

Project on Military Procurement

Dina Rasor
Project Director

422 C Street, N.E.
Washington, D.C. 20002
(202) 543-0883

OFFICER INFLATION :
ITS COST TO THE TAXPAYER
AND TO
MILITARY EFFECTIVENESS

Prepared By Thomas Lawson

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"To say that the military has too many officers
is silly. The fact is that we don't have
enough officers."

-- John F. Lehman, Jr.
Former Secretary of the Navy
March 1987

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INTRODUCTION

In 1982, the Department of Defense proposed to the Senate Armed Services Committee the need for new legislation to manage the number of general and flag officers better. Specifically, the Department wanted to justify approximately 60 more positions for Generals and Admirals for the four services. In the "Department of Defense Manpower Requirements Report FY 1985," the Pentagon reported the need to increase the number of officers in the Army by 9,599, in the Navy by 9,379, in the Marine Corps by 1,668, and in the Air Force by 9,053 in Fiscal Year 1985. In these times of budget deficits and low overall troop levels, the Project on Military Procurement questions the need for an increase in the number of officers in the Armed Forces. The Congress has also questioned the need for so many senior officers and recently ordered the Department of Defense to reduce its officer corps by six percent over the next three years. Such an order has met with strong protest from the Pentagon. In March 1987, Secretary of the Air Force Edward Aldridge said that such a reduction would be "very, very disruptive" of Air Force capabilities, and recently Secretary of Defense Caspar Weinberger reportedly wrote Congress that "grievous damage to the defense structure" would result from further officer reductions. At approximately the same time period in March, Assistant Secretary of Defense for Force Management and

Personnel Chapman Cox told a Senate Subcommittee on Manpower and Personnel that he could not explain the 12 percent increase in the number of officers that had occurred in the Armed Services since 1980.

In times of conflict, officers provide the leadership and develop the overall strategy of campaigns. We rely on their skills to defeat the enemy. But in times of peace, the demand for officers is much less. They have less of a mission to perform and fewer troops to command. By retaining or increasing the number of officers in times of peace, their existence needs to be justified. This results in assignments in procurement, public relations, and lobbying-- all of which are debilitating to our defense capabilities and costly to the taxpayer.

This paper will review the number of officers in the U.S. Armed Forces, their effectiveness to our national defense, and their cost to the American Taxpayer. For purposes of this paper, an officer is any person at the rank of Second Lieutenant or Ensign and higher and a senior officer is a person at the rank of Major or Lieutenant Commander and higher. All other personnel in uniform are considered to be enlisted personnel, with our apologies to Warrant Officers.

I. MANPOWER LEVELS IN THE U.S. ARMED FORCES-- 1945 to 1986

Ratio Of Officers To Enlisted Personnel

On June 30, 1945, the war in the European theater had been over for one month. In the Pacific theater, the island

of Okinawa had been captured by the Allies, two atomic bombs were about to be dropped on Japan, and full surrender of the Japanese forces would occur soon after. On this day, towards the end of World War II, there were 2,068 Generals and Admirals in command of the U.S. forces, with a ratio of 1 officer for every 11.6 enlisted men and women (Table I). Since World War II was such a large undertaking for our nation, we can well understand such a large number of officers after four years of combat.

However, the number of officers has increased substantially over the years from the level required to conquer the Axis forces. On June 30, 1951 and December 31, 1967 the U.S. was in the midst of the Korean and Vietnam conflicts, which may also justify high officer levels. But 1958, and 1976 through 1986 were years when America was not at war with any nation, and yet the percentage of uniformed personnel which were officers has grown to numbers far higher than the percentages during those times of war (see Figures 1 and 2, and Table II):

- * In 1939, another time of peace for the U.S., there was 1 officer for every 11.7 enlisted men.
- * In 1945, there was 1 officer for each 11.6 enlisted men and 1 General or Admiral per 5,829 servicemen.
- * In 1986, there was 1 officer for each 5.9 enlisted personnel and 1 General or Admiral per 2,055 servicemen. In 1986 we were not fighting a world war, and yet we had far more officers per enlisted personnel than ever before.

[Note: During World War II, the German Army had one officer for each 35 enlisted men. It is widely recognized that the German Army during that war had the better command leadership of all the nations involved in that global war.]

In fact, such an increase in the number of officers in relation to the total number of personnel in uniform has steadily been increasing since data of this sort has been taken. In 1789, 6.4 percent of those in uniform were officers, in 1812 5.9 percent, in 1880 10.4 percent, and by 1910 the level was down to 5.4 percent. During World War I, the level of officers remained around 5 to 7 percent, but as we see in Table II, since 1923 there has been an almost continual increase in the percentage of those in uniform who are officers.

In 1930, 1936, and 1939 the ratios of officers to enlisted men were comparable to the 1945 level (Table IV). However, at the end of World War II the services began to demobilize their troops as they had done after our previous wars. But the services were also concerned about the loss of so many men and women from their organizations and several bills were introduced in the Congress to allow the services to retain personnel. In September 1945, Senate bill S. 1438 was introduced to "encourage citizens of the United States to make the United States Navy a career." This bill passed both houses of Congress by December 1945. Another bill, Public Law 281 approved on December 28, 1945, provided for the appointment of additional commissioned officers in the Regular Army. The law stipulated that the number of these newly appointed officers in the Army should not exceed 25,000. However, on June 27, 1946 General Dwight D. Eisenhower testified on behalf of Senate bill S. 2343, which

would ammend P.L. 281 so that the number of officers allowed could be increased to 50,000. In just one year the number of commissioned officers that the Army wanted had doubled! According to General Eisenhower, "The prospects are that even in the reasonably long-term future, we will have need for at least 80,000 officers." This prediction came true. The ratios of officers to enlisted personnel has grown smaller from 1958 to 1986 as we have retained more officers and fewer enlisted personnel. From 1982 to 1986 the number of enlisted personnel increased by 2.2 percent while the number of officers increased by 6.8 percent.

In the time period between 1945 and 1986, the reduction in officers has not been even for all ranks. First Lieutenants have been reduced by a factor of 8 and Captains by a factor of 3, but the senior officers came down the least (Table III). In 1986, there were essentially the same number of Colonels and Lt. Colonels as there were in 1945, while the number of enlisted personnel has been reduced by a factor of six.

Ratio Of Officers Per Command And Its Effects

An inflation in the number of senior officers causes an overabundance of leaders for each command opportunity available (Tables V, VI, and VII):

- * In 1945, the Army had 14 Generals for each active division, 24 Generals per division in 1951, and 24 Generals per division in 1982 and 1986.

* The Navy had 1 Admiral per 130 ships in 1945, 1 Admiral per 10 ships in 1951, and 1 Admiral per 2 ships in 1982 and 1986.

* The Air Force had 1 General per 244 airplanes in 1945. By 1986 that ratio had dropped to 1 General per 32 aircraft. Even though it will vary to some degree, a squadron is usually composed of 24 aircraft, which means there is one Air Force General for each squadron in the Air Force.

