

EXHIBIT 13

S. HRG. 103-845

**POLICY CONCERNING HOMOSEXUALITY IN THE
ARMED FORCES**

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

**FIRST⁹
~~SECOND~~ SESSION**

MARCH 29, 31; APRIL 29; MAY 7, 10, 11; JULY 20, 21, 22, 1993

Printed for the use of the Committee on Armed Services



U.S. GOVERNMENT PRINTING OFFICE

67-701 CC

WASHINGTON : 1994

S201-13

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-046288-8

COMMITTEE ON ARMED SERVICES

SAM NUNN, Georgia, *Chairman*

J. JAMES EXON, Nebraska	STROM THURMOND, South Carolina
CARL LEVIN, Michigan	JOHN W. WARNER, Virginia
EDWARD M. KENNEDY, Massachusetts	WILLIAM S. COHEN, Maine
JEFF BINGAMAN, New Mexico	JOHN MCCAIN, Arizona
JOHN GLENN, Ohio	TRENT LOTT, Mississippi
RICHARD C. SHELBY, Alabama	DAN COATS, Indiana
ROBERT C. BYRD, West Virginia	BOB SMITH, New Hampshire
BOB GRAHAM, Florida	DIRK KEMPTHORNE, Idaho
CHARLES C. ROBB, Virginia	LAUCH FAIRCLOTH, North Carolina
JOSEPH I. LIEBERMAN, Connecticut	KAY BAILEY HUTCHISON, Texas
RICHARD H. BRYAN, Nevada	

ARNOLD L. PUNARO, *Staff Director*

RICHARD L. REYNARD, *Staff Director for the Minority*

CONTENTS

CHRONOLOGICAL LIST OF WITNESSES

HISTORICAL AND LEGAL BACKGROUND

MARCH 29, 1993

	Page
Burrelli, Dr. David F., Analyst in National Defense, Foreign Affairs and National Defense Division, Congressional Research Service, Library of Congress	6
Schlucter, Professor David A., School of Law, St. Mary's University	95
Saltzburg, Professor Steven A., National Law Center, George Washington University	127
Dale, Charles, Legislative Attorney, American Law Division, Congressional Research Service, Library of Congress	149

THE ROLE OF UNIT COHESION IN DEVELOPING COMBAT EFFECTIVENESS

MARCH 31, 1993

Henderson, William Darryl, former Commander of the Army Research Institute, author of "Cohesion: The Human Element in Combat"	248
Korb, Lawrence J., Director of the Center for Public Policy, Education and Senior Fellow in the Foreign Policy Studies Program at the Brookings Institution	255
Marlowe, David H., Chief, Department of Military Psychiatry, Walter Reed Army Institute of Research	261

THE EXPERIENCE IN FOREIGN COUNTRIES

APRIL 29, 1993

Moskos, Dr. Charles C., Professor of Sociology, Northwestern University	349
Segal, Dr. David R., Professor of Sociology, University of Maryland	354
Stiehm, Dr. Judith H., Professor of Political Science, Florida International University	365
Waller, Lt. Gen. Calvin, U.S. Army (Retired)	399

TESTIMONY FROM MEMBERS OF THE SENATE

MAY 7, 1993

Metzenbaum, Hon. Howard M., a United States Senator from the State of Ohio	457
Murkowski, Hon. Frank H., a United States Senator from the State of Alaska	469
Kerry, Hon. John F., a United States Senator from the State of Massachusetts	476
Boxer, Hon. Barbara, a United States Senator from the State of California	484
Burns, Hon. Conrad, a United States Senator from the State of Montana	501
Feinstein, Hon. Dianne, a United States Senator from the State of California	508

IV

Page

TESTIMONY FROM MILITARY MEMBERS IN CONJUNCTION WITH THE COMMITTEE
FIELD VISIT TO THE NORFOLK NAVAL COMPLEX

MAY 10, 1993

McElfresh, Petty Officer First Class Ginger, U.S. Navy	522
Portes, Petty Officer Second Class Al, U.S. Navy	523
Taylor, Master Chief Tommy, U.S. Navy	525
Schafer, Master Chief Harry, U.S. Navy	526
Carter, Fleet Master Chief Ronald, U.S. Navy	528
Burnham, Lt. John, U.S. Navy	538
Frey, Lt. Fred, U.S. Navy	539
Pledger, Comdr. James, U.S. Navy	541
Hutton, Comdr. Lin, U.S. Navy	543
Holder, Capt. Gordon, U.S. Navy	544
Selland, Richard Dirk, LTJG, U.S. Navy	558
Thorne, Tracy W., LTJG, U.S. Navy	560
Jenisch, Sgt. Brian, U.S. Marine Corps	581
Forrest, 1st Sgt. Richard, U.S. Marine Corps	582
Wolf, Capt. David, U.S. Marine Corps	583
Fulham, Capt. Gary, U.S. Marine Corps	584
Hartsell, Capt. Scott, U.S. Marine Corps	586

TESTIMONY FROM THE CURRENT AND FORMER MEMBERS OF THE MILITARY
SERVICES REGARDING DOD POLICY ON HOMOSEXUALITY IN THE ARMED FORCES

MAY 11, 1993

Schwarzkopf, Gen. H. Norman, USA (Ret.)	594
Peck, Col. Frederick, USMC	599
Bergeron, Maj. Kathleen, USMC	602
Borne, Command Master Chief David, U.S. Navy	605
Cammermeyer, Dr. Margarethe, former Colonel, Chief Nurse, Washington Army National Guard	646
Amidon, Chief Petty Officer Stevens R., U.S. Navy	654
Paniccia, Thomas, former Staff Sergeant, U.S. Air Force; accompanied by Mark Freeze, Esq.	659
Elzie, Sgt. Justin, USMC; accompanied by Lanny Breuer, Esq.	664

DOD POLICY ON HOMOSEXUALITY IN THE ARMED FORCES

JULY 20, 1993

Aspin, Hon. Les, Secretary of Defense; accompanied by Gen. Colin L. Powell, USA, Chairman, Joint Chiefs of Staff; Adm. David E. Jeremiah, USN, Vice Chairman, Joint Chiefs of Staff; Gen. Gordon R. Sullivan, USA, Chief of Staff, U.S. Army; Gen. Carl E. Mundy, Jr., USMC, Commandant of the Marine Corps; Adm. Frank B. Kelso II, USN, Chief of Naval Oper- ations; and Gen. Merrill A. McPeak, USAF, Chief of Staff, U.S. Air Force	700
Powell, Gen. Colin L., USA, Chairman, Joint Chiefs of Staff	707

DOD POLICY ON HOMOSEXUALITY IN THE ARMED FORCES

JULY 21, 1993

Otjen, Major General, Deputy Inspector General for Inspections, USA, Senior Member, Military Working Group accompanied by Brig. Gen. Jerry Miller, USMC; Rear Adm. J. Scott Redd, USN; Maj. Gen. Burt Davilte, U.S. Air Force; and Rear Adm. James M. Loy, USCG, Members, Military Work- ing Group	768
Gorclick, Jamie, General Counsel, Department of Defense accompanied by Maj. Leigh Bradley, USAF and Capt. Kim Keating, USN	768

DOD POLICY ON HOMOSEXUALITY IN THE ARMED FORCES

Page

JULY 22, 1993

Gorelick, Hon. Jamie S., General Counsel, Department of Defense; accompanied by Maj. Gen. John P. Otjen, Senior Member, Military Working Group; and Capt. Tim Keating, U.S. Navy, Legal Advisor to the Military Working Group	804
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----

POLICY CONCERNING HOMOSEXUALITY IN THE ARMED FORCES

WEDNESDAY, MARCH 31, 1993

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

THE ROLE OF UNIT COHESION IN DEVELOPING COMBAT EFFECTIVENESS

The committee met, pursuant to notice, at 9:33 a.m. in room SH-216, Hart Senate Office Building, Senator Sam Nunn (chairman) presiding.

Committee Members present: Senators Nunn, Exon, Levin, Kennedy, Bingaman, Glenn, Shelby, Robb, Lieberman, Thurmond, Warner, Cohen, McCain, Lott, Coats, Smith, Kempthorne, and Faircloth.

Committee staff members present: Arnold J. Punaro, staff director, Andrew S. Efron, general counsel, Richard D. DeBobes, counsel, Madelyn R. Creedon, counsel, and Elizabeth I. Solomon, research assistant.

Professional staff members present: John J. Hamre, David S. Lyles, and Frederick F.Y. Pang.

Minority staff members present: Anthony J. Principi, minority staff director, Romie L. Brownlee, deputy staff director for the minority, William H. Wisecarver III, minority counsel, Charles S. Abell, Ronald P. Kelly, George W. Lauffer, and Durwood W. Ringo, Jr., professional staff members.

Staff assistants present: Barbara L. Braucht, Menge Crawford, Debra W. Crnkovic, Melinda M. Koutsoumpas, Mary J. Kyle, Cindy Pearson, and Diane E. Schratz.

Committee members' assistants present: Andrew W. Johnson, assistant to Senator Exon; David A. Lewis, assistant to Senator Levin; Gare A. Smith, assistant to Senator Kennedy; John P. Gerhart, assistant to Senator Bingaman; Phillip P. Upschulte and Suzanne M. McKenna, assistants to Senator Glenn; Terence M. Lynch, assistant to Senator Shelby; Melvin G. Dubee and Lisa W. Tuite, assistants to Senator Byrd; Jeremiah J. Gertler, assistant to Senator Robb; Thomas R. Parker, assistant to Senator Lieberman; Dale F. Gerry and James M. Bodner, assistants to Senator Cohen; Anthony H. Cordesman and Christopher J. Paul, assistants to Senator McCain; Samuel D. Adcock, assistant to Senator Lott; Pamela G.D. Sellars, assistant to Senator Coats; Thomas L. Lankford, assistant to Senator Smith; and David S. Sullivan, assistant to Senator Faircloth.

OPENING STATEMENT OF SENATOR SAM NUNN, CHAIRMAN

Chairman NUNN. The committee will come to order. The Armed Services Committee meets this morning to continue our hearings on the Defense Department's policy with respect to the service of gay men and lesbians in our Nation's Armed Forces.

At Monday's hearings, I indicated that the committee's primary focus and concern should be, in my opinion, on the implications of any changes in the current policy on the effectiveness of our Armed Forces to carry out their mission to defend our Nation's security.

Historians and social scientists agree that one of the key ingredients of combat effectiveness of military units is cohesion—the establishment of close relationships of trust among soldiers that make the combat capability of a unit greater than the sum of its individual parts.

Our witness at Monday's hearing pointed out that these relationships of trust—what one of our witnesses today calls, "the need not to let your buddy down," are a critical element in a unit's ability to fight. Experts tell us that if you degrade or destroy a military unit's cohesion and discipline, you degrade or destroy the fighting effectiveness of that unit.

Our hearing this morning will give the committee a better understanding of the importance of cohesion and discipline in developing and maintaining combat effectiveness in the Armed Forces. Each of our three witnesses brings impressive credentials to discuss this subject.

Dr. Darryl Henderson is the former commander of the Army Research Institute and the author of the book, "Cohesion: The Human Element in Combat." Before turning his efforts in the Army to the study of combat effectiveness through research on the training and development of soldiers, Dr. Henderson served as an infantry platoon and company commander in Vietnam, where he earned the Bronze Star, the Purple Heart, and the Combat Infantryman's Badge. He was also seriously wounded in the throat by North Korean soldiers in the DMZ in 1975.

When Dr. Henderson speaks of the importance of morale, discipline, and cohesion in combat effectiveness, he speaks from personal as well as academic experience.

Dr. Lawrence Korb is well-known to this committee, and Dr. Korb, we welcome you back this morning. You have been helpful on many occasions before this committee. During President Reagan's administration, Dr. Korb served as Assistant Secretary of Defense for Manpower, Reserve Affairs and Logistics from 1981 to 1985. He served 4 years on active duty as a naval flight officer, and retired from the Naval Reserve with the rank of captain.

Dr. Korb is a recognized expert on military manpower and readiness issues. He currently serves as director of the Center for Public Policy Education and senior fellow in the foreign policy studies program at the Brookings Institute.

Dr. David Marlowe is the chief of the department of military psychiatry at Walter Reed Army Institute of Research. Dr. Marlowe is one of the Nation's leading experts on the study of stress, adaptation, cohesion, and psychological readiness for combat. He has carried out extensive field studies of morale and cohesion in the Army,

including most recently among Army units deployed to the Persian Gulf during Operation Desert Shield and Desert Storm.

We welcome each of you here today to the committee, and we have asked each of our witnesses to discuss the recent social science research carried out in the area of unit cohesion. We have longer statements of each of our witnesses that we will incorporate in the record, and I understand they are going to present their statements somewhere in the 20- to 30-minute time frame, so that would give us a chance to have plenty of time for questions.

We have also asked each of them to give us their views on the importance of cohesion to the effectiveness of combat units, and on the factors that contribute to or detract from that unit cohesion.

Before hearing from our witnesses—I do not see Senator Thurmond here. I am sure he is coming in a few minutes—but Senator Warner, if you have any opening remarks—

Senator WARNER. I would allow the ranking member to give the statement, Mr. Chairman.

Chairman NUNN. Before we get started on this, we have, of course, a need to confirm as many people as we can before we go for recess, and all of us have been waiting anxiously getting confirmations over in the Defense Department, which have been rather slow coming.

We have an opportunity this morning, with a quorum being present, to confirm Dr. John Deutch of Massachusetts to be Under Secretary of Defense for Acquisition.

Senator KENNEDY. Mr. Chairman, I am delighted to make the nomination for Mr. Deutch. He is well-qualified for that position.

Senator WARNER. I second the nomination.

Chairman NUNN. A motion by Senator Kennedy, seconded by Senator Warner. All in favor, signify by saying aye. [A chorus of ayes.]

Opposed. [No response.]

The motion carries. The FBI report I have reviewed, I believe that Senator Thurmond has, but we will make sure he has before we send the nomination to the floor.

We also have a nomination of Vice Adm. Roger Bacon, U.S. Navy, to retire. Senator Warner, would you like to make the motion on that?

