UNITED STATES ARMY INFANTRY SCHOOL Fort Benning, Georgia 31905 27 November 1972

## THE REMAGEN BRIDGEHEAD: THE SIGNIFICANCE OF ACTIONS TAKEN BY UNITED STATES AND GERMAN FORCES BETWEEN 7 AND 17 MARCH 1945 (RESEARCH).

# Captain Michael B. Keck

Infantry Officer Advanced Course 6-72 Roster No. 089, Faculty Advisor Group 10

# TABLE OF CONTENTS

INTR	01	U	C1	CI.	0	N		3				•					٠		•					*		•		e.	•			•	•	•		. 1
	0.	P	* 1	r i	P	t.r																														1
	0.	-		1	-	-	٠	1	•			•		•			•		•	1	•	2		*		•							•	•	-	
	20	0	p.		*		•		•	٠		٠		*			٠		٠		•		÷.,	٠		٠			٠			٠	•		٠	1
	OD	1	ec	10	1	V	es	S	•	٠		٠		•	٠	ŝ.,	٠		٠		•		÷.,	٠		٠		8.	٠			•				1
	Me	t	hc	bd		0	£	1	De	2 V	e	1	0	pa	ne	n	t		•		•		ř.	•		٠		2	•			•		•	٠	1
BODY	•		,		•				•:							e			•		•		6	•					•				•		•	2
	Ge	10	eı	r a	1		S	i	21	18	t	i	0	n		2						2					4				8 1					2
		T	he		T	0	WI	n		> f		R	e	ma	2 0	e	n		2		2	1					1		2			2	2			2
		T	he		T		a.			1.		÷	£	T	2.4	4	A				1	1					1		1			•	•			0
		C	01		1.0	n	G		0.1		1	1	+	÷.	21		D	6	0	2	•	5		. *	+	h.		т	*	de		i.	*	f	4	2
																																				3
		0	. 1	21	+	u	8	E	•					· .		•	•		•		•			•		•			•	•	-	•	•	•	•	2
		6	eı	CH	1a	n .		r 1	01	co	e	S	0.3	36	30	: U	I	1	n	g		C 1	16	-	L	u	16	2 n	a	01	I	I				
			1	5T	1	d	ge	e	•			•		•			٠		٠	1	•			٠		٠		•	٠		6		٠		•	3
		T	he	3	R	h	i	n	e]	La	n	d		Ca	an	P	a	i	g	n	•		8	•		•	3		٠	•	) (	٠	•	:	•	3
	C.					-	i a		c				-	÷ .																						4
	26																																	•		4
		IJ																																У		
			-	St	a	g	e	s	(	o f	-	R	h	iı	16	21	a	11	d	1	C	ar	np	a	í	gi	n,		•		ē					4
		A	dy	7a	111	c	е		t	3	R	e	m	aş	g€	n				1	•	٠,	e.				3	ĕ.			ē.					5
		S	ei	Ĺz	u	r	e		01	Ē	t	h	e	1	BI	:1	d	g	e			3									2					6
		E	xı	pa	n	s	i.	01	n	c	f		t	he	2	E	r	1.	d	g	el	he	2.8	d					•							7
ANAL	YS	I	S	A	N	D	1	C	RI	ГI	T	C	I	SN	1.				•		•			•		•					6.	•	•	•	•	10
									2		4																									10
	MJ	S	L. é	ak	e	S		0	I	· ·	2.11	e		υ,	• •	•		4	r	m ;	y		۰.	٠		•		۰.	•		6	•	• me	•		ALC: NOTE: N
		С	01	nm	ıu	n	i	C	al	± 1	0	n	s								•		6				15			5	1	•	•			11
		T	a	ct	:1	c	a	1	1	En	ıp	1	a	ce	en	ae	n	t		0	f	1	łd	ld	í	t.	í.	on	a	1	B	ri	de	ges	ί,	11
		L	a	ck	5	0	f		Re	es	se	r	v	e		1						9	6											1		11
		I	nt	te	1	1	i,	g	e	10	e			•							•					•										12
									2		2			T						33														11 s		a final second
	Mj	S	ta	ak	e	s	1	0	f	t	: h	e		Gé	21	CR	1.a	n		A	r	my	7							-						12
		F	a	i 1	.u	r	e	13	te	C	Ľ	e	S	t	rc	) y	t.	t	h	e		B	ci	d	g	e	2									12
		I	na	ad	le	q	u	a	te	e .	F	0	r	ce	es	3	S	e	c	u	r	iı	19		t	h	9	B	r	10	19	e				12
		I	na	ad	le	a	u	a	te	2	I	.0	2	1:	5 1	1	c	a	1		S	uı		00	r	t	P.						202			13
																																				13
		č					4						~			11		1.			Č.	部											and the	•		
EFFE	CJ	s	,	1	M	P	L	I	C	1	C I	0	N	S	,	A	N	D		R	E	C	21	(M	IE	N	D	AT	L	10	NS	•	•			14
APPE	INI	)I	XI	ES	5.		•		•		EVEN S			•					•			Constanting of the second	•	•		•				N. S. S. S.			•	•	Eds. (a)	16
	A-	-	Ma	ap	,	11	A		1	01	r e	r	v	i	er	1	S	k	e	E	c	h	¢	>f		R	eı	na	g	eı	1	an	d			
			SI	ur	r	0	u	a	d	ir	19		A	re	e	1												8j								17
	B-		SI	CE	+	C	h		0	f	Ĩ		6	er		ic	) r	·f	f		8	r	1 0	10	e		t.	0	T	n.	~1	uo	e			
																																		•		18
	-			eu	10	L L	L P	11	1	101		-	1				-	2	•	10	•	0				•	R		•	100		•	•	•	0	10
	C-		Ma	ap	)		В		14	- 1	16		K	n	11	16	= 1	a	12	u		U	11	nP	a	1	81					•	•	•		19
	D-		Ma	ap	)	-	C			1]			C	0	rı	3.5	4	P	1	a	n		o í	1201	A	t	t.	ac	k			•	9.69			20
	E-		Ma	ap	,	=	D	"		E 2	¢p	a	n	s	ic	10	1	0	£		B	r	ic	1 g	;e	h	e.	au	1	f	rc	m	7	to	>	
																																		•		
BIBL	.10	G	R	AF	H	Y	•		•	- AND	100			•	Sec. 1	1000			•		0.00 ····		•		H-Mas	•									Store C	. 22

THE REMAGEN BRIDGEHEAD: THE SIGNIFICANCE OF ACTIONS TAKEN BY UNITED STATES AND GERMAN FORCES BETWEEN 7 AND 17 MARCH 1945 (RESEARCH).

## I. INTRODUCTION

A. Overview. On 7 March 1945, members of Company A, 27th Armored Infantry Battalion, 9th Armored Division, attacked and seized the Ludendorff Bridge crossing the Rhine River at Remagen. The Rhine River represented Germany's last defensive barrier. The seizure of the only remaining bridge across the Rhine provided a springboard for the final thrust into the heartland of Germany.

In their extensive planning and preparation for the Rhineland Campaign, Allied commanders completely disregarded Remagen as a possible bridge crossing site. The sudden realization that the Ludendorff Bridge was still intact thrust Remagen in the limelight. The spectacular seizure of the Ludendorff Bridge ranks as one of the most dramatic events of World War II. It was estimated that the capture of the bridge intact saved the American nation over 5,000 dead and more than 10,000 wounded and substantially hastened the end of the war (6:223). It is worth noting that the 9th Armored Division crossed the Rhine River precisely 2,000 years after Caesar's first assault crossing at Andernach. Andernach is less than 12 miles south of Remagen (10:22).

