesitated to send them forward in cases of an uncertain diagnosis.[96] BAR's were best repaired in the rear, yet commanders hesitated to lose control of the weapons. A mutually satisfactory solution was to repair

BAR's when a unit was out of the line, since an ordnance contact team could then reach them with a full array of tools, parts, and equipment. Other small arms caused fewer maintenance problems and were more readily repaired or replaced within units. Radios posed chronic complexities not resolved then or since. Communications personnel could tinker with a unit's radios for days, only to have the majority fail when the first shot was fired.[97] Standard procedure was to get all communications working when out of combat and then to hope for the best during combat. Trained communications personnel seem to have been a chronic shortage.[98] In the case of casualties, commanders selected promising young men from the ranks and relied upon them to learn their jobs through practical experience. This did not much alleviate maintenance problems, so communications maintenance was best accomplished in the rear.

The longer a unit spent in the rear, the more likely its soldiers were to become interested in wine, women, and song. Contrary to popular opinion, soldiers removed from stimulus can go for prolonged periods without giving serious thought to sex or alcohol.[99] Commanders generally attempted to isolate their rest and rehabilitation sites from local temptations, but this was not always possible -- particularly when temptations were mobile. Local entrepreneurs quickly appeared to cater to a soldier's vices. In North Africa the attractions were Eau de Vie, an

alcoholic beverage versatile enough to drink or use as heating fuel, and prostitutes so degraded they virtually guaranteed infection.[100] In Italy, one enterprising soldier built a bunker around a grand piano and turned it to all the diversions a soldier could ask for.[101] France offered a full array of the pleasures of the flesh, to include the much fantasized trip to Paris.[102] The Pacific islands generally encouraged restraint, but in the Philippines the opposite was true.[103] When troops reached this level of recovery -- the satyr phase -- commanders attempted to divert them with motion pictures and doughnut parties put on by Red Cross Clubmobiles.[104] Soldiers seem to have regarded this wholesome entertainment as an addition to, rather than a substitute for, other interests.

Commanders of the 3rd, 9th, 30th, 32nd, 88th, and 90th Infantry divisions seem to have regarded this final phase of troop recovery with suspicion. They were happy to see troops fit again, but to them fraternization with local civilians meant trouble.[105] They often imposed restrictions of one sort or another, but these were hard to enforce and easy to break. The best solution was to get units back into a field environment as quickly as possible, either to retraining or to combat. Frequent rotations minimized the wear of combat while also minimizing the time for idle minds that could have become the devil's workshop. Insofar as reducing fraternization was concerned, rigorous retraining

efforts served the same purpose as combat.[106] When units rotated from rest and rehabilitation into training or combat, their troops were physically healthy and psychologically refreshed, their chains of command were reconstructed, their logistical and personnel situations were in order, and they were ready for the demands to come.

In this chapter we have seen some basic features of mobilization -- cadre selection, organization, logistical support, deployment, and commitment to combat -- extend through the entire wartime experience of infantry divisions. Far from being something that was ever complete, mobilization proved an ongoing process as battered units resupplied, reorganized, retrained, and redeployed. Insofar as there was a correlate of success in this process, it had to do with pace and timing. The best divisions seem to have been those most successful in securing periodic breaks in the action. Minor breaks were generally given over to rest and rehabilitation, major breaks to retraining. One shaded into the other, of course. Units in combat eroded over time, and the history of good divisions was cyclical -- erosion and renewal. This cycle featured peaks of preparedness and valleys of ineffectiveness. Important aspects of the art of war during this period were rotating units into renewal before they became too badly mauled, and

launching units on important enterprises when at their peaks.

Endnotes

1. The Army Almanac; A Book of Facts Concerning the Army of the United States (Washington; Government Printing Office, 1950), 520-561.

2. Ibid., 517-592.

3. Ibid.

4. Ibid.; see also Martin Blumenson, Breakout and Pursuit (Washington; Office of the Chief of Military History, Department of the Army, 1961) and Russell F. Weigley, Eisenhower's Lieutenants (Bloomington, Indiana University Press, 1981), 210-217.

5. The information supporting Chart I developed in an exhaustive -- and exhausting -- review of the after action reports and G-3 Operations files of the six divisions in question. Specific references include: Third Infantry Division Report (Subject: Participation of 3rd Infantry Division in Sicilian Operation) to the Adjutant General, 10 September 1943, CARL (N-6528-A); Third Infantry Division Report (Subject: Report of Operations, 18 September - 31 October 1943) from the Commanding General, 3rd Infantry Division to the Adjutant General, War Department, 9 November 1943, CARL (N11216.1); Third Infantry Division Reports (Subject: Report of Operations, ETO) from the Commanding General, 3rd Infantry Division to the Adjutant General, War Department, monthly to 31 May 1945, CARL (N11216); Report on Operations, 9th Infantry Division, Southern Tunisia, Northern Tunisia and Sicily (Headquarters Ninth Infantry Division, APO #9, % Postmaster, New York, N.Y., 22 September 1943, CARL (M9405 H6); Ninth Infantry Division Reports (Subject: Report of Operations, ETO) from the Commanding General, 9th Infantry Division to the Adjutant General, War Department, monthly to 8 May 1945, CARL (N11546); 30th Infantry Division After Action Report (Subject: June 1944-May 1945, European Theater of Operations) from the Commanding General, 30th Infantry Division to the Adjutant General, War Department, 4 May 1945, CARL (N12139); 32nd Infantry Division Report of Activities, Papuan Campaign, New Guinea, September 1942-January 1943 CARL (M-N 1034.1); 32nd Infantry Division After Action Report (Subject: Leyte Campaign, 20 October 1944-21 January 1945) from the Commanding General 32nd Infantry Division to the Adjutant General, War Department, CARL (N11706); 32nd Infantry Division

Historical Report (Subject: Luzon, 27 January - 30 June 1945) from the Commanding General 32nd Infantry Division to the Adjutant General, War Department, 30 June 1945, CARL (N12626); History of Operations, Italy -- G-3 Operational Report, 88th Infantry Division, periodically from February 1944 through June 1945, CARL (M-N 1029); 90th Infantry Division After Action Report (Subject: June 1944 - May 1945, European Theater of Operations) from the Commanding General, 90th Infantry Division to the Adjutant General, War Department, CARL (N11240).

6. History of Operations, Italy -- G-3 Operational Report, 88th Infantry Division, periodically from February 1944 through June 1945, CARL (MN-1029).

