

USAWC STRATEGY RESEARCH PROJECT

MANNING THE FUTURE FORCE

by

Colonel Kelly R. Fraser
United States Army

Colonel Paul M. Brady
Project Advisor

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U.S. Army War College
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ABSTRACT

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The world is changing and the Army is responding to these changes and positioning itself for the challenges of the future strategic environment. The Future Force will be very different from the Army of today. New equipment, technologies and tactics will require soldiers with different skill sets than those of today's soldiers.

New soldiers in the Future Force will be recruited from the generation of Americans referred to as the Millennials--those born in 1982 and later. How will the aptitudes and attributes of the Millennial generation mesh with the human resource requirements of the Future Force? Is there a delta between these aptitudes and attributes of the Millennials and the human resource requirements of the Future Force? If so, how can the Army close that gap? The Army's success in recruiting and integrating the Millennial generation into the Army of the future will ultimately determine the success of transformation, and the success of the Army in the emerging strategic environment. Who are these Millennials and will they measure up? The future of our Army depends upon it.

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MANNING THE FUTURE FORCE

The world is changing and today's world is less predictable and in many ways more dangerous than the world of a few years ago. As the world is changing so is the nature of warfare. Revolutionary advancements in information technology provide the potential for unprecedented integration of weapon systems. The Army is responding to these changes by positioning itself for the challenges of the future. The Future Force¹ will begin fielding in 2010² and it will be "high tech" and very different from the Army of today. New equipment, new technologies and new tactics will require soldiers with different skill sets. Some of the soldiers of the future Army are in the Army today. They belong to Generation X, those born between 1961 and 1981.³ They will have to be retained and possibly retrained for these new skill sets.

The new soldiers for the Future Force will be recruited from the generation of Americans referred to as the Millennials--those born in 1982 and later.⁴ How will the aptitudes and attributes of the Millennials mesh with the requirements of the future Army? Is there a delta between these aptitudes and attributes and the skill requirements of the future Army? If so, how can the Army close the gap?

The Army's success in retaining and retraining the Generation X soldiers in the Army today and recruiting and integrating the Millennials into the Army of the future will ultimately determine the success of transformation, and the success of the Army in the emerging strategic environment. The Army's ability to retain and retrain Generation X soldiers is beyond the scope of this project. This project will explore the aptitudes and attributes of the Millennials, evaluate whether they mesh with the projected requirements of the Future Force, and recommend what the Army must do to recruit and retain Millennials to man the Future Force.

Manning is a critical element of the future Army. Future weapon systems, no matter how sophisticated and lethal, will only perform to the level of the soldiers who employ them. Human resources are a pivotal factor in the success of the Future Force, and therein lies the relevance of this project.

METHODOLOGY

An initial survey of the future environment and how the Army will transform as a part of that future will provide the basis to derive human resource requirements for the future Army. Given these, an analysis of the Army's ability to meet requirements from the Millennial resource pool will follow.

No sophisticated, highly technical organization can expect a perfect match of skills to requirements for entry level positions. Matching the skills of the Millennials with the

requirements of the future Army will reflect a delta, the disparity between Army requirements and the skills of the manpower available to meet those requirements. A delta does not equate to mission failure. Instead, it should be expected. The delta, then, is the basis for applying an intervention, or a solution, to close the gap between requirements and available resources. Discussion of these solutions will encompass the applicable functions of the Army's Personnel Life Cycle⁵ which includes acquisition, training and sustainment.

ASSUMPTIONS

There is risk in predicting Millennials' future behavior. They are still very young and it may be premature to assess their future predilections as they are too young and too new in the work force to have established a significant track record. However, we do know some things about the Millennial generation, and that knowledge is useful in predicting future behavior.

The term generation is somewhat vague. Three authors from Arkansas Tech University, Gene Cole, Richard Smith, and Laurie Lucas use the definition of a generation originally developed by Strauss and Howe in 1991. The definition is useful and is the one used throughout this project. They define a generation as:

A cohort-group whose length approximates the span of a phase of life and whose boundaries are fixed by peer personality. Peer personality is defined as a generational persona recognized and determined by common age location.⁶

This concept will be applied to describe the general characteristics of the Millennials.

The Future Force will contain a very small but representative subset of the Millennial cohort. Those that ultimately choose the Army will mirror the aptitudes and attributes of their generation.

SCOPE

The conclusions of this project will be applicable to both officer and enlisted personnel, since Millennials will be accessed into the entry level ranks of both. However, the focus of this paper is enlisted personnel because they drive the readiness and capabilities of the Army. Additionally, officers constitute a much smaller percentage of the total force (about 16%)⁷ and they are selected in a more discriminatory manner, bypassing many undesirable characteristics of the cohort.