If we look at the number of fighting craft, we find that in 1986 there were 251 Admirals for 452 fighting ships (1:1.8) and 339 Generals for 3398 fighters and bombers (1:10).

[Note: The numbers of ships, aircraft, and divisions are taken from several sources-- the Statistical Abstract, Public Affairs Office interviews, and Naval Institute publications. They are as accurate as possible, but since new craft are added to the Services often there can be slight discrepancies in the total numbers reported by all of these sources.]

While this may seem a dramatic way to view the overabundance of officers, there are some hidden effects we have a hard time seeing. When a person is a senior officer, he or she is entitled to a staff position. In wartime there are many slots for such people, but in peacetime the requirement for officers is much lower. As a result, we find senior officers filling positions of procurement, program, and financial management. This often takes them away from their mission of command and leadership in a combat role. Officers are expanded into nonmilitary programs such as blood banks, pension programs, and public relations. As the officer corps increases, Colonels become the "go-fors" and changers of vu-graphs (overhead slides given to illustrate a lecture) for

their numerous superiors. This is especially true in the Pentagon where Colonels are required to perform tasks that a Lieutenant or Captain performs at a base or port assignment in the States.

Another serious consequence is the effect the inflation of senior officers has on the decision making process. Since each officer has a command and each has its proper channel to communicate with each other (usually via memos), decisions are said to take much longer. Often it takes the flow of memos on what to build twice as long to settle as it takes to build the prototype. While this results in wasted time and money and undelivered weapons in peacetime, such a slow down during war will actually place our soldiers in jeopardy.

Comparing Peacetime Ratios

In a response to ratio comparisons of these types, the Department of Defense (DOD) says that the use of 1945 as a standard of comparison is poor since the levels were a result of four long years of war and battlefield promotions. The DOD proposes a more realistic comparison would be between 1983 and a time several years after an armed conflict. (For a more complete discussion of this argument, see Appendix I.)

Using this advice, the year 1958 is appropriate for a standard for troop composition. At that time we were at peace and yet also engaged in the build-up of our defense capability due to the Cold War with the Soviet Union. In an overall comparison of rank to the numbers in 1958, there are

20,897 more senior officers in 1986 than at comparable levels in 1958, 18,498 more junior officers, and 39,395 less enlisted personnel. Using 1958 as the standard, there should be only 62 Admirals for our 555 ships in the Navy and 168 Air Force Generals for our 10,782 aircraft in September 1986. To achieve this level, the DOD would need to retire 189 Admirals and 171 Air Force Generals. Of course, these Generals and Admirals are in charge of other programs such as missiles in the Air Force and aircraft in the Navy so strictly looking at the number of ships in relation to the number of Admirals is somewhat simplified. However, such comparisons point out the increase in the high ranking officers which has occurred over time, and are not as radical as they first appear since the officer inflation was well underway by 1958 when compared to 1939, another peacetime year.

While such a reduction of over 20,000 senior officers could make our defense organization more efficient, this could also create a problem in the promotion of the remaining officers. If there are fewer Colonel slots available, Lt. Colonels and Majors are faced with less opportunity to be promoted. While this would be a problem in the short run, the benefits in the long run to the command structure of the military would be worth the sacrifice.

The retiring of senior officers would also cause a great savings to the American Taxpayer. The reduction in the number of officers by rank could result in a large savings to

the taxpayer-- based on the average annual cost of officers in August 1980, we could save over \$1.2 billion each year! The cost of an excessive officer corps is high when compared to similar costs for nonmilitary personnel (see Tables XIII, XIV, XV, and XVI).

II. THE COST OF MILITARY OFFICERS TO THE TAXPAYER

As proposed in its "Manpower Requirements Report FY 1983", the Department of Defense budgeted \$108 billion-- almost 42 percent of its budget-- to pay, shelter, feed, and support the military and civilian personnel who presently work for it or who have retired after working for the Department. The \$43 billion requested for active duty personnel was an increase from the \$37 billion appropriated for Fiscal Year 1981. However, an abundance of officers-- particularly senior officers-- requires an abundance of money for their support.

We should mention that this portion of the report is only examining the cost of those on active duty. The cost and benefits of the over 1.2 million retired servicemen could be the subject of an entire report of its own. Also, the cost of bonuses are not considered. We are only considering the basic salary and benefit packages available to the uniformed and civilian employees of the Department of Defense.

In 1986, the basic pay for those in uniform ranged from \$ 8,592 per year for Privates to \$ 68,700 per year for

Generals and Admirals (Table VIII). From 1982 to 1986, those in uniform received a pay increase of approximately 11 percent, except for the very top Generals who received an increase of approximately 20 percent. During that time, Federal General Schedule employees received an increase of approximately 8 percent. In comparison to the basic rate in 1986, Table IX details the Annual Composite Standard Rates by rank that were effective on October 1, 1981. These rates are the sum of the basic pay, basic allowance for quarters, permanent change of station expenses (for moving from base to base), incentive and special pay, and miscellaneous expenses. In effect, these are the "salaries" of the officers.

But such figures do not tell the whole story of military pay and benefits. While these "salaries" are part of the compensation for service, they do not reflect the complete cost to the taxpayer. The Assistant Secretary's office has a report which shows more complete cost figures: "Average Cost of Military and Civilian Manpower In the Department of Defense." Table X presents the average cost to the U.S. Government for officers in the U.S. Armed Forces in 1980.

These costs consist of the pay and benefits awarded to the officers. The pay components are basic pay, basic allowance for quarters, variable allowance for subsistence, and permanent change of station expenses. Benefits include such items as training or educational expenses, dependency, indemnity, and unemployment compensation, retirement plan

costs, and such support costs as medical, commissary, recreational, welfare, morale, and feeding operations. So, while a Colonel in the Air Force did not receive a check for \$63,811 at the end of the fiscal year, the taxpayer will have paid that much for his or her service, and the Colonel will have received benefits worth that amount. An Air Force General would have received \$92,236.

Not all of these benefits are taxable. As shown in Table XI, the basic allowance for quarters, basic allowance for subsistence, variable housing allowance, change of station, training, and support expenses can add up to a fair amount of money which is not reported to the IRS.

Since these figures are in 1980 dollars, the cost of these officers may seem reasonable. But when we adjust their costs to 1987 dollars (Table XII), the average annual cost for each of the 1,055 Generals or Admirals ranges from \$ 120,541 to \$ 125,441. The number of senior officers effects more than just organizational structures. (The calculation of the inflation factor is explained in Appendix II.)

The Cost Of Military Personnel Versus Civilian Personnel

To maintain an objective analysis of military pay, it is important to compare the pay and benefits of a civilian civil servant in the Department of Defense to that of those in uniform who often work in the same office and at the same level of responsibility. Such cost comparisions are in

Tables XIII, XIV, XV, and XVI, and are derived from the "Average Cost" report of August 1980. While civilians also receive benefits which are not taxable, their total cost to the taxpayer is much less-- especially at the senior levels.