B. Scope. The period from 7 March (when Company A seized the bridge) until 17 March (when the bridge finally collapsed into the Rhine) is the concern of this monograph. Additional discussion of the long-range plans for the Rhineland Campaign and U.S. Army actions prior to the seizure of the bridge is necessary in developing the situation. I shall review what was done and left undone by both American and German forces.

C. Objectives. I shall examine the seizure of the Ludendorff Bridge and the subsequent exploitation of the bridgehead in order to determine those factors which influenced the operation. I shall try to determine the applicability of the lessons learned at Remagen to the present-day situation and how these lessons learned can be incorporated into current doctrine.

D. Method of Development. The paper will be developed in the following manner. A brief description of the town of Remagen and the surrounding countryside will be given. This description will include a discussion of the Ludendorff Bridge and the demolition plan for the bridge. Additional discussion of the German forces securing the bridge is necessary to set the stage for what occurred during the seizure. The remainder of the paper will be developed in the chronological order of events. II. BODY

A. General Situation.

1. The Town of Remagen (see appendix A).

Remagen was a small, unambitious resort community located on the west bank of the Rhine River midway between Cologne and Coblenz. The village had a population of about 5,006. Aside from the Ludendorff Bridge spanning the Rhine River, Remagen held little of strategic value. However, several large buildings, in particular the imposing Church of Saint Apollinarus, offered the occupying force excellent points of observation. Likewise, the narrow, twisting streets provided the enemy excellent strongpoints for antiarmor positions, assuming enemy troops and material were available to man them. The roads leading to Remagen from the west were generally good. The smooth, rolling terrain favored the attacker on the west side of the river. However, the rugged terrain and thick forests on the east side of the river presented many obstacies to the attacking force. The confluence of the Ahr River and Rhine River south of Remagen adds considerable speed and turbulence to the 700-foot-wide river as it passes Remagen (6:54-61).

On the east bank of the Rhine, across from Remagen, a 600-foot cliff, called the "Erpeler Ley," looms against the sky. The high ground provides the occupying force a commanding view of the countryside for 10 miles in all directions. Additionally, the occupying force has an excellent vantage point for placing direct fire on the bridge below. To the north and east rise the Seibengebirge ("Seven Mountains") and other thickly forested, mountainous areas whose steep slopes and gullies provide natural tank traps against advancing armor. The terrain strongly favors the defender (6:4-5).

2. The Ludendorff Bridge (see appendix B).

The Ludendorff Br<sup>-1</sup> 'ge was constructed in 1918 and crossed the Rhine River from the southern edge of Remagen to the southern edge of Erpel. The bridge was 1,069 feet long and consisted of three symmetrical arches resting on four stone pilings. Two stone towers at each end of the bridge commanded both the entrance to the bridge and the surrounding landscape. The threestory towers were intersticed with gun apertures and provided excellent observation from rooftop positions. The towers could easily have quartered a full battalion of troops. The bridge allowed railroad traffic in both directions. Additionally, there was a 1-meter footwalk on each side of the bridge. On the east side of the river, the railroad tracks led into a 1,200-foot tunnel through the base of the "Erpeler Ley" (6:59-64).

1

 German Demolition Plan for the Ludendorff Bridge (see appendix B),

An elaborate demolition plan for the bridge was put into effect in 1938. Sixty demolition containers were strategically emplaced along the bridge. The containers held 8 pounds of explosives. The explosives were to be electrically detonated by a fuze attached to a cable laid beneath the tracks. The fuze ignition switch was located in the tunnel. The system was designed to detonate all 60 charges simultaneously, causing the bridge to collapse into the river. In addition, an emergency handlit primer cord could be utilized should the electrical fuze fail to function. Furthermore, in 1944 to offset possible rapid armored advances, German engineers planted demolitions along the causeway approaching the bridge on the west bank. The charge was designed to blow a ditch 30 feet wide and 12 feet deep across the entrance way (6:65-69).

4. German Forces Securing the Ludendorff Bridge.

The German forces securing the bridge were comprised primarily of the sick and wounded and whatever local Volkssturm forces that could be mustered. Captain Willi Bratge was designated combat commander of the Remagen area in December 1944. His forces consisted of a 36-man bridge security company, about 180 Jugend (Youth Corps) members, and 120 Russian volunteers of dubious loyalty. Captain Karl Friesenhahn commanded a 120-man engineer company. Additionally, there were several antiaircraft units consisting of less than 200 men and a rocket battery with less than 20 men. Although the Volkssturm commanders counted over 500 members in their ranks, they admitted that only one-tenth of that figure would actually take up arms and fight. German forces totaled less than 1,000 poorly trained and ill-disciplined troops. Confusion in command channels and poor communications further complicated Captain Bratge's efforts to unify German forces into an effective deterrent force (6:41-53).

5. The Rhineland Campaign (see appendix C).

After months of planning and preparation, Allied forces launched the Rhineland Campaign in February 1945. In formulating the plan for the final plunge into Germany, General Eisenhower was primarily concerned with the course of action once the Rhine River was breached. In developing the plan, General Eisenhower established a twofold mission: (1) Prevent German forces defending the west bank of the Rhine River from escaping to the east bank where they could be effectively deployed in a final defensive effort and (2) in so doing, Allied forces would be free to select those crossing sites where their forces could be concentrated with minimum forces defending along the remainder of the front. In that little hope was held for capturing a Rhine River bridge intact, huge stores of bridging equipment were moved to the front (1:3).

Eisenhower developed his operation in three phases. In phase one, the First Canadian Army and the Ninth U.S. Army under the command of Field Marshal Montgomery would seize the west bank of the Rhine from Nijmegen to Dusseldorff, Concurrently, General Bradley's First U.S. Army forces would cover Ninth Army's southern flank and destroy any resistance bypassed throughout the zone. In phase two, Montgomery would continue preparations for a crossing on the lower Rhine. In developing the bridgehead, Bradley's forces would secure the west bank of the Rhine from Dusseldorff to Coblenz, aggressively striking the enemy's flank and rear to the southeast. Meanwhile, Third U.S. Army was to attack eastward from Prum to Coblenz. In phase three while Montgomery's forces were expanding the bridgehad, Third and Seventh Armies would destroy any remaining resistance in the Moselle-Saar-Rhine triangle and secure the Rhine River as far south as Karlsruhe (12:668). Although Eisenhower's initial plans called for a crossing in the lower Rhineland by Field Marshal Montgomery's forces, the seizure of the Ludendorff Bridge necessitated a sweeping change in plans. The original mission was changed in order to exploit the bridgehead.

B. Sequence of Events.

1. Disposition of Allied Forces During Early Stages of Rhineland Campaign.

Phase one commenced on 8 February when the First Canadian Army, despite stubborn enemy resistance and early thaw floodwaters, attacked the Reichswald southeast of Nijmegen. They reached the Rhine River opposite Emmerich on 14 February. Retreating German forces flooded the Roer Valley by destroying the discharge valves on Roer River dams, therein preventing First and Ninth Armies from joining the phase one offensive until 23 February. On that date, they launched a coordinated attack across the Roer River. Under cover of the Ninth Air Force and British Second Tactical Air Force, several bridgeheads were secured across the Roer River. Capitalizing on their initial momentum, First Army continued its advance toward Cologne, while Ninth Army veered sharply to the northeast following the Munchen-Gladbach-Dusseldorff axis. The Ninth Army's movement to the northeast caught the enemy by surprise allowing Ninth Army forces to advance to the Rhine at Neuss on 1 March. Three days later Ninth Army linked up with the Canadian First Army at Geldern (2:19-22).

