AN ANALYSIS OF THE HUNGNAM EVACUATION
BASED ON CURRENT AND EMERGING JOINT DOCTRINE

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

ALBERT M. VARGESKO, MAJ, USA
B.S., Indiana University of Pennsylvania, 1974

Fort Leavenworth, Kansas
1991

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# An Analysis of the Hungnam Evacuation Based on Current and Emerging Joint Doctrine

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**ABSTRACT**
This study investigates the roles that each Service played in support of the successful evacuation of the US X Corps from the port of Hungnam in Dec., 1950. The concept presented is one that emphasizes the unique capabilities of each Service while concentrating on the necessity for complimentary support in order to achieve success. The evacuation of X Corps incorporated a variety of joint tasks: withdrawal under pressure, relief operations, aerial evacuation and resupply, engineer operations, underwater demolitions, naval gunfire support, close air support, deep attack and naval transport. In addition, the evacuation of thousands of civilian refugees compounded the planners' problems. The study supports the rationale for using this joint operation as an example in future joint doctrine. In contrast to most joint operations of recent history, this operation included all the Services. The Hungnam Evacuation provides an excellent historical example for today's joint planners.

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ABSTRACT

An Analysis Of The Hungnam Evacuation Based On Current And Emerging Joint Doctrine by MAJ Albert M. Vargesko, USA, 105 pages.

This study investigates the roles that each Service played in support of the successful evacuation of the U.S. X Corps from the port of Hungnam in December of 1950. The concept presented is one that emphasizes the unique capabilities of each Service while concentrating on the necessity for complimentary support in order to achieve overall success.

In order to view the operation through the eyes of each Service, a wide variety of source documents pertaining to each was evaluated. In order to view the operation through the eyes of the participants, soldiers who were there provided their comments by letter input. A look at current doctrine pertaining to joint operations was also a part of the evaluation and analysis.

The evacuation of X Corps incorporated a variety of joint tasks: withdrawal under pressure, relief operations, aerial evacuation and resupply, engineer operations, underwater demolitions, naval gunfire support, close air support, deep attack and naval transport. In addition, the evacuation of thousands of civilian refugees compounded the planners problems.

The study supports the rationale for using this joint operation as an example in future joint doctrine. In contrast to most joint operations of recent history, this operation included all the Services. The Hungnam Evacuation provides an excellent historical example for today's joint planners.
Acknowledgement

This thesis is dedicated to all servicemen and women who served during the Korean War. I owe special thanks to my Uncle, Clarence E. Baker, who took part in the evacuation and shared his insights with me. I also owe my gratitude to the members of "The Chosin Few." These Army veterans of the 7th Infantry Division were especially helpful in sharing their experiences from the Chosin Reservoir to Hungnam.
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CHAPTER 1

INTRODUCTION

1.1 Statement of the Research Question.

The study addresses one main question: How does the Hungnam Evacuation compare to current and emerging joint doctrine?

This is a study of the Hungnam Evacuation of the U.S. X Corps during the Korean War. This operation is a classic example of a successful joint operation, involving all four Services, executed under extreme conditions.

In order to answer the question, the study investigates the roles that each service played in support of the operation. It includes a review of current joint doctrine. Finally, the study includes an operational analysis in terms of the Battlefield Operating Systems (Maneuver, Fire Support; Command and Control; Mobility, Countermobility, Survivability; Air Defense, Combat Service Support, Intelligence) and the Defensive Battlefield Framework (Deep, Security, Close, Rear and Reserves). Contained in the conclusion is an evaluation of current joint doctrine, recommended changes to this doctrine, and suggestions for content in the emerging joint doctrine.
1.2 Background.

In our military history, complicated joint operations have met with both outstanding success and dismal failure. The evacuation from the North Korean port of Hungnam by the U.S. X Corps in 1950 is an example of outstanding success. From 9 to 24 December 1950, Major General Edward M. Almond's X Corps saved itself from enemy destruction, and then redeployed to Pusan to fight again. It was an operation unprecedented in the annals of U.S. military history. The evacuation included men, supplies, equipment and civilian refugees. No manuals were available to the planners on conducting an operation of this magnitude. There were just ten days to plan the operation. Chinese Communist Forces (CCF) tried to annihilate X Corps before and during the conduct of the operation.

The major units comprising X Corps and their commanders were as follows:

1st Marine Division - MG O. P. Smith
7th Infantry Division - MG D. B. Barr
3rd Infantry Division - MG R. H. Soule
Republic of Korea (ROK) I Corps - MG Kim Pac IL

After the landing at Inchon in September, 1950, UN forces drove the invading North Koreans back across the 38th parallel. The U.S. Eighth Army drove north on Korea's west coast, while X Corps thrust north along the east coast
of the Korean peninsula. Some units from the U.S. 7th Infantry Division (7th ID) reached the Yalu River on the Korean border with Manchuria. The North Korean army ceased to exist as a formidable fighting force. Only small pockets of resistance remained to fight. United Nations (UN) forces believed they would be home for Christmas. This would soon change. The appearance of an even greater enemy force set the stage for the evacuation.

While there were signs of possible Chinese intervention in October and early November, the UN Commander-in-Chief (CINCUN), General Douglas MacArthur, did not believe they wanted a major confrontation. A new phase in the war had begun. In late November, 1950, Chinese "Volunteers" began to attack the UN forces. They came in mass across the frozen Yalu River to attack Eighth Army and X Corps. The enemy had the elements of surprise, numerical superiority and weather on their side.

The 1st Marine Division and the 31st Regimental Combat Team (RCT), 7th ID, were encircled by the CCF at the Chosin Reservoir on 27 November 1950. The Army force was on the east side of the reservoir, and the Marines were on the west. These units could not support each other because of the terrain and water separating them. These units would fight valiantly against tremendous odds and with little hope of any ground support. Close Air Support was effective but was limited by the weather.
MG Almond received orders to fly to Tokyo for a conference with General MacArthur on 28 November. Present were General MacArthur; General Walton Walker, Commander of Eighth Army; Vice Admiral C. Turner Joy, Commander of Navy Force Far East (COMNAVFE); and Lieutenant General George E. Stratemeyer, Commander of the Far East Air Force (FEAF). Present also were some of Gen. MacArthur's senior staff.

MacArthur told Almond to end all offensive action, withdraw, and concentrate his X Corps in the Hamhung-Hungnam area.

It appeared to MacArthur that Eighth Army was in more danger than X Corps. The theme of the conference was, "What can X Corps do to help Eighth Army?" Almond felt his first mission was to extricate the Marine and Army units cut off in the Chosin Reservoir area. MacArthur agreed but asked what Almond could possibly do to relieve the Chinese pressure on Walker's right flank. Almond said he could send the 3rd Infantry Division but only if Eighth Army could supply it once it crossed the mountains. Almond added that because of the terrible weather and mountainous terrain, the 3rd Division would be at risk.

The Joint Chiefs of Staff (JCS) shared the opinion that Eighth Army and X Corps should effect a link up to form a line of defense. MacArthur stated his opposition to this concept and his reasons with the following message to the Pentagon:

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Any concept of the actual physical combination of the forces of the Eighth Army and X Corps in a practically continuous line across the narrow neck of Korea is quite impracticable due to the length of this line, the numerical weakness of our forces, and the logistical problems created by the mountainous divide which splits such a front from north to south. In addition to the above, the minimal road network running from east to west could never have supported a corps movement. Only an evacuation of X Corps by sea was logical.

Planning for the evacuation began immediately after MG Almond returned on 28 November. Staffers had to consider that more than 100,000 troops must be assembled and embarked under the very noses of the CCF. No large scale movement of combined Army, Navy, Air Force and Marine units had been contemplated since Okinawa. The planners estimated the total tonnage to be outloaded from Hungnam would reach 400,000 tons. The Navy would need 75 cargo vessels, 15 troop ships, and 40 Landing Ship Tank (LST) to move that amount of men and equipment by water.

MG Almond also ordered maximum usage of Yonpo airfield southwest of Hungnam for evacuation purposes. About 500 tons of men and equipment were airlifted from Yonpo each day from 14 to 18 December. Engineers carved two short airstrips out of the frozen ground in the Hungnam area to augment the efforts of evacuation by air.

The battle fought by X Corps to contain forces on H'anghung-Hungnam was during the coldest winter of the war.
The frigid Siberian winter struck with full intensity during this operation. Temperatures plunged to minus 35 degrees F at night, and the wind was incessant. Soldiers on both sides suffered from frostbite. Some CCF soldiers even froze to death in their foxholes while waiting to attack.

The terrain around the Chosin Reservoir consisted of mountain ridges cut by deep gorges. The valleys were forested, and the timberline went to 7,500 feet in places. South of Chosin Reservoir this terrain gradually changed to plateaus in the vicinity of Hamhung. A broad flat coastal delta connected Hamhung with Hungnam.

There were few roads, and these generally ran from the north to the south. The main road south from Chosin Reservoir was a dirt-gravel road of varying widths. It was a one-way trail at the Funchilin Pass and then became two-way from Chinhung-ni to Hungnam. (See map Appendix A)

The withdrawal of the encircled Army force from the frozen Chosin Reservoir was a tragic one. The 31st RCT, 7th ID, became encircled by the CCF and fought them bitterly for four days and five nights. The commander, Colonel Allan McLean, was shot and captured on 29 November. Reduced in size from casualties, the unit then became known as Task Force Faith. The ranking officer, Lieutenant Colonel Don C. Faith, led the beleaguered force in an attempt to break out. LTC Faith formed a convoy of vehicles full
of wounded. The able bodied and walking wounded faced almost constant enemy fire along the way. Task Force Faith tried to break out on 1 December but the convoy encountered roadblocks, blown bridges, bazooka and mortar fire. The CCF overwhelmed the convoy, killing the wounded in the trucks and taking prisoners. Task Force Faith dissolved but some men escaped across the frozen reservoir to safety at Hagaru-ri. LTC Faith gave his life trying to get his force through, and was posthumously awarded the Congressional Medal of Honor.

According to a member of the 31st RCT, SGT Chester L. Bair (1st Battalion, 32nd Infantry Regiment) they went to the Chosin Reservoir with 3,155 men. When the survivors of Task Force Faith staggered into Hagaru-ri, only 385 were left. His battalion began with 1,053 men and only 181 survived. (See Appendix B for organization of the 31st RCT)

Another survivor from this RCT was Daniel Arellano. He was wounded and captured during the morning of 2 December while defending trucks full of his wounded comrades. He spent the next three years as a POW in a North Korean "death camp."

The 1st Marine Division was successful in its break out even though outnumbered more than two to one. It was a much larger force than the 31st RCT and had excellent air support from its Marine Air Wing. Therefore, it was able to reach the safety of the defensive
perimeter at Hagaru-ri. Here it was joined by the few Army survivors from Task Force Faith and some other X Corps units defending Hagaru-ri.

The 1st Marine Division commander, MG Smith, took command of all forces at Hagaru-ri. He reinforced the defenses and directed an assault airstrip be built. This was the lifeline to the outside world because the forces were surrounded. Sustainment operations hinged on this airstrip. Ammunition, fuel, food and other supplies were flown in by C-47. They flew out the wounded and those with frostbite.

MG Smith was determined to get his entire force out by fighting through the CCF to the coast. He declined an offer to fly out his personnel by air. The commander of Combat Cargo Command (CCC), MG W. H. Tunner, made the offer when he flew into Hagaru-ri on 5 December. MG Smith felt it necessary to fight his way out with men and equipment in order to preserve Marine Corps honor.

The Marine combined force broke out of Hagaru-ri on 6 December and fought south through to Koto-ri. Again, an airstrip was necessary for its sustainment, and this time, engineers from the 185th Engineer Combat Battalion built it. This was another example of a fine joint effort. Marines and Army personnel defended the perimeter together. While Marine close air support was invaluable in breaking up enemy troop concentrations, it was the U.S. Air Force that provided an air drop at Koto-ri that saved the force.
The enemy created an obstacle blocking the forces withdrawal, by destroying a bridge at Funchilin Pass next to a hydroelectric power plant gatehouse. This created a gap of sixteen feet that could not be bypassed, and the Marines had no bridging with them. This gap was also over a chasm some 1500 feet deep. There was no other way to continue.