While cost comparisons of this type can be subjective, most people in the government agree that the Congressional Budget Office (CBO) has produced the most objective comparison of civilian and military income. This comparison is shown in Table XVII, which was presented by the CBO at the March 12, 1981 hearings on Military Pay and Retirement Reform before the House Committee on the Budget. In 1980, in terms of disposable income, it was financially more rewarding to be a Lt. Colonel in the Army than to be the Secretary of the Army or a member of Congress. And a Colonel made more money than the Secretary of State.

Cost Of Benefits For Officers

The cost of military personnel and their disposable income are two very separate items. Benefits available to those in the military add much to the annual compensation for service in the military. All too often it is said that the basic pay for military personnel is too low for competition in the free market. The usually-proposed solution to this problem is an across-the-board raise to all in uniform. These raises have amounted to 11.7 percent in October 1980 and 14.3 percent for officers and 10 to 17 percent for enlisted personnel in October 1981. The Reagan

Administration originally requested an 8 percent across-the-board raise for October 1982, but that was lowered to 4 percent. When we add all the benefits military personnel receive, their compensation-- particularly for officers above the rank of Major-- can be better than the benefits in the civilian sector.

Some hidden benefits that military officers receive are understated. One example is the allowance for quarters, which is tax free income. The Government spends around \$5,800 to maintain each of the large and luxuriant manor homes that Navy Admirals and Generals in the Marine Corps and Air Force live in rent free. This amount does not even approach the mortgage payment one would have to pay for such a residence.

Another example is the free health care they receive. In a recent Rand Corporation study, "A Description of Officers and Enlisted Personnel in the U.S. Armed Forces," it was reported that 60 percent of the officers interviewed thought that the complete medical benefits they receive could be replaced by a policy costing between \$50 and \$200 a month. Five percent of those interviewed came closer to the mark by putting the value of that benefit at \$750 a month.

Officer Retention

A straight comparison of pay differences between civilian and military personnel is difficult, mainly due to these "hidden" benefits that cannot be applied to civilians.

In the House hearings mentioned previously, it was claimed that a manager in the private sector at the level of authority as a General would make twice the money that a General in the service will make. Such comparisons are much too speculative and tenuous to be valid. Much more to the point is the observation that there is no shortage of Generals or of candidates for promotion to the rank of General or Admiral. In its Manpower Report for FY 1985, the DOD reveals that the retention of officers in the Army has increased by 10 percent, and retention in the other three services has increased significantly. Occasionally there have been problems with the retention of specialists of lower rank, but there has never been a problem with retention of Generals and Admirals-- and most certainly not because of pay and benefits. Just so a General does not feel too badly, a comparison of Congressional and military pay and benefits done by Representative Les Aspen's office in November 1980 placed a value of \$78,925 for a year as a member of Congress, and a value of \$98,227 for a year spent as a General.

Bonus Pay

While we recognize the need to provide monetary incentive to retain those with special skills in the military, those incentives must be provided effectively. Bonuses to retain doctors, electronics technicians, and others with specialized skills are needed. However, the attitude of raising pay and awarding bonuses across-the-board

can lead to a large waste of a taxpayer's money.

In hearings before the Senate Appropriations Committee, Subcommittee on Defense on May 19, 1982, an example of spending abuses of a special bonus program was revealed. The Aviation Officer Continuation Bonus Program, a program designed to provide incentive for military pilots to remain in the service as long as possible, was offered for the first time in Fiscal Year 1981. This bonus was to be used as a retention incentive, selectively applied to areas where officer shortages in critical aviation specialities existed, and to be applied at times in a military career when a bonus can be expected to influence the decision to remain in the service. Despite a DOD policy directive which followed the Congressional intent of the program, the General Accounting Office (GAO) found that the Navy and the Marine Corps treated their share of the bonus money as long-term career pay, designated their entire aviation community as a critical shortage area, and allowed all within that community with 6 to 16 years of service to be eligible for the bonus. The GAO calculated that as a result of this across-the-board approach \$81.6 million of the \$102.9 million committed in Fiscal Year 1981 was not spent correctly.

As an extreme example of how this across-the-board approach was not in the spirit of the directive, two pilots-- one with 15 years and the other with 16 years of active duty service-- were given a bonus of \$24,633 and \$38,990 respectively as an incentive to remain in the service another

5 and 4 years. It seems doubtful that those pilots needed any incentive to stay in the service to their 20 year mark, at which time they could retire with good benefits. Also, at that time there were very few job openings for pilots in commercial airlines, so little incentive was needed to keep the pilots. It comes as little surprise that the Navy did not lose a single pilot to retirement that year.

The cost to the Government of these senior officers can be lowered by reducing their participation in bonus programs and by abandoning the across-the-board approach to pay increases. Those above the rank of Major or Lt. Commander need little monetary incentive to remain in the service.

III. DAMAGE OF EXCESS OFFICERS TO MILITARY EFFECTIVENESS

The damage of an excessive officer corps to the taxpayer's checkbook is obvious and can be measured rather accurately. However, a hidden casualty to this problem may be our own military effectiveness. An overabundance of officers often means an underabundance of commands. This forces our military personnel into areas far removed from military missions-- often encouraging them to neglect their original mission of leadership and strategy to win the next war.

In a recent article, Fred Downs, a former Army officer, told of some problems with the way Army officers are being trained at West Point. After telling an audience of cadets that their job is "to kill the enemy and take ground," Downs was admonished by a high-ranking officer that at West Point

they do not call it killing the enemy, but rather "servicing the target." Downs concludes that the "official Army policy has resulted in an MBA-style approach to management" and warns that:

"The Army these days is teaching management, not leadership. This may be appropriate for all of the administrative jobs the Army does, but it is not appropriate for the combat units: infantry, artillery and armour. You cannot manage men in combat. You must lead men in combat. And we do not have enough officers today who are ready for that job."

In a similar article, Richard Harwood writes:

"A field-grade Marine officer recently assigned to duty in Washington is disturbed by how 'bureaucratic' the leadership of the Corps has become: 'There is a real dearth of people wearing three stars (lieutenant general) and above who think very often or very seriously about fighting wars. They think, almost obsessively, about fighting inter-service battles or battles with Congress or battles with other bureaucracies.' "

We need to re-examine what we want to require of our officer corps. Do we want our officers to work on winning wars, teaching leadership, creating new strategies, or do we want them preparing budgets, lobbying for programs on Capitol Hill, and wrangling with government contractors? Right now we place our overabundance of Generals and Admirals and other officers in commands of dubious military value, which threatens to make being an officer just another job.

Encouraging officers to get advanced managerial and business degrees to fill these slots could backfire on us if a real war beckons. In a war we need military people and warriors, not business executives and public relations

people. In the procurement process we need our officer corps input as the user of the equipment, not as the manager of the program. If we allow our excess of officers to continue, we will find commands for these officers outside the traditional military areas and inevitably encourage a drift away from their original mission-- war.