Senator WARNER. So moved.

Chairman NUNN. Is there a second?

Senator GLENN. I second.

Chairman NUNN. All in favor, signify by saying aye. [A chorus of ayes.]

Opposed. [No response.]

The motion carries. Thank you.

Dr. Henderson, we will start with you, and if you could just speak right into the mike—take your time. We have got plenty of time. Do not feel rushed, and speak directly into the microphone and we will be able to hear you.

**STATEMENT OF WILLIAM DARRYL HENDERSON, FORMER
COMMANDER OF THE ARMY RESEARCH INSTITUTE, AUTHOR
OF "COHESION: THE HUMAN ELEMENT IN COMBAT"**

Dr. HENDERSON. Thank you, Mr. Chairman, members of the committee. It is a pleasure for me to appear here today.

I have been asked to appear before you and discuss cohesion and its significance for combat motivation and unit effectiveness. Much research has been accomplished on cohesion. My statement on why soldiers fight summarizes much of what this research has found. In the final analysis, the nature of the relationship among soldiers in combat is a critical factor in combat motivation. It is also a critical question for the issue before this committee.

Because my statement is necessarily brief, I have included a bibliography and will be prepared to answer questions.

The analysis of modern warfare in terms of who wins, who loses, and why, has traditionally been divided into four broad elements: strategy, weapons and materials, technology, and 4) the human element—that is, soldiers, their numbers, quality, and their motivation.

Of these four broad factors, the human element has long been considered the most crucial for winning wars. Military strategists from Clausewitz to Napoleon to Ho Chi Minh recognize the importance of the human element in winning wars.

The real question is why soldiers fight. What causes soldiers to repeatedly expose themselves to the most lethal environment known, instead of taking cover or leaving the area as quickly as possible?

Combat motivation is not a mythical force that emerges on the battlefield. It must be developed and maintained well in advance of any war. Beginning with World War II, the complexity of combat motivation began to be realized, and earlier references to morale, elan, and esprit de corps, gave way to the concept of cohesion.

Cohesion may be defined as the condition that exists in a unit when their primary values and day-to-day goals of the individual soldier, of the small group with which he identifies, and of unit leaders, are congruent, with each giving his primary loyalty to the group so that it trains and fights as a unit, with all members willing to risk death and achieve a common objective.

Research by Shils and Janowitz on the Wehrmacht and by Stouffer, et al., on the U.S. Army during World War II began an intense research effort that has found the concept of cohesion to be a central factor in explaining outcomes of most wars since World War II.

Cohesion research in Korea, Vietnam, and the Falklands War, for example, as well as extensive research in Israel affirms the overriding importance of the human element in cohesion in determining which side wins the war. Most recently, extensive and detailed research done at the U.S. Army Research Institute and at the Walter Reed Institute succeeded in measuring and evaluating cohesion in the U.S. Army and the U.S. Army combat units.

A quote by S. L. A. Marshall illustrates the findings and significance of cohesion: "I hold it to be one of the simplest truths of war that the thing which enables an infantry soldier to keep going with

his weapon is the near presence or the presumed presence of a comrade."

Another quote by Alexander George summarizes soldier motivation during the Korean War: "The most significant persons for the combat soldier are the men who fight and share with him the ordeal of trying to survive."

A central finding of cohesion research is that the nature of modern war dictates that small-unit cohesion is the only force capable of causing soldiers to expose themselves repeatedly to enemy fire in the pursuit of unit objectives.

The confusion, danger, hardship, dispersion, and isolation of modern war requires that soldiers, sailors, and airmen in combat be controlled and led through an internalization of soldier values and personal operating rules that are congruent with the objective, goals, and values of the organization. For this reason, the significance of the small group or unit to which the soldier belongs can hardly be overstated.

The small group develops strong rules of behavior and expectations about individual conduct on the basis of dominant face-to-face relationships, and becomes the immediate determinant for the soldier's behavior. The soldier's loyalty to the small group and the group's expectation that he will advance under fire is the only reliable force on the battlefield capable of causing the soldier to expose himself repeatedly to the dangers of war.

This behavior represents the internalization of strong group values and norms that causes the soldier to conform to unit expectations even when separated from the unit. The soldier with a strong moral commitment to his unit sees himself in battle or in day-to-day routine as part of a small, intimate group, represented by a few buddies on his left and right, or in the same vehicle, or in a crew compartment with a sergeant or junior officer who is near.

The normative power of the group causes a strong personal commitment on the part of the soldier to conform to group expectations, that doing so is the responsible thing to do, and that conformity is expected in spite of the fact that the soldier would personally prefer to be elsewhere doing something else.

Such commitment is common in well-led and trained units. The need not to let your buddies down is the strongest type motivation that allows soldiers to endure the repeated dangers and hardships of war.

The internal small-group process that results in this type of soldier motivation is complex. It is requisite that the small unit becomes a soldier's primary social group which dominates all other influences on the soldier, and controls the soldier's day-to-day behavior. In addition to providing security, the unit is also the major source of esteem and recognition for the soldier as well as providing a strong sense of mutual affection and attraction among unit members.

Numerous researchers have found out that the creation of a cohesive unit with these characteristics is significantly influenced by broad cultural values, norms, and characteristics that are the result of a common socialization process and basic agreement among unit members about cultural values.

A significant characteristic about a cohesive unit is the constant observation and evaluation of the behavior of unit members. Any deviation from unit norms, values, or expected behavior brings immediate and intense group pressures to conform to group norms. If the behavior is not corrected, then cleavage results in the group and cohesion is weakened. If the situation occurs in combat, where survival is threatened, then the group can be expected to expel or somehow separate or isolate the nonconforming individual.

In brief, research indicates that the soldier will be strongly bound to the primary group or unit so long as it is capable of satisfying the soldier's physical, security, and social needs and there is broad agreement within the group about basic cultural and political values.

Cohesion is often characterized and described as having two components: horizontal cohesion and vertical cohesion. Horizontal cohesion refers to the strength and characteristics of the bonding among the soldiers of a unit, while vertical cohesion refers to the bonding between soldiers and leaders.

Core soldier values that dominate soldier behavior and control the soldier's day-to-day actions in a cohesive unit are the results of an intense military resocialization process. Fighting skill, physical fitness, stamina, and self-discipline, teamwork, duty or selfless service, and loyalty to unit and leaders are the primary core soldier values and can be used to assess the strength of horizontal cohesion in a unit.

To understand vertical cohesion and the bonding that occurs between soldier and leader in a cohesive unit, one must answer the question, why do soldiers follow leaders into combat?

Much of the answer rests on the personal qualities of the leader, whether he is a noncommissioned or a commissioned officer. Military leadership involves enduring and primary personal relationships between leader and soldier.

In combat, few personal relationships surpass the close and intense relationship that develops between the leader and soldiers in a high-performing cohesive unit. Soldiers in danger when survival is threatened become acutely aware of the qualities of their leaders. Soldiers desire strong leaders who are capable of dealing with dangerous situations.

The successful leader has many sources of power that cause the soldiers to follow. Leaders have coercive power, reward powers, and power that comes from the control of information, as well as individual expertise in military skills.

The most potent source of a leader's power, however, is the leader's ability to cause that soldier to identify with the leader. This is often referred to as a leader's referent power. Successful officers and noncommissioned officers in cohesive units relay a strong sense of personal care, competence, and security to their soldiers which relieves soldier anxiety and gains a degree of influence and control over members of their units often associated with charismatic leaders.

To quote from research published in 1985, "The key to achieving this quality of leadership is similarity of values among soldiers and leaders. Such powerful leadership is most dependent on close personal relationships between leaders and subordinate soldiers. Its

great influence stems directly from the intense identification of the soldier with his immediate leader.

"Often, the leader approaches the stature of a loved and respected parent, or of the charismatic leader who demonstrates consistently the Weberian quality of grace, or the ability to consistently handle difficult situations well. "Such referent power is based on the satisfaction of the soldier's personal need for affection, recognition and security through strong identification with a respected leader who has successfully led his unit through situations of danger and hardship. In cohesive armies, the formation of such close ties between soldiers and leaders is not a matter of individual initiative or change, but of official policy."

That concludes my statement, Mr. Chairman. I would be happy to answer questions later.

[The prepared statement of Dr. Henderson follows:]

PREPARED STATEMENT BY DR. WILLIAM DARRYL HENDERSON

WHY SOLDIERS FIGHT

The analysis of modern warfare in terms of who wins, who loses, and why, has traditionally been divided into four broad elements. 1. Strategy 2. Weapons and Materials 3. Technology, and, 4. the Human Element: that is, soldiers—their numbers, quality, and motivation. Of these four factors, the human element has long been considered the most crucial for winning wars. Military strategists, from Clausewitz and Napoleon to Ho Chi Minh, recognized the importance of the human element in winning wars.

The real question is why soldiers fight? What causes soldiers to repeatedly expose themselves to the most lethal environment known instead of taking cover or leaving the area as quickly as possible? Combat motivation is not a mythical force that emerges on the battlefield. It must be developed and maintained well in advance of any war. Beginning with World War II, the complexity of combat motivation began to be realized and earlier references to morale, elan and esprit de corps, gave way to the concept of cohesion. Cohesion may be defined as the condition that exists in a unit when the primary values and day-to-day goals of the individual soldier, of the small group with which he identifies, and of unit leaders are congruent—with each giving his primary loyalty to the group so that it trains and fights as a unit with all members willing to risk death to achieve a common objective. Research by Shils and Janowitz on the Wehrmacht and by Stouffer et al. on the U.S. Army during World War II began an intense research effort that has found the concept of cohesion to be a central factor in explaining outcomes of most wars since World War II. Cohesion research in Korea, Vietnam, and the Falkland's war, for example, as well as extensive research in Israel affirms the overriding importance of the human element and cohesion in determining which side wins the war. Most recently, extensive and detailed research done at the U.S. Army Research Institute and Walter Reed, succeeded in measuring and evaluating cohesion in U.S. Army combat units.

A quote by S.L.A. Marshall illustrates the findings and significance of cohesion. "I hold it to be one of the simplest truths of war that the thing which enables an infantry soldier to keep going with his weapon is the near presence or the presumed presence of a comrade." Another quote by Alexander George summarizes soldier motivation during the Korean war. "The most significant persons for the combat soldier are the men who fight and share with him the ordeal of trying to survive."

A central finding of cohesion research is that the nature of modern war dictates that small-unit cohesion is the only force capable of causing soldiers to expose themselves repeatedly to enemy fire in the pursuit of unit objectives. The confusion, danger, hardship, dispersion, and isolation of modern war requires that soldiers, sailors, and airmen in combat be controlled and led through an internalization of soldier values and personal operating rules that are congruent with the objectives, goals, and values of the organization. For this reason, the significance of the small group or unit to which the soldier belongs can hardly be overstated. The small-group develops strong rules of behavior and expectations about individual conduct on the basis of dominant face-to-face relationships, and becomes the immediate determinant for the soldier's behavior. The soldier's loyalty to the small group and the group's expectation that he will advance under fire, is the only reliable force on the battlefield capable of causing the soldier to expose himself to the dangers of war.

This behavior represents the internalization of strong group values and norms that causes the soldier to conform to unit expectations even when separated from the unit. The soldier with a strong moral commitment to his unit sees himself in battle or in day-to-day routine as part of a small intimate group, represented by a few buddies on his right and left, or in the same vehicle or crew compartment with a sergeant or junior officer who is near. The normative power of the group causes a strong personal commitment on the part of the soldier to conform to group expectations, that doing so is the responsible thing to do, and that conformity is expected in spite of the fact that the soldier would personally prefer to be elsewhere doing something else. Such commitment is common in well-led and trained units. The need to not let your buddies down is the strongest type of motivation that allows soldiers to endure the repeated dangers and hardships of war.

The internal small-group process that results in this type of soldier motivation is complex. It is requisite that the small-unit become the soldier's primary social group which dominates all other influences on the soldier, and controls the soldier's day-to-day behavior. In addition to providing security, the unit is also the major source of esteem and recognition for the soldier as well as providing a strong sense of mutual affection and attraction among unit members.

Numerous researchers have pointed out that the creation of a cohesive unit with these characteristics is significantly influenced by broad cultural values, norms, and characteristics that are the result of a common socialization process and basic agreement among unit members about cultural values. A significant characteristic about a cohesive unit is the constant observation and evaluation of the behavior of unit members. Any deviation from unit norms, values, or expected behavior brings immediate and intense group pressures to conform to group norms. If the behavior is not corrected, then cleavage results in the group, and cohesion is weakened. If the situation occurs in combat, where survival is threatened, then the group can be expected to expel or somehow separate the non-conforming individual. In brief, research indicates that the soldier will be strongly bound to the primary group or unit as long as it is capable of satisfying the soldier's physical, security, and social needs, and there is broad agreement within the group about basic cultural and political values. Cohesion is often characterized and described as having two components: horizontal cohesion and vertical cohesion. Horizontal cohesion refers to the strength and characteristics of the bonding among the soldiers of a unit, while vertical cohesion refers to the bonding between soldiers and leaders.

Core soldier values that dominate soldier behavior and control the soldier's day-to-day actions in a cohesive unit, are the result of an intense military resocialization process. Fighting skill, physical fitness, stamina, and self-discipline, teamwork, duty or selfless service, and loyalty to unit and leaders are the primary core soldier values and can be used to assess the strength of horizontal cohesion in a unit.

To understand vertical cohesion and the bonding that occurs between soldier and leader in a cohesive unit, one must answer the question: Why do soldiers follow leaders into combat? Much of the answer rests on the personal qualities of the leader, whether he is a non-commissioned or a commissioned officer. Military leadership involves enduring and primary personal relationships between leader and soldier. In combat, few personal relationships surpass the close and intense relationship that develops between the leader and soldiers in a high performing cohesive unit. Soldiers in danger, when survival is threatened, become acutely aware of the qualities of their leaders. Soldiers desire strong leaders who are capable of successfully dealing with dangerous situations.