Meanwhile, First Army, commanded by General Courtney Hodges, continued its advance to Cologne with VII Corps securing Ninth Army's southern flank. Third Corps and V Corps attacked southeast toward Remagen and the Ahr River encountering disorganized units from the German Fifteenth Army. Enemy morale was low, and resupply was virtually nonexistent (1:5). By 6 March, VII Corps had seized Cologne and occupied positions along the Rhine River to Ninth Army's southern boundary at Dusseldorff. Elements of III Corps had advanced to within 3 miles of the Rhine and occupied positions along a line extending southeast through Stadt Meckenheim and Merzbach. Concurrently, V Corps was disposed along a line from Kirspenich on the north to the Erft River and Dahlem Woods on the south (1:5).

Ninth Army continued mopping up pockets of resistance within its zone, while Third Army continued its advance to Coblenz and Andernach. General Hodges ordered VII and III Corps to close to the Rhine on 7 March, while V Corps was instructed to occupy positions along the west bank of the Ahr River. In that the Remagen Bridge was the only remaining span across the Rhine, III Corps was ordered to seize it intact (1:5).

In accomplishing this mission, III Corps planned to attack with four divisions across its front (see appendix D). The 9th Armored Division, commanded by General John Leonard, was to attack in a southeasterly direction seizing Remagen and those remaining Ahr River crossings near Sinzig, Heimersheim, and Bad Neuenahr. The 1st Infantry Division was to seize Bonn while securing III Corps' left flank with the 14th Cavalry Group. The 9th Infantry Division was ordered to attack southeast and seize Bad Godesburg and Lannesdorf. The 78th Infantry Division was ordered to seize Ahr River crossings at Ahrweiler while protecting III Corps' right flank (1:6).

2. Advance to Remagen.

The extensive road network throughout the zone facilitated rapid advance. The Kotten Forest extending throughout the center of the corps zone offered the attacking forces a covered approach leading to the battle area. In general, the terrain leading to the west bank of the Rhine favored the attacker. The terrain on the eastern side of the river greatly favored the defender. To facilitate command and control, 9th Armored Division was divided into two combat commands. Combat Command A was to attack to the southeast seizing the Ahr River crossings at Bad Neuenahr and Heimersheim. Concurrently, Combat Command B was to seize Remagen and Sinzig in a twocolumn attack with the northern column capturing the Remagen Bridge and the southern column seizing Ahr River crossings south of Remagen. The northern column, designated Task Force Engeman after its commander LTC Leonard Engeman, contained the 27th Armored Infantry Battalion, 14th Tank Battalion (minus Companies B and C), one platoon of the 89th Reconnaissance Squadron, and one platoon of Company B, 9th Armored Engineer Battalion. LTC Engeman's scheme of maneuver was to clear Remagen of enemy forces, seize approaches to the Ludendorff Bridge, and establish a bridgehead on order. The task force was scheduled to cross the

initial point (IP) south of Stadt Meckenheim at 070730 March. The task force consisted of the following units listed in order of march sequence:

Company A, 27th Armored Infantry Battalion, with one platoon of Company A, 14th Tank Battalion attached (advance guard)

14th Tank Battalion (-)

27th Armored Infantry Battalion (-)

1st Platoon, Company B, 9th Armored Engineer

Battalion

Company B, 27th Armored Infantry Battalion

Company A (-), 14th Tank Battalion

Company C (-), 27th Armored Infantry Battalion

Company D, 14th Tank Battalion

lst Platoon, Company C, 27th Armored Infantry Battalion

89th Reconnaissance Platoon as flank protection and to screen the front (1:7-8)

Throughout their sector, Task Force Engeman encountered isolated rear guard units. There was no established line of defense. At or about 071230 March, elements of the advance guard seized positions overlooking the entire city. The Ludendorff Bridge was discovered intact and jammed with retreating German forces. It was decided that no artillery fire would be directed against the bridge for fear of destroying or damaging it. LTC Engeman planned to attack at 1310 with the 27th Armored Infantry Battalion. Company A was ordered to attack southeast and secure the bridge approach while Companies B and C were ordered to clear the city and protect the flanks. Their fire support included an assault gun platoon and mortar position located on the hill overlooking the city (10:1-3).

3. Seizure of the Bridge.

Upon entering the city, Company A encountered heavy sniper fire necessitating house-to-house fighting. Nevertheless, Company A reached the bridge and secured the western approach by 1500. Shortly before their arrival, the German forces exploded a demolition charge in the causeway approaching the bridge. The explosion left a 30-foot crater. An interrogation of prisoners captured during the attack indicated the bridge was scheduled to be blown at 1600. Spurred on by the realization that the bridge would be destroyed shortly, Company A was ordered across. Additionally, one squad of Company B, 9th Armored Engineer Battalion, was attached to Company A (10:2). and equipment (6:159-160). A listing of significant activities during the exploitation of the bridgehead from 8 to 17 March follows:

## 8 March 1945

Shortly after midnight, Company B, 9th Armored Engineer Battalion, completed repairs to the bridge. Attempts to push reinforcements across the bridge caused further problems when a tank destroyer slipped off the bridge runway and became wedged in the bridge structure. All vehicular traffic was halted and backed up bumper-tobumper as far as Birresdorf. The bridge was finally cleared at 080530 March, and reinforcements began streaming across. During the remainder of the day, the 47th and 311th Infantry Regiments along with five separate infantry battalions and assorted support units were pushed across the bridge expanding the bridgehead 1 mile deep and 2 miles wide. Road blocks were established and defensive positions were fortified. However, the narrow streets of Remagen became so congested with troops and equipment that only one more battalion crossed during the night of 8-9 March (10:9-10).

To facilitate command and control, separate command groups were established on both sides of the river. Communication between command groups was almost nonexistent. Fortunately, the enemy failed to launch a counterattack, and enemy resistance was sporadic. Despite poor weather conditions, the Germans did attempt 10 air raids against the bridge. Eight aircraft were shot down (10:9-10).

## 9 March 1945

The Germans were desperate. The German high command ordered the bridgehead contained at all costs. Enemy opposition stiffened with the arrival of elements of 11 German divisions. Nevertheless, the bridgehead was strengthened with the arrival of the 309th Infantry Regiment, the remainder of the 310th Infantry Regiment, and additional antiaircraft units. Furthermore, extensive obstacles were emplaced to protect the bridge from floating mines and enemy swimmers (10:10-11).

Engineer units began constructing a treadway bridge less than 500 meters north of the Ludendorff Bridge. Likewise, construction was also begun on a heavy ponton bridge upstream at Kripp. No artillery units had as yet crossed the river. Division and corps artillery units supported the operation from the west bank. Overcast skies and limited visibility restricted aerial support during the day (10:10-12).

#### 10 March 1945

By 10 March, the situation was fairly well in hand. The bridgehead was expanded despite very heavy resistance and sharp enemy counterattacks. Advances were made in the northeast and southeast by the 309th and 60th Infantry Regiments respectively. The last elements of the 9th Infantry Division completed their crossing by 1825. Elements of the 99th Infantry Division began crossing at 1530 (10:12-13).