The X Corps engineer staff decided to attempt an airdrop of eight sections of M-2 Treadway Bridge to the Marines. Such an airdrop had never been tried before, but there was no alternative. The Marines would be at the gap in two days if their break out from Koto-ri succeeded. Quartermaster and Combat Cargo Command aerial supply teams at Yonpo had the task of rigging and loading the sections. The Air Force commander at Yonpo requested a trial drop at Yonpo before undertaking the drop at Koto-ri. They rigged a bridge section with a G-1, 24-foot parachute, the largest at hand. When dropped, the bridge section crumpled and buried itself deeply into the ground - one source said twenty feet deep.* What was needed was a bigger parachute and a little luck!

A message was sent to Ashiya airfield in Japan for bigger parachutes. Capt. Cecil W. Hospelhorn of the 8081st Army Quartermaster Airborne Supply and Packaging Company, and a detachment from Ashiya flew at once to Yonpo with a supply of 48-foot parachutes. An experimental drop with the 48-foot chute was successful. Hospelhorn and his men
worked all night rigging each of the eight Treadway bridge sections with two of the big chutes. Eight C-119 "Flying Boxcars" were detailed to carry one bridge section each.

The drop would be made at low level into the small 300-yard drop zone at Koto-ri. A fast drop was needed. A plan developed after Army and Air Force personnel studied the situation. They decided that just before the drop, the bridge section would be pushed so that seven feet of it protruded out the rear of the plane. When the parachute opened, a fast drop with little sway resulted. Planners provided a margin of error by dropping double the number of sections necessary for spanning the gap."

On 7 December at 9:30 A.M., three C-119 aircraft dropped three bridge sections successfully within the perimeter at Koto-ri. They dropped the other five sections by noon. One fell outside the perimeter into Chinese hands, and another was damaged in the drop. They also dropped plywood panels to make a floor over the center sections of the Treadway bridge to carry any type of wheeled vehicle. Tanks could cross on the metal spans."

Marine and Army engineers and enemy Prisoners of War (POW), placed the bridge in about 3 hours. A constant stream of vehicles and personnel crossed the bridge on 9 and 10 December and continued on south toward Chinhung-ni. A relief force from the 3rd ID met them south of Chinhung-ni and provided truck transport to Hungnam.
Later in his career as Commandant of the Army War College, LTG Almond recollected this phase of the operation as follows:

A special task force of the 3rd Infantry Division plus a Marine Battalion, was charged with keeping the road to the port of Hungnam open. With this help, together with the maximum in tactical assistance from Air Force, Marine and Naval aircraft, the surrounded forces were able to fight their way back towards the port and on 10 December, the leading elements of the Marine column entered the X Corps defensive positions at Oro-ri, a point on the line around the Hamhung-Hungnam area. By 12 December, the concentration of the X Corps was complete.... The X Corps front was about 20 miles in length and formed a semi-circle that passed through Hamhung to the port of Hungnam. The 3rd Infantry Division and 7th Infantry Division defended the beachhead initially; then 3rd Infantry Division was left alone supported by their artillery, Naval gunfire, and Naval, Marine and Air Force planes which helped prevent the formation of enemy troop concentrations while the forces embarked gradually."

The Hungnam perimeter extended to the east along the coast defended by elements of the ROK I Corps. To the west, 7th ID spread along the major roadnet leading into Hamhung from the northeast and south of the Sinhung Valley. The 3rd ID and the 1st Korean Marine Corps Regiment (KMC) completed the perimeter. (See Appendix C)

Now it was time to start the actual evacuation. MG Almond appointed his Deputy Chief of Staff, Colonel Edward S. Forney (USMC), as the control officer for continuous evacuation operations at the port of Hungnam. Col. Forney established his control headquarters in a dock area shed. He organized a joint staff composed of an operations
section, (containing representatives from all major units of X Corps), a loading section, naval liaison section, movement section and rations section.

Marine officers, because of their specialized training in ship-to-shore operations, were especially well qualified to direct a Hungnam operation which had been called "an amphibious landing in reverse." Marine officers led the operations, loading, and naval liaison sections. Army officers from X Corps led the movements and rations sections. A organization chart (Appendix D) shows the makeup of the Corps Control Group for the evacuation.

The operations section, in accordance with tactical and logistical requirements, decided the order of units and equipment for outloading. Next, it became the responsibility of the naval liaison section to provide the link between X Corps and the Navy for the management of shipping within the harbor. Upon alerting a unit for embarkation, Col. Forney's loading section made its preparations. The movements section then directed traffic to the assigned staging area where the rations section provided for the wants of the troops. The troops awaited their embarkation in a tent city which sprang up behind the dock area.

Dockside operations were the responsibility of the 2nd Engineer Special Brigade of X Corps, reinforced by the Shore Party troops of the 1st Marine Division who had arrived from Wonson. Their duties included providing camp
facilities as well as supervision of the technical details of the loading. About 5000 Korean laborers and 1500 Japanese stevedores augmented this brigade.

The 2nd Engineer Special Brigade soon found that compared to Inchon, Hungnam was a good harbor in spite of its small size. The tidal range was less than a foot, as opposed to Inchon where the range varied up to 27 feet during spring. Only seven berths for loading ships were available at the docks. Navy officers increased capacity to 11 by double banking four additional ships to be loaded from the outboard side. An additional 11 LST could be handled at one time - seven at Beach Green One and the rest at Beach Green Two. (See map Appendix E)

The naval portion of the operation was handled by Task Force 90 (TF-90). The organization of TF-90 was as follows:

Task Force 90 (TF-90)  Rear Admiral J.H. Doyle
Task Element 90.00 (Flagship)  Captain C.A. Printup
Task Element 90.01 (Tac Air Control)  Comdr. R.W. Arndt
Task Element 90.02 (Repair/Salvage)  Comdr. L.C. Conwell
Task Element 90.03 (Control Ele.)  Lt. Comdr. C.E. Al'imon
Task Group 90.2 (Transport Group)  Captain S.G. Kelly
Task Element 90.21 (Transport Ele.)  Captain A.E. Jarrell
Task Group 90.8 (Gunfire Support)  Rear Adm. Hillenkoetter
Task Group 95.2 (Blockade, Minesweep)  Rear Adm. Higgins
TF-90 exercised control of the Hungnam operations through a task organization set up after a study of the harbor facilities and loading problems. This organization consisted of a chain of control stations: TF-90 operations, the control vessel, beachmaster, port director, and embarkation control liaison officer who was part of Col. Forney's Control Party. Communication was maintained by means of primary and secondary VHF voice radio circuits, so that the officers could speed all operations by speaking directly to one another. 

While the Navy played the largest role in the evacuation, the Air Force played a vital part as well. The U.S. Air Force support for Korea came from the Far East Air Force (FEAF) with headquarters in Tokyo. This command was only six years old but, in that period of time, the FEAF had become a legend in the new United States Air Force. FEAF organization was as follows:

<table>
<thead>
<tr>
<th>FEAF HQ</th>
<th>LTG G.E. Stratemeyer</th>
<th>Tokyo, Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifth Air Force</td>
<td>MG E. Partridge</td>
<td>Itazuke AB, Japan</td>
</tr>
<tr>
<td>Bomber Command</td>
<td>MG E. O'Donnell, Jr.</td>
<td>Yokota AB, Japan</td>
</tr>
<tr>
<td>Combat Cargo Cmd (Provisional)</td>
<td>MG W.H. Turner</td>
<td>Ashiya, Japan</td>
</tr>
<tr>
<td>Twentieth Air Force</td>
<td>MG A.C. Kincaid</td>
<td>Kadena AB, Okinawa</td>
</tr>
<tr>
<td>Thirteenth Air Force</td>
<td>MG H.M. Turner</td>
<td>Clark AB, Philippines</td>
</tr>
<tr>
<td>Air Material Cmd</td>
<td>BG J.P. Doyle</td>
<td>Tokyo, Japan</td>
</tr>
</tbody>
</table>

14
While FEAF supported all forces in Korea, the 1st Marine Air Wing (MAW) had direct responsibility for X Corps. If the X Corps needed more air support, the 1st MAW requested help through Fifth Air Force. Fifth Air Force had the direct responsibility for Korea, however Bomber Command and Combat Cargo Command lent their much needed support also.

Bomber Command normally operated deep into North Korea on missions against lines of communications, supply depots, troop concentrations and the like. The huge B-29 bomber was the mainstay of this effort, although the B-26 medium bomber also played an important role.

Following a personal visit to Hungnam on 3 December, MG Partridge placed his entire Fifth Air Force light bomber force in support of X Corps. From Tokyo, LTG Stratemeyer signaled to MG Almond that the entire medium bomber force of Bomber Command was now available to support X Corps in any manner it desired."

The Combat Cargo Command (CCC) had a very critical role during the operation. It provided aerial resupply and evacuation that kept X Corps alive long enough to be evacuated. C-47's, C-54's and the fairly new C-119 "Flying Boxcars" were the workhorses of the command. C-47's from the 21st Troop Carrier Squadron at Wonsan dropped ten tons of ammunition to the Marines at Yudam-ni (west bank of the Chosin Reservoir), and sixteen tons to the 7th ID RCT at
Sinhung-ni (east bank of Chosin Reservoir) on 28 November. These airdrops provided sustainment and also lifted morale.

On 29 November, MG Almond requested an additional 400 tons of supplies to the cut-off units. Combat Cargo Command's daily capacity at that time was seventy tons a day. The limiting factor was the Army's capability to package and load airborne supplies. The 2348th Quartermaster Airborne Air Supply and Packaging Company in Ashiya, Japan, augmented its strength with Japanese workers to work around-the-clock. A C-119 detachment and a detachment of quartermaster packers were sent to Yonpo airfield from Japan. LTG Stratemeyer freed up all of FEAF's C-47's, C-54's and C-119's in support of X Corps. CCC capacity increased to 250 tons per day.20

Air Force C-47's flying into the crude airstrips at Hagaru-ri and Koto-ri delivered 274 tons of supplies and flew out 4,689 sick and wounded for a total of 240 sorties.21 The new C-119s were too large for these expedient airstrips; so they airdropped supplies. Altogether, 313 C-119's and 37 C-47's airdropped 1,580 tons of supplies and equipment to the 1st Marine Division and attached units.22

Eventually, X Corps units converged on Hungnam and the evacuation began. An unforeseen problem to the X Corps planners was refugees. They threatened the evacuation by clogging the roads and railways leading to Hungnam. Thousands of them followed the soldiers to the port for the
evacuation. No hardship was too severe for them to bear to escape communism. The number of refugees involved, in the dead of winter, was not anticipated by X Corps.

MG Almond gave his personal attention to the relief of the refugees, not only because of military and political considerations, but for humanitarian reasons also. His policy was to evacuate all civil officials and their families, prominent citizens, and then other civilians when shipping space was available. This policy resulted in the sea evacuation of 98,000 civilians, under extremely difficult circumstances."

1.3 Definitions of Joint Operation.

Joint Operation - A military action or the carrying out of a strategic, operational, tactical, training or administrative military mission by forces from two or more Services; also, the conduct of combat, including movement, supply, attack, defense, and maneuvers, by forces of two or more Services needed to gain the objectives of any battle or campaign."

1.4 Limitations.

Specific information such as a unit history of the 2nd Engineer Special Brigade, is not available in the Combined Arms Research Library (CARL) at Fort Leavenworth. Nor was any information available through the interlibrary loan system. There is a unit history from World War II but
nothing on the Korean War. This unit conducted the loading of the shipping at Hungnam and was organized as follows:

2nd Engineer Special Brigade - COL J. J. Twitty

Company A, 56th Amphibious Trk and Trac Battalion
1st Shore Party Battalion (USMC)
58th MP Company
79th Engineer Construction Battalion (-)

1.5 Delimitations.

The actual evacuation dates were 9 to 24 December 1950. In order to provide a good background on the operation, the events from 27 November 1950 to 24 December 1950 are included in this study.

1.6 Significance of the Study.

Joint doctrine at the present time has either just been published in "TEST PUB" form or is still "In work". This is a current listing:


JCS Pub 3-04, Doctrine for Joint Maritime Operations (Air), (In work).

JCS Pub 3-09, Doctrine for Joint Fire Support, (In work).

JCS Pub 4-0, Doctrine for Logistic Support of Joint Operations, (In work).

JCS Pub 4-02, Doctrine for Airlift Support to Joint Operations, (In work).
Based on the background of the Hungnam Evacuation presented in Chapter One, and looking at the titles of the above listed manuals, it is easy to see that a study of the Hungnam Evacuation encompasses them all. While writing future doctrine based on a study of past operations has its flaws, we should always consider the lessons of history so as to avoid past mistakes. Conversely, from the lessons of history we may also capitalize on those military successes proven over time.
Roy E. Appleman, *Escaping the Trap*, (College Station: Texas A&M University Press, 1990), 119-120.