The successful leader has many sources of power that cause soldiers to follow. Leaders have coercive and reward powers, and power that comes from the control of information as well as individual expertise in military skills. The most potent source of a leader's power however, is the leader's ability to cause the soldier to identify with the leader. This is often referred to as a leader's referent power. Successful officers and non-commissioned officers in cohesive units relay a strong sense of personal care, competence, and security to their soldiers which relieves soldier anxiety and gains a degree of influence and control over members of their units often associated with charismatic leaders.

To quote from research published in 1985, "the key" to achieving this quality of leadership, "is similarity of values among soldiers and leaders . . . such powerful leadership is most dependent on close, personal relationships between leaders and subordinate soldiers. Its' great influence stems directly from the intense identification of the soldier with his immediate leader. Often, the leader approaches the stature of a loved and respected parent, or of the charismatic leader who demonstrates consistently the Weberian quality of grace, or the ability to consistently handle difficult situations well. Such referent power is based on the satisfaction of the soldier's personal need for affection, recognition and security through strong identifica-

tion with a respected leader who has successfully led his unit through situations of danger and hardship . . . in cohesive armies, the formation of such close ties between soldiers and leaders is not a matter of individual initiative or chance, but of official policy."

BIBLIOGRAPHY

- Allon, Yigal. *The Making of Israel's Army*. New York: Universe Books, 1970.
- Bergstrom, Allen J. "Ivan is Only About 5' 8". *Air Force*, March 1982, p.76.
- Biesanz, John, and Biesanz, Mavis. *Modern Society*, Englewood Cliffs, NJ: Prentice Hall, 1968.
- Boice, Lawrence R. and T.O. Jacobs. "Toward True Measures of Personnel Turbulence." Draft paper. Washington DC: ARI, May, 1988.
- Breslaver, Irving H. "Women in the Israeli Defense Force." *Retired Officer*, September 1982, pp. 16-19.
- Cockburn, Andrew. *The Threat Inside the Soviet Military Machine*. New York: Random House, 1953.
- Conley, Michael C. *The Communist Insurgent Infrastructure in South Vietnam*. Washington, DC: Center for Research in Social Systems, American University, 1966.
- Crawford, Ann. *Customs and Culture of Vietnam*. Tokyo: Tuttle, 1968.
- Denton, Frank. *Volunteers for the Vietcong*. Santa Monica, Calif.: Rand Corporation, 1969.
- Donnelly, C. "The Soviet Attitude to Stress in Battle." *Journal of the Royal Army Medical Corps* 128 (1982): 72-73.
- Dung, Van Tien. "On Experiences in Building the Revolutionary Armed Strength of Our Party." A paper presented at the American Political Science Association Convention in San Francisco, September 1975.
- Dupuy, T.N. *Numbers, Predictions, and War*. New York: Bobbs-Merrill, 1979.
- Earley, Pete. "Army Urges Rise in Jobs for Women." *Washington Post*, October 15, 1983, p. A3.
- Elliott, David W., and Elliott, Mai. *Documents of a VC Delta Unit*. Santa Monica, Calif.: Rand Corporation, 1969.
- Emerson, Rupert. *From Empire to Nation*. Boston: Beacon Press, 1967.
- Erickson, John, and Feuchtwanger, E.J. eds. *Soviet Military Power and Performance*. Hamden, CT.: Shoe String Press, 1979.
- Etzioni, Amitai. *A Comparative Analysis of Complex Organizations*. New York: Free Press, 1975.
- French, J.R.P., Jr., and Raven, B. "The Bases of Social Power." In *The Study of Leadership*. West Point: USMA Printing Plant, 1970.
- Gabriel, Richard A. "Stress in Battle: Coping on the Spot." *Army*, December 1982, pp. 36-42.
- Gal, Reuven. "Unit Morale: Some Observations on Its Israeli Version." Washington, DC: Department of Military Psychiatry, Division of Neuropsychiatry, Walter Reed Army Institute of Research, 1983.
- Gal, Reuven. *The Israeli Soldier*. Westport, Conn.: Greenwood Press, 1987.
- George, Alexander L. *The Chinese Communist Army in Action*. New York: Columbia University Press, 1967.
- _____. "Primary Groups, Organization and Military Performance." In *The Study of Leadership*. West Point: USMA Printing Plant, 1973.
- Goldhamer, Herbert. *The Soviet Soldier*. New York: Crane, Russak and Co., 1975.
- Goldrich, Robert L. "Recruiting, Retention, and Quality in the All-Volunteer Force." Washington, DC: Congressional Research Service, Library of Congress, 1981.
- Hammer, Ellen. *Vietnam, Yesterday and Today*. New York: Holt, Rinehart and Winston, 1966.
- Harkabi, Y. "Basic Factors in the Arab Collapse." *Orbis*, Fall 1967.
- Henderson, Wm. Darryl. "Can-Do NCOs-With Clout-Can Help Cohesion Problem." *Army*, March, 1982.
- _____. *Why the Vietcong Fought: A Study of Motivation and Control in a Modern Army in Combat*. Westport, Conn.: Greenwood Press, 1979.
- Henderson, William Darryl. *Cohesion. The Human Element in Combat*. Washington, DC: National Defense University Press, 1985.
- Hollander, E.P., and Hunt, R.G., eds. *Current Perspectives in Social Psychology*. New York: Oxford Press, 1963.
- Janowitz, Morris, and Little, Roger. *Sociology and the Military Establishment*. New York: Russell Sage Foundation, 1965.
- Johns, John H., ed. *Cohesion in the U.S. Military*. Washington, DC: National Defense University Press, 1984.

- Jumper, Roy, and Normand, Marjorie Weiner. "Vietnam: The Historical Background." In *Vietnam: History, Documents and Opinion*, ed. Marvin E. Gentleman. New York: Fawcett, 1965.
- Kaiser, Robert G. *Russia, The People and the Power*. Brattleboro, VT.: Book Press, 1976.
- Kellett, Anthony. *Combat Motivation: The Behavior of Soldiers in Battle*. Boston: Kluwer, 1982.
- Kohn, Hans. *Nationalism, Its Meaning and History*. Rev. ed. Princeton, N.J.: Van Nostrand, 1965.
- Kuzumplich, Peter W. *Comparative Wartime Replacement Systems*. Washington DC.: Defense Intelligence Agency, 1986.
- LaPiere, Richard T. *A Theory of Social Control*. New York: McGraw Hill, 1954.
- Luttwak, Edward, and Horowitz, Dan. *The Israeli Army*. New York: Harper and Row, 1975.
- Marshall, S.L.A. *Men Against Fire*. New York: William Morrow, 1947.
- Meyer, Herbert E. "The Coming Soviet Ethnic Crisis." *Fortune* 98 (4 August 1978): 169.
- Middleton, Drew. "Racial Clashes Said to Hinder Soviet Forces." *New York Times*, July 11, 1982; p. 9.
- "More Women Enlist for Soviet Army Duty." *Washington Times*, October 28, 1982.
- Marlowe, D.H. et al. "Unit Manning System Evaluation" Technical Reports Nos. 1 through 5, Washington DC.: Walter Reed Army Institute of Research, 1987.
- Moskos, Charles C. "The All-Volunteer Force." In *The Political Education of Soldiers*. Morris Janowitz and Stephen D. Wesbrook, eds. Beverly Hills, Calif.: Sage Publications, 1983.
- _____. "The American Combat Soldier in Vietnam." *Journal of Social Issues* 31 (1975): 27.
- _____. "The American Enlisted Man." New York: Russell Sage, 1970.
- _____. "Civil Education and the All-Volunteer Force." A paper presented at the IUS symposium on "Civil Education in the Military," October 15-16, 1981.
- _____. "From Institution to Occupation: Trends in Military Organization." A paper presented at the International Congress, Foundation Society and Armed Forces, The Hague, Netherlands, May 9-12, 1982.
- _____. "Social Considerations of the All-Volunteer Force." In *Military Service in the United States*. Brent Scowcroft, ed. Englewood Cliffs, N.J.: Prentice-Hall, 1982.
- _____. "The Sociology of the All-Volunteer Force." A paper presented at the annual meeting of the American Sociological Association, Toronto, Canada, August 24-28, 1981.
- Moskos, Charles C. and Frank R. Wood, eds. *The Military—More Than Just a Job*. New York: Pergamon-Brassey's, 1988.
- Nyrop, Richard F., ed. *Israel: A Country Study*. Washington, DC: American University, 1979.
- Odom, William E. "The Militarization of Soviet Society." *Problems of Communism* 25 (September-October 1976): 34-51.
- Patchen, Martin. *Black-White Contact in Schools: Its Social and Academic Effects*. West Lafayette, Ind: Purdue University Press, 1982.
- Pike, Douglas. *The Vietcong, the Organization and Techniques*. Cambridge, Mass.: MIT Press, 1966.
- Rand Corporation. *Vietnam Interviews*. Santa Monica, Calif.: Rand Corporation, K Series.
- Record, Jeffrey. *Sizing Up the Soviet Army*. Washington, DC: Brookings Institution, 1975.
- Remarque, Erich M. *All Quiet on the Western Front*. New York: Fawcett-Crest, 1975.
- Rochells, Andrew J. and Patton, Paul G. "Demographic Changes in the USSR: Implications for the Soviet Military." Washington, DC: Student paper, National Defense University, 1982.
- Rolbant, Samuel. *The Israeli Soldier: Profile of an Army*. Cranbury, NJ: Thomas Yoseloff, 1970.
- Rosenau, James N. and Holsti Ole R. "U.S. Leadership in a Shrinking World: The Breakdown of Consensus and the Emergence of Conflicting Belief Systems." *Work Politics* 35 (April 1983): 368-392.
- Scott, Harriet Fast, and Scott, William F. *The Armed Forces of the USSR*. Boulder, CO: Westview Press, 1981.
- Sharp, U.S.G. and Westmoreland, W.C. *Report on the War in Vietnam*. Washington, DC: Government Printing Office, 1968.

- Shelyag, V.V., Glotochkin, A.D., and Platonov, K.K. *Military Psychology: A Soviet View*. Moscow, 1972. Translated and published by the U.S. Air Force.
- Shils, Edward A. and Janowitz, Morris. "Cohesion and Disintegration in the Wehrmacht in World War II." *Public Opinion Quarterly* 12 (1948): 281.
- Siebold, Guy L. "Army Values, Results of Theme Year Research." Alexandria, VA: ARI January, 1987.
- Smith, Hedrick. *The Russians*. New York: Ballantine Books, 1980.
- Stein, Benjamin J. "The Cheerful Ignorance of the Young in L.A." Washington Post, October 3, 1983 editorial page.
- Suvorov, Viktor. *Inside the Soviet Army*. New York: Macmillan, 1982.
- Tarasulo, Yitzhak. "The Daily Life of a Soldier in the Modern Soviet Army." A presentation at the National Convention of the Inter-University Seminar on the Armed Forces and Society, Chicago, October 1983.
- Taylor, William T., Jr. *Christian Science Monitor*, June 17, 1982, p. 1.
- _____. "Turbulence Definition and Measurement" Vols. 1-3, McLean, VA: General Research Corporation, 1982.
- Turley, William S. "The Political Role and Development of the Peoples' Army of Vietnam." Carbondale, IL: Southern Illinois University, 1975.
- U.S. Embassy, Saigon. *Vietnam Documents and Research Notes*, 1967.
- Van Creveld, Martin. *Fighting Power: German and U.S. Army Performance, 1939-1945*. Westport, Conn.: Greenwood Press, 1982.
- von Clausewitz, Karl. *On War*. Translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1976.
- Webb, James. *Fields of Fire*. Englewood Cliffs: Prentice-Hall, 1978.
- Webbe, Stephen. "A Soviet Soldier's Lot." *Christian Science Monitor*, Midwest Edition, December 3, 1981, pp. B-24-27, B-30.
- Weber, Tom. "Rewarding Things that Count." Washington, DC: Student paper, National Defense University, 1982.
- Wimbush, S. Enders, and Alexiev, Alex. *The Ethnic Factor in the Soviet Armed Forces*. Santa Monica, Calif.: Rand Corporation, 1982.
- Young, Warren L. *Minorities and the Military: A Cross-National Study in World Perspective*. Westport, Conn.: Greenwood Press, 1982.
- Zaslloff, Joseph J. *Political Motivation of the Vietcong: The Political Re-groupees*. Santa Monica, Calif.: Rand Corporation, 1968.

Chairman NUNN. Thank you, Dr. Henderson. Dr. Korb.

STATEMENT OF LAWRENCE J. KORB, DIRECTOR OF THE CENTER FOR PUBLIC POLICY EDUCATION AND SENIOR FELLOW IN THE FOREIGN POLICY STUDIES PROGRAM AT THE BROOKINGS INSTITUTION

Dr. KORB. Thank you very much, Mr. Chairman. It is a pleasure to appear before you once again.

I do appreciate this opportunity to discuss with you the critical question of whether changing the policy on gays in the military will undermine unit cohesion. I commend you for addressing this complex and emotional question in an orderly and scientific manner.

Since this subject has become an important public policy issue, there have been too many wild and unsubstantiated claims on all sides of the debate. Regardless of their position on this issue, no responsible person, particularly one who has served on active duty in the military, would desire to take any step which he or she knew would permanently undermine the unit cohesion or fighting effectiveness of our armed forces.

However, I believe the burden of scientific proof must be on those who wish to exclude gays from the military. In our system of Government, we cannot infringe on the right of any American to serve his or her country unless we can convincingly demonstrate that the presence of that person in a unit would prevent the development of cohesion even with the most competent and highly motivated leadership.

All my research and experience on this issue tells me that the question of whether the presence of openly gay men and women in the armed services would undermine fighting effectiveness cannot be answered definitively until the policy is actually changed. In some ways, the situation we face today is analogous to that which we faced two decades ago when we made the transition to an all-volunteer force and allowed women to move into nontraditional areas of military service.

During my days in the Pentagon there were some in Congress and in the think tanks and in the universities who argued that a force of volunteers supposedly attracted only by market incentives would not fight because their main motivation was money, not patriotism. In fact, the volunteers were often derided by some as mercenaries.

Similarly, there were those who said that the presence of large numbers of women in the operational theater would undermine military effectiveness and that if women were captured and killed in battle, popular support for the conflict would be eroded.