Edward Luttwak, a well known military analyst, states the problem well:

The military has become civilianized in the sense of emulating, at higher cost, things the civilians can do better-- but does not concentrate on the things the civilians cannot do, which are to train combat leaders, to study tactics, and prepare strategies.

Reduction of the current officer corps will encourage the right type of officer to emerge and be promoted-- those intent on fighting and winning real battles, rather than bureaucratic, business, and political ones.

CONCLUSION

Since the end of World War II, our military services have become increasingly "top heavy." The senior officer corps has been reduced only slightly, and in some instances not at all, over time, while for the most part the number of enlisted personnel has steadily declined. Even though this condition results in a large expense in terms of pay and benefits, the more important expense is the cost to the

organization in terms of effectiveness. Decisions are slowed down as all officers involved have to communicate the possibilities of a program and the needs for that program as they see them. Senior officers are less likely to be given meaningful military leadership roles. As a nation, we divert them from their original mission-- fighting and winning wars.

The Project on Military Procurement concludes that the U.S. Armed Forces are too "top heavy" to provide an effective defense of our country. The retiring of many officers and the placing of our officer corps back to their original tasks are the best ways to help reduce the burden of federal spending on the American Taxpayer, while at the same time encouraging a more realistic and effective defense of the United States of America.

Table I. U.S. Armed Forces Personnel On Active Duty On Selected Dates.
(excluding Officer Candidates)

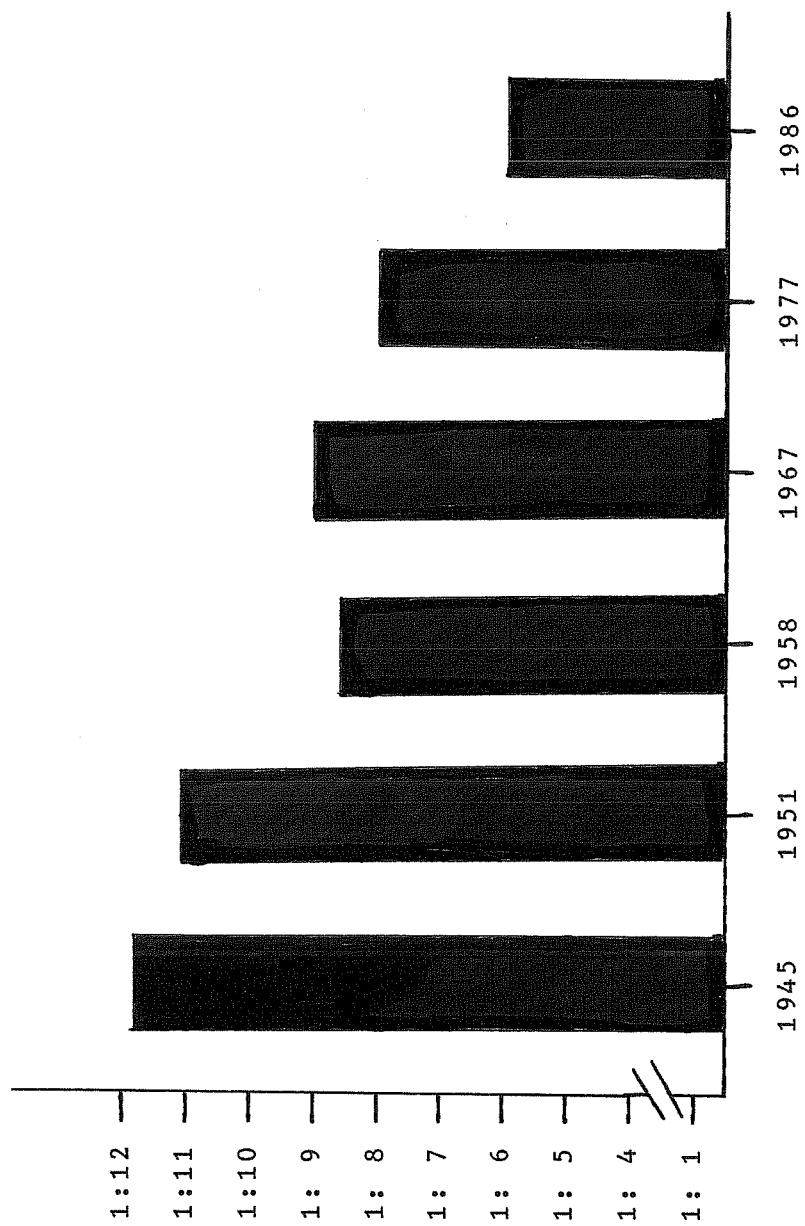
RANK	6/30/45	6/30/51	11/30/58	12/31/67	9/30/77	9/30/86
General--Admiral	2,068	1,047	1,271	1,330	1,159	1,055
Colonel--Captain	14,988	10,792	14,046	17,546	14,225	14,603
Lt. Colonel--Comm.	45,045	25,022	30,501	43,095	32,497	32,740
Major--Lt. Comm.	91,265	38,978	52,306	67,392	50,301	54,404
Captain--Lt.	288,533	91,436	89,455	105,315	93,717	104,727
First Lt.--Lt.(JG)	345,789	88,182	77,531	62,093	34,054	44,398
Second Lt.--Ensign	254,695	43,145	36,467	80,744	32,721	39,218
Enlisted Personnel	11,015,086	2,947,236	2,277,609	3,006,774	1,802,455	1,864,248
Total On Duty	12,057,469	3,245,838	2,579,186	3,384,289	2,061,129	2,155,393

Ratio of *Total*
Officer : Enlisted

1 : 11.6 1 : 10.9 1 : 8.5 1 : 9.0 1 : 8.0 1 : ~~5.9~~ ^{7.4}

Ratio of General-
Admiral : All Other

1 : 5,829 1 : 3,099 1 : 2,028 1 : 2,544 1 : 1,777 1 : 2,055



On The Last Day Of The Fiscal Year

Figure 1. Ratio of Officers to Enlisted Personnel.

Table II. The Percentage Of Total Military Personnel
Which Were Officers From 1923 To 1983

Date	Percent	Date	Percent
30 June 1923	9.5	30 June 1958	12.5
30 June 1932	10.3	30 June 1959	12.7
30 June 1933	10.3	30 June 1960	12.8
30 June 1935	9.8	30 June 1961	12.7
30 June 1936	8.6	30 June 1962	12.2
30 June 1937	8.2	30 June 1963	12.4
30 June 1938	8.1	30 June 1964	12.6
30 June 1939	8.3	30 June 1965	12.8
30 June 1940	7.4	30 June 1966	11.3
30 June 1941	7.3	30 June 1967	11.4
30 June 1942	7.3	30 June 1968	11.7
30 June 1943	8.6	30 June 1969	12.1
30 June 1944	9.5	30 June 1970	13.1
30 June 1945	10.4	30 June 1971	13.7
30 June 1946	13.9	30 June 1972	14.5
30 June 1947	12.1	30 June 1973	14.3
30 June 1948	11.7	30 June 1974	14.0
30 June 1949	11.8	30 June 1975	13.8
30 June 1950	12.4	30 June 1976	13.5
30 June 1951	9.9	30 Sept 1977	13.3
30 June 1952	10.4	30 Sept 1978	13.3
30 June 1953	10.6	30 Sept 1979	13.5
30 June 1954	10.7	30 Sept 1980	13.5
30 June 1955	12.0	30 Sept 1981	13.7
30 June 1956	12.5	30 Sept 1982	13.8
30 June 1957	12.3	30 Sept 1983	14.1
		30 Sept 1984	14.2
		30 Sept 1985	14.4
		30 Sept 1986	14.3

Note: 31 May 1945 was the peak for the number of military personnel in uniform in World War II, 30 April 1952 was the peak for the Korean Conflict, and 30 June 1968 the peak for the Vietnam Conflict.

