CURRENT MEDICAL REGULATING DOCTRINE AND PRACTICE IS ANALYZED BY COMPARING MEDICAL REGULATING IN THE KOREAN WAR YEARS WITH A POSSIBLE KOREAN WAR SCENARIO TODAY. AN ANALYSIS OF SERVICE SPECIFIC MEDICAL TREATMENT CAPABILITIES AND MEDICAL REGULATING DOCTRINE AND HOW THESE COMPLIMENT JOINT DOCTRINE IS EXAMINED IN THE CONTEXT OF THE CINC'S OPERATIONAL PLAN FOR KOREA. THE EVOLVING ROLE OF USTRANSCOM IN INTEGRATING MEDICAL REGULATING AND PATIENT TRANSPORTATION SYSTEMS IS EXAMINED. THE ULTIMATE GOAL, DIRECTLY BENEFITING THE SUPPORTED CINC, IS BETTER USE OF AIRFRAMES AND A HIGHER RATE OF RETURN TO DUTY PATIENTS. THIS INTEGRATED SYSTEM ASSISTS THE CINC IN MEETING HIS MORAL RESPONSIBILITY TO PROVIDE THE BEST MEDICAL CARE POSSIBLE AND TO CONSERVE THE COMBAT POWER OF HIS FIGHTING FORCE. SEVEN SPECIFIC RECOMMENDATIONS ARE DRAWN FROM THE RESEARCH.
MEDICAL REGULATING IN A THEATER OF WAR: WHAT DOES THE CINC NEED?

by

Patrick J. Kelly

Lieutenant Commander, Medical Service Corps, USN

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: 

17 June 1994

Paper directed by Col D. P. Oberthaler
Staff, Warfare Division
Department of Operations

Approved by:

Col D. P. Oberthaler, USA Date
Abstract of
MEDICAL REGULATING IN THE THEATER OF WAR:
WHAT DOES THE CINC NEED?

Current medical regulating doctrine and practice is analyzed by comparing medical regulating in the Korean War years with a possible Korean War scenario today. An analysis of service specific medical treatment capabilities and medical regulating doctrine and how these compliment joint doctrine is examined in the context of the CINC's Operational Plan for Korea. The evolving role of USTRANSCOM in integrating medical regulating and patient transportation systems is examined. The ultimate goal, directly benefiting the supported CINC, is better use of airframes and a higher rate of return to duty patients. This integrated system assists the CINC in meeting his moral responsibility to provide the best medical care possible and to conserve the combat power of his fighting force. Seven specific recommendations are drawn from the research.
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>11</td>
</tr>
<tr>
<td>I INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II THE COMMANDER'S REQUIREMENTS</td>
<td>4</td>
</tr>
<tr>
<td>III MEDICAL REGULATING IN THE AREA OF OPERATIONS</td>
<td>7</td>
</tr>
<tr>
<td>IV. MEDICAL REGULATING OUTSIDE THE AREA OF OPERATIONS</td>
<td>13</td>
</tr>
<tr>
<td>V. THE KOREAN WAR, 1950-1953</td>
<td>16</td>
</tr>
<tr>
<td>VI. KOREA TODAY</td>
<td>20</td>
</tr>
<tr>
<td>VII. CONCLUSIONS AND RECOMMENDATIONS</td>
<td>25</td>
</tr>
<tr>
<td>NOTES</td>
<td>30</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>36</td>
</tr>
</tbody>
</table>
MEDICAL REGULATING IN A THEATER OF WAR: WHAT DOES THE CINC NEED?

CHAPTER I

INTRODUCTION

The operational artist, his medical planners and the separate services have grappled with the issue of adequate medical care in a combat environment for hundreds of years. The issue turns on the commander's responsibility for the health and well-being of his personnel, and his need to conserve the combat power of his fighting force.

The medical system, like the combat system it exists to support, is often complex and contradictory. At one time it was a matter of merely getting the wounded out of the way so as not to hamper the tactical situation, and find replacements as rapidly as possible. With improved capability the demands on the medical care and transportation systems used to support it, have grown markedly. There is demand for the greatest technology that money can buy while at the same time the requirement to be highly mobile and flexible. Technological advances often mean bigger, harder to move equipment and additional expertise to maintain it. Additionally, the medical planners are forced to compete with the warriors for limited, shared transportation assets. Thus the medical planners' dilemma.

This paper deals with medical regulating, one critical component of the medical system in a combat environment. Medical regulating includes the actions and coordination necessary to arrange for the movement of patients through the echelons of
This process matches patients with a medical treatment facility that has the necessary health service support capabilities.