It was not until the Persian Gulf war that these myths were debunked.

Now, much has been made in the media about my supposed change of position on the issue of gays in the military. There is, indeed, a basis for these stories, but I would like to point out a couple of things.

This policy that is in existence, as Senator Nunn pointed out in his speech on the Senate floor, was not developed by the Reagan administration. It was developed by the Carter administration and promulgated by Deputy Secretary of Defense Graham Claytor in January of 1981, shortly before we took office. Our job was to codify or, if you will, develop implementing instructions to that particular policy.

Now, it is indeed true that my opinions on this have evolved over the last decade, and in many ways the process is similar to the way in which my attitudes toward the all-volunteer force and women in combat evolved.

There was a time when I felt that all able-bodied men should be made to serve the country, and to be honest, to this day I still have very strong feelings about those in my generation who beat the draft. Similarly, there was a time when I did not believe that my sisters and daughters ought to be allowed to go in harm's way.

However, I have come to the conclusion that in a country that has never figured out who shall serve when not all shall serve, a volunteer professional military is the least worst alternative, and that despite my own biases, there was no good reason to prevent women from being, as the army would say, all that they can be.

I might add that two men who have served as Secretary of the Navy in Republican administrations have also recently changed their opinion on the issue of gays in the military.

Those who are opposed to the change in current policy cite surveys of active duty personnel which show that a vast majority of them are opposed to the change. Given the cues they have received from their top leadership and the innate conservatism of the military institution, that should not be surprising.

But research also shows that, while in 1943 approximately 80 percent of the whites in the armed forces opposed integration, by 1951, 3 years after the policy change, that number had dropped to 44 percent, and I would like to say I am by no means equating the integration of the armed forces with this proposed change. I am merely citing surveys. I do think it is a different type of change, and I agree with those who say that it is an affront to African Americans to make direct comparisons between the two.

Moreover, recently some 80 percent of the Canadian armed forces opposed dropping the ban before the Canadian military decided it had no empirical or rational basis to fight that ban in court. Since the ban was dropped, the Canadians have not reported any morale or significant morale or cohesion problems. There is no scientific reason to suppose that if the ban against gays is lifted in this country, opinion in the military on this issue will not change.

People opposed to the ban also cite specific cases or anecdotal evidence to support their position. I have no reason to doubt the validity of these cases, but there are plenty of case studies on the other side as well.

One needs only to look at the recent articles in our major newspapers by people such as Gen. Lucian Truscott IV, who is a West Point graduate, Robert Goodwin, special assistant to Presidents Kennedy and Johnson, and Colbert King of the Washington Post editorial staff, to see specific evidence that openly gay men have served valiantly in battle without undermining unit cohesion. In addition, court papers reveal that Sgt. Perry Watkins served with distinction in the army as an openly gay man for some 15 years in the 1960s and 1970s.

In terms of research that bears on the issue, there exists a body of empirical data from militaries around the world as well as police and fire departments in this country. For the most part, these studies reveal that dropping the ban has not undermined morale or cohesion in a way that could not be handled.

Countries that allow homosexuals to serve in the military include such as Israel, Canada, the Netherlands, and Australia, and they say that they have not experienced problems that cannot be solved. The General Accounting Office reported the same finding when they surveyed police and fire officials who have admitted homosexuals into their departments.

There is in galleys right now a book called "Gay Cop" that is based on interviews with 41 named members of the New York Police Department and over 100 individuals who choose not to reveal their identities. This book, which is being published by Rutgers University Press, finds that the police department in New York has been able to deal with openly gay cops. This book even delves into the issue of privacy because the officers must change in their locker rooms.

Now, there are those who will argue that these case studies are irrelevant, that the U.S. military is *sui generis*. As some have said to me, compared to the United States these other militaries—and this is not my word; it has been said to me—are Lilliputian, and of course U.S. police and fire departments do not go on overseas deployments. Certainly there is some truth to this point of view, but I do not think that the experience of other militaries can be dis-

counted completely, as they do have some empirical bearing on the subject.

Moreover, as Professor Theodore Sarbin, who is the co-author of the 1991 PERSEREC study for the U.S. military, has stated, there is no data linking gays to lower morale or cohesion. Rather, he noted that where there is good leadership there is high morale, and let us remember that several of the foreign forces who fought and died alongside our men and women in the Gulf—allow gays and lesbians to serve openly.

More recently, in March of this year we had the strange situation of Captain Pamela Mint of the Minnesota National Guard, who was in the process of being discharged as an admitted homosexual, called back to deal with an emergency situation.

Is there a probability that morale and cohesion may be undermined temporarily if this policy is changed? Unfortunately, research and experience says the answer is probably yes. As we know, unit cohesion problems existed for many years after President Truman's executive order integrating the services.

Unit cohesion in fact broke down completely on board the U.S.S. *Kitty Hawk* on its way to the Tonkin Gulf in 1972. As a result, 46 sailors were injured in a 15-hour race riot. At about the same time, 130 sailors on the *Constellation* charged their captain with "calculated racism."

During my 5 years at the Navy War College, we had the student officers analyze these cases over and over to see what lessons they could learn. I think the racial situation in the Navy improved markedly partly as a result of that.

Finally, as we know, we had the wrong kind of unit cohesion among many male navy aviators at the annual Tailhook conventions during the eighties and early nineties.

Research tells us that the more dissimilar the group, the more difficult will be the task of trying to create cohesion. I do not think there is any doubt about that. These dissimilarities can be based on such things as race, creed, color, gender, philosophy, and sexual orientation.

But research also shows that proper leadership and training can surmount these impediments. Since our armed forces already are and are likely to be composed of people with different backgrounds and values, its leaders have had and will continue to have to adjust to this diversity in building cohesion.

As Prof. Richard Kahn of the University of North Carolina and president of the Military History Society has stated, cohesion is the result of that bonding that occurs under the shared experience of strict authority and harsh discipline, and may be more difficult to achieve without all the traditional methods of male bonding, but that hardly means it cannot or should not be achieved.

I might also refer the committee to the recent statement of Gen. Carl Mundy, the commandant of the Marine Corps, in the upcoming issue of *Leatherneck Magazine*, in which he says the marines will be able to maintain unit cohesion even if President Clinton changes the policy.

Research also shows us that changing the policy will not result in wholesale changes of behavior in the ranks. The recent experience of the Canadians and Australians attest to this, as does the

experience of the Dutch since 1974. Therefore, the short-term costs of maintaining unit cohesion caused by changes in the policy are likely to be minimal.

Obviously there are considerations other than unit cohesion that must go into your deliberations on the issue. However, based upon my own military service, policy research and Pentagon experience, I find no convincing evidence that changing the current policy would undermine unit cohesion any more than the other social changes that society has asked the armed forces to make over the past 50 years. In fact, this change is likely to have less short-term impact on cohesion if we learn the lessons from past changes.

Thank you very much, Mr. Chairman.

[The prepared statement of Dr. Korb follows:]

PREPARED STATEMENT BY LAWRENCE J. KORB ON HOMOSEXUALS IN THE MILITARY AND UNIT COHESION

Mr. Chairman, members of the committee, it is a pleasure to appear before you once again. I appreciate the opportunity to discuss with you the critical question of whether changing the policy on gays in the military will undermine unit cohesion. I commend you for addressing this complex and emotional question in an orderly and scientific manner. Since this subject has become an important public policy issue, there have been too many wild and unsubstantiated claims on all sides of the debate.

Regardless of their position on this issue, no responsible person, particularly someone who has served on active duty with the military, would desire to take any step which he or she knew would permanently undermine the unit cohesion or fighting effectiveness of our Armed Forces. However, the burden of scientific proof must be on those who wish to exclude gays from the military. We cannot infringe on the rights of any American to serve his or her country unless we can convincingly demonstrate that the presence of that person in a unit would prevent the development of cohesion even with the most competent and highly motivated leadership.

All my research and experience tells me that the question of whether the presence of openly gay men and women in the armed services would undermine fighting effectiveness cannot be answered definitively until the policy is actually changed. In many ways, the situation the Nation faces today is analogous to that which we faced two decades ago when we made the transition to an All Volunteer Force and allowed women to move into non-traditional areas of military service. During my days in the Pentagon, there were some in the Congress and in the think tanks and universities who argued that a force of volunteers, supposedly attracted only by market incentives, would not fight because their main motivation was money, not patriotism. In fact, the volunteers were often derided by some as mercenaries. Similarly, there were some who said that the presence of large numbers of women in the operational theater would undermine military effectiveness and that, if women were captured and killed in battle, popular support for the conflict would be eroded. It was not until the Persian Gulf war that those myths were debunked.

Much has been made in the media about my supposed change of position on the issue of gays in the military. There is indeed a basis for these stories. As a result of my research and experience in this area, my opinions have indeed evolved over the last decade. This process was similar to the way in which my attitudes toward the All Volunteer Force and women in combat evolved. There was a time when I felt that all able bodied men should be made to serve their country. To this day, I have very strong feelings about those of my generation who beat the draft. Similarly, there was time that I did not believe that my sisters and daughters ought to be allowed to go "in harms way." However, I have come to the conclusion that in a country that has never figured out who shall serve when not all shall serve, a volunteer professional military is the least worst alternative. And that despite my own biases, there was no good reason to prevent women from being "all that they can be." I might add that two men who have served as Secretary of the Navy in Republican administrations have also recently changed their opinion on the issue of gays in the military.

Those who are opposed to changing the current policy cite surveys of active duty personnel which show that a vast majority of them are opposed to the change. Given the cues that they have received from their top leadership and the innate conservatism of the military institution, this should not be surprising. But, my research

shows that, while in 1943 approximately 80 percent of the whites in the Armed Forces opposed integration, by 1951, 3 years after the policy change, that number had dropped to 44 percent. Moreover, some 80 percent of the Canadian armed forces opposed dropping the ban before the Canadian military decided it had no empirical or rational basis to fight the ban in court. Since the ban was dropped, the Canadians have not reported any morale or cohesion problems. There is no scientific reason to suppose that, if the ban against gays is lifted, opinion in the military on this issue will not change.

People opposed to lifting the ban also cite specific cases or anecdotal evidence to support their position. I have no reason to doubt the validity of these cases, but there are plenty of case studies on the other side as well. One needs only to look at recent articles in our major newspapers by Gen. Lucian K. Truscott IV (West Point graduate), Robert Goodwin (special assistant to Presidents Kennedy and Johnson), and Colbert King (Washington Post's editorial staff), to see specific evidence that openly gay men have served valiantly in battle without undermining unit cohesion. In addition, court papers reveal that Sgt. Perry Watkins served with distinction in this army as an openly gay man for some 15 years.

In terms of research that bears on the issue, there exists a body of empirical data from militaries around the world as well as police and fire departments in this country. For the most part, these studies reveal that dropping the ban has not undermined morale or cohesion. Countries that allow homosexuals to serve in the military such as Israel, Canada, the Netherlands, and Australia, say that they have not experienced problems that have undermined morale and cohesion. The GAO reported the same finding when they surveyed police and fire officials who have admitted homosexuals into their departments. However, there are those who will argue that these studies are irrelevant, that the U.S. military is "sui generis." Compared to the United States, these other militaries are "lilliputian" and of course, U.S. police and fire departments do not go on overseas deployments. While there is some truth to this point of view, the experience of other militaries cannot be discounted completely as they have some bearing on the subject. Moreover, Professor Theodore Sarbin, co-author of a 1991 PERSEREC study for the U.S. military, has stated that there is no data linking gays to lower morale or cohesion. Rather he noted that where there's good leadership, there's high morale. Finally, let us remember that the French, Dutch, and Italians who fought and died alongside our men and women in the Gulf allow gays and lesbians to serve openly.

More recently, in March of this year, we have had the strange situation of Captain Pamela Mindt, of the Minnesota National Guard, who was in the process of being discharged as an admitted homosexual, being called to active duty by her unit to deal with an emergency situation.

Is there a probability that morale and cohesion may be undermined temporarily if this policy is changed? Unfortunately, based upon past experience, the answer is yes. Unit cohesion problems existed for many years after President Truman's executive order integrating the services. Unit cohesion broke down completely aboard the U.S.S. *Kitty Hawk* on its way to the Tonkin Gulf in 1972. As a result, 46 sailors were injured in a 15 hour race riot. At about the same time, 130 sailors on the *Constellation* charged their captain with calculated racism. And we had the wrong kind of unit cohesion among many male naval aviators at the annual Tailhook Conventions during the 1980s and 1990s.

Research tells us that the more dissimilar the group, the more difficult will be the task of trying to create unit cohesion. The dissimilarities can be based upon such things as race, creed, color, gender, philosophy and sexual orientation. But research also shows that proper leadership and training can surmount these impediments. Since our Armed Forces are composed of people with different backgrounds and values, its leaders have had and will continue to have to adjust to this diversity in building cohesion. As Professor Richard Kahn of the University of North Carolina and president of the Military History Society has stated, cohesion is the result of that bonding that occurs under the shared experience of strict authority and harsh discipline, and may be more difficult to achieve without all the traditional methods of male bonding—but that hardly means it can't or shouldn't be achieved.

Research also shows that changing the policy will not result in wholesale changes of behavior in the ranks. The recent experiences of the Canadians and Australians attest to this, as does the experience of the Dutch since 1974. Therefore, the short-term costs of maintaining unit cohesion caused by changes in the policy are likely to be minimal.

Obviously, there are considerations other than unit cohesion that must go into your deliberations on this issue. However, based upon my military service, policy research, and Pentagon experience, I find no convincing evidence that changing the current policy would undermine unit cohesion any more than the other social

changes that society has asked the Armed Forces to make over the past 50 years. In fact, this change is likely to have less short-term impact on cohesion.

Chairman NUNN. Thank you, Dr. Korb. Dr. Marlowe.

**STATEMENT OF DAVID H. MARLOWE, CHIEF, DEPARTMENT OF
MILITARY PSYCHIATRY, WALTER REED ARMY INSTITUTE OF
RESEARCH**

Dr. MARLOWE. Mr. Chairman, members of the committee, I would like to thank you for the pleasure of appearing before you today to talk about the very important issue of military unit cohesion. The concept of small, tightly bonded, highly interdependent groups is the foundation and essential building block of modern armies.