7. The Army Almanac, 518-592.

8. Ibid., 559.

9. Ibid., 520-521.

10. Ibid., 547-567.

11. Ibid., 558-559.

12. Ibid., 518-592.

13. Ibid.

14. Ibid.

15. See Note 5, above; for particularly good examples, see History of Operations, Italy -- G-3 Operational Report, 88th Infantry Division (Subject: Training During Reorganization Period), 12 June 1944, CARL (M-N 1029.5, Reel 5) or History of Operations, Italy -- G-3 Operational Report, 88th Infantry Division (Subject: Training, Assimilation and Battle Indoctrination of Replacements), 22 November 1944, CARL (M-N 1029.5 Reel 5).

16. Report (Subject: Army Ground Forces Observer's Report, ETO), Lieutenant Colonel E. J. Learz to the Commanding General, Army Ground Forces, 21 October 1944, CARL (N-3606).

17. John S. Brown, Draftee Division: A Study of the 88th Infantry Division, First All Selective Service Division into Combat in World War II (Ann Arbor; University Microfilms International, 1983), 186-194.

18. See Note 15, above.

19. Brown, 210-224.

20. For the retraining overseas, see Note 15, above. For comparison see Brown, 52-93; Bell I. Wiley, "The Building and Training of Infantry Divisions," in The Army Ground Forces, The Procurement and Training of Ground Combat Troops (Washington; Historical Division of the Army, 1948); Army Ground Forces Letter (Subject: Training Directive Effective November 1, 1942) to Commanding Generals, 19 October 1942, National Archives, MMRB (320.2).

21. Blumenson, 138-169.

22. Ibid., 356-363.

23. M. Hamlin Cannon, Leyte: The Return to the Philippines (Washington; Office of the Chief of Military History, Department of the Army, 1954) 221-274; Robert Ross Smith, Triumph in the Philippines (Washington; Office of the Chief of Military History, Department of the Army, 1963) 457-512.

24. Ernest R. Fisher, Jr. Cassino to the Alps (Washington, Center of Military History, United States Army, 1977), 255-280, 470-498.

25. Blumenson, 383-401; 90th Infantry Division Report (Subject: The Reduction of the Fortress Metz), 30 October 1944, CARL (R 11906).

26. Third Infantry Division Report (Subject: Report of Operations, Italy) from the Commanding General, 3rd Infantry Division to the Adjutant General, War Department, June 1944, CARL (R 11216.4).

27. Third Infantry Division Report (Subject: Report of Operations, European Theater of Operations) from the Commanding General, 3rd Infantry Division to the Adjutant General, War Department, 13 March 1945, CARL (R 11216.10).

28. Report on Operations, 9th Infantry Division, Southern Tunisia, Northern Tunisia and Sicily (Headquarters Ninth Infantry Division, APO #9, % Postmaster, New York, N. Y., 22 September 1943, CARL (M9405 H6).

29. 13,000 Hours: Combat History of the 32nd Infantry Division - World War II (Public Relations Office, 32nd Infantry Division, undated), 10-11, CARL (N18933.4).

30. 90th Infantry Division After Action Report (Subjects: July and August 1944, European Theater of Operations) from the Commanding General of the 90th Infantry Division to the Adjutant General, War Department, CARL (N11240).

31. Ibid.

32. Third Infantry Division Report (Subject: Report of Operations 18 September - 31 October 1943) from the Commanding General of the 3rd Infantry Division to the Adjutant General, War Department, CARL (N11240).

33. See Note 30, above. See also Major Constantine J. Blastos, "Judgment of Units," USACGSC student paper for academic year 1965-1966, CARL (N 8224.8).

34. John P. Delaney, The Blue Devils in Italy: A History of the 88th Infantry Division in World War II (Infantry Journal Press, Washington, D. C., 1948), 101.

35. Ibid., 117.

36. Army Ground Forces Memorandum (Subject: Report of Army Ground Forces Activities) to the Chief of Staff, United States Army, 10 January 1946, J. E. Sloan Papers.

37. See Note 15, above.

38. Brown, 268-269, 327-328.

39. Captain D. G. Browne, The Tank in Action (London; William Blackwood and Sons, 1920), 8-14.

40. Report (Subject: Tank Battalions, Tank Destroyer Battalions, and Tank Companies) by Colonel G. B. Devore to the Army Ground Forces Board, AFHQ, NATO, 14 March 1944, USAARMC Library, Fort Knox, Kentucky (876TB102); John Prados, "Cobra, Patton's 1944 Summer Offensive in France," Strategy and Tactics (New York; Simulations Publications, November 1977), Number 65, 4-14.

41. Letter (Subject: Transmittal of Historical Report and Conclusions) from Lieutenant Colonel George M. Davis (Commander of the 760th Tank Battalion) to the Commanding General, Fifth Army, 9 February 1944, USARRMC Library, Fort Knox, Kentucky (8760 TB 101a).

42. Tables of Organization of Infantry Units (Washington; The Infantry Journal, 1941), T070; Letters from Major General John M. Lentz (then the Training Officer of Army Ground Forces) to the author in response to the author's inquiries, September 28 and September 30, 1977.

43. Army Ground Forces Memorandum from General Leslie J. McNair to Brigadier John M. Lentz (AGF, G-3), 10 March 1943, National Archives, MMRB (353.02/103).

44. 32nd Infantry Division After Action Report (Subject: Leyte Campaign; 20 October 1944 - 21 January 1945) from the Commanding General 32nd Infantry Division to the Adjutant General, War Department, CARL (N 11706).

45. History of Operations, Italy -- G-3 Operational Report, 88th Infantry Division, CARL (M-N 1029).

46. See Note 40, above.

47. Army Ground Forces Letter (Subject: Training Directive Effective November 1, 1942) to Commanding Generals, 19 October 1942, National Archives, MMRB (320.2); Army Ground Forces Letter (Subject: Training in Operations Against Permanent Land Fortifications) to Commanding Generals, January 5, 1943, National Archives, MMRB (353/2).

48. Robert E. Gensler, Senior Analyst, Landmine and Countermine Warfare, Italy 1943-1944 (Washington; Engineer Agency for Resources Inventories, 1972), Appendices A, B, and C.

49. Army Ground Forces Observer Report (Subject: European Theater of Operations, 13 August - 20 September 1944) from Lieutenant Colonel D. L. Durfee to Commanding General, Army Ground Forces, CARL (N3346).