The business of medical care is to collect the patient, administer the necessary emergency measures and transport him to the required echelon of medical care. The continuum of medical care runs from the company aid man organic to the infantry units to definitive care in CONUS. It means putting medical care where it is needed and providing the transportation - land, sea and air - to get the patient there. Thus, medical regulating includes not only the aspect of where casualties can receive adequate medical treatment, but also how they are transported.

Maintaining a ready, experienced fighting force is critical to achieving success on the modern battlefield. The operational artist ultimately expects military medicine to conserve trained manpower by treating the injured at the lowest possible level and returning as many to duty as soon as possible. A viable, well-planned medical regulating function contributes to this end by placing the wounded in the hands of properly equipped and qualified medical personnel as quickly as possible to preserve life and limbs.

This paper is organized and designed to examine medical regulating as it has evolved, and what it means to the operational Commander (Chapter II). It defines service component and joint responsibilities and medical regulating along a continuum from area of operations to inter-theater
responsibilities (Chapters III and IV). It then looks at medical regulating during the Korean War (Chapter V) and lessons we should draw for a possible Korean scenario today (Chapter VI). I close with conclusions and recommendations drawn from the research.
Adequate medical regulating is important to the geographical Commander in Chief (CINC) for four primary reasons. First, the primary objective of health service support is to conserve the commander's fighting strength of land, sea and air forces. Aeromedical regulating, as a component of health service support becomes particularly critical to the CINC when early in the conflict aeromedical evacuation provides a substitute for extensive medical capability within the theater.

As the conflict continues, more medical assets become available both within and outside of the area of operations. Casualties will be regulated through different echelons of care. Medical regulating and aeromedical evacuation effectively extend the capability of combat medicine, allowing for the rapid treatment and return to duty of minor casualties and evacuation to the rear for those seriously injured. This system achieves the dual objectives of treating and returning to duty as many as physically possible, and evacuating out of the area of operations those in need of more definitive care.

Second, medical regulating is the CINC's mechanism to provide continuity of care, a necessary principle of medical support. The principle of continuity is to provide optimum, uninterrupted care and treatment to the wounded, injured and sick. This includes moving the patient to the appropriate echelons of care.
and providing treatment on the way. This can only be achieved when the system accommodates movement from the forward area of the combat zone to an area as far in the rear as the patients’ condition requires.³

Third, medical regulating is important to the CINC in that he must pay for medical care with spaces on aircraft and in rear area protection.⁶ Ultimately, the CINC is required to make difficult allocation of resource choices.

Medical planners argue, on the high ground of moral responsibility, that "...only if airlifters recognize that aeromedical evacuation is a valid airlift requirement will disaster be avoided in attending the sick and wounded."⁷ The airlifters have competing requirements based on assigned airlift missions. There is no easy formula for solving this problem. This was a lesson learned as recently as Desert Shield/Desert Storm and remains an issue today.⁸ The dilemma lies in that aeromedical evacuation is at once a medical and airlift mission and the CINC must balance these requirements against other competing airlift missions.⁹

Last but not least, medical care is a moral obligation.¹⁰ The American people have entrusted their youth to further the political objectives of their country and fully, and rightfully, expect their commanders to do everything in their power to care for those that serve their country. The CINC cannot meet this moral imperative without a well planned, operative medical regulating system.
This moral imperative is particularly relevant given the American way of fighting a war — limited, decisive, quick engagements with overwhelming use of force and minimum casualties. Medical evacuation of the sick and wounded hasn't always been held in such high regard. As recently as Operation Overlord in June 1944, the theater commander's policy was that "Patients evacuated by air were given no priority; therefore, areas receiving no supplies by air were unable to use airlift for patient evacuation." This approach would be unacceptable today as the CINC receives great moral pressure from the American public to care for every casualty to the greatest extent possible.
CHAPTER III

MEDICAL REGULATING IN THE AREA OF OPERATIONS

In this chapter, medical regulating is examined in the combat area of operations. This separation between area of operations, intra-theater and inter-theater evacuation is not entirely artificial since patient evacuation in the combat zone from point of injury to a medical treatment facility in the area of operations is normally the responsibility of the component commanders.¹ As will be shown in Chapter IV, intra-theater and inter-theater evacuation is a joint responsibility.