The core issue has always been the controlling role played by group relationships at the primary group level, and effectiveness, sustainability, and the maintenance of soldier performance and, in my business, soldier mental health.

This was underlined by the conclusions of the Commission of Civilian Psychiatrists sent by the War Department to investigate the problem of combat fatigue in 1945 when they said, ". . . we mean to emphasize the fact that the organized pattern of the unit and its emotional bonds constitute the dominant, constructive, and integrative force for the individual soldier in his fighting function."

This group life is his inner life. When an individual member of such a combat group has his emotional bonds of group integration seriously disrupted, then he as a person is thereby disorganized. The disruption of group unity is, in the main, a primary causal factor, not a secondary effect of personality disorganization.

We have been primarily concerned with those aspects of group cohesiveness that enable the soldier to deal with the untoward stresses of combat and dangerous deployments. Our concern has been both to define and hopefully to enhance both military unit cohesion and those particular aspects of it that buffer and mediate the effects of acute and chronic stress.

From the latter period of the Vietnam conflict through the late 1970s, both the line army and army medical researchers expressed profound concerns about the level of cohesiveness in U.S. units. Some units in Vietnam had been polarized and riddled by competing subgroups committed not to their squads, platoons, or companies, but to others who behaved in an extramilitary fashion. "Heads" (drug-using groups) contended with "juicers" (alcohol users), "hawks" with "doves," "lifers" with "U.S.'s" (draftees), African Americans contended with whites.

Polarization and adherence to group identities and structures that were rooted outside the unit and the primary soldier group led to rapid rises in the incidence of fragging. In 1970 and 1971 and of very rapid rise in the incidence of psychiatric admissions despite the fact that combat was at a low level, and many of these were for behavioral and character disorders.

From 1981 on, we have been carrying out an extensive program looking at the cohesiveness of military groups, how it is formulated, how it is put together. In great part, this was articulated to the Army's COHORT program, a special program developed at the be-

ginning of the decade of the eighties to try to develop more cohesive units.

In the course of this, we evaluated over 225 companies using both interview and questionnaire assessment techniques. We have also been involved in debriefing and looking at issues of cohesion in 13 battalions that served in combat in Panama, and we have followed extensively cohesion and issues of stress adaptation and morale in five brigades that served in Operation Desert Shield and Desert Storm both in Saudi Arabia and since their return, as well as looking at a great many other soldiers, some 25,000.

Cohesion is not a thing or a single factor, but partly a state, partly a process comprised of ongoing interactions, judgments, perceptions, sentiments and relationships within the squad through company or battery.

In our work, as Dr. Henderson has indicated, we divide cohesion into two general categories, horizontal and vertical. Major components of horizontal cohesion are a belief that members of the primary group have the skills and abilities to successfully carry out their military tasks; belief that members of one's own group will fully participate in organizational tasks and pull their own weight; belief that the group can functionally organize itself for effective optimum performance because of its members' extensive knowledge of each other's strengths and weaknesses; affective emotional ties between soldiers as friends or buddies characterized by mutual trust and confidence, and belief in the group members' personal reliability; significant openness of relationships and expectations that support will be provided by other soldiers to help group members deal with personal, familial, and organizational stress and minimize its effects; belief that members of the primary group are, first and foremost, committed to taking care of each other, and that in situations of stress, pressure, challenge or danger will look out for, protect, and aid each other.

Vertical cohesion, we see with the following factors: perceived technical and tactical competency of leaders; the perceived degree to which leaders are seen as concerned about the personal lives, needs, and dignity of their subordinates, including perceived equity and a lack of favoritism on the part of leadership; the perceived degree of predictability of leader actions, decisions, time management, prioritization of soldier activities and needs, particularly as it reflects upon the soldier's personal life; the perceived level and accuracy of leader-soldier communication; and leader abilities to impart skills to soldiers and provide effective training.

Horizontal and vertical cohesion do not exist as an isolated set of personal perceptions. They are the product of a set of powerful contextual factors that establish the environment and conditions in which perception takes place. These contextual factors shape and order the perceptions and acts that we measure as cohesion.

The contextual factors necessary to create small-unit cohesion in army organizations are derived from such wider patterns as (1) a shared organizational culture and values, (2) common status and the common primary identity as soldiers for all members of the unit, (3) a commonly shared language, constructs, metaphors, et cetera, characterizing members of the primary group, (4) experiences in which the group collectively undergoes a series of chal-

allenges and stresses and successfully achieves a set of goals in which the members of the group see themselves as having mastered a set of skills and demonstrated their competency executing these skills, (5) minimal unnecessary turbulence and continuity of tenure within units.

The primary mechanism and process utilized by the U.S. Army for socializing soldiers into a common organizational culture with common values and language and a common identity is initial entry training. It consistently proves to be the most powerful creator of the contextual bases for cohesion as well as the single most powerful bonding experience and model of the behavior required to be part of the military group.

The individual undergoes a positive identity transformation from civilian to soldier. This new identity establishes the soldier's new status position and creates that set of expectations and cultural norms about the bounds and content of soldierly behavior that are to be expected of himself and of others.

This pattern of events and experiences in training and the continuing and consistent support and help that trainees must give each other develops powerful ties between the members of the group. It also creates the anticipation that such ties are critical to the maintenance and sustenance of all future primary military groups that the soldier will enter.

Initially, the ties are primarily instrumental and operational—you help me, I will help you—but they also develop significant affective and emotional content. The content is expressed through the concept of the primary group as being like a family, or being a family.

Initial entry training does not replace the previous personality or values brought into the army by the new soldier. Rather, it adds a new role with new behaviors and standards to be exhibited and expected of others while serving as a soldier and as a member of a squad, team, or crew.

These new role perceptions and the new and powerful knowledge that the group and its members' behavior are critical to one's own performance and potential survival have important consequences. In the forging ground of the training company, one's behavior comes under a searching scrutiny that seldom, if ever, exists in civil life. Both gross behavior and nuances are continually evaluated by other trainees.

The poor performer, the nonadapter or nonlearner, the probable delinquent, the individual who places his or her own immediate needs above the welfare of the group and others who impress their peers over time as potential ineffectives, come to be seen as long-term dangers to the group. Ultimately, the group will reject the individual who appears to embody a threat based upon his or her behavior. That person will be extruded and isolated, and often left to fail by himself.

Each time a soldier enters a new unit, he or she will again be the object of a quiet but searching assessment by those already there. Our data demonstrate two phases to the incorporation process. The first involves assessment of the soldier as a member of the group in garrison. It usually takes between 2 and 5 weeks for soldiers to determine whether a new squad or platoon member is

trustworthy, meets standards, and shares enough of a common culture to be bonded into the group.

The process is more intense for those who live in the barracks, where off-duty as well as on-duty time is shared, and it is more focused on duty performance and behavior for the married soldier who lives off post.

The second phase takes place during the first prolonged field exercise, where the newcomer is again assessed in terms of his or her field and potential combat skills and his or her ability to get along with others under conditions of stringency and deprivation.

The individual is thus continually evaluated by his or her peers as a person, as a loyal and trustworthy group member, and for technical competence. If the soldier presents an image perceived as threatening to the survival of the group in combat, as, for example, the occasional insistence of drug users in Vietnam on using drugs when on patrol, the group will take extreme and hostile action. The soldier must belong, and belonging depends upon each member of the group playing his or her appropriate role while on duty.

The profound interdependency that characterizes military groups is grounded in the need for extraordinary levels of interpersonal trust. Common language, values, and perceptions, are the modes of communicating and expressing this trust. It is the foundation of that ultimately selfless and extraordinarily intimate agape-like, nonerotic love that characterizes the primary group in combat.

In our work in Operation Just Cause and Operation Desert Storm, we heard the same theme expressed over and over again in squad after squad, and in its simplest and most powerful form we were told, "We are family. We are brothers. We can make it only because we have each other."

In all of our interviews as well as our quantitative data, soldiers were agreed that the prolonged periods of living together with each other and their leaders, working together, training hard and becoming a family were critical to their ability to withstand the prolonged stresses of the Desert Shield period separation, heat, crowding, isolation, and also were critical to the extremely high level of effectiveness displayed when committed to combat.

There was a widespread feeling that the high levels of cohesion and corporate skill achieved in the desert had been central to the absolute minimization of the number of casualties that U.S. ground forces had taken.

We face grave difficulties whenever we attempt to extrapolate from today to the day after tomorrow. However, I believe that only in understanding the compelling and enduring human realities of combat and military organization can we contend with the future.

I would offer the thought that technological advances, smaller forces, battlefield dispersal and the shift to a force projection modality have made the continuing maintenance of highly cohesive military units more important to the future than they have even been in the past and the immediate present.

In the past, in time of danger we have usually been, one way or another, afforded the luxury of time in which to create highly cohesive units to counterpunch or strike the enemy. When we have not had that luxury, the results, as in the initial results of the Korean conflict, were disastrous for our soldiers.

The speed with which events and their consequences now overtake us make it imperative that our forces be able to make an immediate transition from peace to war. High continuing levels of cohesion are critical to making that transition with maximum unit effectiveness and minimal short- or long-term negative effects on the mental health, physical health, and performance of the soldier.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Marlowe follows:]

PREPARED STATEMENT BY DR. DAVID H. MARLOWE, CHIEF, DEPARTMENT OF
MILITARY PSYCHIATRY, WALTER REED ARMY INSTITUTE OF RESEARCH

Mr. Chairman and Members of the Committee: I am Dr. David H. Marlowe, Chief of the Department of Military Psychiatry, Division of Neuropsychiatry, Walter Reed Army Institute of Research. I understand that I have been invited here today in my professional capacity as an expert on cohesion in military units. The conclusions and opinions offered should not be construed as official Army positions. I have a prepared statement on cohesion that I would like to present to the committee and enter into the record. I appreciate the opportunity to appear before the committee and shall be happy to answer any questions you may have.

WRAIR STUDIES BEARING UPON COHESION AND ITS ANALYSIS

From its creation in 1951, in response to the medical and military problems generated by the high levels of "Combat Fatigue" casualties during World War II and the high proportion of combat stress casualties seen in the first phases of the Korean conflict, the Division of Neuropsychiatry of the Walter Reed Army Institute of Research (WRAIR) initiated long-term research about the nature of cohesion and cohesive processes in military groups. The experience of World War II (see below) demonstrated that one of the most critical buffers against the effect of combat stress was small group and military unit cohesion. Issues involving military group structure and interaction, interpersonal behavior, soldier bonding, the effects of deviant behavior, such as delinquency and drug abuse, on group bonding and process have been a recurring part of our research agenda. Above all we have been primarily concerned with those aspects of group cohesiveness that enable the soldier to deal with the untoward stresses of combat and dangerous deployments. Our concern has been to define and, hopefully, to enhance both military unit cohesion and those particular aspects of it that buffer and mediate the effects of the acute and chronic stresses to which the soldier can be subjected and to optimize the maintenance of individual and organizational mental health.

From the latter period of the Vietnam conflict through the late 1970s both the line Army and Army medical research community expressed profound concerns about the levels of cohesiveness in U.S. units. Some units in Vietnam had been polarized and riven by competing sub-groups committed not to their squads, platoons, or companies, but to others who behaved in an extra military fashion. "Heads" (drug using groups) contended with "Juicers" (alcohol users), "hawks" with "doves," "Lifers" (career soldiers) with "U.S.s" (draftees), African Americans contended with Whites. Polarization and adherence to group identities and structures that were rooted outside the unit and the primary soldier group led to rapid rises in the incidence of "fragging" (attempts to kill unit leaders with fragmentation grenades or other arms) in 1970 and 1971. The 1971 rate per 1000 soldiers was 2.5 times the 1969 rate. Despite the low level of actual combat in the latter phases of the war, the incidence of psychiatric admissions, few of which were traditional combat stress casualties, rose markedly. As MG Spurgeon Neel M.D. put it in his study *Medical Support of the U.S. Army in Vietnam*:

"Unlike World War II, in Vietnam the incidence of psychiatric admissions did not co-vary with the incidence of combat injury. Rates rose despite the diminishing combat role in that country in 1969 and 1970 . . . For Vietnam it has been suggested that identity with another peer group, such as one based upon race, political affiliation, or drug use, at the unit level has threatened the integrity of the squad as the sole reference point for the soldier in combat."

Our concerns about levels of cohesion in units continued throughout the 1970s. In studies of the ecology of drug usage at an east coast Army post, we saw groups of drug users organized against the Army and their units. That cohesion which existed seemed primarily designed to enable drug using groups to protect their using behavior, often at the expense of the mission. Care, concern, and support, and com-

mitment to mission had eroded markedly in a number of units in both the United States and the Federal Republic of Germany. At the same time, analyses of the 1973 Arab-Israeli war demonstrated that modern, highly accurate, highly lethal weaponry had the capacity to create combat stress casualties far more quickly, in days rather than the weeks and months, than the rates that characterized the slower tempo of battle in previous 20th century warfare. Our concerns, along with those of the senior leadership of the Army during the depths of the "hollow army" period, were obviously convergent and led to 12 years of major research focus on unit cohesion, its relationships and consequences.

In 1979 a group of us from the WRAIR made a presentation to the Army Policy Council on the historically affirmed relationship of military unit cohesion to resistance to combat stress and subsequent breakdown, and the new risks for psychological breakdown in battle demonstrated in the 1973 Arab-Israeli war.

In 1981, at the request of the Army Deputy Chief of Staff for Personnel (DCSPER), the Department of Military Psychiatry, Walter Reed Army Institute of Research, under my direction, began a program of research and evaluation of a number of significant human issues bearing on soldier mental health, resistance to stress and potential combat performance sustainability of the Army's then new COHORT Unit Manning system, the first of a number of programs designed to enhance primary group and company/battery cohesion. The COHORT (Cohesion, Operational Readiness and Training) program was designed to create conditions that would enable units to develop higher levels of cohesiveness and training. A primary reason for the creation of the COHORT program was to create unit climates that would mediate the effects of stress in combat and reduce the numbers of combat stress reactions. The evaluation research was conducted in response to a tasking received from the DCSPER of the Army, and was implemented via a research protocol "Behavioral and attitudinal consequences of social organization: Research study of selected COHORT companies, COHORT battalions, and the 7th Light Infantry Division in the U.S. Army," which integrated a number of sub-studies. In the course of this program (1982-1989) quantitative data was gathered from over 225 combat arms units over a 7 year period, and extensive individual and group interviewing was carried out in approximately 100 units, a number of which were studied repetitively over a period of years. Our major concerns were factors bearing upon the creation and maintenance of military unit cohesion and their relationship to soldier mental health, psychological readiness for combat and perceived unit effectiveness.