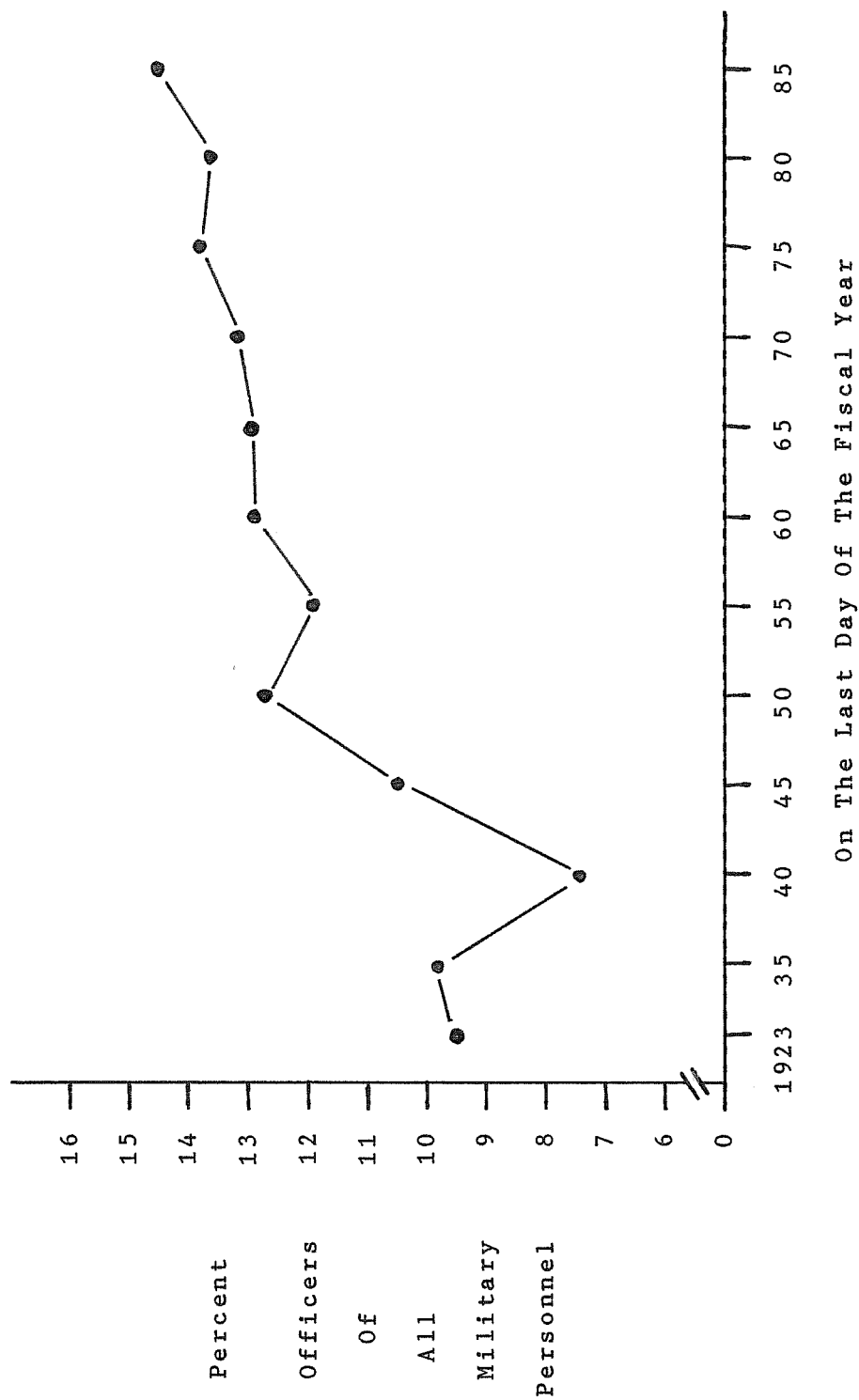


Figure 2. The percentage of all military personnel who were officers.

Table III. The Rate Of Reduction For Officers
From 1945 To 1983.

Rank	30 June 1945	30 Sept 1986	Rate of Reduction
General-Admiral	2,068	1,055	2
Colonel-Captain	14,988	14,603	1
Lt. Colonel-Comm.	45,045	32,740	1
Major-Lt. Comm.	91,265	54,404	2
Captain-Lt.	288,533	104,727	3
First Lt.-Lt.(JG)	345,789	44,398	8
Second Lt.-Ensign	254,695	39,218	7

Table IV. U.S. Armed Forces Personnel On Active
Duty Before World War II.

Rank	6/30/30	6/30/36	6/30/39
Officers	23,392	23,845	25,735
Enlisted	227,321	262,306	302,279
Total on Duty	250,713	286,151	328,014
Ratio of Officer : Enlisted	1 : 9.7	1 : 11.0	1 : 11.7

Table V. The Number Of U.S. Army Generals Available
For Each Army Division On Active Duty On
Selected Dates.

Date	No. of Generals	No. of Divisions	No. of Generals Available to Each Division
6/30/45	1,221	89	14
6/30/51	436	18	24
11/30/58	490	15	33
12/31/67	517	17	30
12/31/69	513	18	28
12/31/74	458	13	35
9/30/75	436	14	31
9/30/77	450	16	28
9/30/78	432	16	27
9/30/81	415	16	26
9/30/82	391	16	24
9/30/86	400	17	24

Table VI. The Ratio Of U.S. Navy Admirals To The
Number Of Ships In The Fleet On Selected Dates.

Date	No. of Admirals	No. of Ships in Fleet	Ratio of Admiral : Ship
6/30/45	470	61,045	1 : 130
6/30/51	276	2,621	1 : 10
11/30/58	299	2,750	1 : 9
12/31/67	308	931	1 : 3
12/31/69	311	886	1 : 3
12/31/74	288	512	1 : 2
9/30/75	277	577	1 : 2
9/30/77	273	543	1 : 2
9/30/78	261	531	1 : 2
9/30/81	253	550	1 : 2
9/30/82	250	569	1 : 2
9/30/86	251	555	1 : 2

Table VII. The Ratio Of U.S. Air Force Generals To
The Number Of Aircraft In The Force On
Selected Dates.