4 Radio Files, C 50095, CINCUNC to DA for JCS, 30 Nov. 1950, (Schnabel, 280).


6 Appleman, 7.

7 Ibid., 25.


9 Daniel Arellano, interview with author, letter dated 8 February 1991, Torrance, CA.

10 Appleman, 297.

11 Ibid., 296-97.

12 Ibid., 298.


14 Montross, 22.

15 Ibid., 23.

16 Ibid., 24.


18 Ibid., 23.


21 Ibid., 258.

22 Ibid., 257.

23 Ibid., 255.

24 Ibid., 259.


CHAPTER 2

REVIEW OF THE LITERATURE

2.1 What others have written.

The most detailed primary source I found is the record from Headquarters, X Corps, *Special Report on the Hungnam Evacuation*. This work gives an excellent day by day description of the evacuation. It also includes the X Corps operations order for the evacuation complete with overlays of the perimeter defensive plan. Since it was written at an Army headquarters, it primarily covers the evacuation from that perspective. There is very little detail on Air Force support to the operation. There is a little more detail provided on Marine Corps units and Naval support but not enough for my needs.


A book by James A. Field, Jr., *U. S. Naval Operations in the Korean War*, sufficiently discussed the Navy's
role in the evacuation. There are some helpful charts
and maps in his book that helped explain the naval support
to the evacuation.

A very excellent work by Roy E. Appleman on the
U.S. X Corps, Escaping the Trap, goes into detail on the
1st Marine Division and its story of the Chosin Reservoir
battle and its fighting withdrawal to Hungnam. An entire
chapter is dedicated to the Hungnam Evacuation.

I found detailed maps from the December 1951 issue
of the Marine Corps Gazette. In the article, "The Hungnam
Evacuation, Amphibious Operation in Reverse," L. Montross
gives an excellent description of the harbor at Hungnam to
include maps, and describes the Marine and Navy roles in a
somewhat parochial way. While clearly highlighting their
contribution, the article also downplays the roles of the
Army and Air Force.

I got information on the units that took part in
the Chosin Reservoir battle from a previous MMAS thesis,
Chosin Reservoir, Korea, 1950: A Case Study of United
States Army Tactics and Doctrine for Encircled Forces,
Major Robert M. Coombs, USA. I also looked at how he rela-
ted his study to doctrine.

I was able to get the commander's perspective from
his Reflections on the Hungnam Evacuation, Korea, Dec.,
1950, by LTG Edward M. Almond (Retired), published in Aug-
ust, 1973. Most of his comments are addressed in Chapters
5 and 6. He leaves us some excellent lessons that can be put to good use today and tomorrow.

Existing joint doctrine is mostly "In work" as of this writing. There is one good document titled JCS Pub 3-02 Doctrine for Amphibious Operations, published in August of 1967 and has five changes. Many of the principles of an amphibious landing were in fact exhibited at Hungnam, only in reverse. To simply say the entire joint operation was that way is incorrect. A chapter on Amphibious Withdrawal is included in JCS Pub 3-02. I will use this document in my analysis and conclusion chapters.

2.2 Gaps in the Literature.

I have already mentioned in Chapter 1 that I could find little information on the activities of the 2nd Engineer Special Brigade during the evacuation.
CHAPTER 3

RESEARCH METHODOLOGY

3.1 Methods Employed in my Research.

The first step was to become familiar with the subject by using all the available sources of information in the Combined Arms Research Library. These include X Corps reports, books on the Korean War, magazine articles on microfiche, and unit histories. I used the interlibrary loan system (particularly Carlisle Barracks' library) to obtain documents or books not available at CARL. I used CARL to find current joint doctrine, and reference to the joint doctrine that is being written.

While keeping in mind my research question, I tried to formulate an approach that would answer the question and provide useful information for the people writing the doctrine. By analyzing the operation in terms of Battlefield Operating Systems and the Defensive Battlefield Framework, helpful lessons on joint operational warfighting resulted.

Additionally, I wished to obtain viewpoints from the actual participants in the evacuation. I found an organization named, "The Chosin Few," made up of Army veterans of the 7th ID. I wrote letters to a sampling of this
group and received excellent cooperation from them. Some excerpts of their comments appear at appropriate places in the thesis.

3.2 Strengths and Weaknesses of Methodology.

A strength of this methodology is that by looking in depth at the role of each Service in the operation, the research question was easily answered. This joint operation was one of few in our history that included all the Services performing in superb fashion. By looking at the operation in terms of the Battlefield Framework and Battlefield Operating Systems, current AirLand Battle terminology can be easily translated into joint doctrine.

A weakness of the methodology is that the majority of sources used for the research are secondary sources. Primary sources are difficult to obtain, but I have used those available.
4.1 By Land.

X Corps units made the maximum use of all land transportation assets available in getting to Hungnam. They used railroads, trucks and the soles of the soldier's feet. The 1st Marine Division and attached elements used the narrow gauge railroad that was usable from Pohu-Jang (8 miles south of Koto-ri) south to Hungnam, and the gravel road that generally ran along the same route.

The ROK I Corps and the remainder of the 7th ID (-) traveled west by southwest along the Korean coast to close on Hungnam. They used a standard gauge railroad that ran from Pukchong to Hungnam and coastal roads as well. While the other X Corps units moved on Hungnam, the 3rd ID consolidated defensive positions on the outskirts of Hambung and Hungnam after arriving there by sea from Wonsan.

Most of the vehicles and personnel that were at the Chosin Reservoir made the trip to Hungnam via the gravel road. The 52nd Transportation Truck Battalion reportedly handled 10,500 personnel and 60 tons of cargo in support of the 1st Marine Division and attached elements.
Use of the railroad was an additional aid to the success of the withdrawal. The narrow gauge railway ran south from Pohu-Jang to Hungnam for about forty-five miles. Captured rolling stock amounted to fifty cars and eight locomotives. Later, this increased by another sixty-three cars and two locomotives through the efforts of the 301st Railway Operating Battalion (ROK). Its personnel ran the operations and maintenance of this line while the 142nd Quartermaster Battalion supervised the railhead at Hamhung.1

The 1st Marine Combat Service Group supervised the railhead operations in Hungnam. Overall rail supervision came from the Corps Transportation Officer who used the 3rd Transportation Military Railway Service and Korean National Railway personnel as managers. In an unusual role, Headquarters and Headquarters Detachment from the 4th Chemical Battalion effectively operated the transfer point at Pohu-Jang.2

This railway augmented the medical evacuation system. Three cars of this line were hastily converted into hospital cars by the 1st Marine Medical Battalion. It ran medical service initially using these cars but was later replaced by personnel from the 163rd Medical Battalion. The effect of using rail cars this way was great. It not only provided additional medical care but freed up the sixty corps ambulances for use elsewhere.3

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Approximately 4000 total personnel (noncasualties included) used this narrow gauge railway for evacuation. Additionally, some 8,900 tons of ammunition moved to Hungnam by rail.4

The 7th ID (-) and the ROK I Corps withdrew to Hungnam using the standard gauge railroad line from the 7th ID (-) railhead at Pukchong and the existing road net. The ROK I Corps also used boats in order to move south along the coastline. The 7th ID (-) destroyed what equipment and supplies it could not save at Pukchong, then rail loaded or road marched the rest to Hungnam. Many casualties were transported in three rail cars manned by members of the 163rd Medical Battalion. These cars were converted to hospital cars by members of 163rd and the 1st Marine Medical Battalion.5

The traffic regulating plan established by Corps planners successfully controlled the heavy traffic throughout the period. Fifteen officers from the 96th Field Artillery Battalion and enlisted men of the 5th Field Artillery Group operated the traffic control communications net using both radio and wire. Personnel were also drawn from the 8224th Engineer Construction Group to augment Corps Military Police in manning traffic regulating points.4

MG Almond received orders on 8 December 1950 to evacuate X Corps from Hungnam, concentrate his forces in South Korea and report to Eighth Army. The bulk of X Corps
evacuated by sea to Pusan, but some units ended up spread along the South Korean coast at the ports of Mukho, Samchok, Pohang, Ulsan and Masan. Based on MG Almond’s orders to X Corps units on 29 November, most units were already closing on Hungnam by 8 December.

Some of the soldiers that passed through Hungnam still remember it well. Here is an excerpt of a letter from William Camp, Jr., a soldier with the 2nd Battalion, 32nd Infantry Regiment, 7th Infantry Division.

We came into the perimeter of the 3rd Infantry Division at Hamhung and remained there for about five days in a school area until all of our unit straggled in. ...From Hamhung to Hungnam it took about four to five hours in a 2-1/2 ton truck. The port was filled with troops, many of which were Marines, and no one seemed to be in charge. The artillery was hub to hub; 8" guns, 155mm howitzers, 105mm howitzers - all with recoil pits, as the tubes were near vertical.

There were thousands of refugees any given time in the area. They were getting on any vessel they could, taking any way out of the area heading south.

We kept our equipment organized and loaded on a Greek freighter after waiting in freezing weather four days. ...there were loose mines in the harbor and along the coastal waters. We had C-rations to eat on the ship going to Pusan.'

Another perspective comes from Alan Yager, a medic in the 1st Battalion, 32nd Infantry Regiment, 7th Infantry Division. He was in the 31st RCT at the Chosin Reservoir.

We rode on trucks and walked to get to Hungnam. Arriving in the afternoon, Hungnam was full of activity and there seemed to be good control. It was getting about dusk when we got on an LCVP (Landing Craft, Vehicle/Personnel) that took us out to the ship.... On ship it was very crowded, half of us had to stand while the other half lay down to sleep. *
This view comes from a soldier who was not at the Chosin Reservoir, but served on the Hungnam perimeter. His name is Dolphus L. Belch, and he was in the 2nd Battalion, 32nd Infantry Regiment, 7th Infantry Division. His unit was one that shared the perimeter with the 3rd Infantry Division when the perimeter was first formed.

When the evacuation from the Chosin Reservoir started, the 2nd and 3rd Battalion, 32nd Infantry Regiment, deployed to the defensive perimeter around Hungnam.... The area of Hungnam had been bombed out pretty badly. There were lots of troops and equipment behind the perimeter. I saw no sign of real chaos. I would say the loading was done with pretty good control. And there were many refugees trying to get through the perimeter and they did cause somewhat of a problem.

During the whole time I was on the perimeter we only had probing action from the enemy. I never saw a battalion or company sized unit assault the perimeter. We were relieved on the perimeter by the 3rd Infantry Division."

4.2 By Air.

MG Almond directed maximum evacuation by air using all available resources. Yonpo airfield, about 3 miles southwest of Hungnam, became the scene of the greatest air-lift of the war. When maximum effort was attained during the six days from 12 to 17 December, the planes were taking off every three minutes, both day and night. Combat Cargo Command flew 393 sorties from Yonpo, evacuating 228 patients, 3,891 passengers, and 2,088 tons of cargo."

Beginning on 12 December, the security-shrouded mass air evacuation began when CCC transport planes flew
hundreds of ROK Marines from the base. As CCF pressure increased, more and more transports flew in to help evacuate all Air Force, Marine, Army, ROK units and their equipment. Flying around-the-clock despite winter storms and scant radio aids, every available CCC aircraft supported the evacuation.

Included in the exodus from Yonpo was a Fifth Air Force Fighter Wing, a Marine Air Wing, vehicles of all sizes and hundreds of tons of ammunition. The wounded personnel were flown to other hospitals in South Korea or Japan. Chester L. Bair made it out this way. A survivor of Task Force Faith, his evacuation went as follows:

I made it into Hagaru-ri on the morning of 2 December. The Marines kept me in a hospital tent, then placed me on a train. There it was warm, but we had to get off it. The enemy would drop shells on it and we would have to get out and man foxholes until the all clear was sounded. After about two days of this, I was loaded on a plane (I believe a C-47) and flown to, I believe, Hungnam.... At Hungnam I was again placed on a C-47 and flown to Osaka, Japan. There the hospital was full so they sent us to Kyoto, Japan."

Elements of the 3rd ID set up a perimeter defense around the airfield to delay attacking Chinese troops. Artillery shells and naval gunfire whizzed over the field day and night to explode just outside the perimeter amid enemy forces. Control tower operators guided pilots away from danger areas where the artillery was firing.