Furthermore, each component is tasked to provide sufficient medical treatment facilities (MTFs) to meet its own requirements along with all treatment and evacuation support in an area occupied exclusively by that component.² For this reason, in this chapter I will examine the MTFs used by each service and the service medical regulating doctrine. Realizing that each component maintains primary responsibility for service medical care and area of operations regulating, medical planners must be familiar with the health care systems of all other services including their assets, missions, capabilities, limitations and doctrinal employment.³

With today's smaller force structure and the imperative to win two Major Regional Contingencies (MRCs), medical care will increasingly become a joint, shared asset. This will aid in
ensuring efficient use of limited health service support resources, especially assets and beds. Particularly in a relatively small area of operations with a high number of casualties, shared assets will likely be mandated by the CINC.

A recent example of shared assets was in the use of Air Force Aeromedical Staging Facilities (ASFs) in Desert Shield/Storm. ASFs, not capable of triaging or providing emergency resuscitative medical care, needed additional support to hold patients at their facility. Consequently, a Marine Collecting and Clearing Company was used at one location while at another the Navy furnished the medical capability and the Air Force provided shelters. This shared use of assets can be anticipated in future conflicts.

Before directly addressing service component capabilities, it must be understood that there is a direct relationship between the delay in treating the wounded and mortality rates. Increased mortality rates result in fewer experienced warriors, thus reducing the operational commander’s combat power. Medical regulating in the area of operations is done primarily by ground transportation or helicopters. Clearly, aeromedical evacuation is preferred due to its speed and flexibility. The most significant advances to come out of military medicine in Vietnam were in the area of transportation, and not medicine. This refers to the use of the helicopter and the speed with which you can evacuate the wounded from point of injury to the appropriate level of care. In planning area of operations evacuation, the
services and the CINC need to keep in mind that helicopters save lives when they are made available for the aeromedical evacuation of patients.

**ECHELONS OF CARE**

The following table, demonstrating echelons of care and medical treatment facilities by service, is taken out of the *Doctrine for Health Service Support in Joint Operations*:

<table>
<thead>
<tr>
<th>FIRST ECHELON</th>
<th>ARMY</th>
<th>NAVY</th>
<th>USMC</th>
<th>USAF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>self/buddy aid</td>
<td>self/buddy aid</td>
<td>self/buddy aid</td>
<td>self/buddy aid</td>
</tr>
<tr>
<td>SECOND ECHELON</td>
<td>clearing stations</td>
<td>A/C carrier casualty rec and treat ship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOURTH ECHELON</td>
<td>Field Hosp Gen Hosp</td>
<td>Combz Flt Hosp Combz Fixed Hosp</td>
<td>Combz Flt Hosp Combz Fixed Hosp</td>
<td>Contin Hosp</td>
</tr>
</tbody>
</table>

*The U. S. Army*

The Army is capable of amassing significant medical assets in the area of operations. Clearing stations have some holding capability and emergency resuscitative services. Mobile Army
Surgical Hospital (MASH) units contain operating rooms and 60 beds. Combat Support Hospitals have additional operating rooms and 200 beds. Evacuation hospitals contain surgical specialties and 400 beds. Field and General Hospitals contain significantly more surgical and definitive care capability in a sterile environment.

The Army uses litters, ground ambulance, rotary wing and USAF fixed wing aircraft for evacuation. A unique element of the U. S. Army is the dedicated use of evacuation helicopters. Under the Army's new medical concept of employment, the integration of air and ground assets results in better utilization of assets, increased flexibility and better evacuation to the soldier. Using this concept, an evacuation battalion is established as a command and control element to coordinate air and ground evacuation units in the theater of operations. One air ambulance company is given to each division. This has one obvious advantage over simply assigning air transportation to a unit in time of war in that ambulance companies and air evac battalions train with the medical personnel using their UH-60 and UH-1 helicopters. Using this concept, Army evacuation personnel train the way they fight.

The U. S. Navy/Marine Corps

As defined by Navy doctrine, the objective of the medical regulating system is to influence the movement of casualties to the appropriate level of care without overloading any particular
medical treatment facility. The Navy, of course, can bring significant afloat medical capability along with Marine Corps echelon II assets and echelon III Fleet Hospitals on the ground.