The ultimate tests of any set of ideas are to be found in their consequences in the real world. The world of the garrison and of training, stressful as it may sometimes be, is still a pale reflection of the world of ground combat. In 1989 at the request of the Army Deputy Chief of Staff for Operations (DCSOPS) we began a debriefing program of soldiers in units that had seen combat in Operation Just Cause in Panama, carrying out an extensive interview and questionnaire program. This program, carried out in 13 Combat Arms and Military Police battalions focussed in greatest part on the relationships between unit cohesion and unit interpersonal relationships and the consequences, for the soldier, of exposure to the stresses and traumas of the environment.

In September 1990 at the direction of the then Vice Chief of Staff of the Army, General Sullivan, and the request of the then DCSPER, Lieutenant General Reno, we began an extensive program studying stress, adaptation, cohesion, sustainability, psychological readiness for combat and the psychological and psycho-social consequences of combat participation in U.S. Army troops deployed to Operations Desert Shield and Desert Storm. Teams were deployed four times to Southwest Asia (SWA). Once again we utilized a combination of questionnaires and unit interviews and debriefings. Pre and post combat data were gathered from battalions in six brigades both in SWA and upon return to their home bases in the United States and Europe. Five combat arms brigades were followed extensively, and other data has been and is still being collected on long terms effects of deployment on 25,000 service members in active duty and reserve units. In all of this work cohesion has thus far proven to be, both quantitatively and qualitatively, a critical variable affecting soldier handling of stress in combat.

COHESION

Since the beginning of recorded history armies and their leaders have had a profound concern about the cohesiveness of their constituent units. In its simplest form cohesion could be viewed as that set of factors and processes that bonded soldiers together and bonded them to their leaders so they would stand in the line of battle, mutually support each other, withstand the shock, terror and trauma of combat, sustain each other in the completion of their mission and neither break nor run.

Cohesion and the sense of mutual support were seen as essential in dealing with the fears and apprehensions that came as forces moved to battle and as even more critical in maintaining them in battle itself.

In psychological and social terms, both pre-modern and modern warfare have demanded, within their tactical doctrines, differing technologies of warfare and the social organization of their combat forces, the systematic provision of high levels of group and psycho-social support to the soldier committed to battle if combat success is to be achieved. The earliest commentators understood the nature of the profound ties that should characterize the primary groups—those small groups of soldiers involved in face to face daily relationships upon whom success in battle depended.

Wu Ch'i, the great contemporary of Sun Tzu, writing some 2,300 years ago, described a victorious army in terms of proper discipline stating:

"What is called discipline is that when encamped their conduct is proper; that when on the move the army is awe inspiring, so that in advance it cannot be opposed. In retirement it cannot be pursued. In advance or retirement it is in good order. . . . Though cut off they can reform; though dispersed they retain their files. Whether the position is secure or perilous the troops can be assembled and cannot be isolated."

In terms of creating such an Army, Wu Ch'i goes on to say:

"Put men from the same villages together and the sections of ten and the squads of five will mutually protect each other."

This concept of small, tightly bonded, highly interdependent groups as the foundation and essential building block of the disciplined mass of pre-modern armies was well understood from the classical period onward. In the Roman Legion, for example, it was acknowledged that the discipline and ordering of training, drill, and skills was dependent upon the social ordering, group identification and bonding of the Legionnaires.

Each legion was divided into 10 Cohorts of 1,000 men, each Cohort into 10 Centuries under the command of a Centurion, and each Century was divided into squads or messes of 10 men under the command of a Decanus. These 10 men, a Conturbina or Maniple, trained, ate, lived and fought together as the equivalent of a contemporary squad. One may trace a direct line of social descent, if you will, from the Conturbina through the squad comprised of the group of tent and mess mates that characterized the units of the American Civil War, to the squads, teams and crews that are the foundations of our contemporary military forces. Armies are not and never have been built on undifferentiated masses of soldiers operating singularly or as individuals, but are built out of highly interdependent small groups.

WORLD WAR II: THE EXTENSION OF THE UNDERSTANDING OF THE ROLE OF COHESION; COMBAT FATIGUE, SUSTAINMENT, AND PERFORMANCE

With the adoption of Selective Service and the expansion of U.S. military forces in preparation for possible involvement in World War II, American psychiatry relied, initially, on its interpretations of the experience of World War I in considering the psychological sustainability of troops committed to combat. World War I military psychiatrists had correctly come to the conclusion that the large numbers of casualties classified as victims of "Shell Shock" or "War Neurosis" were essentially suffering from a class of psychological disorders rather than physically induced illnesses. Mort had come to the conclusion, based upon both the psychiatric and neurological assumptions of the time, that the problem was one of individual predisposition and vulnerability based upon individual psychological and constitutional factors. Most authorities reasoned that "truly" normal men—the "psychologically strong" were at very low risk for psychological or performance breakdown in battle. Thus, with the initiation of the draft in 1940, attempts to screen out the potentially vulnerable were central to thinking about the prevention of psychological casualties in war. Initially 5,250,000 were rejected by Selective Service and of these 1,686,000 (32 percent) were excluded for emotional, mental or "educational" disorders. An additional 504,000 were separated from the Army on psychiatric or behavioral grounds (Ginzberg, *The Lost Divisions*, Kings Press, Columbia University, New York, 1959). In addition to these outright rejections and separations, a consistent process of weeding out of those thought to be psychiatrically at risk and their movement to non-combatant service and service support units and positions, took place throughout World War II. This process was carried out by psychiatrists, other medical officers and commanders.

Despite this massive screening and purging of the potentially vulnerable, U.S. forces suffered high numbers of psychological casualties, primarily in the form of

transient or more prolonged emotional and behavioral breakdown with inability to perform, called combat fatigue or combat exhaustion. Approximately one out of every five combat casualties suffered by U.S. forces was psychiatric/psychological. In addition, it was observed that these overt combat fatigue casualties were but one category of risk generated by stress and concurrent psychological and psycho-physiological breakdown. The breakdown of behavior came in many guises including death or wounding due to errors of judgment, sensory decrements or performance deficits generated by combat stress, an increase in illnesses known to have a psychogenic or psychosomatic component, increases in rates of injury and physical illness, and increases in illness that are preventable through volitional behavior, such as frostbite and malaria.

The power of the battlefield to break down human behavior can never be overstated. The immediate causes of such breakdowns are well known and have been described by many authorities. It was simply put by Appel and Beebe, responsible for critical epidemiological work on combat fatigue during World War II, in an article in the *Journal of the American Medical Association* (131, 18, 1946):

"The key to an understanding of the psychiatric problem is the simple fact that the danger of being killed or maimed imposes a strain so great that it causes men to break down. One look at the shrunken apathetic faces of psychiatric cases as they come stumbling into the medical station, sobbing, trembling referring shudderingly to "them shells" and to buddies mutilated or dead is enough to convince most observers of this fact. There is no such thing as "getting used to combat." Each man "up there" knew that at any moment he may be killed, a fact kept constantly before his mind by the sight of dead and mutilated buddies around him. Each moment of combat imposes a strain so great that men will break down in direct relation to the intensity and duration of their exposure. Thus psychiatric casualties are as inevitable as gunshot and shrapnel wounds in warfare. . . ."

Examples of the levels of psychological casualties generated in line divisions in Europe in World War II are given in the following table showing combat neuro-psychiatric casualties in relationship to numbers wounded in action in a series of battles as well as the rates for one U.S. Marine Division in the battle for Sugar Loaf on Okinawa.

Division, Battle and Time Period	No. of Days	No. of WIA	No. of NP	Percent
86th Gustav line 11-14 May	4	2000	250	12.5
86th Gustav line 11 May-10 June	30	4000	623	15.5
88th Gustav line 11-14 May	4	650	125	19.2
88th Gustav line 11 May-10 June	30	1300	248	10.0
34th Gustav line 25 June-29 July	36	1800	235	13.0
91st Cecina River 12 July-15 August	35	700	250	*33.0
88th Volterra 1-31 July	23	1750	564	*32.0
34th Gothic Line 13 September-26 October	44	1600	346	*21.0
91st Gothic Line 13 September-26 October	44	2700	919	*34.0
88th Gothic Line 13 September-26 October	44	3600	817	*22.0
1st Arm Gothic Line 13 September-26 October	44	250	137	*54.0
85th Gothic Line 13 September-22 November	71	4000	597	14.9
6th Marine Okinawa 12-21 May	10	2662	1289	48.4

(Drawn from Matkins and Glass, "Neuro-Psychiatry in World War II, Vol. II, Overseas Theaters," Office of The Surgeon General, Department of the Army, Washington D.C., 1973)

* It will be noted that there are marked variations in rates between divisions in roughly equivalent actions and within divisions for different actions. In the latter case the most powerful single factor accounting for differences in rates is intensity and severity of combat, although other factors such as initial exposure to severe combat load the outcome. In the former case other factors, particularly cohesion and morale were consistently stated to be the major affectors of the rates.

The U.S. Army's intense attention to psychological breakdown in battle, its causes, and those factors that might prevent it or lower the levels of risk and enhance the sustainability of soldiers in combat came early in the war at the beginning of our commitment to offensive warfare in North Africa. At that time green units meeting a skilled and powerful enemy, the Afrika Korps, had unexpectedly massive numbers of combat psychological casualties, reaching levels as high as 36 percent of all casualties at the battles of the Kasserine and Faid passes.

In 1943 CPT Herbert Spiegel M.D., an Army psychiatrist, was sent to evaluate the factors that had affected performance and the levels of combat psychiatric casualties seen in the Tunisian campaign. Spiegel reported, in an article published in the *Journal of the American Psychiatric Association* in 1944, on the sustainment of performance of men in battle that:

"If abstract ideas—hate or desire to kill—did not serve as strong motivating forces, then what did serve them in that critical time? What enabled them to attack and attack, and attack week after week in mud, rain, dust and heat until the enemy was smashed? It seems to me that the drive was more a positive than a negative one. It was love more than hate. Love, manifested by (1) regard for their comrades who shared the same dangers, (2) respect for their platoon leader or company commander who led them wisely and backed them with everything at his command, (3) concern for their reputation with their commander and leaders, and (4) an urge to contribute to the task and success of their group and unit.

In other words, interpersonal relationships among men and between the men and their officers became more intense, and rank less important. These cohesive forces enabled them to identify themselves as part of their unit. It enabled them to muster and maintain their courage in the most trying circumstances. It even led them, at times to surprise themselves with gallant and heroic actions. . . ."

This core issue of the powerful controlling role played by group relationships to effectiveness, sustainability and the maintenance of soldier mental health was underlined by the conclusions of the Commission of Civilian Psychiatrists sent by the War Department to investigate the problem of combat fatigue in 1945. Their primary conclusion was that:

" . . . we mean to emphasize the fact that the organized pattern of the unit and its emotional bonds constitute the dominant constructive and integrative force for the individual soldier in his fighting function. This group life is his inner life. When an individual member of such a combat group has his emotional bonds of group integration seriously disrupted, then he, as a person, is thereby disorganized. The disruption of group unity is, in the main, a primary causal factor, not a secondary effect, of personality disorganization.

We find that American psychiatrists and other physicians have considerable difficulty in grasping the significance of the group as the core of personality organization for the soldier in his fighting function. . . ."

Colonel Albert Glass M.D. summed it up first at the WRAIR 1957 International Symposium on Preventive and Social Psychiatry, reviewing his experience in World War II and Korea:

"Available epidemiological data indicated that the mental illness of troops in warfare, exclusive of psychotic disorders, is more significantly related to circumstances of the combat situation than to any personality attributes or characteristics of the individuals who are exposed to battle stress. Pertinent combat circumstances include the intensity and duration of battle which can be measured by the battle casualty rate and the days of continuous action. However, of equal importance in determining the frequency of psychiatric cases are less measurable elements of battle; to wit, the degree of support given the individual by buddies, group cohesiveness, and leaders. These less tangible influences explain the marked differences that may occur in combat effectiveness and the frequency of psychiatric cases among units which are exposed to the same intensity and duration of battle."

Then in his landmark history of neuro-psychiatry in World War II:

"Perhaps the most significant contribution of World War II military psychiatry was recognition of the sustaining influence of the small combat group or particular members thereof, variously termed "group identification," "group cohesiveness," the buddy system, and "leadership."

Awareness of the foregoing social and situational determinants facilitated the use of preventive measures to enhance group identification, improve leadership and generally raise the level of group morale."

A non psychiatrist, BG S.L.A. Marshall put the issue simply and forthrightly:

"The greatest enemy of the rifleman is individual loneliness. Man is a gregarious animal. His greatest steadying force is the touch of his fellows. Under battle's pressure, he cannot long endure out of sight and voice contact with them. It was so in the time of the Medes and the Persians; it will be so in the wars of undefined dimension in a terrible tomorrow. Such marvels as radio and television do not change it. We need the touch of the hand, even as we need the conviction that we are a useful part of something much larger and more important than ourselves, whenever the pressures of life put inordinate demands upon our frail persons."

These observations and the other studies carried out during World War II and subsequent conflicts are responsible for the extensive research commitment of contemporary military psychiatry to the issue of cohesion, the analysis of the social organization and structure of military groups. For three decades my colleagues and I have been working to try to better understand the group processes, issues of individual and group identity, the patterns of interpersonal relationship and those other factors that protect the soldier against psychological and behavioral breakdown or that may conduce to it.

We have focussed on and explored the definition of the major psycho-social correlates and predictors of unit effectiveness and performance and sustainment of individuals and groups under stress and the nature, structure and processes of group bonding and identification.