Date	No. of Generals	No. of Aircraft	Ratio of General : Aircraft
6/30/45	298	72,726	1 : 244
6/30/51	285	18,370	1 : 64
11/30/58	418	26,898	1 : 64
12/31/67	429	15,017	1 : 35
12/31/69	437	15,213	1 : 35
12/31/74	401	11,376	1 : 28
9/30/75	357	10,736	1 : 30
9/30/77	368	10,140	1 : 28
9/30/78	361	10,022	1 : 28
9/30/81	337	10,161	1 : 30
9/30/82	338	10,193	1 : 30
9/30/86	339	10,782	1 : 32

Table VIII. Yearly rates of basic pay for 1982, 1984, and 1986, based upon the monthly (October) rate for each year.

Rank	Year		
	1982	1984	1986
General	\$ 57,492	\$ 66,000	\$ 68,700
Lt. General	57,492	66,000	68,700
Maj. General	57,492	65,400	68,700
Brig. General	54,672	56,856	60,900
Colonel	48,036	49,956	53,520
Lt. Colonel	37,872	39,384	42,192
Major	30,552	31,774	34,032
Captain	24,144	25,104	26,892
First Lt.	16,584	17,256	18,480
Second Lt.	13,188	13,716	14,688
Chief W.O.	30,312	31,524	33,768
Warrant Officer	16,584	17,256	18,480
Sgt. Major	24,228	25,200	26,988
Master Sgt.	20,172	20,976	22,476
Sgt. F.C.	17,472	18,276	19,572
Staff Sgt.	14,424	15,000	16,068
Sergeant	10,872	11,304	12,108
Corporal	8,988	9,348	10,020
Private F.C.	8,016	8,340	8,940
Private	7,716	8,028	8,592
Recruit	6,888	7,152	7,668

Table IX. Annual Composite Standard Rates For Officers In The

U.S. Armed Forces Effective 1 October 1981.

Rank	Army	Navy	Marine Corps	Air Force
General-Admiral	\$ 61,622	\$ 63,040	\$ 61,608	\$ 60,318
Lt. General-Vice Admiral	63,678	62,319	63,290	59,725
Major General-Rear Admiral(U)	63,064	64,142	62,790	60,852
Brig. General-Rear Admiral(L)	64,439	62,050	63,588	61,201
Colonel-Captain	61,364	61,793	59,986	58,242
Lt. Colonel-Commander	50,797	51,981	50,195	49,806
Major-Lt. Commander	42,638	43,979	42,247	43,891
Captain-Lieutenant	34,809	37,559	36,642	35,861
First Lieutenant-Lt.(JG)	27,146	29,163	30,328	27,202
Second Lieutenant-Ensign	21,734	22,496	22,351	21,403

Table X. The Average Annual Cost To The Taxpayer Of Military Officers
In The Department Of Defense In Fiscal Year 1980.

Rank	Army	Navy	Marine Corps	Air Force
General-Admiral	\$ 88,633	\$ 91,220	\$ 91,761	\$ 92,236
Lt. General-Vice Admiral	83,787	89,962	89,760	89,723
Major General-Rear Admiral(U)	80,052	86,417	85,154	85,620
Brig. General-Rear Admiral(L)	71,073	74,203	75,817	76,203
Colonel-Captain	61,493	63,885	65,335	63,811
Lt. Colonel-Commander	50,408	51,821	53,722	52,735
Major-Lt. Commander	41,546	42,552	44,239	43,966
Captain-Lieutenant	36,947	36,979	37,109	37,685
First Lt.-Lieutenant(JG)	29,736	29,377	29,525	28,919
Second Lt.-Ensign	22,513	21,760	23,521	23,118

Table XI. The Average Pay And Benefits Of Military Officers In FY 1980.

Rank	Army			Navy		
	Taxed	Tax Free	Total	Taxed	Tax Free	Total
General-Admiral	\$ 82,564	\$ 6,069	\$ 88,633	\$82,540	\$8,680	\$91,220
Lt. General-Vice Admiral	79,816	3,971	83,787	80,500	9,462	89,962
Major General-Rear Admiral(U)	75,215	4,837	80,052	76,831	9,586	86,417
Brig. General-Rear Admiral(L)	65,792	5,281	71,073	64,943	9,260	74,203
Colonel-Captain	55,045	6,448	61,493	55,183	8,702	63,885
Lt. Colonel-Commander	44,046	6,362	50,408	43,764	8,057	51,821
Major-Lt. Commander	35,824	5,722	41,546	35,357	7,195	42,552
Captain-Lieutenant	29,506	7,441	36,947	30,147	6,832	36,979
First Lt.-Lieutenant(JG)	22,970	6,766	29,736	23,662	5,715	29,377
Second Lt.-Ensign	16,651	5,862	22,513	17,303	4,457	21,760

Table XI (continued). The Average Annual Pay and Benefits Of Military
Officers In Fiscal Year 1980.

Rank	Marine Corps			Air Force		
	Taxed	Tax Free	Total	Taxed	Tax Free	Total
General	\$ 83,035	\$ 8,726	\$ 91,761	\$ 82,733	\$ 9,503	\$ 92,236
Lt. General	81,034	8,726	89,760	79,934	9,789	89,723
Major General	76,428	8,726	85,154	75,404	10,216	85,620
Brig. General	67,091	8,726	75,817	65,840	10,363	76,203
Colonel	56,625	8,710	65,335	54,489	9,322	63,811
Lt. Colonel	45,464	8,258	53,722	44,064	8,671	52,735
Major	36,905	7,334	44,239	36,193	7,773	43,966
Captain	30,968	6,141	37,109	30,420	7,265	37,685
First Lt.	24,678	4,847	29,525	23,013	5,906	28,919
Second Lt.	17,890	5,631	23,521	17,195	5,923	23,118

Table XII. The Value In 1987 Dollars Of The Average Annual Cost To The
Government For Military Officers.

Rank	Army	Navy	Marine Corps	Air Force
General-Admiral	\$ 120,541	\$ 124,059	\$ 124,795	\$ 125,441
Lt. General-Vice Admiral	113,950	122,348	122,074	122,023
Major General-Rear Admiral(U)	108,870	117,527	115,809	116,416
Brig. General-Rear Admiral(L)	96,659	100,916	103,111	103,636
Colonel-Captain	83,630	86,884	88,856	86,783
Lt. Colonel-Commander	68,555	70,477	73,062	71,706
Major-Lt. Commander	56,502	57,871	60,165	59,794
Captain-Lieutenant	50,248	50,291	50,468	51,252
First Lt.-Lieutenant(JG)	40,441	39,953	40,154	39,330
Second Lt.-Ensign	30,618	29,594	31,988	31,440

Table XIII. A Comparison Of The Average Pay And
Benefits Of Army Officers And Army Classified
Civilian Personnel In Fiscal Year 1980.