The Navy/Marine Corps team can amass the following types of facilities and capabilities in the area of operations:

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Ors/ Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>USMC Collecting and Clearing Company</td>
<td>ORs/ 60 beds</td>
</tr>
<tr>
<td>USMC Surgical Support Company</td>
<td>ORs/150 beds</td>
</tr>
<tr>
<td>Fleet Hospital</td>
<td>ORs/250-500 beds</td>
</tr>
<tr>
<td>Various Amphibious and Carrier Assets</td>
<td>ORs/150-600 beds</td>
</tr>
<tr>
<td>Hospital Ship</td>
<td>ORs/1000 beds</td>
</tr>
</tbody>
</table>

The Navy/Marine Corps uses litter, ground ambulance, helicopter and USAF, USN and USMC fixed wing assets for evacuation. These assets represent great flexibility for the CINC. There are however, four noteworthy limitations. First, the fleet hospitals require a significant amount of time to set up and become operable. In Desert Shield/Desert Storm the three Fleet Hospitals required 35, 62 and 70 days respectively between the date of activation order and the date 500 bed capacity was achieved. Second, the hospital ships ability to support combat operations depends on helicopter access to the battlefield. Either the ship's distance or the combat forces distance from the the areas in and around the coastline (littoral areas) will impact on their effective use. This problem is particularly acute in an era where a number of potential enemies possess shore based surface to surface missiles, and the extensive use of mine warfare in the littoral areas. These considerations could remove the fleet hospital from the CINC's combat zone arsenal. A third
limitation is that at any time the amphibious ships and aircraft carriers could be required to pull out of range for tactical reasons. This too would remove a number of combat zone beds. Finally, the Marine Corps in particular uses a lift of opportunity concept for its helicopters. It has reasonably been argued that the doctrine of lift of opportunity for evacuating injured Marines is obsolete. Indeed, this could significantly delay treatment for wounded Marines, particularly in the early stages of an operation when the helicopters are most in demand to support the tactical situation.

The U. S. Air Force

The Air Force has less a problem with medical regulating in the area of operations because of its unique mission and capabilities. The Air Force more frequently finds itself in a supporting role for the other services at comparatively sophisticated bases of operation. Typically located at an airhead, wounded airmen have ready access to medical care positioned there. The Air Force contributes significantly to tactical evacuation by providing mobile aeromedical staging facilities that are used extensively be the Army, Navy and Marine Corps in the evacuation process.
For the CINC, medical regulating outside the area of operations can become a contentious allocation of resources issues. Whereas evacuation in the area of operations is largely a service component responsibility, intra and inter-theater medical regulating falls under the responsibility of the medical planners and airlifters on the USTRANSCOM and the supported CINC staff. Detailed planning is required between the medical planners and airlifters to ensure optimal use of limited airframes, which are often dedicated to strategic, tactical or logistics related missions.

The theater evacuation policy impacts directly on evacuation requirements as aeromedical evacuation system (AES) requirements are based on area of operations, intra-theater and inter-theater evacuation policies as outlined in the Defense Planning Guidance. These policies stipulate the maximum amount of time between hospitalization and evacuation from both the area of operations and the theater. In determining requirements, the OPLAN must be very clear on the population at risk and the evacuation disposition of civilians, allied forces and enemy prisoners of war to provide a clear, accurate estimate of requirements. Other planning factors include host nation support, level of intensity of conflict, and the time-phasing of medical assets into the theater of operations. Ultimately,
Aeromedical evacuation requirements are based on the number of airframes required to meet a shortfall in hospitalization. The policy must be flexible and adaptable to adjust to the changing tactical environment.

In defining responsibility, the Joint Medical Regulating Officer (JMRO), a member of the combatant CINCs staff, is responsible for ensuring that patients are regulated to facilities within the theater that can provide the required care. The JMRO must be fully aware of the bed status and capability of every military treatment facility (MTF) in the theater. Additionally, direct two-way communications between the MTFs and the JMRO afford the JMRO a true picture of AES requirements. Inter-theater evacuation is coordinated by the Armed Service Medical Regulating Officer (ASMRO). The ASMRO, a direct reporting unit of USTRANSCOM, performs a supporting role to the combatant CINC. Medical regulating roles then, are clearly defined through each echelon of care.

USTRANSCOM and the supported CINC must determine the requirement for use of dedicated fixed wing aircraft and their crews. The Civil Reserve Air Fleet (CRAF) is one option. The CRAF program is designed to quickly mobilize U. S. commercial aircraft for emergencies. All activated CRAF aircraft belong to USCINCFTRANS in wartime. In a future large scale combat operation, reservists would fly 95% of the wartime evacuation missions. At present there are 33 CRAF aircraft dedicated to aeromedical evacuation. 97% of the AE medical crews are
reservists. Additionally, 18% of medical personnel, 50% of strategic airlift crews and a significant percentage of aerial port personnel are reservists. Only the National Command Authority is authorized to initiate a reserve call up. This issue is being worked by USTRANSCOM with the goal of greater flexibility for the CINC in using the CRAF program. If not available, the supported CINC will be faced with using his own fixed wing assets for aeromedical evacuation out of the area of operations.