While it was efficiently led, the operation had its hectic moments. Aircrews had very little rest in what was
usually bad flying weather. The maintenance crews worked
desperately on four C-119's which were grounded for mechan-
ical difficulties. The planes would have to be destroyed
if they were not ready for flight before the field was
closed. Crews replaced an elevator on the first of these
planes; another was flown back to Japan even though its
fuel pump was out of order; two entire engine assemblies
were pulled from a plane in Japan and flown to Yonpo in
time to save the third; and only the fourth was nonrepair-
able and destroyed.13

An interesting report from an Army Transportation
Corps officer also testifies to the hectic activity. Capt.
James B. Reed's job at Yonpo was documenting all Army car-
go. His report follows:

The picture changed greatly during the evac-
uation of Hungnam. Instead of documenting the
cargos that arrived, we just loaded and moved
cargo and passengers as fast as we could unload
them. We forgot about safety limits and carried
maximum loads. Still, in the midst of the confu-
sion and evacuation, the Air Force did a peculiar
thing. While we were trying to get rid of supplies,
planes coming from the rear areas brought us drums
of gasoline we did not want. It took a lot of time
to unload those 55-gallon drums, and then we had to
haul the gasoline to Hungnam (by truck) to get it
evacuated. We got the Air Force to stop once, but
then the shipments began again. Don't ask me what
it was all about. I never figured it out.14

In addition to Yonpo airfield, two temporary air-
strips were built by engineers of the 8224th Engineer Con-
struction Group. Both could be used for evacuating wounded
personnel. One airstrip was beside the 121st Evacuation
Hospital, within the defensive perimeter of Hungnam. The other airstrip, built on the beach at Hungnam, provided for Control Party liaison planes once Yonpo airfield closed.

4.3 By Sea.

The evacuation of X Corps by sea took place from three ports, Songjin, Wonsan, and Hungnam. The evacuation from Wonsan took place from 3 to 10 December and involved both U.S. and Korean troops. The bulk of these forces, the 3rd ID, went to Hungnam to assist in its defense. There was virtually no enemy effort to hamper the evacuation at Wonsan. The last ships left Wonsan on 10 December after more than 3,800 troops, 7,000 refugees, 1,146 vehicles and 10,000 bulk tons of cargo had been outloaded. Marine Corps units conducted the outloading of troops from the 3rd ID and the 1st Korean Marine Corps Regiment.

Major elements of the ROK Capital Division and the ROK 3rd Division were assembled at Songjin, located about 100 air miles northeast of Hungnam. LST beached there, and on 9 December ROK troops boarded them and two merchant vessels. The vessels arrived at Hungnam on 11 December, and troops of the ROK Capital Division plus the 26th RCT of the ROK 3rd Division unloaded. For a time, they were part of the defense on the right flank, east of Hungnam.

The actual sea evacuation from Hungnam was from 11 to 24 December and was by far the largest operation of the
three. Luckily for X Corps all the naval assets required for an operation of this size were available: port facilities, adequate shipping, and experienced people.

The port at Hungnam proved to be an excellent choice for the main effort. The Hungnam docks formed three sides of a rectangle; the fourth side was open to the harbor. Dock No. 1 could berth four ships, Dock No. 3 could berth two ships, and Dock No. 4 could berth one ship. By double banking ships at Dock No. 1, four more ships could be loaded from the outboard side, for a total of eleven ships being loaded at once. Dock No. 2 was short and was used for landing small boats. Immediately to the east of the docks, Green beach was used extensively. Eleven LST could be loaded out of Green beach at one time. The largest ships anchored out in deeper water and were loaded from small craft operating from the shore. (App. E)

A fragile link in the evacuation was the limited number of tugboats. Only two 390-ton diesel electric tugs were available. Their engines had more than 5,000 hours of usage since the last overhaul. These radio-equipped tugs were vital for handling ships in winter winds up to forty knots. Miraculously, neither tug broke down for more than three hours, and repairs were made with the materials at hand.

Adequate shipping was available due to the foresight of the COMNAVFE, Vice Admiral C. Turner Joy. On 29
November, he advised Rear Admiral James H. Doyle, commanding TF-90, to keep all his ships on six hours notice. Most of the amphibious ships of TF-90 were in Sasebo, Japan for upkeep and replenishment. The next day, as the military situation continued to deteriorate, all ships of TF-90 deployed immediately to Korea. Upon arrival, they enlarged the anchorage area in the harbor at Hungnam, and initiated minesweeping operations to provide channels for gunfire support ships.

The major problem at Hungnam turned out to be the availability of loading space. Here the turnaround time at first was critical. At Pusan, where short notice had been received of the impending arrivals, unloading capacity for a time was unable to keep up. In order to receive the troops and equipment at Pusan, X Corps sent a control group there under the command of Lt. Col. Arthur M. Murray. Soon, he reduced the unloading time from a normal three days to one. Many of the ships returned to Hungnam for a second load.

LST for a time were scarce in TF-90. A total of forty were ultimately available, but bad weather and the initial congestion at Pusan caused a delay in their return trip. Thirteen were used to lift the 1st Marine Division. Based on an assumed five-day turnaround between Hungnam and Pusan, the problem of availability arose. Col. Forney began stockpiling LST by 20 December. By that time, Pusan
was operating in high gear and in the end, there were LST to spare." Additionally, they used some old Liberty and Victory ships, as well as Korean, Japanese and Greek merchant ships to prevent any shortfall of shipping.

Considering the amount of traffic in this small port at all hours and in all weather, mishaps were few but did occur. On the night of 10 December, the Enid Victory, a chartered vessel, cut the eastern point of the harbor too close and ran aground. It wasn't until the next afternoon and favorable tides, that tugs succeeded in freeing the ship. A few days earlier the Senzan Maru, a Japanese freighter laden with 50,000 bags of flour, missed the channel entrance in the morning darkness and hit a mine. She made it in, and after ten days work she safely set sail. A Korean LST full of refugees fouled a shaft with a manila line and was unable to clear the beach. After the snarl was cleared and engines repaired, a second attempt to clear was made. This time both shafts were fouled, one by wire and one by manila. Despite the cold, divers freed the snags and food was brought on board for the refugees. On 19 December, the invalid sailed for Samchok and made it."

Throughout the period of embarkation carrier air operations continued. Land based Marine aircraft operated out of Yonpo airfield along with Air Force fighters until 13 December. For example, on 10 December, there were 72 aircraft operating out of Yonpo and 288 carrier based
aircraft providing tactical air support. Although lacking in armor and artillery, enemy troops threatened the perimeter in sizable numbers. While perhaps a third of the air sorties were used in deep strikes, the bulk were within a 35-mile circle. Troop movements on the roads were hit, ammunition and supply dumps destroyed, and enemy command centers were bombed.

Eventually, naval gunfire support got into the act. On the night of 15 December, the cruiser Saint Paul commenced 8-inch call fire for interdiction of enemy troop movements. On the 17th, the cruiser Rochester took the 8-inch duty. Nightly thereafter, cruisers and destroyers delivered prearranged harassing fire and illumination, while responding to requests from ashore by day. To supplement the flat-trajectory fire of the cruisers and destroyers, and to put plunging fire on reverse slopes, three rocket-firing ships were maintained on station. On the 21st, they fired their first barrage against a reported troop concentration in the hills along the eastern flank. Last but not least, the battleship Missouri lobbed 162 rounds of 16-inch shells at the CCF.34

An impressive total of 18,637 rounds of 5-inch and 2,932 of 8-inch supported the evacuation phase, an increase respectively of about 70 and 27 percent over expenditures in the Inchon landing. The investment was perhaps excessive but it contributed to troop morale.38
Having a sufficient quantity of skilled personnel in the right positions was vital to the success of the overall operation. In putting a Marine Officer with extensive amphibious experience in charge of the Control Group, chance for success was high. Had the Corps G-3 been put in charge, many coordination problems might have ensued. For this unique operation, it was best to tailor the task with the right person. Colonel Forney did this within his staff, placing Marine, Army, and Naval officers in supervision of areas within their expertise.

In fact, for the Leathernecks on Forney's staff, it was their fourth embarkation in a period of five months. This experience paid off in speed and effectiveness of loading since embarkation officers could load by sight, planning their ship loads without the need for stowage diagrams. It was also helpful in unloading since these troop units would be disembarked soon in South Korean ports.

The Corps G-3 had responsibility for defense of the perimeter around Hungnam. This perimeter would shrink in planned stages as units outloaded. The G-3 had to maintain a balance ashore of tactical combat troops and logistical elements. The tactical troops prevented penetration of the defensive perimeter while logistical units provided them support. It became standard operating procedure that, once the G-3 and G-4 agreed on the evacuation of a unit, that
unit would be informed. The unit would send a liaison officer to Colonel Forney to work out the specifics of loading. Colonel Forney worked with the Navy to maintain a reserve of ships to prevent any delays in outloading.

Outloading was the responsibility of an Army unit, the 2nd Engineer Special Brigade. This unique unit, which specialized in ship-to-shore operations for the Army, was especially tailored for this job. Units attached were:

2nd Engineer Special Brigade
Co. A, 56th Amphibious Truck and Tractor Battalion (USMC)
1st Shore Party Battalion, Fleet Marine Force (USMC)
58th Military Police Company (Army)
79th Engineer Construction Battalion (-) (Army)
1500 Japanese Stevedores
5000 Korean Laborers

These personnel were needed to conduct an operation of this size in a minimum amount of time. The Marines helped with their personnel, equipment, and wealth of experience. The Army MPs were required for traffic control to keep everything moving in the right direction. The extra engineers were helpful in providing more cranes and operators, plus carpenters to build pallets or crates. The 44th Engineer Construction Battalion provided floodlights with generators for night loading at the docks.

The Japanese stevedores helped load the ships while the Koreans provided laborers for numerous required tasks.
All of these workers were necessary to conduct a 24-hour a day operation in the freezing cold and complete the operation. There would be no second chance.

On the morning of 24 December, seven LST beached at Hungnam to evacuate the final group of 3rd ID troops. Three battalion size units remained. These battalions then left their positions for the beaches, leaving behind seven reinforced platoons at strongpoints. After a final search for any remaining troops, these platoons went aboard waiting LST.26

It was about this time that my uncle, Sergeant Clarence E. Baker, 703rd Ordnance Company, 3rd ID, and his boss, LTC George M. Nolen, the 3rd ID Ordnance Officer, drove their jeep aboard one of the LST. Their last job was demolition of a Hungnam supply depot.27

Marines of the 1st Amphibious Tractor Battalion, covering the last of the Army withdrawals from the beach, were last to leave the beach at 2:36 P.M. on Sunday, 24 December. No doubt everyone aboard ship felt that leaving North Korea behind to be a good Christmas gift.

In the greatest evacuation by sea in U.S. military history, the Navy removed 105,000 soldiers, 17,500 vehicles and 350,000 tons of bulk cargo from Hungnam. The Navy used 109 ships, some twice, in transporting 192 shiploads. In addition to the military evacuees, 98,100 Korean refugees were also evacuated to South Korea.28
4.4 Refugees.

The X Corps did not anticipate the size and extent of the refugee movement in the dead of winter. Refugees posed an immediate and serious threat because enemy soldiers habitually infiltrated these civilian groups. No danger or hardship was too severe for the refugees to risk in an effort to escape. Thousands of people fled carrying all that they owned in order to escape the communists.

The enormity of the problem is shown by what happened when X Corps completed the evacuation of Hamhung. As the last train for Hungnam, eyewitnesses claim that 50,000 refugees tried to get aboard. Orders were that no refugees were permitted within the Hungnam perimeter. Many refugees were killed when they tried to get through minefields or American fields of fire at the front lines.

On 12 December a rumor, possibly originating with an enemy source, spread among the refugees in the Hamhung area that the U.S. would evacuate all refugees from Hungnam. This started a mass movement toward Hungnam and threatened to clog the main road between the two places. In spite of all efforts to keep them back, refugees arrived in mass at the perimeter between 14 and 20 December. The X Corps provost marshal, with help from ROK I Corps troops, had to take measures to control these masses. Even the Korean city officials of Hungnam left their posts and joined the refugee movement."
During this period, many refugees were placed on South Korean Navy vessels and small fishing boats, and sent south. On 23 December, Colonel Forney brought in three old Victory ships and two LST to port. These vessels loaded up 50,000 refugees and took them out of Hungnam.

So ended the Hungnam Evacuation. A triumph in the face of the enemy, brought about by a good and fairly simple plan, great cooperation and coordination between the four Services and good leadership. MG Almond summed up the operation this way:

After the receipt of orders from CINCFE for the evacuation of X Corps from the Hungnam area, the organization of the defense for the area was further complicated by the concurrent planning for the amphibious evacuation of the troops and the multitudinous detail necessary for the removal of all supplies and equipment.