Rank	Comparable GS Rating	Civilian Cost	Military Cost
General	---	---	\$ 88,633
Lt. General	GS-18	\$ 61,472	83,787
Major General	GS-17	61,570	80,052
Brig. General	GS-16	61,645	71,073
Colonel	GS-15	59,072	61,493
Lt. Colonel	GS-14	50,562	50,408
Major	GS-13	42,928	41,546
Captain	GS-12	36,020	36,947
First Lt.	GS-11	29,773	29,736
Second Lt.	GS-10	28,091	22,513

Table XIV. A Comparison Of The Average Pay and
Benefits Of Navy Officers And Navy Classified
Civilian Personnel In Fiscal Year 1980.

Rank	Comparable GS Rating	Civilian Cost	Military Cost
Admiral	---	---	\$ 91,220
Vice-Admiral	GS-18	\$ 61,324	89,962
Rear Admiral(U)	GS-17	62,373	86,417
Rear Admiral(L)	GS-16	61,649	74,203
Captain	GS-15	59,120	63,885
Commander	GS-14	50,397	51,821
Lt. Commander	GS-13	43,066	42,552
Lieutenant	GS-12	36,099	36,979
Lieutenant(JG)	GS-11	30,007	29,377
Ensign	GS-10	28,012	21,760

Table XV. A Comparison Of The Average Pay and
 Benefits Of Marine Corps Officers And Marine Corps
 Classified Civilian Personnel In Fiscal Year 1980.

Rank	Comparable GS Rating	Civilian Cost	Military Cost
General	---	---	\$ 91,761
Lt. General	---	---	89,760
Major General	GS-17	\$ 61,406	85,154
Brig. General	GS-16	62,237	75,817
Colonel	GS-15	59,947	65,335
Lt. Colonel	GS-14	50,527	53,722
Major	GS-13	42,589	44,239
Captain	GS-12	35,271	37,109
First Lt.	GS-11	29,333	29,525
Second Lt.	GS-10	28,166	23,521

Table XVI. A Comparison Of The Average Pay And
Benefits Of Air Force Officers And Air Force
Classified Civilian Personnel In Fiscal Year 1980.

Rank	Comparable GS Rating	Civilian Cost	Military Cost
General	---	---	\$ 92,236
Lt. General	---	---	89,723
Major General	ES-4/ES-3	\$ 67,020	85,620
Brig. General	ES-2	65,289	76,203
Colonel	GS-15	59,134	63,811
Lt. Colonel	GS-14	50,630	52,735
Major	GS-13	43,033	43,966
Captain	GS-12	35,729	37,685
First Lt.	GS-11	29,935	28,919
Second Lt.	GS-10	28,175	23,118

Table XVII. Tables Presented By The Congression Budget Office At Military Pay and Retirement Reform Hearing, March 12, 1981.

COMPARATIVE TAKE HOME PAY (Military vs. Federal Executive Levels Based on Expected October 1981 Pay Rates a/)

	Gross Income b/	Basic Pay + BAS c/ + BAQ d/ + VHA e/			FICA Tax f/	Federal Income Tax g/	State Income Tax h/	Retirement Contribution i/	Health Insurance Contribution j/		Disposable Income k/
		Pay	BAS	BAQ					Health	Insurance	
Military Officers (Pay Grade/Years of Service)											
0-10/26	64,518	50,113	1,138	7,378	3,689	12,873	2,408	—	—	—	54,966 47,086
0-8/26	62,318	50,113	1,138	7,378	3,689	12,873	2,408	—	—	—	52,766 44,886
0-7/26	62,318	50,113	1,138	7,378	3,689	12,873	2,408	—	—	—	52,766 44,886
0-6/22	57,232	46,424	1,138	6,460	3,230	11,268	2,196	—	—	—	49,009 41,637
0-5/20	53,633	42,805	1,138	6,460	3,230	9,712	1,988	—	—	—	46,551 39,782
0-4/16	46,550	36,597	1,138	5,877	2,938	7,198	1,631	—	—	—	41,222 35,270
0-3/6	39,824	30,820	1,138	5,244	2,622	5,217	1,299	—	—	—	35,946 31,243
0-1/2	31,065	23,326	1,138	4,715	1,886	3,063	868	—	—	—	27,934 25,071
	19,120	13,263	1,138	3,371	1,348	932	314	—	—	—	17,917 16,985
Military Enlisted											
E-9/26	33,639	25,096	1,652	4,446	2,445	3,518	970	—	—	—	30,988 27,470
E-8/20	27,063	19,045	1,652	4,107	2,259	2,060	622	—	—	—	25,165 23,105
E-7/14	23,266	15,691	1,652	3,821	2,102	1,051	435	—	—	—	21,780 20,416
E-6/8	19,383	12,458	1,652	3,515	1,758	841	283	—	—	—	18,259 17,471
E-5/6	17,477	10,980	1,652	3,230	1,615	530	216	—	—	—	16,525 15,995
E-4/4	15,939	10,025	1,652	2,841	1,421	378	176	—	—	—	15,091 14,713
E-3/2	14,180	8,441	1,652	2,477	1,610	184	112	—	—	—	13,502 13,358
E-1/1	12,650	6,911	1,652	2,477	1,610	0	66	—	—	—	12,121 12,121
Federal Executives/ Members of Congress											
Level I	69,630				—	22,718	3,531	4,874	794	794	37,713
Level II	60,663				—	18,043	3,015	4,246	794	794	34,565
Member of Congress	60,663				—	18,043	3,015	4,853	794	794	33,958
Level V	50,113				—	12,873	2,408	3,508	794	794	30,530

COMPARATIVE TAKE HOME PAY (Military (vs.) Federal White Collar Based on October 1981 Pay Rates a/)

	Gross Income b/	Basic Pay + BAS c/ + BAQ d/ + VHA e/			FICA Tax f/	Federal Income Tax g/	State Income Tax h/	Retirement Contribution i/	Health Insurance Contribution j/		Disposable Income k/
		Pay	BAS	BAQ					Health	Insurance	
General Schedule (Grade/Step)											
GS-15/4 and higher	50,113					12,873	2,409	3,508	794	794	30,529
GS-14/4	46,685					11,381	2,211	3,268	794	794	29,031
GS-13/4	43,657					10,079	2,037	3,056	794	794	27,691
GS-12/4	31,068					5,297	1,313	2,175	794	794	21,489
GS-11/4	25,923					3,756	1,018	1,815	794	794	18,540
GS-9/4	21,426					2,607	759	1,500	794	794	15,766
GS-7/4	17,513					1,745	534	1,226	794	794	13,214
GS-5/4	14,141					1,085	357	990	794	794	10,915
GS-1/1	8,342					130	109	584	794	794	6,725

Table XVII (continued). Tables Presented On Pages 56 - 58, Military Pay And Retirement Reform Meeting, March 12, 1981.