Additional USTRANSCOM initiatives include combining the medical regulating and air evacuation decision processes under one combatant commander. Ultimately, the goal is to integrate two fragmented systems into one global transportation network with USCINCTRANS as the DoD Single Manager for Inter-theater Medical Regulating. This system, incorporating theater to theater and OCONUS to CONUS regulating under USCINCTRANS, directly benefits the CINCs by offering greater control over two distinct systems, thus contributing to an improved medical regulating system and serving as a force multiplier by conserving the combat power of his fighting forces. An additional benefit is the more efficient use of fixed wing airframes, and resultantly, more airframes to carry out his other missions.
CHAPTER V
THE KOREAN WAR, 1950-1953

Medical planners must have statistics and factors from previous conflicts to forecast future requirements. Medical planning factors and statistics based on actual experience are necessary in the preparation and justification of the Army Medical Department resources to support contingencies.¹

For the reasons stated above, we examine some of the telling casualty, medical asset and evacuation data compiled from the Korean War years.

At 0400 on 25 June 1950, the Russian trained North Korean Army swept across the 38th parallel. U. S. Army units landed one week later.² Thus began our three year involvement in the Korean War. While not nearly as bloody as the World Wars that preceded it, it is perhaps more instructional for today's purposes given the possibility of a major regional contingency in Korea.

The U. S. Army averaged 207,851 soldiers per month in Korea, ranging from 29,610 during the first month of the war to 271,169 in July 1953 when an armistice was concluded.³ The other services had far fewer troops and a much less detailed medical history of the war. Admissions to all medical treatment facilities in Korea numbered 443,163 for all causes during the period of war. Of these 77,788 were wounded admissions and 365,375 disease and non-battle injuries.⁴ The leading causes of disease non-battle injuries were respiratory admissions (20%), ill-defined conditions (10%), infectious/parasitic conditions
(10%) and psychiatric conditions (9%). These four accounted for half of non-battle admissions.

For wounded patients, 35% were admitted for penetrating wounds, 23% for fractures and the majority of the others were contusions, cold injuries and sprains, strains or dislocations. 18,769 soldiers were killed in action. Of the total killed and wounded, 19.7% were killed and 80.3% wounded. This compares with World War II where 24.5% were killed and 75.5% wounded.

Having laid the groundwork in the number at types of injuries, we will move to a discussion of medical assets available. As previously stated, this plays an important in the number of evacuees within and outside of the area of operations.

Not surprisingly, during the initial stages of the campaign, hospital support was critically short. Within 6 months however, there were four Mobile Army Surgical Hospital (MASH) units, three 400 bed evacuation hospitals, four 400 bed field hospitals, one station hospital and three hospital ships. Intra-theater fixed medical treatment facilities were utilized nearby in Japan and Guam. This is a predictable trend that holds a valuable lesson for today's planners. Evacuation requirements will be greatest in the early months of a Korean conflict when casualties are highest and hospital capabilities the lowest.

Of the disease non-battle injury patients, the farther they were transported to the rear the less likely they were to return to duty, and the greater the chance of being evacuated off the peninsula. For battle injuries, very few of the patients seen
in third echelon Mobile Army Surgical Hospitals or Evacuation Hospitals (4% and 6% respectively), were returned to duty while 43% of those treated at a communication zone hospital returned to duty within the theater evacuation policy. An obvious lesson is to treat patients as far forward as possible to conserve the combat power of the fighting force. This is accomplished through effective triage, rapid treatment and evacuating the patient only as far to the rear as absolutely required by his condition in order to return to duty as many as possible. Additionally, treating patients at a forward facility lessens the requirement for aeromedical evacuation.

The theater evacuation policy at the beginning of the war was 21 days for hospitals in Korea and 120 days for hospitals in Japan and Guam. This represents the maximum number of days a patient was eligible to remain in those facilities prior to evacuation. In other words, if the patient’s stay was expected to be 22 days or more in Korea, he was evacuated off the peninsula. As expected, this evacuation policy changed throughout the conflict based on the number of casualties and the hospitalization assets in theater. In Japan, for example, the evacuation policy fluctuated from 120 days to 60, then 30 days before going back to and remaining at 120 days in January 1951.

The methods of evacuation also varied depending on the number of casualties, and the availability of hospitalization and evacuation assets. Using time from wounding to first hospitalization as a key indicator, effectiveness improved
dramatically as assets were brought into the area of operations and casualty figures stabilized. Considering six month periods at a time, the percentage hospitalized on the first day from July to December 1950 was 34%. This rose to 76% in January to June 1952. Clearly, the increased use of helicopters markedly improved this percentage.