In connection with the evacuation planning, numerous conferences were held by the Corps Commander with the Naval Commander, the Air Commander and the commanders of all the major subordinate units. In these conferences the groundwork was laid for the phasing out of the supplies and the concurrent evacuation of military personnel while maintaining sufficient covering forces adequately supported. The Corps Commander made repeated visits to all units in order to maintain the high degree of coordination so essential to such a complicated operation.

4.5 Daily Summary

This daily summary is provided as an additional aid to understanding the evacuation progress from day to day. Most of it is taken verbatim from Special Report On The Hungnam Evacuation, Headquarters X Corps.

42
9 December

The tactical situation on 9 December 1950 found some units of X Corps fighting to break contact with CCF while others prepared to defend the Hamhung-Hungnam area.

- The 1st Marine Division, with elements of X Corps attached, continued its withdrawal south from Koto-ri towards Hungnam. The enemy kept it under almost continuous fire the whole way.

- The 3rd ID continued to improve its defensive positions along the Hungnam-Hamhung perimeter and kept up active patrolling. No enemy contact made that day.

- The 7th ID (-) performed the same missions as the 3rd ID. The 7th ID (-) had the northeast sector of the Hungnam-Hamhung perimeter to defend.

- ROK I Corps elements were withdrawing by rail, water and motor transport to the vicinity of Hungnam. The units that arrived in the area took up defensive positions on the eastern portion of the perimeter. The 3rd ROK Division and parts of the ROK Capital Division loaded out of Songjin.

- The Corps Signal main body arrived at Hungnam and opened up 24-hour operations.

10 December

Very little change in the Corps situation. Units on the perimeter continued patrolling and preparation of
their defenses while elements of the 3rd ID covered the withdrawal of the 1st Marine Division and attached X Corps troops.

- The 1st Marine Air Wing flew 200 sorties in support of X Corps. Main effort of air support was to support the 1st Marine Division withdrawal.

11 December

The 1st Marine Division, plus attached X Corps elements, reached the perimeter of Hungnam and immediately began loading on ships.

- There were 228 air sorties that day.
- Artillery harassing fires broke up enemy troop concentrations.
- Light enemy pressure was all the action on the perimeter that day.
- Loadout began of the advance party of ROK I Corps, and the advance party of the 3rd ROK Division (-).
- The 44th Engineer Construction Battalion and the 73rd Engineer Combat Battalion began work on two emergency airstrips in the vicinity of Hungnam.
- The 79th Engineer Combat Battalion (-) was attached to the 2nd Engineer Special Brigade to assist in the outloading of the supplies and equipment from the port.
- The hospital ship Consolation arrived in port for the evacuation of casualties.
- The advance party of the X Corps CP flew by C-47 from Yonpo to Pusan.

12 December

The first naval gunfire support of the evacuation began when a destroyer fired 59 rounds at an enemy truck convoy moving toward Hungnam.

- No enemy contact reported from the perimeter.
- The 1st Marine Division reported 30% loadout.
- General MacArthur received a briefing at Yonpo airfield from MG Almond on the status of the evacuation.
- One LST departed port with 900 wounded from a ROK hospital. Air Force planes airlifted 200 wounded from Yonpo to Pusan.
- Ordnance units outloaded all vehicles that required rebuilding.

13 December

Light enemy contact in the 3rd and 7th ID sectors of the perimeter was reported.

- The 1st Marine Division reported 60% loadout.
- Close air support (CAS), naval gunfire support and Army artillery provided harassing fires to break up enemy troop concentrations.
- Engineers completed the airstrip next to the 121st Evacuation Hospital in the vicinity of Hungnam.
14 December

Several enemy platoon size attacks against 3rd ID positions were reported. All were repelled successfully.
- The 1st Marine Division completed its loadout.
- The 7th Infantry Division (-) began to loadout.
- Work on the airstrip on the beach near Hungnam began. Working 24-hours a day, engineers expected the completion date to be 15 December.

15 December

Company B, 185th Engineer Combat Battalion complete demolition of a 2100-foot railroad bridge and rolling stock in Hamhung.
- There was a marked increase in enemy activity.
- Pilots flew 177 CAS sorties.
- Outloading of Class II (tents, clothing etc.), Class III (POL), and V (Ammo) began.
- The beach airstrip could handle emergency operations of C-47 and lighter aircraft that day.

16 December

The 3rd and 7th ID moved to phase 2 positions when the perimeter shrank as planned.
- The ROK I Corps reported 90% completion of their vehicles and 70% of their personnel outloaded.
- Moderate enemy contact reported.
- Pilots flew only 36 CAS sorties due to weather.
- Corps artillery and naval gunfire support provided harassing and interdiction fires, and illumination rounds.

- Service units of the 7th ID reported 90% completion of their outloading.

- The 142nd Quartermaster Battalion became responsible for evacuating all Class I (foodstuffs) from Hungnam.

17 December

The Air Force completed the evacuation of Yonpo airfield to include all personnel and serviceable aircraft.

- Reports came in concerning light enemy activity on the perimeter in the form of reconnaissance.

- The 3rd ID improved and consolidated their defensive positions.

- Loadout of the 7th ID reached 75% completion.

- Pilots flew 89 CAS sorties on troop concentrations, vehicles, oxcarts, and enemy occupied buildings. They also reported the enemy using civilians as human shields.

- Corps artillery fired harassing and interdiction missions on bridges, roads and trail junctions.

- Naval gunfire support from destroyers and cruisers fired harassing and interdiction missions.

- The ROK I Corps completed outloading from Hungnam.

18 December

Corps engineers destroyed all remaining supplies and equipment at Yonpo airfield after discovering that the
Air Force left without completing the job. Had the engineers not checked the airfield, the enemy would have captured food, fuel, tentage and ammo.

- Enemy attacks on the perimeter increased in strength.
  - The outloading of administrative units began.
  - There were 165 CAS sorties against railroads, vehicles, bridges, emplacements and houses containing troops.
  - Supply installations completed their consolidation in Hungnam.

19 December

- The heaviest enemy attacks so far occurred.
  - Counterattacks plus intense naval gunfire, artillery and air strikes were necessary to restore the perimeter.
  - One POW reported his regiment suffered heavy losses from naval gunfire. It was reduced to battalion size prior to reaching the Hungnam perimeter to attack.
  - The 3rd ID assumed full responsibility for the perimeter and moved to phase 1 positions.
  - The 7th ID command post closed in Hungnam and reopened aboard USS Breckenridge.
  - Corps engineer units completed their outloading.

20 December

The 69th Ordnance Company began outloading 9,000 tons of ammunition, 400 unserviceable vehicles, tanks.
- Divisional engineers destroyed the bridge over the Tongsongchon River.
- Pilots flew 165 CAS sorties.
- The 92nd Armored Field Artillery outloaded.
- Only light enemy probing activity occurred this day.
- The 7th ID completed outloading.

21 December

Artillery, naval gunfire, and air strikes hit enemy troop concentrations, supply dumps, and truck convoys.
- Only two small enemy probing attacks hit the perimeter this day.
- The outloading of administrative units continued.
- The 10th Engineers, 3rd ID, blew two more bridges.

22 December

Enemy probing attacks occurred all along the perimeter. They were repulsed by 3rd ID troops.
- Carrier based aircraft provided 190 CAS sorties during the daylight hours while B-26 bombers from the 5th Air Force provided night bombing support.
- Naval gunfire strongly supported the defense with call, harassing and interdiction fires. Star shells provided the illumination required during hours of darkness.
- The 3rd ID began outloading supplies, equipment and personnel from its service units.
- The 3rd ID artillery fired 9,964 rounds this day.
23 December

The 3rd ID executed a planned withdrawal to an inner perimeter in the final steps before their departure.

- Strong support by naval gunfire and air prevented the enemy from interfering with the withdrawal.
- 3rd ID service elements and unit trains continued outloading.
- The 10th Engineer Battalion, 3rd ID, prepared for demolition of bridges and installations of military value within the defensive perimeter.
- Carrier based Navy and Marine aircraft flew 238 CAS sorties.
- All remaining artillery units outloaded.
- The X Corps Command Group displaced their command post aboard USS Mt. McKinley. MG Almond would watch the final day of the evacuation from the ship's bridge.

24 December

The 3rd ID, under the cover of intensive naval gunfire and carrier based air support, executed the final withdrawal.

- Covering forces consisting of a battalion from each regiment protected the perimeter while the main body embarked.
- Seven reinforced platoons manned strongpoints as the main covering force troops embarked. After a final
search for stragglers, these troops loaded an LST.

- The 10th Engineers and Navy Underwater Demolition Teams executed planned demolitions of warehouses and the docks of Hungnam.

- Carrier aircraft flew continuous cover during this last phase of the evacuation.

- *USS Mt. McKinley* fired her 5-inch guns into the rubble of Hungnam, then set sail.
Headquarters, X Corps, Command Report: Special Report
on Chosin Reservoir, 27 Nov. to 10 Dec. 1950, 46.

1 Appleman, 30.
2 Headquarters, X Corps, Command Report, 90.
3 Montross, 24.
4 Headquarters, X Corps, Command Report, 53.
5 Headquarters, X Corps, Command Report, 50-51.
7 Alan Yager, interview with author, written letter dated 1 March 1991, North Bay, N.Y.
9 Air University Quarterly Review, 15.
10 Futrell, 260.
11 Bair, same letter.
12 Ibid., 260.
14 Appleman, 332.
15 Ibid., 333.
16 Ibid., 336-337.
17 Montross, 24.
18 Ibid., 22.
19 Field, 298.
20 Appleman, 338.
21 Field, 298.
22 Ibid., 298.
23 Ibid., 304.
24 Ibid., 301-302.
25 Montross, 24.
26 Appleman, 337.
27 Ibid., 339.
29 Appleman, 340.
30 Ibid., 343.
32 Headquarters, X Corps, Special Report..., 9.
CHAPTER 5

ANALYSIS

5.1 Methodology.

This chapter contains a discussion of current and emerging doctrine, then compares the doctrine to the Hungnam Evacuation. This is done as a means of validating or refuting the doctrine. Since most joint doctrine is still in development, a further analysis of the Hungnam Evacuation is needed. I will analyze the operation using the Battlefield Operating Systems and the Defensive Battlefield Framework (as outlined in FM 100-5 Operations, May 1986) as a frame of reference.

5.2 Current/Emerging Joint Doctrine and Analysis.

The only JCS Publication currently available to the field that deals with an operation of this type is JCS Pub. 3-02, Doctrine For Amphibious Operations, dated 1 August 1967. There are two "Test Pub" that are undergoing evaluation in the field: JCS Pub. 3-0, Doctrine For Unified And Joint Operations, dated January 1990, and (JTF) Joint Task Force Planning Guidance And Procedures, dated 15 June 1988. Both "Test Pub" have application to this study.
DEFINITION - An amphibious withdrawal is a withdrawal of forces by sea in naval ships or craft from a hostile shore.

PURPOSE - The purpose of the amphibious withdrawal is to disengage forces for employment elsewhere.

SCOPE - The amphibious withdrawal operation extends from initial measures in defense of the embarkation area, in conformity with the requirements imposed by the enemy situation, to the embarkation of the final elements of the force being withdrawn.

ORGANIZATION AND COMMAND RELATIONSHIPS - The organization of forces, the responsibilities for accomplishment of tasks, and the command relationships during an amphibious withdrawal are essentially the same as those obtaining in the objective area during the assault phase of an amphibious operation. Such variations in responsibility and command authority as are required by the individual situation must be announced in the directive to undertake the operation.

CHARACTERISTICS

a. While sharing the basic maritime feature of the amphibious assault, in that it depends upon the sea for support and transportation, the amphibious withdrawal embraces the following distinguishing characteristics:

(1) Except in the case of withdrawing associated with amphibious raids, planning processes will usually be abridged.

(2) Where enemy action against the landing force is substantial or when the requirement for the forces elsewhere is great, the time available for execution of the withdrawal will be brief.

(3) Facilities for embarkation and loading may be extremely restricted, with consequent intensification of combat service support problems.
(4) Where the withdrawal is conducted in the face of strong enemy action, the requirements for security are of paramount importance.

(5) All of the requisite fire support means may not be available.

(6) Means for controlling the withdrawal may be limited.

(7) The operation may, of necessity, be conducted under adverse conditions of weather, terrain and hydrography.

(8) Circumstances may render it advisable to conduct the operation under conditions of limited visibility.