ASSUMPTIONS UNDERLYING THE COMPARATIVE TAKE HOME PAY TABLE:

- a/ Present pay and allowance rates were assumed to increase 3.3 percent in July, 9.1 percent in October, subject to the salary limit of \$50,113.
- b/ 0-10 income includes \$2,200 personal money allowance.
- c/ Basic Allowance for Subsistence, at the rate applicable when on leave or authorized to mess separately (for enlisted members).
- d/ Basic Allowance for Quarters at the With Dependent rate.
- e/ Variable Housing Allowance, calculated for the Washington Metro Area, D.C. DAQ multipliers are: 0.50, 0-4 to 0-10; 0.40, 0-1 to 0-3; 0.35, E-7 to 0.50, E-4 to E-6; and 0.65, E-1 to E-2.
- f/ 6.7 percent of first \$32,100.
- g/ Based on four personal exemptions, joint return, and standard deduction. These assumptions may not represent typical federal executive or member of Congress. Similarly, they do not necessarily represent typical military members.
- h/ Based on Virginia income tax rates, same conditions as in g/.
- i/ Calculated at 8 percent of gross pay for members of Congress, 7.0 percent for other federal executives.
- j/ Based on Blue Cross-Blue Shield High Option, family rates.
- k/ The bracketed numbers show the effect of exempting the first \$20,000 from federal income taxes.

Appendix I.

When the Department of Defense announced its intention to increase the number of star positions in 1982, two articles appeared in the Air Force Times to explain the action. The April 19, 1982 article, entitled "Star reforms could ease Hill pressure," points out that the ratio of General-Admiral per 10,000 service members is lower for the U.S than the ratios of any other Western ally, with the exception of West Germany.

A follow-up article, "Star gazing" in the April 26, 1982 issue states:

"Almost all of the officers who wore stars in World War II were in the service well before the war began. They and other career officers and NCOs formed the cadre around which the country built a massive force by calling up reservists, recruiting volunteers, and conscripting draftees. Today's peacetime force would serve as a similar frame work in another mobilization, and the number of generals and admirals probably would not increase dramatically."

These arguments are not too reassuring. While we support our NATO partners, the forces of Norway, Denmark, and the Netherlands are not serious forces when compared to West Germany and the United States.

Also, there was a rather dramatic build-up of officers during World War II. In his 1939 Annual Report, the Secretary of War listed the composition of Army officers and,

as Table XVIII shows, most Army officers who wore stars and bars in World War II were not in the service well before that war began.

The inflation of star officers has continued since 1945, with no year approaching the level of officers that occurred in 1939.

Table XVIII. The Composition Of The U.S. Army
In 1939 And 1945.

Rank	30 June 1939	30 June 1945
General	65	1,221
Colonel	796	8,145
Lt. Colonel	1,606	29,935
Major	2,860	46,398
Captain	4,095	115,008
First Lt.	2,146	106,792
Second Lt.	1,471	62,167
Enlisted	174,854	5,616,033
Total On Duty	187,893	5,985,699

Appendix II.

The conversion of 1980 dollars to 1983 dollars was performed using the Consumer Price Index as the economic standard for conversion.

According to the Congressional Budget Office, the Consumer Price Index for Fiscal Year 1980 was 247.0 and the Index for Fiscal Year 1987 was 336.8 (Cannally pers. comm.).

The factor to bring 1980 dollars to 1987 dollars was calculated by the following formula:

$$\frac{\text{CPI 1987}}{\text{CPI 1980}} = \frac{336.8}{247.0} = 1.36$$

To adjust 1987 dollars, the 1980 dollars were multiplied by the factor of 1.36.

Appendix III.

Manpower Statistics

Statistical Abstract of the United States. 1940. U.S. Dept. of Commerce. Bureau of Census.

Strength of the Army Report. 1 July 1945. Dept. Chief of Staff for Personnel, Dept. of the Army.

Army Air Forces Statistical Digest World War II. December 1945. Office of Statistical Control. U.S. Army Air Force.

Strength of the Army Report. 30 June 1951. Dept. Chief of Staff for Personnel, Dept. of the Army.

Statistical Digest Fiscal Year 1951. U.S. Air Force Headquarters, U.S. Air Force, Washington D.C.

Military personnel Statistics 30 June 1959. Annual Report of the Navy and Marine Corps. NAVPERS 15658(A) U.S. Dept. of the Navy, Bureau of Naval Personnel.

Selected Manpower Statistics 31 January 1959. Office of the Asst. Secretary of Defense (Comptroller), Statistical Services Center.

Selected Manpower Statistics 15 April 1968. Office of the Secretary of Defense, Directorate for Statistical Services.

Selected Manpower Statistics May 1978. Dept. of Defense, Washington Headquarters Services, Directorate for Information, Operations and Reports, Washington, DC.

Selected Manpower Statistics Fiscal Year 1981. Dept. of Defense, Washington Headquarters Services, Directorate for Information, Operations and Reports, Washington, DC.

Selected Manpower Statistics Fiscal Year 1983. Dept. of Defense, Washington Headquarters Services, Directorate for Information, Operations and Reports, Washington, DC.

Manpower Requirements Report FY 1985. Volume III: Force Readiness Report. February 1984. Dept. of Defense, Office of the Assistant Secretary of Defense (Manpower, Installations, and Logistics), The Pentagon, Washington, DC.

Selected Manpower Statistics Fiscal Year 1986. Dept. of

Defense, Washington Headquarters Services, Directorate
for Information, Operations and Reports, Washington, DC.

Command Statistics

Statistical Abstract of the United States. 1946, 1959,
1960, 1968, 1978, 1980, 1982, 1984, and 1987. U.S.
Dept. of Commerce. Bureau of the Census, Washington
DC.

Office of the Chief of Public Affairs. U.S. Army. The
Pentagon, Washington, DC.

Public Inquiries and Research, Navy Office of Information.
U.S. Navy. The Pentagon. Washington, DC.

Civil Affairs Branch, Community Relations Division, Office
of Public Affairs, Secretary of the Air Force. The
Pentagon, Washington, DC.

Cost of Military Personnel

Average Cost of Military and Civilian Manpower in the
Department of Defense. August 1980. Office of the
Assistant Secretary of Defense (Comptroller). The
Pentagon, Washington DC.

Accounting Manual, 1 October 1981. Office of Directorate
of Accounting Policy. Office of the Assistant Secretary
of Defense (Comptroller). The Pentagon, Washington, DC.

A Description of Officers and Enlisted Personnel in the
U.S. Armed Forces: A reference for military manpower
analysis. March 1982. The Rand Corporation. R-2851-
NRAL.

Military Effectiveness And Officer Reduction

Budahn, P.J. 2% officer cut to hit combat and support
units, Pentagon says. Army Times May 4, 1987.

Halloran, R. A fight on reducing the officer corps.
The New York Times March 20, 1987.

Kreisher, O. Pentagon, Congress battle over military
officer corps cuts. San Diego Union March 1, 1987.

Maze, R. and P.J. Budahn. Cox unable to justify 12 %
rise in officer strength. Air Force Times March 16,
1987.

Harwood, R. Sorry, Ivan-- it's still Semper Fi The
worthiness of the Marine Corps is resolved on the
battlefield. The Washington Post, April 12, 1987.

Downs, F. It's time West Point stopped sugarcoating
combat. The Washington Post National Weekly Edition
August 31, 1987.