As previously noted, this author was able to find very little detailed medical information on the evacuation of Marine Corps personnel. An interesting anecdote related by a Marine named Richard Newman is both interesting and informative on the method of evacuating Marines. "Four of my buddies carried me back a mile or so to the field hospital. Next they flew me to the hospital ship. From the hospital ship they flew me to Japan, then on to Oak Knoll Hospital in Oakland, CA." This story of one Marine takes us from initial point of injury through four echelons of care, using litter bearers, helicopters and fixed wing aircraft. His unfortunate travels take him from the forward edge of the battle area to a communication zone hospital and ultimately to CONUS, and provides us, in abbreviated form, a very detailed story of Marine Corps evacuation practices in Korea.
Why Korea? In an age of increasing regional tensions, there are none more threatening than Korea. The North Koreans possess an Armed Force of 1.2 million, with 5 million trained reserves. Not only are they the 5th largest Army in the world, but they have amassed 65% of their ground forces within 60 miles of the DMZ.¹ As recently as December 1993 General Shalikashvili, the Chairman of the U. S. Joint Chiefs of Staff, said "South Korean and American troops could halt a North Korean attack, but he could not guarantee the safety of Seoul, which is about 25 miles from the DMZ."² This is not particularly reassuring given that Seoul is the population center of the South and the numbers of American Forces and their families stationed from Seoul to the DMZ.

The Republic of Korea Army is about 600,000 strong.³ The U. S. has approximately 40,000 Armed Forces and their families stationed in South Korea.⁴ While the U. S. military presence is small relative to ROK strength, U. S. ground power represents 5.5% of the total combined power and U. S. air forces 30% of the combined air power.⁵

In defining the population at risk and the number of possible casualties to be cared for, it is important to understand the medical planning assumptions involved:
(1) Medical services are a national and service responsibility. U. S. citizens, allied forces and others will be provided care only to the extent resources are available.

(2) Allied forces will be stabilized and returned to national control.

(3) The civilian population will receive medical care only in extreme circumstances and not to interfere with treatment of U. S. Forces.

Having stated the population eligible, it must be understood that "tomorrow's combat will be, bullet for bullet, more deadly than ever before." The total number of casualties may not be as great however, if medical personnel are able to affect a decrease in the number of non-battle injuries treated in the Korean War. In World War I, World War II and the Korean War, three times more personnel were lost due to disease non-battle injuries than to combat. As seen during the Korean War, these losses were due in large part to respiratory illness, infectious/parasitic conditions and psychiatric illness. To the extent that these injuries can be prevented, it will reduce the burden of treatment and evacuation.

Medical assets in theater have increased markedly since the Korean War. These assets, coupled with the number of personnel that can be brought into theater, will determine the care
available and the aeromedical evacuation capability required. As defined in the Joint Operation Planning and Execution System (JOPES), planners must be fully aware of all peacetime operating, air transportable, pre-positioned materials and hospitals, fleet hospitals, corps and general hospital and hospital ships, and when they become operable. Armed with this information, the planner knows what’s available, and coupled with planned casualty estimates can plan medical regulating requirements.

In Korea, there are presently four peacetime operating medical treatment facilities, and three Naval Hospitals in the communication zone. Multiple dispersed medical assets throughout Pacific command include Korea, Alaska, Okinawa, Guam and Hawaii. For planning purposes, all U. S. hospitals, including hospital ships are considered joint assets.

The basic concept of operations for medical regulating includes the services who are responsible through echelon III, the Assistant Joint Medical Regulating Officer - Korea (AJMRO-K) and the Joint Medical Regulating Officer (JMRO), Pacific Command who are responsible for intra-theater movement, and the Armed Services Medical Regulating Officer (ASMRO), who is a member of USTRANSCOM and coordinates inter-theater movement. Detailed coordinating instructions are included in the CINCPAC Operations Plan for Korea.

Each of the services has certain strengths and weaknesses that they bring to the medical regulating table. In Chapter II it was noted that the medical regulating issue impacts the CINC
in the use and allocation of airframes. This issue is highlighted in the Operational Plan for Korea. The CINC has made the following taskings to meet joint requirements:

**COMUSFORK:** Provide rotary wing tactical air ambulance support for all Services on the peninsula and for the hospital ships.

**CINCPACAF:** Provide 5 C-130 aeromedical evac missions daily to C+40, and 6 thereafter.
Provide 3 C-141A missions daily to C+30, and 12 thereafter.
Provide 3 C-9A aircraft dedicated to aeromedical evacuation.