EXECUTION

a. Without respect to its specific purpose, the amphibious withdrawal will be executed in accordance with the following sequence of steps:

(1) Defense, as required by the enemy situation, by air, naval and ground covering forces accompanied by the embarkation of personnel, supplies and equipment which are not required for support of operations ashore.

(2) Progressive reduction of troop and material strength ashore under the protection of naval and ground covering forces. Depending on limitation of afloat cargo capacity and/or loading time, all usable military material is either evacuated or destroyed. During this phase, specific provisions are made for the evacuation of patients.

(3) Withdrawal of the ground covering force, with priority to heavy elements such as artillery and tanks, and usually under the cover of darkness, and supported as necessary, by air and naval fire support means.

SUPPORTING ARMS - The defense of an embarkation area on a hostile shore requires the same close coordinated employment of all arms -- artillery, naval gunfire and air -- as that required for an assault landing. The procedure used in the coordination is essentially the same in both cases. The primary difference is that, in the assault, supporting arms and
control facilities are progressively built up ashore, whereas, in a withdrawal from a hostile shore, the arms and control facilities are progressively decreased ashore until eventually all their functions are performed by units afloat or airborne. Isolation of the beach, if requisite supporting arms are available, may be more readily achieved than during the assault, since enemy troop and weapon dispositions cannot be pre-planned or emplaced due to the transitory nature of the operation.

EMBARKATION PROCEDURES

a. Planning for the embarkation of forces, incident to an amphibious withdrawal, is conducted in accordance with the normal planning procedures as set forth in Chapter 12 if the embarkation is preparatory to the employment of the force in an amphibious operation. In case the embarkation is incident to a decision to terminate operations on shore and to redeploy troops to a designated base or base areas, the planning procedures are abridged as necessary to conform to time requirements.

b. Combat loading will be employed in embarkation in preparation for an amphibious operation. Embarkation for movement to base areas will normally employ administrative loading.

c. The initial size of the embarkation area depends on several factors, such as:

(1) Terrain essential for defense in the event the embarkation is accomplished under enemy pressure.

(2) Number of personnel and amount of equipment and supplies to be embarked.

(3) Artillery, naval gunfire and air support available for defense if required.

(4) Nature and extent of embarkation beaches.

(5) Time available for the embarkation.
My analysis of *Doctrine For Amphibious Operations* begins with the paragraph on ORGANIZATION AND COMMAND RELATIONSHIPS. It states that both the organization and command relationships are essentially the same for an amphibious assault as an amphibious withdrawal. The Hungnam Evacuation exemplified this concept.

The organization and command relationships for X Corps were the same when they landed as when they evacuated from Hungnam. X Corps had a special task organization of units and staff giving it amphibious capabilities. The 1st Marine Division, 2nd Engineer Special Brigade, and Marine officers on the Corps staff gave it these capabilities. The only minor difference to the organization was that during the evacuation, Japanese stevedores and Korean laborers augmented the efforts of US troops in outloading X Corps.

Command and control of the evacuation was not much different than that of an amphibious assault. Centralized planning and execution were necessary for both of these very complex operations. At Hungnam, Col. Forney's Control Party provided the close control required for success. Control was also provided by establishment of the defensive perimeter, and subsequent smaller perimeters. These perimeters served the same purpose in the defense, as a beachhead line serves in an amphibious assault. This purpose is to control limits of the friendly forces, build up combat power in the beachhead area, and protect the force.
In the CHARACTERISTICS paragraph, it states that "Means for controlling the withdrawal may be limited." The planners of the Hungnam Evacuation recognized this. They made extra efforts to insure control of the evacuation, instead of just accepting the fact that control would be difficult. For example, a Chemical unit was used to run a railroad transfer point at Pohu-Jang. Manpower was needed, and the unit was available and able to perform this vital mission. ROK I Corps troops were used to augment U.S. Army Military Police in refugee control. In another instance, Field Artillery personnel augmented Military Police in controlling traffic when minimizing congestion became critical.

In summary, Doctrine for Amphibious Operations gives a very good background for all amphibious operations. It provides enough guidance to form the basis in planning an amphibious withdrawal. This study validates the doctrine. Clearly, lessons learned by the Marine Corps from past amphibious operations, including the Hungnam Evacuation, are reflected in the doctrine.

Turning next to Doctrine For Unified and Joint Operations, there is a paragraph titled, "Guidelines for Joint Operations," which contains the following:

1. Establish a command structure that clearly defines overall command responsibility for each phase of a campaign or operation.

2. Ensure that communications equipment is interoperable, redundant, and complemented by standardized formats and procedures.
3. Select forces to participate in operations based on their utility, required skills, expertise, combat readiness and functions—not on equity.

4. Delegate necessary decision making authority to the point of action.

5. Apply overwhelming force at decisive points.

6. Organize for wartime joint operations in peacetime.

My analysis of *Doctrine For Unified And Joint Operations* is that the doctrine directly reflects lessons learned from Hungnam. For example, MG Almond established a command structure that clearly defined overall command during the withdrawal of forces from the Chosin Reservoir. He placed the 1st Marine Division commander in charge of all X Corps units in that area. This clarified the chain of command for getting those forces back to Hungnam. His actions are reflected by Guideline number one.

The creation of X Corps was a prime example of the selection of forces based on their utility, required skills, expertise, combat readiness and functions. X Corps was created specifically for the amphibious assault at Inchon. The X Corps expanded from two to five divisions after Inchon, largely because of its utility and expertise in amphibious operations. This is a good example of Guideline number three.

MG Almond delegated decision making authority to the point of action to get things done. While the Control
Party directed the entire evacuation from Hungnam, the 2nd Engineer Special Brigade commander made the necessary loading decisions. The G-3 made pertinent decisions on the tactical situation and defensive perimeter. The G-4, in coordination with the G-3, made decisions on the order of unit embarkations, and the makeup of logistical support units left to provide for the forces defending. This is a good example of Guideline number four.

The Hungnam Evacuation reflected the tenant of using overwhelming force in the form of joint firepower. To insure an orderly evacuation, CAS, artillery, and naval gunfire combined to pound the enemy forces at every opportunity. This kept the enemy off balance and prevented any sizable buildup of forces to attack the perimeter. Seldom did the CCF attack in any force larger than company size against the Hungnam perimeter. This is a good example of Guideline number five.

The next document to be discussed is Joint Task Force Planning Guidance and Procedures. Appendix A has a "Key Task Checklist" which is worth discussion. It includes questions such as:

1. Will action be unilateral or combined?
2. Is noncombatant evacuation needed?
3. Is medical support adequate to support planned operations?
4. What is the status of communications?
The Hungnam Evacuation was a combined operation with a ROK Corps being part of X Corps. The ROK I Corps gave X Corps improved capabilities when it came to knowing the terrain, the enemy, and the native language. The troops of ROK I Corps were invaluable when augmenting the Military Police with refugee control.

Noncombatant evacuation was an operation that had a major impact on X Corps. The sheer masses of refugees, in the tens of thousands, required manpower to contain and care for them. The South Korean Navy and Korean fishing vessels helped evacuate and relocate these refugees. Noncombatant evacuation needs to be anticipated and planned for in future operations where joint/combined forces are employed. Failure to account for the impact of these persons could detract from the mission accomplishment of the military forces.

Medical support during the Korean War made advances in the speed of evacuating wounded with the advent of the helicopter and use of emergency airstrips. Many more wounded would have died were it not for this new method of evacuation. At three different locations, Hagaru-ri, Koto-ri, and within Hungnam, engineers built short emergency airstrips to provide a quick means of evacuating wounded personnel.

Communications gear was not interoperable between the Services for the Hungnam Evacuation. Extensive use of
liaison officers was a workable solution. It is still the most likely solution today since the problem still exists. Operation "Desert Storm" saw an extensive use of liaison officers to solve the lack of radio interoperability.

5.3 Battlefield Operating Systems.

Since most joint doctrine is still "in work" it cannot be evaluated. Instead, the Hungnam Evaluation will be evaluated against two Army concepts, the Battlefield Operating Systems and Defensive Battlefield Framework. This will result in analysis and recommendations that may be of use by authors of joint doctrine.

The Battlefield Operating Systems include Maneuver, Fire Support; Mobility, Countermobility and Survivability; Command and Control, Air Defense, Combat Service Support, and Intelligence. Definitions of these systems are from US Army FM 100-5 Operations. How these systems contributed to the success of the operation will be explained in the next few pages. Recommendations will appear in Chapter 6.

5.3.1 Maneuver.

Maneuver is the movement of forces in relation to the enemy to secure or retain positional advantage. The X Corps used maneuver, along with joint support from the Air Force and Navy, to consolidate at Hungnam.

The CCF attacks hit both the 1st Marine Division and elements of the 7th ID very hard. Maneuver was very
difficult for these two X Corps units as they were both in mountainous terrain, surrounded, and fighting the bitter winter cold. Once both forces consolidated with other X Corps units at Hagaru-ri and the Marine Division commander took charge, a withdrawal plan developed. While not very exotic, the plan was tailored to the situation. This plan called for a steady, deliberate withdrawal, covered by extensive CAS, moving when the force was strong enough to do so. A stop at Koto-ri with another strong defensive perimeter, enabled this force to catch its breath, fly out the wounded, and fly in supplies.

While this X Corps force moved to Hungnam, 3rd ID sent a force out to meet them at Chinhung-ni and also established the Hamhung-Hungnam perimeter. Finally, the ROK I Corps and the rest of 7th ID moved in concert with one another down the east coast to Hungnam. This Corps maneuver plan kept all X Corps units moving and prevented the CCF from committing its total strength against any one isolated unit. This plan of maneuver, combined with the advantage of CAS and the adverse effect of weather on the CCF, worked to successfully consolidate X Corps at Hungnam.

5.32 Fire Support.

Fire support includes mortars, field artillery, naval gunfire, army aviation, and air-delivered weapons. Superior fire support enabled X Corps to conduct the evacuation in an orderly manner. This support included
artillery, CAS, naval gunfire support and deep bombing by the Air Force. The CCF could not compete with the overwhelming strength of U.S. fire support. The CCF had to adjust their tactics to hide by day and use the night to move and to attack. Although the night took away the CAS, illumination provided by artillery, naval gunfire, and Air Force aerial flares enabled the ground forces to see the enemy and destroy them.

Combined with intelligence gained from photo recon planes and refugees, fire support missions were able to pound enemy troop concentrations almost as fast as they formed. This fire support was so devastating to the enemy that they attacked the Hungnam perimeter only in platoon or company size formations out of fear of bombardment. While artillery, CAS and naval gunfire provided close fire support for the Hungnam defensive perimeter, the FEAF Bomber Command provided X Corps a deep strike capability.

5.33 Command and Control.

The command and control system which supports the execution of AirLand Battle doctrine must facilitate freedom to operate, delegation of authority, and leadership from any critical point on the battlefield. Command and control is enhanced when the commander's intent is clear, there is unity of command, and when good verbal and written communications are used.
MG Almond exercised the proper command and control for the occasion throughout the campaign. At the tactical level, he let his divisions (and ROK I Corps) fight their battles. At Hagaru-ri, he consolidated all Army units under the command of the 1st Marine Division commander to ensure unity of command. At the operational level, he kept firm control of the evacuation through the Control Party. Control was maximized by making it the central operations cell for the evacuation, and staffing it with the right mix of amphibious experts, logistics and liaison officers.

Communications were adequate even though interoperability of radio sets was not possible. Extensive use of liaison officers, liaison planes, and hard work by Signal Corps units gave the X Corps effective communications. The message traffic between the X Corps command post and CINCPAC Headquarters in Tokyo was constant during the operation.

Good written communication was also a component of the success of Hungnam. An excellent embarkation annex was part of the X Corps operations order. A copy of the annex, Logistical Instructions for Embarkation, is at Appendix F.

5.34 Mobility, Countermobility and Survivability.

Mobility missions include breaching enemy minefields and obstacles, improving existing routes or building new ones, and providing bridge and raft support for cross-major water obstacles. Countermobility efforts limit the maneuver of enemy forces and enhance the effectiveness of
US fires. Engineers improve the survivability of the friendly force by hardening command and control facilities, and key logistic installations and by fortifying battle positions in the defense.4

The engineers were key players in providing mobility during the operation by keeping the lines of supply open. Corps engineers maintained the MSRs and kept them open in all types of weather. Dump trucks, road graders and bulldozers all helped to patch up the roads and build turnouts on many of the one-way dirt-gravel roads that predominated the area of operations.

Perhaps their most vital contributions were in building the emergency airstrips that provided the means for sustaining the force and evacuating the wounded. Without the airstrips, many more wounded would have died. Air evacuation was faster, safer, and more gentle.