The psycho-social factors involved have variously been referred to in military studies as "unit cohesion," "cohesion," "morale," "unit esprit," "leadership," and "unit climate." When they are analyzed they can be separated out into a set of differentiable but interrelated components. These component factors interact and cumulate to have powerful consequences for the performance and readiness of units as corporate endeavors, and their individual members in peacetime, and the effectiveness and sustainability of both in combat.

CLASSES AND CONTEXT OF MILITARY UNIT COHESION

Cohesion is neither an entity or a thing. It is not, as I have tried to indicate, a single or singular factor. It is partly a state, i.e., the unit existing as a cohesive corporate body. In other aspects it is a process comprised of ongoing interactions, judgments, perceptions, sentiments and relationships within the squad, crew, company or battery. In our work over the past years we have divided cohesion into two general categories, each has strong effects on the other but each is amenable to fairly independent analysis. These are Horizontal and Vertical cohesion. Horizontal cohesion encompasses those factors that bond and integrate the primary group, team, crew, squad and section and the extended primary group, the platoon. When we speak of horizontal cohesion we refer then to soldiers who are essentially peers as junior enlisted and junior non commissioned officers. When we speak of vertical cohesion we are speaking of the components of that bonding that exists between these soldiers and their leaders, senior non-commissioned officers and officers at the company/battery level. It is important to point out that the unit of analysis in which we define and measure cohesive processes and cohesion in ground combat forces is the company or battery.

Based on a large number of studies done since World War II and the body of evidence provided by military history, memoirs and novels by active combatants, oral historical sources and our own past research, the company or battery is the largest unit in which actual interactive cohesive processes exist for most soldiers. If it is a truism that soldiers, once committed to combat, fight for each other more than for any other value or end, it is critical to underline that under normal circumstances the group involved is limited to the company or battery. The strongest relationships are to be found between members of the same squad, crew or section, the next strongest within the platoon, and the outer boundary is essentially the company or battery. Our observations have underlined the fact that it is the strength of the ties within a soldier's basic primary group (squad, crew or section), seconded by his ties to his wider interactive groups (platoon and company) and the degrees to which he feels confidence and trust in the company and platoon and his unit leaders, that most affect performance.

The company is the human environment in which the soldier's face to face relationships take place. These are the relationships which provide the soldier with the primary social and psychological support that are critical to mediating the stresses of training and combat.

It must be realized that the overwhelming majority of influences on the soldier's life, commitment, satisfaction, and feelings and perceptions about the possibility of going into combat and the Army in general, are focused upon and attributed to the company/battery level. Generalities of command and organizational climate, decisions made at higher levels that affect the soldier's or his family's life for good or ill are reallocated within the company and attributed in part or in full to the company chain of command. The command climate of the wider organization, particularly of the battalion, can have powerful effects on relationships between leaders and soldiers, and between soldiers within a company or battery.

However, while a Battalion Commander, or even a Brigade or Division Commander, who is perceived as an extraordinary leader may increase a sense of common identity among his troops, such a leader may have little or no effect on pat-

terms of face to face interaction. As in the past, and for all but its most senior leaders, the company is the arena of the overwhelming majority of intimate social, recreational and supportive interaction and relationships. During duty hours and, above all during deployments, the company defines the soldiers possible social universe.

A measure of the powerful degree to which the company and its constituents, platoon, squad etc., order relationships may be seen in a large scale sociometric study which we carried out at an Eastern Army Post in 1973. Soldiers were asked to indicate friends on Post by unit and individuals with whom they shared off duty recreational interests. There were over a thousand respondents who made over 4000 choices. The overall results were:

Choices within own unit (Company)	3,438
Choices in other units	741
Percent of choices in own Company	82.2

The company level, then, is that at which we analyze and evaluate cohesion. It is at this level that we find the components of the relationships that are critical to the soldier's confidence and to his ability to survive and win in combat. The greater the personal trust that the soldier has in his peers, the greater the confidence that the soldier has in the skills of his fellow soldiers and the tactical skills of his company level leadership, the effectiveness with which his company operates and uses its weapons systems, the greater, in general, will be the unit's capacity to fight effectively and to sustain itself. The greater, also will be the capacity of its soldiers to sustain themselves and perform effectively for long periods in face of the stresses and trauma of combat and commitment of going against fire.

Soldiers' affiliations with larger organizations, Battalions, Brigades, Regiments, Divisions, are essentially symbolic. They may play important roles in defining the soldiers self image, his expectations, and his belief in the power and effectiveness of his organization to execute its mission but they play little part in the soldiers daily routine or in the universe of his face to face behavior.

THE COMPONENTS OF COHESION MEASUREMENT AND ASSESSMENT: PSYCHOLOGICAL READINESS FOR COMBAT AND PROJECTED SUSTAINABILITY OF UNITS AND SOLDIERS

In our WRAIR studies of cohesion and in its analysis, assessment, and evaluation, we see it as a major contributor to psychological readiness for, and sustainability in, combat of companies and batteries, and as critical to the maintenance of the mental health of soldiers in face of the exposure to peacetime and wartime stresses and trauma. We have developed an analytic framework for assessing, both qualitatively and quantitatively, the various components of both cohesion classes, horizontal and vertical. For the past 12 years these assessments have been carried out utilizing a combination of unit interviewing/debriefing and a series of questionnaires based upon and developed out of work carried out in the United States and other armies since 1941. Such data have served as an excellent guide, at very high levels of correlation, to actual combat performance in both the United States (particularly during World War II in Europe) and other armies (particularly the Israeli Defense Force).

The database out of which our assessment instruments were developed is, therefore, a wide scale involving convergent quantitative and qualitative data sources. The sources are: historical, sociological, psychological and observational, with a bias toward measuring and evaluating those factors that have correlated best with assessed performance, combat outcomes, and measures of soldier mental health. Among the sources utilized in the framework and development of our work were: the results of the "Field Forces" surveys undertaken by the Adjutant General Research Branch in World War II (some published in Stouffer et al., *The American Soldier*, others archived as "special studies"); extensive analysis of unit performance and levels of generation of combat stress casualties in World War II and Korea undertaken by Division Psychiatrists and Corps and Theater Psychiatric consultants; oral historical materials; military historical and cliometric materials; post combat debriefings carried out by WRAIR and other personnel in Korea, Vietnam, Grenada, and Panama; pre and post combat interview data gathered in Operation Desert Shield/Desert Storm; and data gathered in the course of assessing cohesion processes and levels in the Army's COHORT program and in the development of the Army's light infantry divisions. A number of studies carried out by the Israeli Defense Forces since 1973 have also been utilized.

Based upon these data sources we define each class of "military unit cohesion" as containing the following specific components:

A. *Extended Horizontal Cohesion:*

By extended horizontal cohesion we mean the bonding established between soldiers at junior enlisted through junior NCO ranks (e.g. essentially pay grades E-1 through E-5). The major components of this class of military unit cohesion include:

1. Belief that members of the primary group have the skills and abilities to successfully carry out their military tasks.
2. Belief that members of ones group will fully participate in organizational tasks and pull "their own weight."
3. Belief that the group can functionally organize itself for effective optimum performance because of its members' extensive knowledge of each others strengths and weaknesses.
4. Affective or emotional ties between soldiers as friends or buddies characterized by mutual trust and confidence and belief in group members' personal reliability.
5. Significant openness of relationships and expectation that support will be provided by other soldiers to help group members to deal with personal, family and organizational stress and minimize its effects.
6. Belief that members of the primary group are committed to taking care of each other and that in situations of stress, pressure, challenge or danger, will look out for, protect and aid each other.

Analytically we normally assess these components of Horizontal Cohesion in terms of three more inclusive factors:

1. Affective bonding in the groups.
2. Military skill, competence and effectiveness.
3. Instrumental ties, e.g., reciprocal obligations to protect and "look out for" each other.

B. *Extended Vertical Cohesion:*

Of equal importance to horizontal cohesion as a sustaining factor in combat are the soldier's perceptions of and relationships with his leaders. Like extended horizontal cohesion, extended vertical cohesion is also a multiplex measure. It integrates the soldier's perceptions and evaluations of the key leaders in his chain of command and is an expression of general leader-soldier "integration." It is also weighted by the soldier's perception of the unit's key and critical leaders. In establishing the company or battery context and climate these leaders are; the Company/Battery Commander, the First Sergeant and the Platoon Sergeant. When deployed, the Platoon leaders importance rises dramatically.

The primary components of extended vertical cohesion include the following basic elements which bear on unit effectiveness and psychological resiliency:

1. Perceived technical and tactical competency of leaders.
2. Perceived degree to which leaders are concerned about the personal lives, needs and "dignity" of their subordinates, including perceived equity and lack of favoritism.
3. Perceived degree of predictability of leader actions, decisions, time management and prioritization of soldier activities and needs, particularly as it reflects upon (2) above.
4. Perceived level and accuracy of leader-soldier communication.
5. Leader abilities to impart skills to soldiers and provide effective training.

These components are normally subsumed into two broader factors characterizing extended vertical cohesion. These are:

1. Perceived professional and technical competency, trustworthiness to lead in combat.
2. Perceived care and concern for the soldier.

A number of other perceptions, grounded in the soldiers actual experiences in the unit, the challenges that the unit has met together through time, ongoing patterns of training, weapons system operation and maintenance, trust in the tactical competency of the unit overall, and perceived unit concern for soldiers' families also contribute to the development of patterns of cohesion and to the psychological readiness of the unit to enter combat and sustain itself.

FACTORS THAT ESTABLISH UNIT COHESION

Horizontal and vertical cohesion and the interactive, behavioral and perceptual components discussed above do not exist as an isolated set of interpersonal actions. They are the product of a set of powerful contextual factors that establish the environment and conditions in which the interactive and interpersonal actions and perceptions take place. These contextual factors shape and order the perceptions and acts that we measure as "cohesion."

The contextual factors necessary to create small unit cohesion in Army organizations are derived from the following wider patterns:

1. A common and shared organizational culture and values.
2. Common status and primary identity as soldiers, for all members of the unit.
3. A commonly shared language, constructs, and metaphors characterizing members of the primary group.
4. Experiences in which the group collectively undergoes a series of challenges and stresses and successfully achieves a set of goals in which the members of the group see themselves as having successfully mastered a set of skills and demonstrated their competency executing these skills in order to achieve their goals.
5. Minimal unnecessary turbulence and continuity of tenure within units.

THE CREATION OF A COMMON ORGANIZATIONAL CULTURE AND VALUES

The primary mechanism and process utilized by the U.S. Army for socializing soldiers into a common organizational culture with common values and language, and a common identity is Initial Entry Training (IET). We have had occasion to study IET four times in the past 30 odd years. It consistently proves to be the most powerful creator of the contextual bases for cohesion as well as the single most powerful bonding experience and model of the behavior required to be part of a military group for first term soldiers.

IET provides, for almost all soldiers who complete it, a series of both individual and group successes in the form of tasks accomplished and mastery gained. In its collective tasks, its buddy system, its structured demands for interdependent and cooperative behavior, its highly defined requirement for group support to ensure success, and its well structured feedback and reward system for task mastery and "jobs well done," it provides both the opportunity for and the experience of extraordinary bonding to the soldiers who are members of the primary group.

The primary group may center on the squad, but usually extends to include the entire IET platoon and secondarily the company. This experience creates much of the internal model the young soldier will carry into the field Army. For the overwhelming majority of young soldiers, the IET experience is unique and represents a significant discontinuity from previous patterns of living and social relationships centered on individual performance and individual need satisfaction.

Most critically, the individual undergoes a positive identity transformation, from civilian to soldier. This new identity establishes the young soldier's new status position and creates that set of expectations and cultural norms about the bounds and content of soldierly behavior expected of self and others. The new soldier almost invariably sees this IET period and identity transformation as a transition involving great personal growth and maturation.

For the overwhelming majority of trainees the experience of IET is also charismatic in the traditional sense of that word. Part of the identity transformation and extraordinarily positive response that the new soldier feels comes from the powerful experience of bonded membership in highly organized and effective primary and secondary groups; the IET squad and platoon, the company and the Army. The new soldier sees himself as possessing greatly increased personal confidence, competency and ability. There is a new sense of power to meet challenges and conquer obstacles derived from membership in his military group, its support and the successes achieved in the course of the training process. This transformation is buttressed by the strong bonding of trainees to their primary group leaders, their Drill Sergeants who serve as powerful role models after whom trainees begin to shape and mold their own behavior. Drill Sergeants are perceived as embodiments of competency and effectiveness. Highly skilled leaders and teachers, taking care of their men and solving the problems of group members. They are also perceived as possessing exceptional power and authority, particularly to make the Army system responsive to soldiers' real needs.

The leaders, greatest potency in defining the military group and creating its significance for new soldiers comes from their capacity to lead and teach, bringing the group from one measurable success to another. The training process and its leaders create a cognitive model of the cohesive, effective, military unit. They create the conditions in which new soldiers internalize this model. Esteemed leaders work to enhance the bonding of the group, the importance of this bonding, both individual and collective self esteem, confidence and interdependence.

This takes place through continuous drill sergeant and trainee interaction and continuous role modeling and encouragement of bonding within a structure that tries to achieve continuous interplay between individual and collective success in achieving high density of visible goals.

This pattern of events and experiences in training, underlain by the continuing and consistent support and help that trainees must give each other, develops powerful ties between the members of the group. It also creates the anticipation that such ties are critical to the maintenance and sustenance of all future primary military groups the soldier will enter. Initially, the reasons for the necessity for such strong bonding are primarily instrumental and operational, but they also develop significant affective and emotional content. This content is primarily expressed, particularly in the latter part of the training cycle, in the concept of the primary group "being like a family." Fellow trainees, particularly "buddies," build upon the required buddy pairings and primary group responsibilities in training. While in most cases the bonding of the group in the training company is seen as transient, it creates a powerful and important template. The effective primary group is to be a family or like a family. The more cohesive the group the more extensively and intensively soldier relationships are seen as familial. Primary group obligations and commitments are seen as those siblings are expected to have to each other, imbued with the same level of commonality and trust that siblings should feel.