50. Army Ground Forces Letter (Subject: Equipment for Army Ground Forces) to Commanding General, Army Service Forces, 6 April 1943, National Archives, MMRB (AGF 401-1). Also, see the entry for 25 April 1944, in The History of the 351st Infantry Regiment, regimental log located in the Modern Military Records Branch of the National Archives, Suitland, Maryland.

51. Third Infantry Division Report of Operations, ETO (Subject: Amphibious Training Exercises), August 1944, CARL (R 11216.5).

52. Ninth Infantry Division Report of Operations, ETO (Subject: Roer River Crossing), 23 February 1945, CARL (R 11546).

53. 90th Infantry Division Action Against the Enemy Report, ETO (Subject: Capture of Prumsfeld), 4 February 1945, CARL (N 12137).

54. Brown, 184-224, 242-261; 88th Infantry Division History of Operations, G-3 Operational Report (Subject: Capture of Monterumici and M. Mario), 8 April 1945, CARL (M-N 1029.5, Reel 5).

55. For the source of this and the next several paragraphs, see Note 15, above.

56. 88th Infantry Division History of Operations, G-3 Operational Reports with Associated Memoranda (Subjects: Training...), June and July entries, 1944, CARL (M-N 1029.5, Reel 5).

57. History of Operations, Italy -- G-3 Operational Reports, 88th Infantry Division, September - November, 1944, CARL (MN - 1029).

58. Delaney, 139-147; General Orders Number 53, Battle Honors Signed by the Order of the Secretary of War, Washington D. C., 11 June 1946, J. E. Sloan Papers.

59. See Note 57, above. See also "Vedriano -- Last Ounce of Effort," in The Blue Devil (Kensington, Maryland; Newsletter of the 88th Infantry Division Association, April 1981), 2.

60. See Note 56, above. See also Brown, 323-326.

61. See Note 15, above.

62. Field Manual 100--5, Tentative Field Service Regulations: Operations (Washington; United States Government Printing Office, 1939), 128-170, 170-203.

63. Brown, 148-176; Preparation for Overseas Movement (Washington; War Department, 1 February 1943), National Archives, MMRB (WD 370.5); see also Maurice Matloff, Strategic Planning for Coalition Warfare, 1943-1944 (Washington; Office of the Chief of Military History, 1957).

64. Captain John W. Appel, "Prevention of Manpower Losses from Psychiatric Disorders" (undated study for the

Chief of the Mental Hygiene Branch) in the J. E. Sloan Papers, USAHRC, Carlisle Barracks, Pennsylvania.

65. See Note 32, above.

66. Ninth Infantry Division Reports (Subject: Report of Operations, ETO) from the Commanding General of the 9th Infantry Division to the Adjutant General, War Department, August and September 1944, CARL (11546); 30th Infantry Division After Action Reports (Subject: August 1944, September 1944) from the Commanding General, 30th Infantry Division to the Adjutant General, War Department, CARL (N 12139); 90th Infantry Division After Action Reports (Subject: August 1944, September 1944) from the Commanding General, 90th Infantry Division to the Adjutant General, War Department, CARL (N 11240).

67. See Note 44, above.

68. 32nd Infantry Division Historical Report (Subject: Luzon, 27 January - 30 June 1945) from the Commanding General 32nd Infantry Division to the Adjutant General, War Department, 30 June 1945, CARL (N 12626).

69. History of Operations, Italy -- G-3 Operational Report, 88th Infantry Division, June 1944, CARL (M-N 1029).

70. Ibid., July 1944.

71. History of the 350th Infantry Regiment and History of the 351st Infantry Regiment, both regimental logs located in the Modern Military Records Branch of the National Archives, Suitland, Maryland, entries for 11-13 May, 1944.

72. See Note 5, above.

73. See Note 64, above. This information seems corroborated by my personal experience in less stressful environments.

74. See Notes 16 and 49, above.

75. Delaney, 49.

76. Letter from Dr. Paul C. Richmond (then Surgeon General of the 88th Infantry Division) to the author in response to the author's inquiries, 3 December 1977).

77. See Note 16, above.

78. David J. Chester, Neil J. Van Steenberg, and Joyce E. Bruechel, "Effect on Morale of Infantry Team Replacement and Individual Replacement Systems," Sociometry, XVIII, December 1955, 687-597; See also Note 64, above.

79. History of the 349th Infantry Regiment, entry for April 1944.

80. Ibid.

81. See Note 16, above.

82. Ibid., see also Notes 32 and 49, above.

83. Ibid., see also Martin van Creveld, Fighting Power: German and U. S. Army Performance 1939-1945 (Westport, Connecticut, Greenwood Press, 1982), 74-79.

84. See Notes 16 and 49, above.

85. For a discussion of fatalism in combat, see J. Glenn Gray, The Warriors: Reflections on Men in Combat (New York; Harper Colophan Books, 1959), 97-130.

86. See Note 16, above.

87. Ibid.

88. See Note 85, above. See also "Psychiatry With an Infantry Battalion in North Africa" by Herbert Spiefel, M. D., in Neuropsychiatry in World War II (Washington; Office of the Surgeon General, Department of the Army, 1973), 1I, 111-126.

89. See Note 49, above. See also Note 88, above.

90. Colonel Albert J. Glass and Lieutenant Colonel Robert J. Bernucci, editors, Neuropsychiatry in World War II (Washington; Office of the Surgeon General, Department of the Army, 1966 and 1973), Volume I 695-699, Volume II 270.

91. See Note 16, above.

92. Bell I. Wiley, 476-479; see also Note 16, above.

93. See Note 16, above.

94. See Note 5, above.

95. See Note 42, above.

96. See Note 16, above.

97. See, for example, Small Unit Actions (Washington; Historical Division of the War Department, 1946), 117-173.

98. See Note 16, above.

99. Author's personal experience. An interesting comment on this phenomenon occurs in Erich Maria Remarque, All Quiet on the Western Front (New York, Fawcett Crest, 1956), 107-111.

100. Letter from Dr. Paul C. Richmond (then Surgeon General of the 88th Infantry Division) to the author in response to the author's inquiries, 3 December 1977; Letter from Colonel Robert J. Karrer (then Inspector General of the 88th Infantry Division) to the author in response to the author's inquiries, 13 December 1977; Letter from Colonel Peter L. Topic (Artillery Battalion Executive Officer, then G4 of the 88th Infantry Battalion) to the author in response to the author's inquiries, September 1977.