**USTRANSCOM:** provide strategic and tactical aeromedical evacuation system assets to support the OPLAN.

Despite the service specific nature of area of operations medical regulating, the CINC has identified a weakness in rotary wing capability in the Navy and Marine Corps and has tasked COMUSFORK to provide this support. He has also determined that fixed wing aeromedical evacuation is important enough that he tasked the Air Force with a significant dedicated airframe requirement. As an editorial comment, this demonstrates the beauty of operating in a joint environment under the control of a single commander.

Although classified, the evacuation policy is set by the SECDEF upon the advice of the Chairman, JCS and the theater combatant commander and is described in Annex Q of the OPLAN. It is flexible and changes as the tactical situation shifts. Obviously, there is an inverse relationship between the evacuation policy and the amount of aeromedical evacuation assets required.
We can be sure that the opening days and weeks in a future Korean War, as we saw in 1950, would produce a significant number of casualties. The North Koreans will attack with SCUDs and artillery fire capable of hitting any target on the peninsula, heavy mechanized infantry down the two corridors leading into the South, and up to 60,000 special forces opening a second front behind the lines at night and under inclement weather conditions. Using surprise and heavily offensive tactics, the North Koreans will surely inflict huge numbers of casualties up and down the peninsula. Not only will our Forces need treatment, but we will be faced with allied forces, U. S. civilians and possibly dependents of U. S. Armed Forces personnel. It will require all the good planning, rapid response capability and courage that U. S. Forces can muster to 'stop the bleeding' and hopefully evacuate the wounded from the peninsula.
Although relatively narrow in scope, this paper has addressed a number of important medical regulating issues. Based on the discussion and analysis I propose the following seven recommendations to improve the combat power of supported CINCs:

1. The medical departments of each service need to adequately address the large number of disease non-battle injuries (DNBIs) we have historically faced in wartime. As noted in the Korean War, the U. S. had 365,675 DNBIs. This represented nearly 80% of all morbidity. DNBIs deplete combat power, overburden the medical treatment and medical regulating systems, and require unwarranted time and resources away from the treatment of the wounded. Not all are preventable but some possible areas to research further include the use of cold weather gear, troop discipline/education and possible prophylaxis to combat disease.

2. The danger of operating amphibious, and particularly hospital ships in the littoral areas of a conflict needs to be addressed and planned for. The use of mine warfare and shore-based surface to surface missiles may remove a significant number of planned hospital beds if this issue cannot be resolved. If the hospital ships cannot get close to the littorals to receive
helicopter transported patients, they are rendered useless as a treatment platform. This is particularly relevant to a peninsula like Korea where a significant amount of medical assets will be afloat.

3. The rapid deployment and utilization of medical assets when developing the Time Phased Force Deployment List must be continually driven home by medical planners. Given the likelihood of a rapid, highly offensive attack by the North Koreans across the DMZ, it is particularly important to get medical assets in theater early to treat those already in need of treatment. The early use of medical facilities saves life and limb, and reduces the burden on the evacuation system.

4. Despite its limitations, the National Command Authority, CINCUSTRANS and the combatant CINC's should consider the use of the Civil Air Reserve Fleet (CRAF) for medical evacuation early in the conflict. This can not only improve fixed wing evacuation, but frees CINC transportation assets to execute the campaign.

5. The issue of dedicated evacuation helicopters for Fleet Marine Force medical units needs to be readdressed. It has been shown repeatedly that the helicopter is far preferable to the ground ambulance in getting early, proper treatment for the wounded. In the Korean Plan, the CINC has tasked COMUSFORK to
provide this service. This may be viable due to the relatively small size of the area of operations. When the Army is operating far distant from the Marine Corps, this arrangement could significantly degrade Army air ambulance assets.

6. The status of dependents, civilians and allied forces can be a serious overburden to the medical departments. Given that U. S. Forces are to be treated first, I suggest we would have a very difficult, if not impossible time, turning away diseased and wounded dependents, U. S. civilians and allied forces. This is particularly worrisome in Korea with a large dependent population and the certainty of high casualties during a North Korean blitzkrieg at night, with little warning. Medical care as a service and a national responsibility with active duty having first priority does not obviate the likelihood that these other categories of diseased and wounded will need to be treated. This has to be addressed and planned for.

7. While I haven't discussed the possibility of NBC warfare in Korea, it is a serious issue that needs to be addressed. As evidenced by almost daily news reports, it is highly probable that the North Koreans already possess a nuclear weapons capability. It is estimated that the North Koreans would use biological and chemical weapons against our airfields to take away our air superiority. If we were unable to use our technological superiority we would be hard pressed to halt their
offensive or use fixed wing aircraft for aeromedical evacuation. We need to plan alternative strategies for these real possibilities.