#### 11 March 1945

There was little progress on 11 March. However, additional reinforcements were pushed across the bridge. Heavy concentrations of counterbattery fire were instrumental in breaking up German counterattacks. The treadway bridge north of Remagen and the heavy ponton bridge at Kripp were opened to traffic despite heavy enemy artillery fire and airstrikes. Three ferry sites were also placed in operation. As a result of damage sustained by artillery fire, the treadway bridge was only able to handle light traffic (10:13-14).

## 12 March 1945

By 12 March, three divisions had crossed the river. Coordinated attacks by all three divisions encountered heavy resistance. Aggressive counterattacks by German armor and infantry units forced the American units to defend in place. Four additional field artillery battalions crossed the river on 12 March. Over 50 airstrikes were directed against the bridge in a desperate attempt to cut off American supplies and reinforcements. Once again U.S. antiaircraft batteries proved highly successful in destroying 26 aircraft (10:14-15).

## 13 March 1945

Stubborn enemy resistance coupled with extremely rugged terrain continued to slow the expansion of the bridgehead on 13 March. The Ludendorff Bridge was closed temporarily to allow repairs and to install additional protective measures to counter enemy mines and swimmers. However, the treadway bridge and ponton bridge were operational, and reinforcements continued to flow across. Significant advances were made by the 311th Infantry Regiment, 78th In.antry Division. Smaller advances were made by the 9th and 99th Infantry Divisions. Once again the Luftwaffe made desperate attempts to destroy the bridge but lost 26 aircraft in the process (10:15-16).

#### 14 March 1945

There was some progress in the northeastern sector on 14 March, but the situation remained fairly stable elsewhere. Additional field artillery reinforcements proved effective in countering enemy artillery fire and counterattacks (10:16-17).

#### 15 March 1945

Significant advances were made on 15 March with the 78th and 9th Infantry Divisions advancing to within 1500 meters of the autobahn. Throughout the bridgehead area, there were indications that the enemy was weakening. Enemy counterattacks, artillery fire, and airstrikes diminished considerably throughout the bridgehead (10:18-19).

New boundaries and objectives were established for III and VII Corps. Likewise, the Corps were restructured to facilitate command and control. The bridgehead was split. The VII Corps, with two divisions, assumed responsibility for the northern sector, and III Corps, with three divisions, assumed responsibility for the southern half (10:18-19).

#### 16 March 1945

At 161415 March, the 309th Infantry Regiment, 78th Infantry Division, seized the autobahn in its sector. The 393d Infantry Regiment, 99th Infantry Division, advanced some 4,000 yards to the Weid River. Likewise, the 9th Infantry Division made significant advances in its sector. The 1st Infantry Division completed its crossing and closed in assembly areas by 1300 (9:19).

#### 17 March 1945

Expansion continued on 17 March, and additional segments of the autobahn were seized. Significant advances were made on all fronts within the bridgehead. The enemy appeared to be weakening. Alert shore defenses observed and captured enemy swimmers towing explosives. In their desperation, the Germans began employing V-2 rockets against the bridgehead, but they proved unsuccessful (10:19-20).

Succumbing to 10 days of continuous punishment, the Ludendorff Bridge collapsed into the Rhine River at 1500. Although there are no figures available on the number of personnel or the amount of supplies and equipment that crossed the Rhine River during the 10-day period, the Ludendorff Bridge served its purpose. By 17 March, First Army secured a bridge-

#### III. ANALYSIS AND CRITICISM

A. Mistakes of the U.S. Army,

1. Traffic Control.

Perhaps the most serious deficiency in the bridgehead operation was the almost total lack of provisions for traffic control. Routing all traffic through the center of Remagen caused severe bottlenecks, seriously hindering the normal flow of supply and evacuation vehicles. In the initial effort to reinforce the bridgehead, the lack of adequate traffic control measures had vehicles backed up bumper-to-bumper for several miles. The situation had deteriorated to the point of calling upon members of the division band to aid in traffic control. Their inexperience only heightened the problems. Furthermore, the failure to provide adequate radio communication to the already undermanned and inexperienced traffic control element rendered their efforts almost useless. The high density of personnel and equipment located in Remagen provided an extremely vulnerable and lucrative target to enemy artillery (7:34-35).

2. Communications.

Inadequate communications in the early stages of the bridgehead created tremendous command and control problems. On 8 March, Combat Command B headquarters was unable to communicate with the forward units on the east bank of the river. Situation reports were being delivered by messenger. The forward units in contact were unable to call in artillery fire. By 9 March, the situation had improved considerably with the establishment of several radio relay points along the east bank of the river. However, during the first 2 days of the bridgehead, American forces on the east bank of the river remained in an extremely vulnerable situation. Likewise, the inadequate communications between traffic control elements on both sides of the river further compounded the problem (7:35-36).

3. Tactical Emplacement of Additional Bridges.

On 8 March, an engineer unit began construction of a steel treadway bridge less than 500 meters north of the Ludendorff Bridge. Its proximity to the bridge at Remagen rendered the treadway bridge susceptible to the same enemy artillery fire and airstrikes directed against the Ludendorff Bridge. In fact, construction on the bridge was halted temporarily on several occasions as a result of artillery fire and airstrikes intended for the Ludendorff Bridge. The treadway bridge was not completed until 11 March and was not able to accommodate heavy traffic for 2 additional days in that it sustained considerable damage. Although engineer units estimated construction of the bridge would require 12 hours, it actually took over 33 hours to complete construction of the 1,032-foot span (10:9-10).

4. Lack of Reserve.

Although the Ludendorff Bridge was reported intact on 6 March, there was no apparent plan for establishing a tactical reserve to exploit the situation. Consequently, LTC Engeman was able to commit only one company to the seizure of the bridge. Upon seizing the bridge and establishing a foothold on the east bank, there were no available forces to reinforce Company A for over 13 hours. Furthermore, Corps artillery had been positioned too far south to support the bridgehead with effective fire. Had the enemy been prepared, they could have destroyed the initial bridgehead force with little effort. The sudden decision to exploit the bridgehead to the maximum resulted in piecemeal committing of units, destroying unit integrity and creating additional command and control problems (7:33).

Although Company A was able to seize and hold the bridge until reinforcements arrived, the overall strategic importance of the bridgehead warranted more positive planning. Quite obviously, an organized, mobile, well-balanced reserve could have exploited the bridgehead more efficiently and rapidly and at much less risk (7:33).

5. Intelligence.

Information of enemy troops and dispositions for the most part was insufficient and in some instances incorrect. Failure to rely on information gathered from committed units oftentimes led to untimely and erroneous intelligence. In that the enemy situation was unknown and prior reconnaissance was not possible, attacking forces were placed in a dangerous situation. In the case of the 78th Infantry Division, the regiments utilized every available collection agency to gather information; however, little if any information, properly evaluated, ever filtered back down to the units (7:36-37).

B. Mistakes of the German Army.

1. Failure to Destroy the Bridge.

In that the Ludendorff Bridge was unfavorably situated for a large-scale river crossing, Field Marshal Von-Rundstedt discounted the possibility of an American crossing at Remagen. He ordered that the bridge be retained until the last possible moment. Von-Rundstedt underestimated the speed of First Army's advance until it was too late. Although U.S. Army engineers indicated the demolitions failed to detonate as a result of poor wiring and a faulty detonator, Hitler placed the entire blame on Field Marshal Von-Rundstedt. Von-Rundstedt was relieved of command and reduced to the rank of private. Field Marshal Kesselring assumed command; however, it was impossible for Kesselring to remedy the situation (1:25-26).