101. Delaney, 49.

102. The attractions of a trip to Paris appear several places in Charles B. MacDonald, Company Commander (New York; Bantam Books, 1982).

103. Ebbe Curtis Hoff, editor, Communicable Diseases Transmitted Through Contact or by Unknown Means (Washington; Office of the Surgeon General, Department of the Army, 1960), 282-315.

104. See Note 100, above.

105. Ibid.; see also Note 15, above. See also Hoff, 204-318.

106. Ibid.

CHAPTER V

CONCLUSIONS

This study suggests mobilization-related correlates of success existed in World War II infantry divisions. Divisions that moved quickly through the Army Ground Forces training program differed from those that did not. Divisions that did well in their first major battles had mobilization-related experiences that distinguished them from those that fared poorly. Divisions that sustained excellence over the long haul shared common approaches in pursuing that achievement. Let us review the correlates of success we have found, then comment briefly on the extent to which the Army of the 1980's seems conscious of them.

1

During stateside training, personnel stability was the most significant characteristic distinguishing divisions that moved efficiently through the Army Ground Forces training program from those that did not. Personnel turbulence came in great surges as Officer Candidate Schools, the Army Specialized Training Program, and replacement requirements overseas waxed and waned. The divisions that avoided the worst effects of this turbulence for the most part did so fortuitously. Using training

standards established by Army Ground Forces itself, one can establish that personnel turbulence alone explained at least sixty-one percent of the delay deploying units overseas -- eighty-seven percent if one considers the loss of an OCS or ASTP candidate doubly damaging.[1]

Other explanations for unsatisfactory progress through stateside training programs pale when compared to personnel turbulence. Equipment shortages existed, yet these never seem to have been particularly damaging. Tables of Organization were so lavish that units could progress far into their training with a fraction of their equipment, and industrial production generally caught up with actual needs before divisions deployed for major maneuvers. Consumable supplies were, quite simply, not a problem. Training and the supervision of training demonstrated minor flaws of no particular consequence in getting divisions through mobilization speedily. Indeed, the Army Ground Forces training programs were probably the most carefully thought out and thoroughly supervised in history. They did prepare units better for some combat environments than for others, a fact that did not at all delay progress through them. Unit Tables of Organization proved sound and remained reasonably stable throughout the war. During mobilization the major organizational flaw seems to have been the burden of nondivisional units upon division headquarters. This burden

was fleeting, quickly assumed by the newly established Army Service Forces or special headquarters.[2]

Only cadre selection, another manning consideration, posed problems worth mentioning in the same breath as personnel turbulence. Cadre irregularities seem immeasurable, but one has the impression that some divisions were more fortunate than others with respect to the quality of these key personnel. The careers and reputations of senior officers were well enough known and documented to permit a fair distribution, and OCS contingents were probably all of about the same ilk. No centralized system captured the qualifications of non-commissioned officers or house-keeping cadre, however, and the potential of middle-grade officers was superficially known at best. As a result, non-commissioned and middle-grade officer talent seems to have been inequably distributed, subject to the good graces of parent and the alertness of receiving units. If cadre irregularities account for a major fraction of the delay not accounted for by personnel turbulence, the shadow cast by manning difficulties looms very high indeed in the stateside experience of World War II divisions. Our World War II Army managed things well and people poorly.[3]

After having been declared deployable, a division measured itself against a somewhat different set of standards in the events that led through deployment into its first major battle. A residual effect of personnel

turbulence was the size of pre-embarkation replacement contingents. Whether units deployed within sixteen months of activation or after three years, these contingents were the best index of how many men embarked without having trained with the unit. Typically, units that did well in their first major battles averaged about two thousand in their pre-embarkation contingents and those that fared poorly about three thousand. This difference was probably not as significant as the fact that high-performance divisions took the opportunity to integrate new men and polish themselves once overseas. Divisions successful in their first battles retrained overseas before they were committed to combat, and generally experienced a period of preliminary combat at low risk before participating in a major battle. This was not generally the case in divisions that fared poorly. Successful divisions also generally fought first major battles that approximated previous training, whereas unsuccessful ones did not.[4]

Following their first major battles, divisions sought to sustain or attain excellence. Those that did this best had a certain rhythm in their combat, alternating periods of strenuous effort with carefully supervised programs of rest, resupply, replacement, reorganization, repair, retraining, and, occasionally, redeployment. Pace and timing were important aspects of the art of war. The only standard divisions could maintain indefinitely was mediocrity;

successful commanders brought their units to a peak immediately before committing them to important projects. At echelons below regiments, minor breaks of several days to a week allowed for hasty rehabilitation. Longer breaks, usually organized at the division level, allowed significant reconstruction and retraining. Retraining served several purposes at once: to regain skills eroded in combat, absorb replacements, refine doctrine, introduce new organizations and equipment, respond to lessons learned, and rehearse specific operations. The activity of a unit when out of combat dictated its success when in combat.[5]

One might reasonably ask if there were exemplary infantry divisions, divisions that moved efficiently through their stateside training, fought an outstanding first battle, and sustained a good combat reputation throughout the war. In our admittedly subjective analysis we have identified at least two -- the 3rd and 88th Infantry Divisions -- that excelled in all three phases of their wartime experience. The 40th and 41st might well have been added to that list, if the 40th had not seen its first major battle as late as January 1945 and if the 41st had ever really had a first major battle on a division scale. Certainly those divisions, among others, merit special attention in the study of winning teams.

How mindful is the Army of the 1980's of the correlates of success of its World War II divisions? For reasons that do not necessarily relate to historical reflection, today's Army seems better prepared for unit mobilization than was the Army of 1939. Certainly it has reinforced its wartime strengths. It is not certain that it has resolved its wartime weaknesses, however.