It was engineers, both Marine and Army, that placed the Treadway Bridge sections over the gap at the penstocks of the hydroelectric power plant at Funchilin Pass. Without this bridge, the 1st Marine Division and attached units could not have proceeded south to Hungnam and safety.

Engineers played the key role in execution of the Corps Demolition Plan. Company B, 185th Engineer Combat Battalion, played its part in countermobility operations on 16 December at a Hamhung bridge. This was no ordinary bridge! It was a 2,100-foot railroad bridge consisting of
29 spans, eight having wooden-tie cribblings up to deck level.

When the men of Co. B received orders to destroy the bridge and all the rolling stock in the Hamhung area, they decided the spans of the bridge could be dropped individually. Then, they pushed as many cars and engines as possible into the void before blowing up the next span. The engineers destroyed about 15 locomotives and 275 cars during the 16-hour project. Korean railroad men even hauled rolling stock from Hungnam to the bridge site but had to be "prodded" by the engineers in assisting with the actual destruction of the rolling stock.

The engineers released a lot of pent-up emotion on this job. Lt. Erwin C. Hamm said, "They had a helluva time. It was a good way for the men to release their destructive characteristics." Two engineers were slightly wounded when they pushed a boxcar full of ammunition onto the flaming wreckage at the bottom of the chasm and it exploded.

The engineers proved invaluable the day after the evacuation of Yonpo airfield. Neither the Air Force nor the 65th Infantry Regiment, 3rd ID, performed a proper destruction prior to pulling out. When the corps engineers arrived to "finish demolition" they found every building intact and large quantities of gasoline, food and other material abandoned. Five tons of bombs, rockets, and other
munitions littered the area. Major Robert Atkins from the X Corps Engineer Section remarked, "It looked as if someone in the Air Force had blown a whistle and they loaded all the planes and took off."

The Yonpo airfield offered an abundance of ordnance and other material if seized by the enemy. The engineers had to divert effort away from executing the X Corps Demolition Plan, (Appendix G), to destroy the abandoned materials at Yonpo.

Engineers performed a survivability role in the defense of the Hungnam perimeter by digging in artillery and armored forces.

5.35 Air Defense.

Air defense units provide the commander with security from enemy air attack... Air defense secures critical facilities, such as command posts, logistic installations, and special ammunition supply points.

While there was little or no threat of enemy air attacks against X Corps, Air Defense units performed a superb ground support role using their twin-40mm guns and quad-50s in direct fire mode. These weapons spewed out tremendous bursts of fire with terrible effect on massed enemy attacks. Many of our infantrymen owe their lives to the devastating firepower of these weapons and their telling affect on the enemy's morale.
An example of the effectiveness of Air Defense guns used in a direct fire role during this operation is shown by this quote from MG William Marquat:

"Out at the forward positions the infantry would entrench on top of the hills covering the direct enemy approaches. The field artillery would be located to place plunging fire in front of the infantry positions and over the hills on their flanks. The antiaircraft automatic weapons would be emplaced to cover the tops of the hills occupied by the infantry for the purpose of driving out hostile elements which might displace our troops during a night or surprise attack. In the few instances where this type of action was called for, the automatic weapons never failed to make the hilltop positions untenable to the enemy until our infantry could regain the positions. The antiaircraft guns also were sited to sweep the ravines on the flanks which were avenues of approach for hostile flanking movements. In other words, the high angle fire trajectories and the flat trajectories of the automatic weapon habitually were integrated into a perfectly coordinated pattern of artillery fire support."

5.36 Combat Service Support.

Tactical sustainment includes all the Combat Service Support (CSS) activities necessary to support battles and engagements and the tactical activities that precede and follow them.

The unsung heroes of the evacuation were the Combat Support and Combat Service Support units, specifically the Medical, Transportation, Military Police, Ordnance, Quartermaster and Chemical Corps. They sustained X Corps units throughout the operation and contributed to the successful outcome in many ways. Their rapid adjustment to changes in the tactical situation helped support the tactical forces.
Medical Service personnel treated the wounded and those who suffered from frostbite. Transportation Corps personnel kept the supplies moving, controlled the traffic movement, and utilized the host nation rail system to the fullest possible extent. Military Police directed convoys in the right direction and controlled the hordes of refugees that threatened the order of the evacuation. Ordnance personnel patched up vehicles and tanks enough so that they could be loaded on the ships. Quartermaster units were the ones that rigged supplies for air drop to the beleaguered troops near the Chosin Reservoir. Without the supplies and ammunition those fighting units could have been destroyed. Chemical units provided smoke during the embarkation and also provided valuable service when reorganized to run the railroad transfer point at Fohu-Jang. Such selfless service was characteristic of X Corps support troops.

5.37 Intelligence.

Intelligence operations are the organized efforts of a commander to gather information on terrain, weather, and the enemy. Obtaining information prior to the initiation of operations is a vital task.13

The intelligence system never broke down during this time period of the Korean War. The interpretation of the intelligence was what went astray. General MacArthur knew there were Chinese "Volunteers" in North Korea as
early as October 1950. Toward the end of November, it was evident to all with access to the intelligence that the Chinese were in North Korea in enough strength to question the label "Volunteer." Yet he was willing to gamble that the Chinese Communists did not have the will to tackle the world's number one military power at the time.

Intelligence derived from aerial observation and from refugees gave X Corps adequate notice of enemy activity outside the perimeter defense at Hungnam. In preparation for enemy attacks, Navy and Marine aircraft were waiting to strike from carriers. Naval gunfire support also kept the perimeter under a protective fire umbrella. Deep strikes by Air Force bombers hit those targets identified by intelligence officers.

5.4 Defensive Battlefield Framework.

The purpose for analyzing the Hungnam Evacuation against the perspective of the Defensive Battlefield Framework, is to provide recommendations for emerging joint doctrine. The Defensive Battlefield Framework includes Deep, Security, Close, Rear and Reserve Operations. These terms come from the latest edition of the Army's FM 100-5, OPERATIONS, dated 5 May 1986.

5.41 Deep.

Deep operations at any echelon comprise activities directed against enemy forces not in contact, designed to
influence the conditions in which future close operations will be conducted."

The deep battle for X Corps during this operation could be accomplished only with air assets. This was true for a number of reasons. First, X Corps units were thinly spread over a 400-mile front at the end of November, 1950. There was little hope of mutual support over those distances and in that mountainous terrain. Second, there were no long range weapons systems, such as those of today, that were available to X Corps. Air support was the only way possible to strike deep into the enemy rear area. In late November, 1950, this would have meant Manchuria! So, it wasn't until the actual withdrawal of UN forces that our Air Force could use its strategic bomber force to hit the lines of communications in North Korea.

5.42 Security.

Security enhances freedom of action by reducing friendly vulnerability to hostile acts, influence or surprise."

Security operations for units of X Corps during the withdrawal to Hungnam consisted of a mix of phased withdrawal to protect the flanks, along with maximizing terrain restrictions to the enemy. Units of the ROK I Corps withdrew along the right flank of X Corps. Units of the 7th ID withdrew generally down the X Corps center. The 1st Marine
Division with attached elements withdrew along the left flank of X Corps. Since this was a withdrawal under enemy contact, strong rear guard forces were needed to protect the main force.

5.43 Close.

Close operations involve the fight between the committed forces and the readily available tactical reserves of both combatants. Activities comprising close operations include maneuver, close combat, CAS, indirect fire support, combat support/combat service support, command and control. Close operations bear the ultimate burden of victory or defeat. So it was with the withdrawal and evacuation of X Corps. Without the CAS, the indirect fire support, the aerial resupply of the withdrawing forces, the determined fighting of Marine, Army and ROK units, and firm command and control; the operation could not have been successfully accomplished.

5.44 Rear.

Operations in the rear area contribute to the unified battle plan by preserving the commander's freedom of action and assuring uninterrupted support of the battle. Rear operations include assembly and movement of the reserves, redeployment of fire support, maintenance and the protection of the sustainment effort and maintenance of the command and control. Early on during the evacuation,
the 3rd ID was the reserve force. It formed the initial perimeter defense that reached out to assist the units withdrawing to Hungnam. Once these forces were safely inside the perimeter, the defense stiffened, and all fire support assets were brought to bear on the enemy. The Navy supported rear operations since the sea was to the rear of X Corps. Naval gunfire support and CAS from carrier based aircraft helped ensure the orderly conduct of the evacuation. Here in the rear was the command and control that orchestrated the overall operation. In addition, other key activities such as traffic control, medical and field services and refugee control took place in the rear area of operations.

5.45 Reserves.

The reserve is the commander's principal means of influencing the action decisively once the operation is under way.* In the defense, reserve operations are performed to support the main defensive effort.

MG Almond committed 3rd ID to form the perimeter defense around Hungnam and protect the Corps evacuation. This was a timely use of the reserve. Had he committed them earlier during the Chosin Reservoir fight, X Corps might not have had a strong enough force to form and hold the Hungnam perimeter. Even though the 1st Marine Division and attached elements came out in good order, the men were
physically spent. The enemy and the cold weather had taken their toll. The 3rd ID as the reserve force gave MG Almond the means to fight the battle on his terms, to preserve his force, and conduct an orderly evacuation.

5.5 The Enemy

A brief analysis of the enemy situation will be presented here to add perspective to the operation. No two enemy are ever the same. The CCF had strengths and weaknesses that helped decide the outcome of the operation.

When the CCF attacked X Corps units in the vicinity of the Chosin Reservoir on the 27th of November, they had somewhere between 55,000 - 60,000 soldiers. Only eight of twelve divisions of the CCF IX Army Group were committed to battle. These eight divisions were not at their full strength. Opposing them were about 30,000 X Corps troops of the 1st Marine Division, elements of the 7th and 3rd Infantry Divisions and the British 41st Royal Marine Commandos. Why were the CCF unable to destroy them?

One reason was the weather. The Chinese soldiers were not nearly as well prepared to withstand the subzero temperatures as the Americans. The Chinese did not have gloves, their footwear was inadequate and they were not well fed. Lui Kin Ju, a private in the CCF captured on 9 December, said about 20% of his battalion had frostbitten hands. Another captured soldier stated that 20,000 of his
fellow soldiers starved or froze to death since November. 20

These Chinese were from southern China and were not used to the severe Mongolian winters.

Another factor was their lack of resupply. Their was no known resupply effort for food or ammunition after the CCF crossed the border into North Korea. They were ex-
pected to live off the land and from what they captured from the Americans. The CCF 26th Army records show its own weaknesses:

A shortage of transportation and escort personnel makes it impossible to accomplish the mission of sup-
plying the troops. As a result, our soldiers frequen-
tly starve. The troops were hungry. They ate cold food and some had only a few potatoes in two days. They were unable to maintain the physical strength for combat; the wounded personnel could not be evac-
uated....

The firepower of our entire Army was basically inadequate. When we used our guns there were no shells, and sometimes the shells were duds. 21

CCF medical facilities were either primitive or nonexistent in the fighting around the Chosin Reservoir. Few received immediate battlefield treatment for critical wounds. Evacuation to hospitals back in China was a slow process and many died along the way. Most frostbite cases received no treatment at all.

The CCF soldier had to face superior fire from automatic weapons, antiaircraft guns in direct fire role, concentrated tank fire, devastating attack from the air,
far reaching artillery fire, and ultimately, naval gunfire. When the CCF cut the supply lines, ammunition resupply via airdrop kept the X Corp guns from going silent.

The tactics of the CCF were sometimes flawed. For example, a CCF attack at Hagaru-ri on 27 November may have been more successful if the attack had been coordinated. Just one infantry battalion, two artillery batteries and some miscellaneous service troops defended Hagaru-ri. Facing them was a full Chinese Division, the 58th. This division never massed its strength for a full assault. Instead, it fed its regiments one-after-the-other into the defenses of Hagaru-ri. These regiments were repulsed one at a time. Had Hagaru-ri fallen the night of the 27th, the back door would have been closed on the 1st Marine Division and the 31st Regimental Combat Team."

In spite of these weaknesses, the CCF accomplished their mission. The Chinese soldier was durable and could survive on meager rations. The CCF determination and sheer force of numbers made up for their weaknesses.