2. Inadequate Forces Securing the Bridge.

In that Von-Rundstedt ordered the bridge to be retained until the last moment, it is inconceivable that sufficient forces were not provided to adequately secure the bridge. It seems obvious that the defense of a bridge as strategically important as the Ludendorff Bridge would warrant a security force more capable than that found at Remagen. The priority for personnel replacement was elsewhere. Captain Bratge was forced to rely on those Volkssturm forces and piecemeal units available to him. His requests for replacements went unheeded.

Furthermore, a poorly defined chain of command undermined Captain Bratge's authority over those units assigned to Remagen. The antiaircraft and rocket units were instructed to take orders only from their parent units. Some of Bratge's troops were responsible to the Replacement Army, and the remainder were responsible to the German Field Army. The two headquarters vied for authority, therein rendering Captain Bratge's position somewhat meaningless (6:41-53).

3. Inadequate Logistical Support.

The logistical situation for the German forces was critical. Fuel and transportation were at a minimum and in some cases nonexistent. Some artillery units were limited to 10 rounds per day. Captain Bratge's repeated requests for ammunition, weapons, and barrier material were turned down. Most of the crew-served weapons employed by the German security force were of foreign origin, and the operators were not entirely familiar with operating procedures or maintenance requirements. Once again it seems obvious, in light of the strategic importance of the Ludendorff Bridge, that supply priorities should have been directed to the security force at Remagen (6:41-53).

4. Command and Control.

The military judgment of the German commanders was blinded by the seizure of the Ludendorff Bridge. German divisions were thrown piecemeal into the line in an attempt to destroy the bridgehead. Although elements of 11 German divisions were engaged in containing the bridgehead, the lack of strong and aggressive leadership rendered most units ineffective. Command channels were not established. Division and corps commanders were more interested in moving their headquarters than in taking immediate coordinated and aggressive action to counterattack and destroy the bridgehead (6:41-53).

5. Communications.

Not only was the chain of command confusing, but the lines of communication between Remagen and higher headquarters were inadequate. Only one telephone line linked Remagen with the regular Germany Army line between Bonn and Coblenz. Another line was connected via civilian hookup to headquarters in Weisbaden. Both lines were frequently severed by Allied bombings. More often than not, it took a full day to complete a telephone call. Furthermore, Captain Bratge had to rely on civilian telephones to contact attached units in Remagen. The civilian telephone system was frequently put out of operation by Allied bombing, sometimes for as long as 2 wceks (6:41-53).

## IV. EFFECTS, IMPLICATIONS, AND RECOMMENDATIONS

The Army Chief of Staff, General George C. Marshall, summed up the seizure of the Ludendorff Bridge in the following words:

The prompt seizure and exploitation of the crossing demonstrated American initiative and adaptability at its best, from the daring action of the platoon leader to the Army commander who quickly directed all his moving columns. . . The bridgehead provided a serious threat to the heart of Germany, a diversion of incalculable value. It became springboard for the final offensive to come (0:222-223).

The seizure of the bridge signal Germany's doom. Her last defensive barrier had been breached. Her will to fight was gone. German forces were sent reeling by the coordinated American onslaught.

Although the seizure of the bridge at Remagen is an excellent example of military exploitation, the tides of war could have easily been altered had the German forces capitalized on American mistakes. General Eisenhower attributed the success at Remagen to "the dash, the ingenuity, the readiness at the first opportunity that characterizes the American soldier" (6:228). This is true for the most part; however, I feel that American mistakes were greatly overshadowed by German blunders.

The failure of German forces to destroy the Ludendorff Bridge was indeed a grave mistake; however, the failure of the German high command to collectively analyze the situation and take immediate aggressive and coordinated action was perhaps the single most important reason for the American success at Remagen. For 13 hours, only one battalion prevented the German forces from retaking the bridge, and yet the Germans were unable to effectively coordinate a counterattack for over 24 hours.

Major General John W. Leonard, Commanding General, 9th Armored Division, stated:

First and foremost, the operation is an outstanding proof that the American principles of warfare, with emphasis on initiative, resourcefulness, aggressiveness, and willingness to assume great risks for great results, are sound. The commander must base his willingness to assume those great risks upon his confidence in his troops (10:II).

It is my opinion that the lessons learned from the operations surrounding the Remagen bridgehead should be studied by all infantry advanced course students. The principles of warfare demonstrated throughout the operation may be applied today and should be incorporated into training programs throughout the Army.

## These are my recommendations:

 That a study be conducted to determine the adequacy of traffic control personnel and training in all Army units.

 That commanders be instructed in the criticality of continuous communications during offensive actions.

3. That portable bridges be emplaced at sufficient distances from other bridges to preclude both installations from being destroyed by the same artillery barrage or airstrike.

4. That commanders be further instructed in the importance of withholding a reserve with which to exploit a success.

5. That command emphasis be placed on the acquisition and dissemination of timely and accurate intelligence.

That adequate provisions be taken to deny access to key terrain by enemy forces.

7. That personnel and equipment be assigned a mission commensurate with their abilities. Conversely, key installations should be allocated sufficient personnel and equipment necessary to provide adequate security.

8. That a clearly defined chain of command be established and enforced at all levels of command.

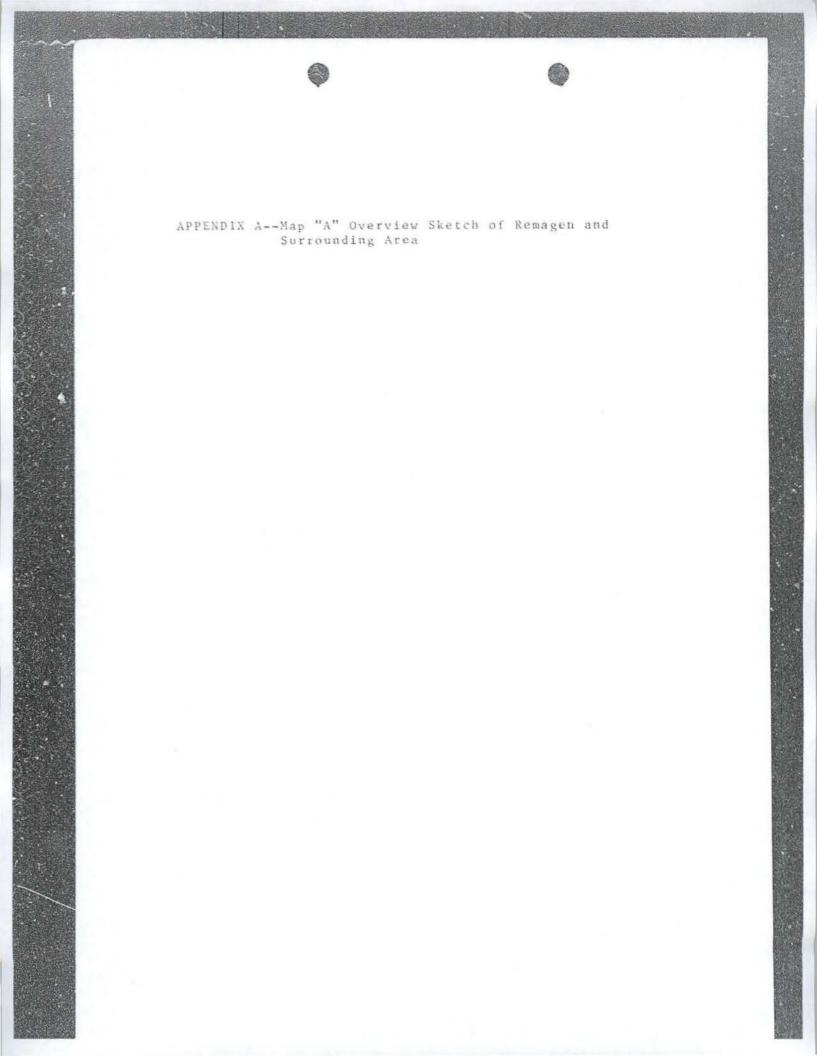
9. That commanders do not allow their judgment to be blinded by the immediacy of the situation.