During World War II's stateside mobilization programs for unit organization, training and supervision, and logistical support proved more than adequate and affected all units about equally. A future mobilization is likely to demonstrate similar attributes. Tables of Organization continue to be well thought out, comprehensively managed, and rigorously standardized. Certainly they suffer from no lack of review, reflection, and revision.[6] The basic organizing principles of all major armies are about the same, so Americans would enter a future mobilization with the confidence that their standard organizations were as capable as any of accomplishing doctrinal missions.[7] Today's Army Training and Evaluation Programs (ARTEPs) are improved yet recognizable descendents of the unit training programs of World War II. They are detailed, specific by unit type, easily understood, and standardized. They continue with the premise that a few able men can direct the training of a gigantic army from its center.[8] Today's trainers benefit from audio-visual materials, supporting

publications, training aids, and facilities undreamed of by their predecessors. The elaborate computer-directed range complexes of the National Training Center have to be seen to be believed.[9] A generation of planners has also given logistics attention as intense as that given training or unit organization. Since the Korean War "creeping", or continuous, mobilization has sustained materiel readiness through contracted deliveries spaced over years and follow-on contracts replacing worn or obsolescent equipment.[10] A military-industrial complex exists, it is robust, and it is capable of expanding efficiently through all levels of mobilization. Bickering over materiel readiness occurs not so much over whether Americans would have the means to win the next war as over whether they would have the means to win the first battles of the next war. One should not underestimate future challenges with respect to unit organization, training and supervision, and logistical support, but one should recognize that these are strong suits in the American Army.

Turning to personnel issues, Americans have less reason to be sanguine. Throughout World War II, their greatest single weakness was a personnel system, inefficient with respect to cadre and filler alike, that reduced the effectiveness of units at home and overseas. We have made uneven progress in this area. It is true that a highly centralized and comprehensively documented personnnel

records system greatly improves the capability to equably distribute cadre. Planners can now conjure up a microfiche detailing the professional history of every available officer and non-commissioned officer -- active, reserve, or retired. They also have a much larger pool of cadre to draw upon than was the case in the 1930's. No future American Army is likely to shape itself from the herculean efforts of a mere 14,000 professional officers. Mobilization plans and designated mobilization positions with respect to cadre personnel seem viable enough, although provisions for raising totally new units along the lines of the draftee divisions remain a neglected area.[12]

Recognizing present advantages with respect to cadre, one may still wonder about quality. Are today's officers as fully the masters of their craft as those of the 1930's? That earlier generation spent more time with troops and at the lower echelons.[13] It may be that headquarters above battalion replicate battalion-level leadership and management techniques; at the battalion level the executive pattern is set of working through a commissioned staff. If battalions are at once the epitome of military organization and close to actual troops and equipment, it would seem that the more time an officer spent in them the more advantaged he would be. When interwar officers were not directly applying their profession, they generally were teaching its principles to others.[14] The educational system with respect

to officers rose from ROTC and the service academies through branch and service schools, the Command and General Staff School, and the Army War College. This educational system was taken seriously, and the most qualified were chosen to teach in it. Educators tend to learn even more than their students, so the most qualified became more qualified in the course of instructing others. This is not to mention the influence of the school system in developing personal contacts among professionals.[15]

Today officers spend less time in battalion assignments or mentorship. Indeed, career patterns favor the accelerated promotion of inexperienced men and militate against school assignments as "dead time." A host of distractions, including euphemistically labelled "secondary military occupational specialties" and branch-immaterial assignments, divert officers for prolonged periods from the nuts and bolts of their profession. The officers most qualified to teach in the Army school system often cannot afford to do so; they must demonstrate proficiency in their "secondary" and keep their place in line with respect to a critical menu of assignment billets. More junior officers take over in a species of peer instruction, and these men often view their assignments as the least evil of several billeting possibilities. No other major army treats its military educational system so shabbily.[16]

The erosion of the Army school system, most catastrophic in the early 1970's because of the hemorrhaging of resources into the recruiting commands,[17] necessarily affected the quality of potential cadre. Quality is further threatened when important choices are made for reasons other than military ability. Despite "whole person" evaluations that heavily weight athletics, the military academies find themselves compelled to give one out of ten admissions to athletes who would not be accepted based upon qualifications alone.[18] The argument is that winning inter-collegiate teams are good publicity and a powerful recruiting draw; adolescents will be more willing to dedicate themselves to a lifetime of military service if they can attend a school that wins football games. When one totals the array of admissions quotas and peculiarities, perhaps one third of our cadets and midshipmen are not in attendanceby the virtue of "whole person" scores.[19] ROTCs are not saddled with football teams, but they do wrestle with quotas and fluctuate dramatically with respect to the quality of the candidates they can attract, place by place and year by year.[20] As one advances in the profession different wrinkles emerge with respect to advancement and preferred assignment, not the least of which depend upon who stays in given the attractions of employment elsewhere.[21] For reasons Americans may not care to fully reproduce, military service in the 1930's was relatively more attractive

financially than it is today. Quotas reappear at higher ranks as specialty and branch mixes for promotions and for attractive or unattractive assignments. A Command and General Staff College classroom, for example, features a curious patchwork of people, a fifth of whom find the bulk of instruction irrelevant to any future job they could possibly have.[22] For them the honor of having been selected far exceeds the value of attending. Conversely, about fifty percent of combat arms officers are not selected and thus suffer in their professional development.[23] Given these factors -- reduced experience at the battalion level and below, reduced participation as instructors in the Army school system, the reduced quality of the Army school system, and relaxed vigilance with respect to standards and professional exposure -- potential cadremen may be less capable than one might hope. Present advantages over the 1930's with respect to cadre may not be as great as one might think.

Turning from cadre to personnel turbulence, one comes to the most damaging phenomenon of World War II. In the United States most of the time lost in preparing divisions was lost to the shufflings of personnel. This could have been avoided. Overseas an ill-considered individual replacement system too often left divisions in prolonged contact relying upon exhausted veterans and green draftees. In Korea and Vietnam personnel turbulence was even worse,

individuals rotated between units that trained without fighting in the United States and units that fought without training in Asia.[24] This is not to mention extraordinary damage to peacetime training caused by individual rotations, a damage that limited the training retention of any major exercise to about three months.[25] Personnel turbulence has been noticed; at the time of this writing remedial efforts are underway. The most impressive of these is COHORT, a unit replacement system partially in effect at the company level and projected for the battalion level as well. Unfortunately, COHORT is in its essence a peacetime system, and it is artificially wedded to a fragile regimental system unlikely to survive mobilization.[26] Surely the British, with their sanguinary history of superb battalions and mediocre divisions, are warning enough concerning regimental systems.[27] No army can long survive without individual replacements into depleted units, and the need for replacements is unlikely to package itself neatly into unit or regimental quotas.