These are but some of the difficult issues that need to be addressed by the National Command Authority, CINCs, service components and medical planners. These problems are complex but the risks associated with the loss of combat power resulting from inadequate or incomplete plans are too high to not consider alternate scenarios or solutions. They ultimately impact on the supported CINC's ability to accomplish national security objectives in his AOR.

CONCLUSIONS

In executing an Operational Plan the operational artist has myriad, complex responsibilities. He needs to stay focused on the strategic objective emanating from the execution of his operational plan. He must satisfactorily answer the questions of how to best use joint force resources to accomplish the mission at minimal costs and risks.

In a medical regulating context, I have shown that the CINC must make hard choices in the use of limited airframes. The cost of not doing so can mean loss of life and limb for many of the Forces entrusted to his stewardship. This is an unacceptable risk. The hard choice has been made by CINCPAC to dedicate tactical and strategic aircraft that could otherwise be used to
execute the campaign. Given the American way of war, this is the only acceptable choice today to the American people.

In dedicating fixed and rotary wing airframes, not only is the CINC meeting his moral obligation to care for his Forces, but he also effectively conserves the fighting power of his combat force. Getting sick and wounded personnel the appropriate treatment in a timely manner greatly increases the return to duty rate of experienced warriors.

A viable, well-planned medical regulating system is necessary to the CINC in meeting his requirement to conserve the combat power of an experienced fighting force. Only he can adequately direct the joint use of resources to meet the mission requirements of a joint campaign. In answering the question of 'so what?' -- does good regulating really matter to the CINC, I have shown that it is not only important and necessary, but that it is a moral obligation that the CINCs take very seriously.
NOTES

Chapter I


Chapter II


3. Ibid., p. 52.


5. Ibid., p. 7.


7. Ibid., p. 59.

8. Joint Universal Lesson Learned Number 32111-28889.


Chapter III


2. Ibid., p. I-17.


5. Joint Universal Lessons Learned 32115-20733.


10. Ibid., p. II-5.


12. Ibid., p. 10.


15. Ibid., p. 1-6.

16. Center for Naval Analyses, Naval Studies Group, Desert
p. 11.

17. Joint Universal Lessons Learned 32082-85604.

18. Terrence Riley, "Medical Service in the FMF: Time For a

19. Department of the Army, Health Service Support in a
Theater of Operations, Field Manual 8-10 (Washington DC: 1992),
p. II-5.

Chapter IV

1. Joint Chiefs of Staff, Joint Operation Planning and
Execution System: Volume II, Joint Pub 5-03.2, Annex Q,

2. Ibid., p. III-525.

3. Joint Chiefs of Staff, Doctrine for Health Service
Support in Joint Operations, Joint Pub 4-02 (Washington: 1993),
p. II-11.

4. Ibid., p. III-525.

5. Joint Chiefs of Staff, Doctrine for Health Service
I-12.

6. Joint Chiefs of Staff, Doctrine for Health Service
Support in Joint Operations, Joint Pub 4-02, (Washington: 1993),
p. I-12.

7. Department of Defense, Armed Services Medical

8. Ibid., p. I-12.

9. Interview with Commander Frank, MSC, USN, Medical Staff,
U. S. Transportation Command, Scott Air Force Base, IL: 20
December 1993.

1990, p. 88.


13. Interview with Commander Frank, MSC, USN, Medical Staff, U. S. Transportation Command, Scott Air Force Base, IL: 20 December 1993.


15. Ibid., p. 20.

Chapter V

1. Frank A. Reister, Battle Casualties and Medical Estimates, Department of the Army, Washington: 1973, p.iii.

2. Ibid., p. 1.

3. Ibid., p. 2.

4. Ibid., p. 5.

5. Ibid., p. 10.

6. Ibid., p. 8.

7. Ibid., p. 35.

8. Ibid., p. 58.

9. Ibid., p. 58.

10. Ibid., p. 62.

11. Ibid., p. 70.

12. Ibid., p. 70.

13. Ibid., p. 82.

14. Ibid., p. 82.

15. Ibid., p. 82.


Chapter VI


4. Ibid., p. 94.

5. Ibid., pp. 147-8.


BIBLIOGRAPHY


Department of the Navy. Operational Medical and Dental Support, Naval Warfare Publication - 6(C), Washington:1989.


Interview with CDR Frank, MSC, USN, Medical Staff, U. S. Transportation Command, Scott Air Force Base, IL: 20 December 1993.