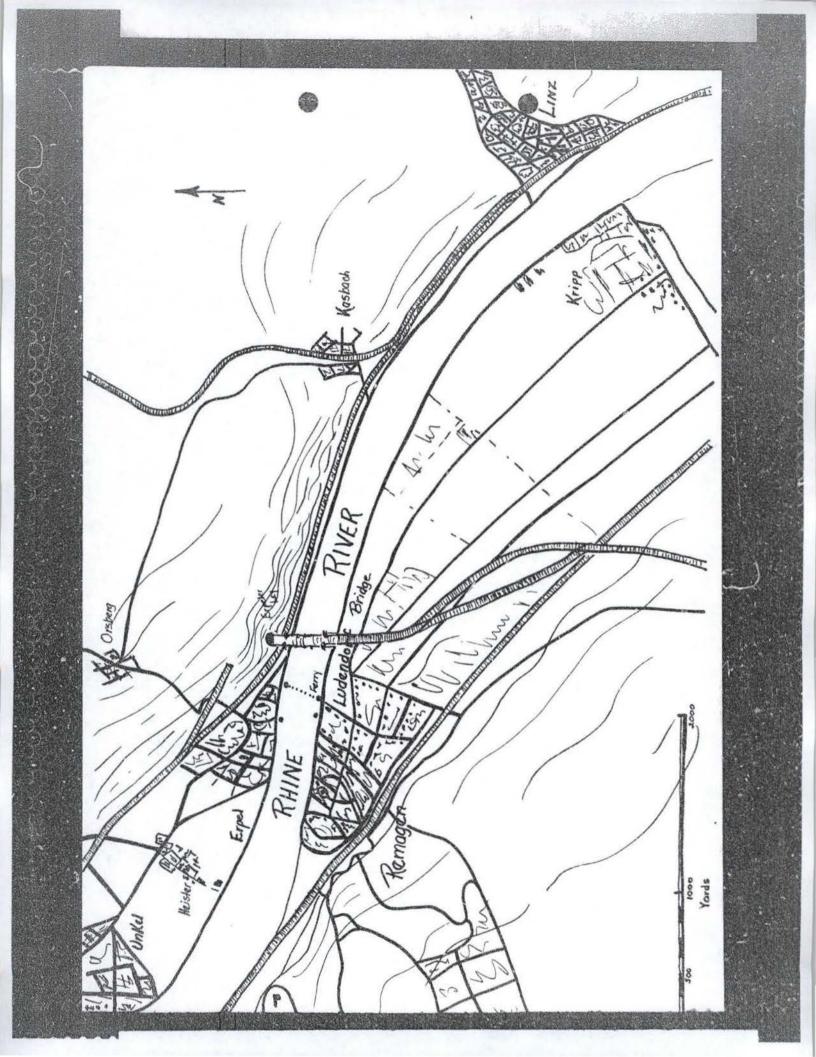
r. hand

MICHAEL B. KECK Captain, Infantry 544-1647

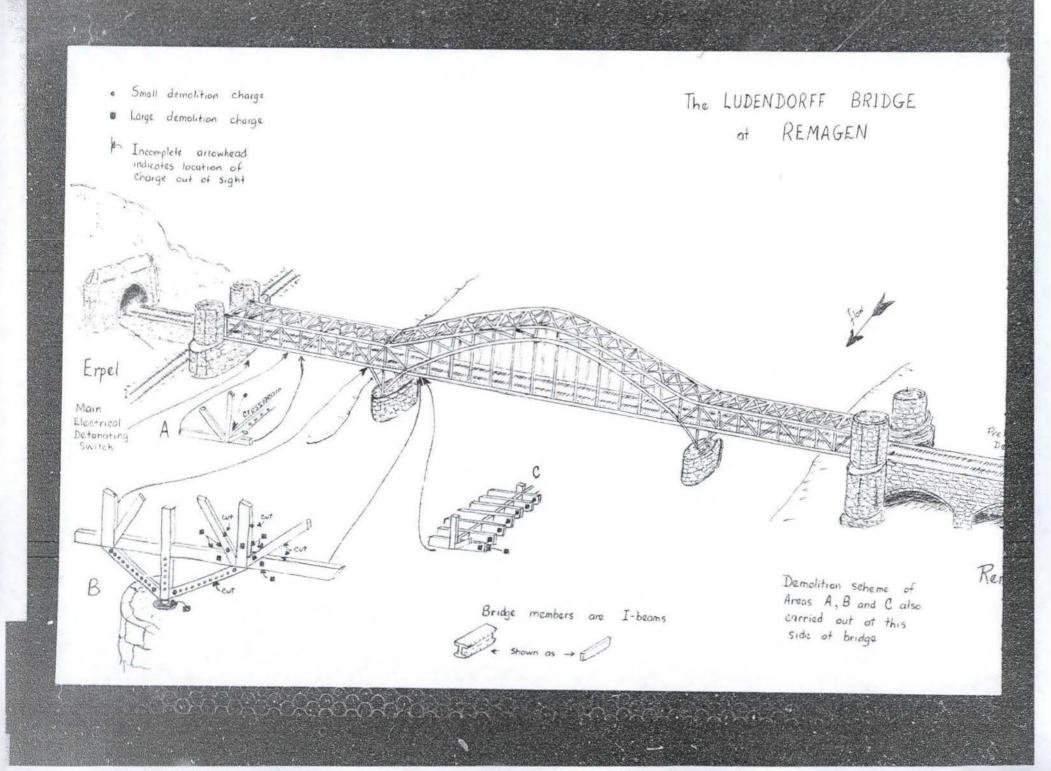
## APPENDIXES

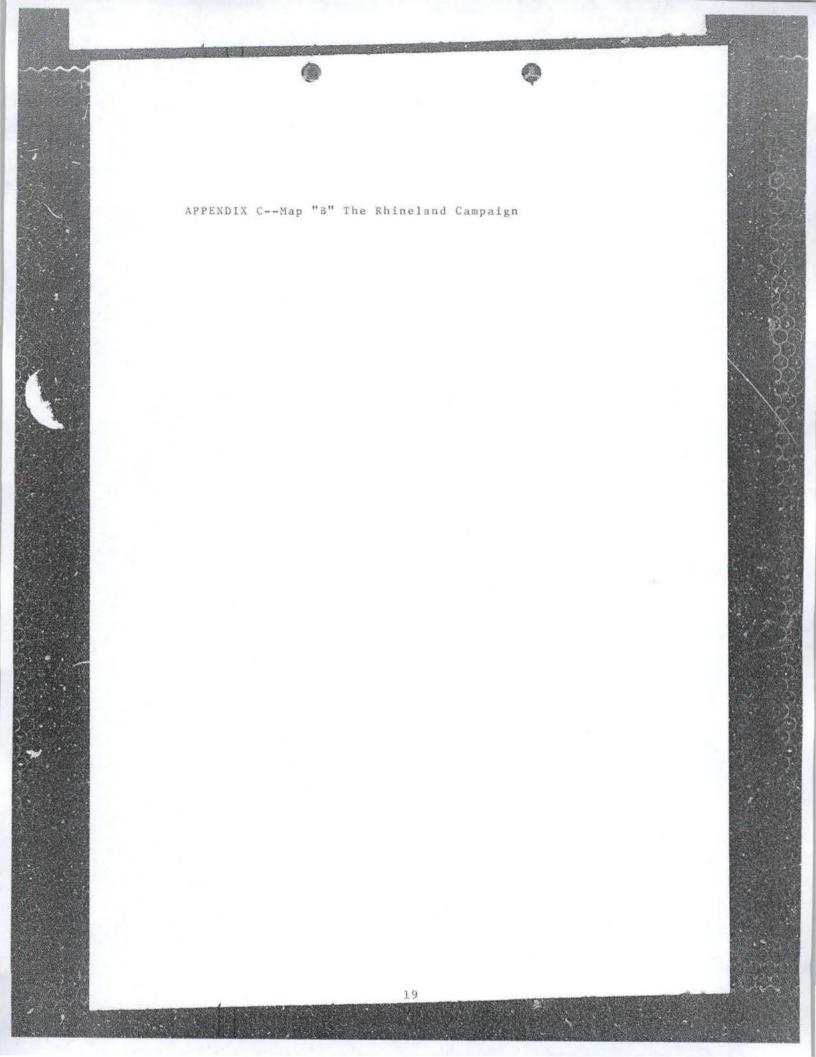
ι

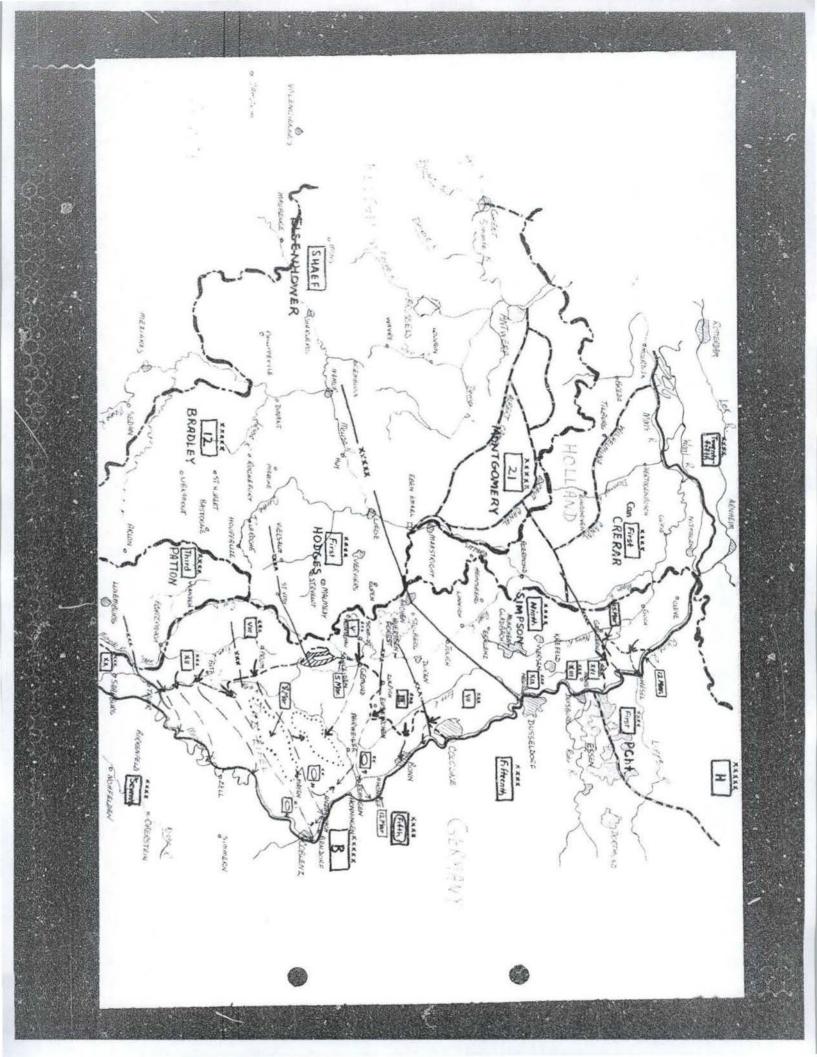


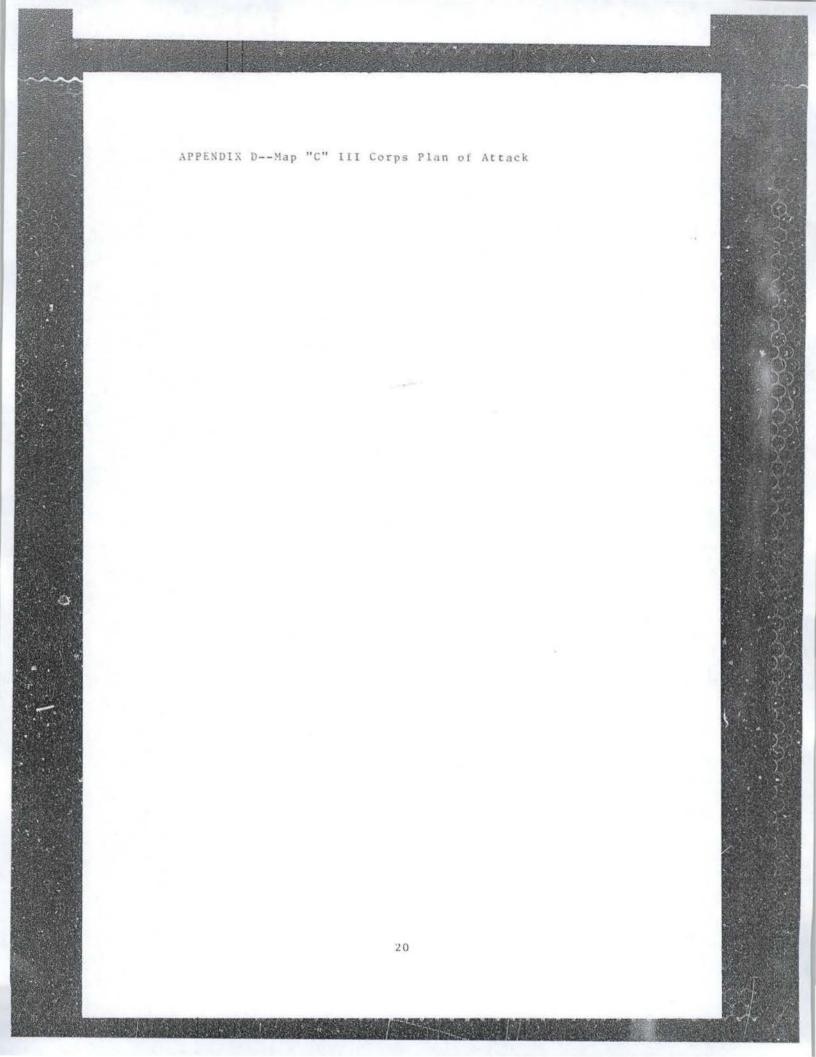


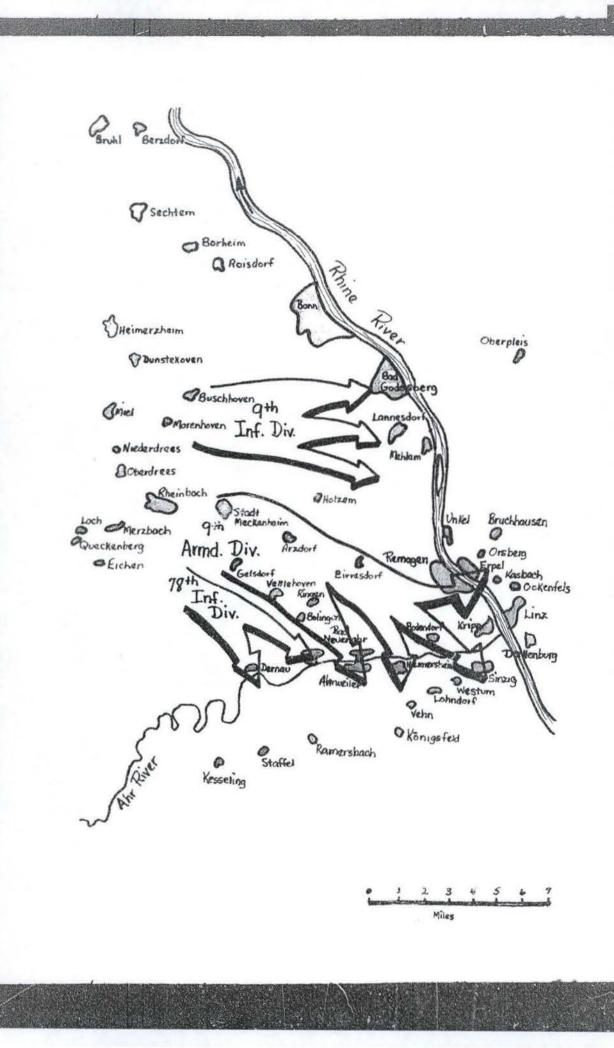
APPENDIX B--Sketch of Ludendorff Bridge to Include Demolition Plan



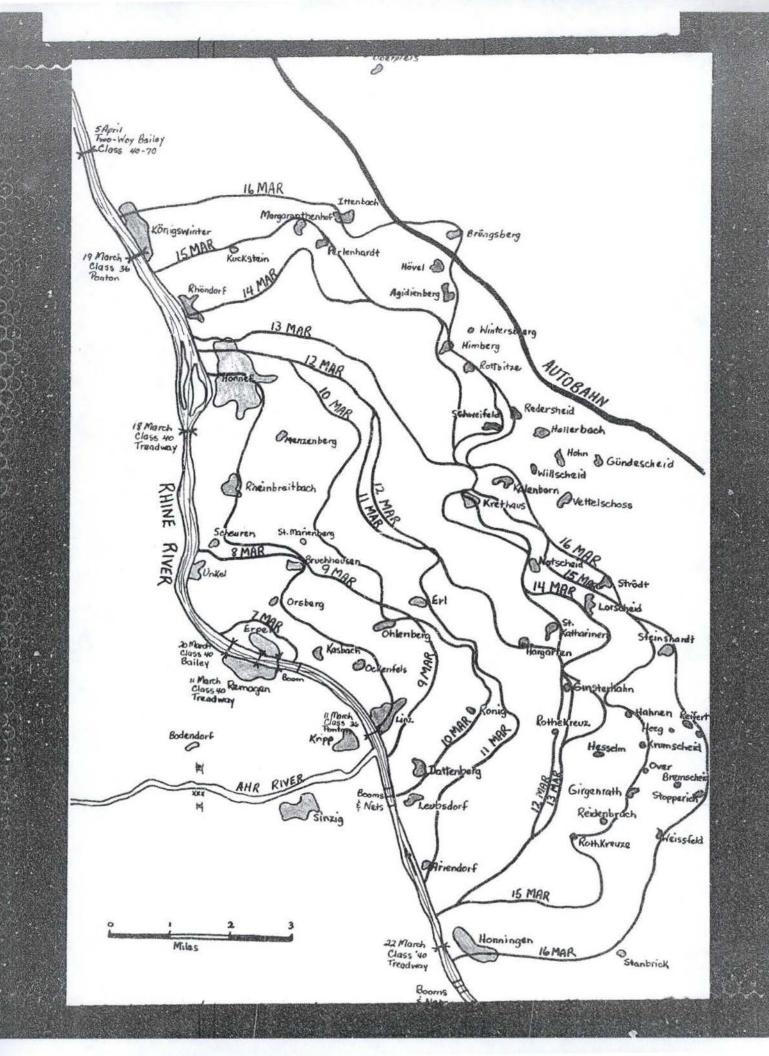








APPENDIX E--Map "D" Expansion of Bridgehead from 7 to 17 March 1945



#### BIBLIOGRAPHY

- Burrows, CPT Emmet J., "The Operations of Company A, 27th Armored Infantry Battalion, (9th Armored Division) in the Seizure of the Remagen Bridgehead, 7-8 March 1945 (Rhineland Campaign)" (monograph in United States Army Infantry School Library, Fort Benning, Georgia: 1949-1950).
- Department of Military Art and Engineering, United States Military Academy. <u>The Invasion of Western</u> <u>Europe, Part 2 (January to May 1945)</u>. New York: n.n., 1946. D767.6.A202