If one accepts the need for individual replacements, the critical topic becomes the operating mechanics of integrating them into veteran formations. Too many World War II divisions simply herded replacements forward into battle and hoped for the best. The most successful World War II divisions engineered periods out of the line into opportunities for rigorous retraining and the absorption of

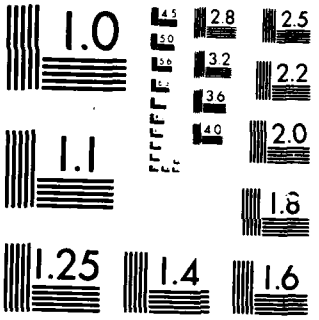
replacements. This, incidentally, was the highly successful German solution as well.[28] In Korea the notion of divisional retraining programs disappeared, and in Vietnam pitifully little retraining occurred at any level above that of the individual soldier.[29] Americans have never been very conscious of the role of pace and timing in sustaining combat excellence. This may be the most valuable correlate of divisional success World War II has to teach us.

Present mobilization planning seems impatient, determined to win first battles and conclude wars in a period of weeks.[30] The rude fact is that the democracies are unlikely to do well early on in wartime. They won't attack, and their totalitarian adversaries are unlikely to attack them if they are prepared. The most likely formula for war pits a conscious aggressor against an insufficiently wary victim. What if the Russians overrun Germany, or the Iranians occupy Kuwait, or the Ethiopians seize Mombasa, or the North Koreans capture Seoul, or the Vietnamese invade Thailand, or the Cubans topple a regime worth restoring -- or all these things happen at once? It would all be the same -- round one. The democracies, with or without German production, have the potential to ultimately dwarf the military resources of their likely adversaries. They may have to take the time to do it right.

At the division level doing it right implies pace and timing. Rather than rushing into combats of unlimited

AD-A164 741 WINNING TEAMS: MOBILIZATION -- RELATED CORRELATES OF SUCCESS IN AMERICAN..(U) ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS J S BROWN 10 MAY 85 3/3

UNCLASSIFIED F/G 15/5 NL



duration, divisions should plan for cycles of relief and recovery. In World War II the divisions that accomplished this did so either by the virtue of a terrain-based defensive glacis they could rotate into the rear of -- "two up, one back" -- or by the virtue of campaigns concluded so rapidly that breaks developed between them. Deployment included acclimatization, retraining, and preliminary combat. Sustainment included rotations in and out of actual combat. There were times when every available unit committed itself; the art of war was timing peaks of preparedness with peaks of effort. A grasp of pace and timing made the difference between fighting well with few casualties and destroying effectiveness altogether in prolonged contests without relief. This implies the need for more divisions than the democracies now have in their inventories; we should plan for them. Perhaps the Germans should raise theirs now. We could profit from more attention to World War II operational time scales and to the habits of efficient World War II divisions. We seem too prone to think in terms of days and weeks rather than months or years. Deterrence would be best served, it seems, if our adversaries recognized that we had the plans and means to win the last battle, regardless of the outcome of the first one. They should know that we will ultimately field the winning team.

Endnotes

1. See Chapter II.

2. Ibid.

3. Ibid.

4. See Chapter III.

5. See Chapter IV.

6. E.g., see the discussion in the "Extract from Consolidated Change Table 300-63" signed for the Secretary of the Army by General Bernard W. Rogers, 1 September 1977, CARL (TOE 6-205).

7. See the entries under "Armed Forces: Organization, Size, and Equipment" in the Foreign Area Studies series (Washington; The American University).

8. E.g., see the discussion of training philosophy in Army Training and Evaluation Program for Infantry Battalions (Washington; Department of the Army, 1979), pp 1-1 through 1-6.

9. Author's personal experience.

10. James A. Huston, The Sinews of War: Army Logistics 1775-1953 (Washington; Office of the Chief of Military History, 1966), 574-590.

11. Disposition Form (Subject: Audit of Officer Record Brief to be Viewed by LTC Promotion Board) to Whom it May Concern from the Adjutant General, Fort Leavenworth, Kansas, 29 March 1985.

12. Specifically, FORMDEPS Volume III Part 4, the United States Army Forces Command document to provide guidelines for unit activation and total mobilization, remains to be published.

13. Review, for example, appropriate entries in Michael J. Krisman, editor, Register of Graduates and Former Cadets (West Point, United States Military Academy, 1980); See also Martin Blumenson, The Patton Papers 1885-1940 (Boston; Houghton Mifflin, 1972).

14. Ibid.

15. See Chapter II.

16. The sources for this paragraph fall, unfortunately, under the mantle of the Command and General Staff College's non-attribution policy. This policy is designed to render speakers, instructors, and students more candid by the virtue of excusing them from personal attribution for remarks made. One very knowledgeable individual has offered himself as a citation, however. Lieutenant Colonel Michael Chase's study "A Comparison of Staff College Systems" addresses a wide array of military education issues and the manner in which different nations address them. Colonel Chase is now an instructor in the Combat Studies Institute of the Command and General Staff College, Fort Leavenworth, Kansas.

17. Interview of Major Joseph Collins with the Commandant of the Infantry School, Fort Benning, Georgia, 26 June 1976.

18. Colonel Gerald W. Medsger, et.al. A Partial Assessment of Intercollegiate Athletics at U.S.M.A. (West Point, New York; Office of Institutional Research, 1973) (OIR 73-018). Interestingly enough, pressure to make these compromises does not seem to originate in the academies themselves.

19. Trends in Admission Variables Through the Class of 1986 (West Point, New York; Office of Institutional Research, 1982) (OIR82-014); Dr. Joseph E. Marron, Analysis of Academic Board Selected Cases (Risk Cases) (West Point, New York; Office of Institutional Research, 1970) (IA1.04-71-002).

20. Results of the RETO (Required Education and Training for Officers) Study as interpreted for the author by Major Gregg Morton, recently assigned to Readiness Group Stewart, 16 April 1985; William F. Muhlanfeld, "Our Embattled ROTC," Army, February 1969, 21-29.

21. Forecasting Army Officer Retention Prior to Commissioning (West Point, New York; Office of Institutional Research, 1982) (OIR 82-011).

22. FC 100-145, Student Data Book, Regular Course 1984/85 (Fort Leavenworth, Kansas; U. S. Army Command and General Staff College, 1984).

23. See Note 16, above.

24. Interview with Major General James C. Smith (principal author of project COHORT, the Army's initiative to restore small unit cohesion), Fort Knox, Kentucky, 14 May 1981.