In summary, the Chinese had no defense against the overwhelming firepower from the ground, the air, and the sea at the Hungnam perimeter. They could not mount a large attack against X Corps because when they tried, they were slaughtered. MG Almond always maintained that X Corps, if supplied by the sea, could have held Hungnam as long as desired by higher authority.
1. JCS Pub. 3-02, Doctrine For Amphibious Operations, (w/changes 1-5) 1 August 1967, Part IV, 17-1 to 17-3.
3. FM 100-5 Operations, Department of the Army, 5 May 1986, 175.
4. Ibid., 43.
5. Ibid., 21.
6. Ibid., 50.
8. Ibid., 310.
9. Ibid., 311.
10. FM 100-5, 51.
11. Appleman, 327.
12. Ibid., 71.
13. Ibid., 46.
15. Ibid., 176.
16. Ibid., 36.
17. Ibid., 39.
18. Ibid., 123.
20. Ibid., 350.
21. Ibid., 354.
22. Ibid., 365.
CHAPTER 6

CONCLUSIONS

The Hungnam Evacuation compares closely with the current and emerging joint doctrine discussed in this study. JCS Pub 3-22, Doctrine for Amphibious Operations, 1 August 1967, needs only minor modifications if the Hungnam Evacuation is used as a model. Recommended changes are as follows:

1). In Part IV, page 17-2, the paragraph on ORGANIZATION AND COMMAND RELATIONSHIPS be changed to add these sentences:

The amphibious withdrawal of a joint and or combined force, is inherently as difficult to control as an amphibious assault by the same force. It requires centralized planning and execution for maximum control of embarking forces and equipment. Officers with amphibious experience must be a part of the operations cell. Civilian refugees and their impact on the evacuation should be considered in the plan.

2). In Part IV, page 17-3, the paragraph on CHARACTERISTICS, item (6), be changed as follows:

Means for controlling the withdrawal may be limited, however, maximum control of the withdrawal is essential for success. Extreme measures may be needed to accomplish this. For example, units might be reorganized to augment Military Police or Transportation elements as the need arises.

No changes are recommended to the two "Test Pubs" that were compared to the Hungnam Evacuation. These two

As a result of this study, many recommendations are submitted for consideration to the authors of the emerging joint doctrine. These recommendations are based upon the Battlefield Operating Systems analysis from Chapter 5 of this study.

**Maneuver.**

1) In the conduct of the withdrawal, the plan should take into account the enemy, terrain, weather, and time available. Consider civilian refugee impact on the withdrawal.

2) Friendly forces must not become isolated from contact with other friendly units, even if this contact is made through aerial means.

3) Freedom of movement must be attained at all costs or else the force may be lost.

**Fire Support.**

1) Deep attack and CAS in support of the forces in the withdrawal is necessary for success.

2) Aerial resupply of artillery ammunition to withdrawing forces may be required to sustain them.

3) Once within range of naval gunfire support, the force in withdrawal brings this asset to bear on the enemy.
4) An allocation of a Tactical Air Control Element, representing each Service with air assets in the area of operations, should be made to the lowest possible level.

Command and Control.

1) Consolidating command of two withdrawing forces, is one method to increase combat power, consolidate logistical requirements, and attain unity of command/effort.

2) Clear, concise written communications are a component of a successful evacuation. Instructions for the embarkation must be thorough, simple and clear. (See Appendix F)

3) When interoperability of radio sets is not possible, the extensive use of liaison officers is an effective substitute.

4) In an operation of an Army Corps near a coastline, a Marine Division should be attached to that Corps. This gives mutual support, and lends amphibious expertise to an Army Corps that inherently has none.

5) Responsibility for destruction of airfields during a withdrawal needs clarification. This study recommends that the Air Force be responsible for all Air Force equipment, (evacuate it or destroy it), and the ground forces be responsible for destroying the airfield, the physical plant, fuel, supplies, and ammunition.

Mobility, Countermobility, Survivability.

1) Construction of emergency airstrips provides an added means of resupply and evacuation in addition to helicopters.
2) A coordinated demolition plan slows the enemy, protects friendly forces, assists in trading space for time, and will deny the enemy the use of the destroyed target. It clarifies who is responsible for target destruction.

3) Keeping open the routes of the withdrawal may require joint cooperation in overcoming obstacles. Ground forces may require aerial delivery of materials/equipment to accomplish a mission.

Air Defense.

1) Air superiority is absolutely vital to the success of an amphibious evacuation. Air defense assets need to provide maximum protection of the evacuation area, the ground forces, and logistical sites, in that priority.

2) Once air superiority has been attained, air defense weapons in direct fire mode can provide great fire support if integrated into the overall fire plan.

Combat Service Support.

1) Cross training of combat service support personnel prior to hostilities for wartime traffic control missions should be a priority. There are not enough MPs or Transportation personnel available during a withdrawal operation to provide the needed control measures.

2) Use of the host nation transportation modes to include rail, shipping, truck transport etc., must be utilized to the maximum extent possible.
Intelligence.

1) Information on the enemy movement, relative strength, and intent needs to be processed by the higher headquarters and provided to subordinate units quickly.

2) Aerial reconnaissance can provide valuable intelligence on enemy targets for the artillery of the withdrawing forces.

3) When confirmed by other sources, information obtained from refugees can be an important source of information about the enemy.

In summary, this study validates the present joint doctrine pertaining to amphibious withdrawals. Additionally, the Hungnam Evacuation provides important lessons learned that should not be forgotten when it comes to writing future joint doctrine. The lessons learned by X Corps are enclosed at Appendix H. They can be useful for authors of the future joint doctrine.
APPENDIXES
NORTH KOREA

CHOSIN RESERVOIR

YUDAM-NI
HAGARU-RI
KOTO-RI
FUNCHILIN PASS
POHU-JANG
PUKCHONG
CHINHUNG-NI
HAMHUNG
YONPO
HUNGNAM
IWON
SONGJIN
WONSAN

SEA OF JAPAN

MAP NOT TO SCALE
31st Regimental Combat Team
7th Infantry Division
27 November 1950

Source: Chosin Reservoir, Korea, 1950, (MMAS Thesis)
HUNGNAM EVACUATION CONTROL GROUP

Source: Special Report on Hungnam Evacuation
HUNGNAM INNER HARBOR

December 1950

Factories/Storage Plants  Residential Area

GREEN  YELLOW

LST Beach Area

Residential Area

2 Docks

1 2

Residential Area

3 4

PINK

Breakwater

Sea of Japan

Source: Marine Corps Gazette, Dec., 1951, L. Montross
LOGISTICS ANNEX

Logistics Instructions for Embarkation

1. Personnel, equipment and supplies ashore not needed in defense of HUNGNAM will be outloaded and shipped to PUSAN-POHANG-DONG area. Supply stocks while in last priority for outloading, will be outloaded to the maximum degree possible. Those which cannot will be finally destroyed.

2. Equipment and supplies afloat, except that urgently needed ashore, will be diverted to target area.

3. X Corps Control Group, Col. E. H. Forney, in charge, is responsible for maintaining a continuous flow of personnel and equipment out of HUNGNAM area. Designated representatives of major units of major units will report to the Corps Control Officer with descriptive list of personnel and equipment to be outloaded. The Commanding General, 1st Mar Div, will furnish TQM assistance as requested by Col. Forney.

4. The CO, 2nd ESB, with 1st Shore Party Bn FMF and 58th MP Co. attached, will be responsible for loading, for operation of port facilities, and for stocking ships, when necessary with B rations for consumption during voyage. Troop assistance will be made available by embarking units as required.

5. The 2nd ESB, with 79th Engr C Bn attached, will be responsible for operation of final staging areas. Units reporting to this area will be fed and sheltered by the 2nd ESB. Troop assistance will be furnished by embarkation units as required.

6. Units are responsible for initial assembly of personnel and equipment.

7. Movement from initial areas will be directed by X Corps Control Officer.

8. Personnel will report to final staging areas with hand carried baggage and equipment only. Remainder of personal equipment and clothing will be carried on organic vehicles. Vehicles will be stowed not higher than cab height and with nothing protruding beyond the sides and rear of the truck.

(Cont'd)
9. Units moved to the final staging area will remain there until called to the loading point.

10. When called to the final loading point, each vehicle will be manned by one driver who accompanies the vehicle until debarked at destination.

11. Operational rations are in short supply and must be conserved for units in contact.

12. Units will carry basic load of ammunition on transport.

13. Units of Bn or larger sizes will send advanced detachments to PUSAN. Arrangements for such parties will be made through G-4, X Corps.

ALMOND
Maj Gen

OFFICIAL.

Smith
G-4

Source: Special Report on Hungnam Evacuation
### DEMOLITION TABLE, HAMHUNG - HUNGNAM OPERATION

<table>
<thead>
<tr>
<th>No</th>
<th>Facility or Installation</th>
<th>Coordinates</th>
<th>Destroyed by</th>
<th>Date</th>
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<tr>
<td>1</td>
<td>Hwy Bridge CV5171</td>
<td>1st Mar Div</td>
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<td>2</td>
<td>Hwy Bridge CV5660</td>
<td>1st Mar Div</td>
<td>14 Dec</td>
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<td>Blown under fire</td>
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<td>3</td>
<td>Hwy Bridge CV5654</td>
<td>1st Mar Div</td>
<td>15 Dec</td>
<td></td>
<td>Steel trestway blown under fire</td>
</tr>
<tr>
<td>4</td>
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<td></td>
<td>Road Crater</td>
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<tr>
<td>5</td>
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<tr>
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<td>7</td>
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<td>3rd Inf Div</td>
<td>18 Dec</td>
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<tr>
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<tr>
<td>9</td>
<td>RR rolling stock and turntable CV7719</td>
<td>X Corps Engrs</td>
<td>18 Dec</td>
<td>Blown and burned</td>
<td></td>
</tr>
<tr>
<td>10</td>
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<td>7th Inf Div</td>
<td>18 Dec</td>
<td></td>
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<tr>
<td>11</td>
<td>Hwy Bridge CV7418</td>
<td>3rd Inf Div</td>
<td>18 Dec</td>
<td></td>
<td>Abutments and center span blown</td>
</tr>
<tr>
<td>12</td>
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<td>3rd Inf Div</td>
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<td>Blown</td>
</tr>
<tr>
<td>13</td>
<td>RR Bridge CV7417</td>
<td>X Corps Engrs</td>
<td>17-18 Dec</td>
<td>300 RR cars and 36 engines blown and burned</td>
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<tr>
<td>14</td>
<td>RR Overpass CV7517</td>
<td>3rd Inf Div</td>
<td>18 Dec</td>
<td></td>
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</tr>
<tr>
<td>15</td>
<td>Hwy Bridge CV7716</td>
<td>7th Inf Div</td>
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<td>Blown</td>
</tr>
<tr>
<td>16</td>
<td>Hwy Bridge CV6612</td>
<td>3rd Inf Div</td>
<td>16 Dec</td>
<td></td>
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(con't)
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<thead>
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<th>17</th>
<th>Low level wood bridge</th>
<th>CV7712</th>
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<td>CV8209</td>
<td>Navy UDT</td>
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<tr>
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<td>ROK Cap Div</td>
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<td>Blown</td>
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<tr>
<td>25</td>
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<td>CV9817</td>
<td>ROK Cap Div</td>
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<tr>
<td>26</td>
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<td>Road crater</td>
</tr>
</tbody>
</table>

Source: Special Report on Hungnam Evacuation
LESSONS LEARNED

Tactical

1. The principles of the defense and retrograde movement were fully applicable in this operation.
2. Where the principles of defense are properly employed, an American unit can successfully defend against a force far superior in numerical strength.
3. An evacuation by sea is not an amphibious operation in reverse, although some principles of amphibious warfare do apply such as the withdrawal from the final perimeter to the landing craft on a broad front.
4. In an evacuation by sea, the perimeter must be large enough to secure uninterrupted loading operations in the dock area.
5. In an evacuation by sea, when supporting troops are withdrawn, tactical troops must become more self-sufficient.
6. In an evacuation by sea the withdrawal of troops must be carefully coordinated to prevent intermingling of units.
7. In an evacuation by sea an exceptionally close relationship must be maintained between tactical and logistical planners.

Logistical

1. In an evacuation by sea the setting up of a Control Group gives the flexibility necessary in operations of this nature where set plans are extremely difficult to develop and carry out.
2. In an evacuation by sea the establishment of supply dumps to supply each withdrawal position saves transportation, permits the closing out by issue of the forward dumps, and eliminates confusion at the beach where the maximum effort is being made to onload, rather than offload additional supplies.

3. In an evacuation by sea, some service units must be retained in the beachhead until the final phase of the evacuation.

4. In an evacuation by sea a reserve of cargo ships and LSTs must be retained through the final phase of an evacuation to meet all unforeseen contingencies that may develop.

Source: Special Report on Hungnam Evacuation
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