- 3. Department of Military Art and Engineering, United States Military Academy. <u>The War in Western</u> <u>Europe, Part 2 (December 1944 to May 1945)</u>. <u>New York: n.n., 1949. D767.6.A202</u>
- First United States Army, Report of Operations, <u>23 February-8 May 1945</u>. Washington, D.C.: United States Government Printing Office. D767.6.A12
- 5. Freakley, CPT Edwin M., "The Operations of the 1st Battalion, 310th Infantry, (78th Infantry Division) in the Crossing of the Ludendorff Bridge at Remagen, Germany, and the Expansion of the Bridgehead, 7-17 March 1945 (Rhineland Campaign)" (monograph in United States Army Infantry School Library, Fort Benning, Georgia: 1948-1949).
- 6. Hechler, Ken. The Bridge at Remagen. New York: Ballantine Books, 1957. D767.681.R2H3
- Hudson, MAJ George E., "Operations of the 311th Infantry Regiment, (78th Infantry Division) in the Remagen Bridgehead Area, 8-20 March 1945 (Rhineland Campaign)" (monograph in United States Army Infantry School Library, Fort Benning, Georgia: 1949-1950).
- Meinecke, MAJ Henry W., "Operations of the 78th Infantry Division in Remagen Bridgehead Area, 8-20 March 1945 (Rhineland Campaign)" (monograph in United States Army Infantry School Library, Fort Benning, Georgia: 1948-1949).
- Report by the Supreme Commander to the Combined Chiefs of Staff on the Operations in Europe of the A.E.F., 6 June 1944 to 8 May 1945. Washington, D.C.: United States Government Printing Office. D767.6.A12
- Research and Evaluation Division. <u>The Remagen Bridge-Head</u>, 7-17 March 1945. Fort Campbell, Kentucky: The United States Army Armor School. D767.681.R2A7

11. The Bridge, Bayreuth, Germany. D767.681.R2A2

-----

12. Wilmot, Chester. <u>The Struggle for Europe</u>. New York: Harper and Brothers Publishers, 1952. D767.6.W68