25. Ibid.

26. Presentation "Personnel Operations and Tomorrow's Force" by Major General Robert M. Elton (Commanding General, USA MILPERCEN) to the United States Army Armor Conference, Fort Knox, Kentucky, 13 May 1981.

27. Correlli Barnett, Britain and Her Army: A Political, Military and Social Survey (New York; William Morrow and Company, 1970), 371-475.

28. Professor Doctor Percy Ernst Schramm, Manuscript C-020; General Hasso-Eccard von Manteuffel, Manuscript A-872; Major General Rudolf von Gersdorff, ETHINT 59; Major General Friedrich von Mellanthin, ETHINT 65; and General Walter Warlimont, ETHINT 3; all in World War II German Military Studies (New York; Garland Publishing Inc., 1979).

29. See Note 24, above.

30. E.g., see Mobilization and Strategic Mobility Planning, the course manual for CGSC P455 (Fort Leavenworth, Kansas; U. S. Army Command and General Staff College, 1984).

BIBLIOGRAPHICAL

ESSAY

BIBLIOGRAPHICAL ESSAY

I know of no general work that collectively analyzes World War II divisions from activation through mobilization, deployment, and combat in an effort to ascertain correlates of success. That is, of course, the purpose of this paper. The Army Almanac, a Book of Facts Concerning the Army of the United States (Washington; Government Printing Office, 1950) contains useful, albeit brief, summaries of divisional histories. E. J. Kahn and Henry McLemore, Fighting Divisions: H :tories of Each U. S. Army Combat Division in World War II (Washington; Infantry Journal Press, 1946) provides a similar service in a somewhat chatty style. Both Kent Roberts Greenfield and Robert R. Palmer, The Organization of Ground Combat Troops (Washington; Department of the Army Historical Division, 1947) and Robert R. Palmer, Bell I. Wiley, and William R. Keast, The Procurement and Training of Ground Combat Troops (Washington; Department of the Army Historical Division, 1948) focus on the stateside preparation of units yet give some attention to overseas experiences. A student of World War II unit mobilization would do well to start with these two official histories.

A number of books trace individual divisions from activation through combat. John Sloan Brown, Draftee Division: A Study of the 88th Infantry Division, First All Selective Service Division into Combat in World War II (Ann Arbor, Michigan; University Microfilms International, 1983)

is the study of a single division that suggested the broader analysis this paper attempts. Other division histories that have proven particularly useful include Donald G. Taggart, History of the Third Infantry Division in World War II (Washington; Infantry Journal Press, 1947); The Sixth Infantry Division in World War II 1939 -1945 (Washington; Infantry Journal Press, 1947); Joseph Bernard Mittelman, Eight Stars to Victory; A History of the Veteran Ninth U. S. Infantry Division (Washington; Ninth Infantry Division Association, 1948); Jack Colbaugh, The Bloody Patch; A True Story of the Daring 28th Infantry Division (New York; Vantage Press, 1973); Robert L. Hewitt, Work Horse of the Western Front; The Story of the 30th Infantry Division (Washington; Infantry Journal Press, 1946); Ours to Hold it High; The History of the 77th Infantry Division in World War II (Washington; Infantry Journal Press, 1948); The 81st Infantry Wildcat Division in World War II (Washington; Infantry Journal Press, 1948); John P. Delaney, The Blue Devils in Italy: A History of the 88th Infantry Division in World War II (Washington; Infantry Journal Press, 1947); Walter E. Lauer, Battle Babies: The Story of the 99th Infantry Division in World War II (Baton Rouge; Military Press of Louisiana, 1951); Leo A. Hoegh and Howard J. Doyle, Timberwolf Tracks: The History of the 104th Division 1942-1945 (Washington; Infantry Journal Press, 1947); and Charles Whiting, Death of a Division (Briarcliff Manor, New

York; Stein and Day, 1981). These divisional histories are not entirely objective, but they do present a great deal of useful information, including the colorful and anecdotal. Another useful insight into the training experiences of these divisions comes in Jean R. Moenk, A History of Large Scale Maneuvers in the United States 1939-1964 (Fort Monroe, Virginia; United States Army Continental Army Command, 1969). A discussion of division organization would not be complete without reference to Tables of Organization of Infantry Units (Washington; The Infantry Journal, 1941). One interested in a quick overview of the factors involved in mobilizing America's World War II divisions and getting them overseas could find Russell F. Weigley, History of the United States Army (New York; MacMillan Publishing Company, 1967) useful.

The official histories of World War II have been invaluable in tracing unit combat experiences and, in particular, operational background. These volumes are thorough, well documented, and objective, if somewhat thickly written. The official histories that have proven most useful in this study include Hugh M. Cole, The Ardennes: Battle of the Bulge (Washington; Office of the Chief of Military History, 1965); Martin Blumenson, Breakout and Pursuit (Washington; Office of the Chief of Military History, Department of the Army, 1961); Robert Rose Smith, The Approach to the Philippines (Washington; Office of the

Chief of Military History, United States Army, 1953); Martin Blumenson, Salerno to Cassino (Washington; Office of the Chief of Military History, United States Army, 1967); Robert Rose Smith, Triumph in the Philippines (Washington; Office of the Chief of Military History, United States Army, 1963); John Miller, Jr., Cartwheel: The Reduction of Rabaul (Washington; Office of the Chief of Military History, United States Army, 1959); M. Hamlin Cannon, Leyte: The Return to the Philippines (Washington; Office of the Chief of Military History, Department of the Army, 1954); Samuel Milner, Victory in Papua (Washington; Office of the Chief of Military History, United States Army, 1957); Philip A. Crowl, The Campaign in the Marianas (Washington; Office of the Chief of Military History, United States Army, 1960); George F. Howe, Northwest Africa: Seizing the Initiative in the West (Washington; Office of the Chief of Military History, United States Army, 1957); Gordon A. Harrison, Cross-Channel Attack (Washington; Office of the Chief of Military History, United States Army, 1951); Albert N. Garland and Howard McGaw Smyth, Sicily and the Surrender of Italy (Washington; Office of the Chief of Military History, Unitd States Army, 1965); and Ernest F. Fisher Jr., Cassino to the Alps (Washington; Center of Military History, 1977). It is, understandably, difficult to track our own divisions indivioually through materials of German, Japanese, or Italian authorship. In addition to archival materials

mentioned below, the very useful twenty-four volume compendium World War II German Military Studies (New York; Garland, 1979) has proven useful for that purpose.