This socialization or "soldierization" process experienced in the Army Training Center critically defines for the new soldier a new and powerful and appended role—soldier, and the behaviors to be expected from those who play that role.

Initial Entry Training does not replace the previous personality or values brought into the Army by the new soldier. Rather it adds to these a new role with a new set of behaviors and standards, those that are to be exhibited, expected of others, and acted upon while serving as a soldier and as a member of a squad, team or crew.

These new role perceptions and the new and powerful knowledge that the group and its members' behavior are critical to one's own performance and potential survival have important consequences, both in the IET company and in future assignments. The trainees become more attentive over time to the abilities and behavior of their fellows. In the forging ground of the training company, one's behavior comes under a searching scrutiny that seldom, if ever, exists in civil life. Both gross behavior and nuances are continually evaluated by other trainees. The poor performer, the non-adaptor or non-learner, the probable delinquent, the individual who places his or her own immediate needs above the welfare of the group, and others who impress their peers over time as potential ineffectiveness come to be seen as long term dangers to the group.

Initially the group will support, help, and try to work with each of its members. Ultimately, however, the group will reject the individual who appears to embody a threat based upon his or her behavior. That person will be extruded and isolated. The group will behaviorally disengage from the extruded member and psychologically bound itself against him and leave him to fail by himself.

COMMON STATUS AND PRIMARY IDENTITY

Each time a soldier enters a new unit, he or she is the object of a quiet but searching assessment by the members of the primary group already there. While some people are accepted and bonded into the unit almost immediately, much of our data has demonstrated a two phased aspect to the incorporation process. The first phase involves assessment of the soldier as member of the group in garrison. Most soldiers maintain that it takes between 2 and 5 weeks to determine whether a new squad or platoon member is trustworthy, meets standards, and shares enough of a common culture to be bonded into the group. The process is more intense for those who live in the barracks, where off duty time as well as duty time is shared, and more focused on duty performance and behavior for the married soldier who lives off post. The second phase takes place during the first shared prolonged field exercise where the newcomer is again assessed, both in terms of field and potential combat skills, and in terms of his or her ability to get along with others under conditions of stringency and deprivation. During duty hours, in the field or when deployed the individual is continuously evaluated by his or her peers as a "person," as a group member demonstrating primary loyalty and trustworthiness to the group, and in the exhibition of technical competence. Presenting a non-group based identity or commitment to the group has the potential to rupture group bonding. If such an identity is perceived as threatening to the survival of the group in combat as, for example, the occasional insistence of drug users in Vietnam on using drugs when on patrol, the group will take extreme and hostile action. The soldier must "belong" and belonging depends upon each member of the group playing his or her appropriate role while on duty.

The profound interdependency that characterizes military groups is grounded in the need for extraordinary levels of interpersonal trust. Common language, values

and perceptions are the modes of communicating and expressing this trust. It is the foundation of that ultimately selfless and extraordinarily intimate *agape*-like love that characterizes the primary group in combat. As one wounded veteran put it during World War II, as quoted in *The American Soldier*:

"You know the men in your outfit. You have to be loyal to them. The men get close knit together. They like each other—quit their petty bickering and having enemies. They depend on each other—wouldn't do anything to let the rest of them down. They'd rather be killed than do that. They begin to think the world of each other. It's the main thing that keeps a guy from going hay-wire."

This same deep intimacy is implicit in the following passage from Roger Little's study of an infantry Company in Korea when he was assigned to WRAIR during the Korean Conflict:

... From comments of those men and others, and the way they behaved, a set of norms that seemed to guide the behavior of buddies can be formulated.

First, a buddy had to "understand" in a deeply personal sense. Buddies became therapists to one another. Infantrymen were most likely to encounter situations provoking unusual and deviant reactions. One man said of another whom he had as a buddy, "Our minds seem to run together." "A buddy understands you and is interested in your story. Some big mouths talk as if everyone is interested in their story, but they're not. You've got to find a guy you like and he likes you, then you're buddies and you know he'll listen to you when you want to talk. A buddy shares everything; if you don't get mail, he lets you read his."

This same profundity of the relationship between combat soldiers (in this case Marines) in Vietnam was feelingly put by Philip Caputo in his introduction to *A Rumor of War*:

"I have also attempted to describe the intimacy of life in infantry battalions, where the communion between men is as profound as any between lovers. Actually, it is more so. It does not demand for its sustenance the reciprocity, the pledges of affection, the endless reassurances required by the love of men and women. It is, unlike marriage, a bond that cannot be broken by a word, by boredom or divorce, or by anything other than death. Sometimes even that is not strong enough. Two friends of mine died trying to save the corpses of their men from the battlefield. Such devotion, simple and selfless, the sentiment of belonging to each other, was the one decent thing we found in a conflict otherwise notable for its monstrosities."

In our work in both Operation Just Cause and Operation Desert Storm we heard the same theme expressed over and over again. In squad after squad, in its simplest and most powerful form we were told:

"We are family. We are brothers. We can make it only because we have each other."

OTHER FACTORS BEARING UPON COHESION

A number of other factors that bear upon military units are worth mentioning at this point. Continuity and tenure in the military unit with ample time for both mastery of collective skills and establishment of the deep relationships of trust is critical. Such tenure, combined with prolonged, demanding and challenging field training provided the basic conditions for soldiers getting to know each other in depth. It brings with it the intimate knowledge of each other, of skills, strengths and weaknesses, and knowledge of how to provide both emotional and technical support that both creates and sustains the highly effective unit. The highest average levels of cohesion that we have ever measured in regular Army units that are not "hyper-elite" like the Ranger battalions, were units in Saudi Arabia in November/December of 1990 and early January of 1991. In all of our interviews, as well as our quantitative data, soldiers were agreed that the prolonged period of living together with each other and their leaders, working together, training hard, and becoming "a family" was critical to their ability to withstand the prolonged stresses of the Shield period (Separation, heat, crowding, isolation, etc.). It was also widely perceived as having been critical to the achievement of the extremely high level of effectiveness and success when committed to combat. There was a widespread feeling that the very high levels of cohesion and corporate skill achieved in the desert had been critical in the absolute minimization of the number of casualties that U.S. ground forces had taken in combat.

It should be pointed out that our follow up work on ODS has shown a drop in the high levels of cohesion that characterized the force in ODS. While some of this was predictable our interviews have indicated that an appreciable amount of this drop is probably due to the high levels of turbulence and turnover that have come with the down sizing of the Army and the withdrawal of troops from Germany.

The issue of continuity and prolonged field and training time together is of special importance given the demography of the new volunteer, professional army with its high married content. In the era of the draft army the majority of off duty time was spent with other soldiers in ones unit, today this is true only of the single, unmarried soldier living in the billets. The married soldier spends his or her off duty time with spouse and children. Overall this has lessened the degree to which informal, off duty relationships and interaction extend and support interpersonal bonding in the company or battery. High levels of bonding thus appear to require more continuity of tenure and field experience than they may have in the past.

COHESION AND FUTURE WARFARE

We face grave difficulties whenever we attempt to extrapolate from today to "the day after tomorrow." However I believe that only in understanding the compelling enduring human realities of combat and military organization can we contend with the future. I would offer the thought that technological advances, smaller forces, battlefield dispersal and the shift to a force projection modality have made the continuing maintenance of highly cohesive military units more important to the future than they even have been in the past and the immediate present. In the past, in time of danger we have usually been, one way or another, afforded the luxury of time in which to create highly cohesive units to counterpunch or strike the enemy. When we have not had that luxury the results, as in the initial weeks of the Korean Conflict, were disastrous for our soldiers. The speed with which events and their consequences now overtake us make it imperative that our forces be able to make an immediate transition from peace to war. High continuing levels of cohesion are critical to making transition with maximum unit effectiveness and minimal short or long term negative effects on the mental and physical health of the soldier. We must always remain aware of the admonition of Cato the Elder and it should constantly underlie concerns that:

"... misconduct in the common affairs of life may be retrieved, but that it is quite otherwise in war, where errors are fatal and without remedy, and are followed by immediate punishment."

COHESION, STRESS, TRAUMA AND MENTAL HEALTH: SOME FINDINGS FROM JUST CAUSE AND DESERT SHIELD/DESERT STORM

In the last two armed conflicts that U.S. Army units have been engaged in we have, among many other factors and findings been able to establish quantitatively as well as qualitatively that:

1. Buddy and fellow squad and platoon members are the primary sources of social support enabling the soldier to deal with the anticipatory stresses of combat, the stresses of the combat situation and post-combat feelings.
2. That both horizontal and vertical cohesion of the unit during the combat period and the unit in the post-combat period have strong effects on the post combat adjustment and the levels of post combat stress symptoms that the soldier experiences.
3. That both pre and post combat psychological symptoms are significantly affected by levels of unit cohesion. Expected apprehension about potential commitment to combat is not simply an individual and independent phenomenon but is mediated and affected by unit cohesion levels.
4. The primary factors in the management of deployment stress were squad/platoon cohesion and leader behavior and image.
5. Perception of leaders exerted a strong effect on levels of report of psychological symptoms by soldiers.
6. Consistently, our longer term follow up shows that post combat stress symptoms and post combat adjustment are both mediated by levels of past and present unit cohesion.

Chairman NUNN. Thank you, Dr. Marlowe.

I think we will go back to our normal 6-minute rule, and I will ask the clerk to notify each of us when our time has expired.

Senator Thurmond, would you like to make an opening statement before I start my questions? I would be glad for you to do that.

Senator THURMOND. Mr. Chairman, I regret I had a conflict and could not be here to follow your opening statement.

The focus of today's hearing is cohesion and the potential impact of any change in the Department of Defense policy excluding avowed homosexuals from military service.

Cohesion has been characterized as the glue that holds a team together. It is what binds a number of individuals into a unit and is recognized as one of the most critical, yet most elusive and fragile, qualities of military units. Cohesion is an intangible quality. It cannot be quantified, but evidence of its presence or absence can be sensed or felt by those in a unit and by observers trained to understand cohesion.

Our witnesses today have studied and written about cohesion and those attributes which contribute to or subvert cohesion in military units. Their studies help us understand why one unit is successful while a similar unit is not able to meet the same performance standards.

I am sure they can describe the factors affecting cohesion better than any of us, but the noted military scholar, S.L.A. Marshall, listed five factors which he says promote cohesion.

According to Marshall, the following factors are essential to cohesion: first, members share common values and experiences. Next, individuals conform to the group norms and behavior. Next, members give up individual identity in favor of a group identity. Next, members develop a dependency on each other, and last, group members must meet all standards of performance and behavior.

Now, whether we agree on these five factors or not, I think we will all agree that in order for a military unit to be successful, it must function as a team. The soldiers, sailors, airmen, or marines, must view the unit almost as a family unit.

The unit must be the source of positive things. It must establish and enforce performance and behavioral standards. It must provide an environment of mutual respect and trust. Successful, well-trained, well-prepared, ready units share these traits.

We here in the Congress and as a nation must not do anything which will undermine the cohesion in our military. I think the impact on cohesion and ultimately on readiness is the single most important consideration in this debate, and I look forward to hearing from our witnesses today, and I hope they can help us understand this fragile concept and what the potential impact of changing the homosexual policy may have.

I am sure we will come back to the record of this hearing many times as we deliberate on our decision. It is easy to become distracted and lose focus during the discussions on the wisdom of changing the current ban. As we hear from advocates from both sides, we must maintain our focus. We must not become distracted. The impact on cohesion and military readiness is the critical factor.

Thank you, Mr. Chairman.

Chairman NUNN. Thank you, Senator Thurmond.

Let me start, Dr. Henderson and Dr. Korb, with a statement. Dr. Korb has stated his view that the question of whether the presence of openly gay men and lesbians in the armed services would undermine fighting effectiveness cannot be answered definitively until

the policy is actually changed. Do you have a view on that, Dr. Henderson?

Dr. HENDERSON. I first of all do not agree with that. I think we know enough now about what causes cohesion, and what the requisites are for cohesion and so on, that we can very accurately say what the effects would be if you introduce certain situations into a military unit.

Chairman NUNN. What do you think the effects would be?

Dr. HENDERSON. The effects would be far more substantial than Dr. Korb indicate. I think he greatly minimized the problems involved. He cited, for instance, the foreign military experiences and the race experience.

If I can just take a minute to talk about those two bits of evidence, first of all, when the armed forces were integrated racially, it was in 1953 when it actually did happen. At that time, the then-equivalent to the Joint Chiefs of Staff, the military leadership, approved of it. It was a military necessity, and they approved of that integration. They at that time did not think it would be disruptive to the extent that they could not deal with it.

Also noteworthy at that time, only 31 percent of the soldiers felt that the services should not be integrated racially at that time, which is far different than what we have today, and I will cite some of those statistics a little bit later.

Chairman NUNN. Now, Dr. Korb gave a figure, 80 percent of the white, I believe, soldiers opposed that. You are saying 30 percent. You give your source.

Dr. HENDERSON. I think he said sometime in 1943, and he said later it was down to 50-odd percent, but by 1953 it had gone down to 31 percent.

Dr. KORB. What I said was, in 1943 it was 80 percent. By 1951 it was 44 percent, and I stopped there, and he is right as the policy—

Chairman NUNN. So we do not have a disagreement on numbers, we just have a time frame difference.

Dr. HENDERSON. That is right. So what I am saying is, when it actually did happen in 1953, only 31 percent of the soldiers were against it, and as I say, right now, on the homosexual issue we are talking 70, 78 percent of the soldiers are strongly against it, and I will come to that in a moment.

What you also find back then is that the American public changed its attitude towards race very quickly. It was broached and there was rapid change in American culture about race, and everybody eventually came around to, integration is right, very quickly. You do not find that in today's public about the homosexual issue.

If you go back and look at the National Opinion Research Survey Council data that tracks these things over time, the University of Chicago 20 years ago, 67 percent of the American public felt that homosexual lifestyle was wrong. Today, in the last 20 years, it is actually hardened somewhat. We have 71 percent of the American public today feels that homosexual lifestyle is wrong, so you do not see the movement on the homosexual issue that you saw on the racial issue previously, and so that really makes it not analogous, as far as I can see.