A number of solid studies address divisional mobilization-related experiences while focusing on functional areas of greater breadth. Leonard L. Lerwill, The Personnel Replacement System in the United States Army (DA Pam 20-211), (Washington; Department of the Army, 1954) and Marvin A. Kreidberg and Merton G. Henry, History of Military Mobilization in the United States Army, 1775 -1945 (Washington; Department of the Army, 1955) are probably the best single volume works on their chosen subjects. James A. Huston, The Sinews of War: Army Logistics 1775-1953 (Washington; Office of the Chief of Military History, 1966) is another extremely valuable survey. The multi-volume U. S. Selective Service Special Monographs (Washington; Government Printing Office, 1947) provides an array of administrative, legal, demographic, and manpower-related information. C. W. Bray, Psychology and Military Proficiency (Princeton: Princeton University Press, 1948) focuses more narrowly on correlates of fitness for combat, while the multi-volume Medical Department United States Army (Washington; Office of the Surgeon General, Department of the Army, 1947) addresses all that came into the perview of the medical profession. Finally, no study of the logistics involved in deploying and sustaining units would be complete

without Robert W. Coakley and Richard M. Leighton, Global Logistics and Strategy: 1940-1945 (Washington; Office of the Chief of Military History, 1968).

A little has been done along the lines of comparing divisional combat performances beyond the inevitable comparisons that develop when campaigns or battles are discussed. George R. Powell, The U. S. Army in World War II, Statistics (Washington; Department of the Army Historical Division, 1950) provides useful information. Trevor N. Dupuy, Numbers, Prediction, and War (London; MacDonald and James, 1979) brings a massive data base and quantitative analysis to bear in comparing divisions involved in DIADEM and other twentieth-century battles. His raw data seems good but, unfortunately, his quantitative methods are flawed and thus his conclusions suspect. Martin van Creveld, Fighting Power: German and U. S. Army Performance 1939-1945 (New York; Harper Colophan Books, 1959) borrows Dupuy's assessment of the Wehrmacht directly, then develops an uneven but useful comparison of German and American methods. Much of what he discusses involved divisions directly, but he does not compare and contrast American divisions with each other.

An analyst of combat performance profits from some idea of what combat is like. Books useful for that purpose include Charles B. MacDonald, Company Commander (Washington; Infantry Journal Press, 1947) and James C. Fry, Combat

Soldier (Washington; National Press, 1968). J. Glenn Gray, The Warriors: Reflections on Men in Combat (New York; Colophan Books, 1959) is also insightful, if more philosophical. Small Unit Actions (Washington; Historical Division of the War Department, 1946) describes four hotly contested battles in considerable detail. It was designed to support battle analysis in the Army's postwar school system and remains valuable as a source of case studies. A landmark work in discussions of what combat is really like remains S. L. A. Marshall, Men Against Fire: The Problem of Battle Command in Future War (Gloucester, Massachussetts; Peter Smith, 1978).

Turning from secondary to primary sources, one finds a wealth of archival materials to support a study of this sort. The Combined Arms Research Library (CARL) in Fort Leavenworth, Kansas has a vast yet carefully selected array of observers reports, after action reports, plans, G-3 files, G-2 files, decision memoranda, etc. dating from World War II. Collected over the years to support Command and General Staff College instruction, this material is unexcelled as a source concerning divisional combat operations. In my notes I have entered library filing numbers, e.g. CARL (N11240). The National Archives are, of course, the premier source for documents developed in the line of duty. In my notes I have entered the file numbers for documents drawn from the National Archives as they are

listed in the War Department Decimal File System (Washington; The Adjutant General of the Army, 1943). The United States Army Armor School Library at Fort Knox, Kentucky provided the Lieutenant Colonel King Papers, a valuable collection of official documents relating to the activation and stateside training of divisions. The United States Army Historical Research Center at Carlisle Barracks, Pennsylvania contains a large collection of personal papers donated by numerous military figures or, more often, their family. If I had to cite a few particularly useful documents out of the vast array consulted, I would mention Army Ground Forces Letters (Subject: Cadre Personnel for New Divisions), Army Ground Forces Letters (Subject: Training Directive Effective...), and Preparation for Overseas Movement (War Department, 1 February 1943, WD 370.5). Wartime versions of Field Manual 100-5 are also useful. These materials are available in the National Archives and at Fort Leavenworth, Fort Knox, and Carlisle Barracks, as well as other places.

In my research I did draw upon eyewitness testimony. In my notes I cite the generous assistance of Colonel Dixie Beggs, then an infantry G-3; Colonel Horace M. Brown, an artillery officer; Major Harvey R. Cook, an infantry officer and then a division special services officer; Colonel Robert J. Karrer, then infantry division inspector general; Brigadier General John J. King, then a rifle company

commander; Mr. William N. Partin, then a quartermaster officer; Dr. Paul C. Richmond, then a division surgeon general; Colonel Peter L. Topic, an artillery officer and then an infantry division G-4; and Mr. C. "Doc" Waters, then a rifleman. These men immeasurably enriched my analysis. The flaws in that analysis are, of course, mine -- not theirs.

Initial Distribution List

1. Major John M. Bond
   3/10 SFG (A)
   Fort Devens, Massachusetts, 01433

2. Colonel Horace M. Brown
   Box 206
   Weaverville, North Carolina, 28787

3. Ltc. Michael T. Chase
   Combat Studies Institute
   Fort Leavenworth, Kansas, 66027

4. Combined Arms Research Library
   U.S. Army Command and General Staff College
   Fort Leavenworth, Kansas, 66027

5. Defense Technical Information Center
   Cameron Station
   Alexandria, Virginia, 22314

6. Colonel Walter S. Dillard
   History Department, USMA
   West Point, New York, 10996

7. Major Gregory V. Morton
   HQ, USAEUR, (ATTN: IG-TID)
   APO New York 09403

8. Doctor John W. Partin
   Combat Studies Institute
   Fort Leavenworth, Kansas, 66027

9. Doctor Larry A. Yates
   Combat Studies Institute
   Fort Leavenworth, Kansas, 66027

10. Professor John E. Wilz
    History Department, Indiana University
    Bloomington, Indiana, 47401

END

FILMED

4-86

DTIC