THE FUTURE ENVIRONMENT AND ARMY'S ROLE

Today, the United States Army is the most powerful land force in the world and it was a key component in winning the Cold War. Its prowess and high state of training was a successful deterrent to the Soviet Union for over fifty years. In Iraq, both in 1991 and 2003, and in Afghanistan the Army demonstrated its superior ability to wage war. Flushed with a string of successes, why must the Army transform?

The Army can not be complacent. Our enemies are studying our operations and are looking for new, asymmetric, innovative ways to defeat our capabilities. Recently, our enemies have used the tactic of terrorism. The attacks on the USS Cole and the events of 9/11 are manifestations of this tactic and our enemies will continue to probe for weaknesses in the future.

Although the U. S. military currently operates from a position of overwhelming advantage, transformation is essential to maintain that advantage.⁸ Our military superiority protects our security, our way of life, and to a great degree, the stability of the world.⁹ The Army of the future must be capable of protecting America's freedom and interests in the emerging world environment.¹⁰ The 2001 Quadrennial Defense Review (QDR) defines four general missions for the Army:

- Defend the United States
- Deter aggression and coercion forward in critical regions (Europe, Northeast Asia, the East Asian littoral, and the Middle East/Southwest Asia)
- Swiftly defeat aggression in two overlapping major conflicts while preserving for the President the option to call for a decisive victory in one of those conflicts – including the possibility of regime change or occupation
- Conduct a limited number of smaller-scale contingency operations¹¹

These are very broad. However, from these missions and the Army's deployment history over the past fifteen years, we can conclude that the Army will continue to experience a high rate of deployment activity while conducting a variety of missions with a potentially wide range of intensity. The Future Force must be structured and manned to accomplish this.

THE FUTURE FORCE

Soldiers will be the heart of the Future Force.¹² Like the soldiers of today and yesterday, they will have to be courageous, well trained, physically fit and able to adapt and flourish in a values based organization. In addition, soldiers in the future will have skill requirements that

encompass both mental and physical capabilities, and soldiers will be required to operate in an environment that is more fast-paced than ever before.

The Future Force will be smaller and will have to leverage technological innovation, improved processes, and, most importantly, optimize the human dimension to overcome the limitations of smaller size. The Army will have to be capable of operating across the full spectrum of operations in the future to include peacekeeping and peace enforcement, limited wars against non nation-state terrorist organizations, and, potentially, to fight full scale wars against rogue nations such as North Korea. Army units will have to be deployable, agile, survivable and lethal across this entire spectrum.¹³

Soldiers will have to communicate and closely coordinate operations with elements from other services and allied nations. The Army will continue to be fires based, leveraging information technology to acquire targets at far greater ranges than today and, where possible, engaging those targets while outside the range of their weapons. When it is not possible to engage the enemy at long range the Army will be capable of maneuvering and defeating the enemy formations in close combat. These actions will require highly skilled and well trained soldiers.

The information systems required to achieve these decisive results with a smaller Army are only beginning to be fielded. The systems will be complex, requiring competent soldiers who are comfortable with highly technical equipment. These soldiers must be able to assimilate and evaluate an abundance of information, making appropriate decisions based upon that information.¹⁴ Improved information technology will provide vast amounts of data. Soldiers will have to quickly discern what is pertinent and important. Speed will be critical because the objective will be to engage the enemy at greater distances before they can engage us. In effect, soldiers will be required to scan potentially overwhelming amounts of data, make decisions, and act quickly and decisively in a very complex and ambiguous environment.¹⁵

These are daunting tasks that will require high quality soldiers. Soldiers will have to understand doctrine and complex Rules of Engagement (ROE), and be able to pass the relevant information to the appropriate tactical element, regardless of component or nationality. Because of the need for speed, these activities will happen at lower levels than ever before and with significantly less supervision and redundancy. The pace of activity will require junior soldiers to bear greater responsibility for the conduct of the battle.

Former Secretary of the Army, Thomas White described his intent for the Future Force as follows:

The hallmarks of the Objective Force operations will be developing situations out of contact; maneuvering to positions of advantage; engaging enemy forces beyond the range of their weapons; destroying them with precision fires and maneuver; and tactically assaulting enemy capabilities and locations at times and places of our choosing.

Secretary White explains further that soldiers and leaders must know and live Army values, be disciplined, be physically tough and mentally conditioned for combat, have perseverance, be competent in doctrine, and possess the will to win. He adds they must be tough, resilient, resourceful, agile professionals.¹⁶

Some will disagree with Secretary White's assertion that the new, highly technical Army will require physically fit soldiers. However, future Army missions, whether they consist of combat, peacekeeping, or peace enforcement, will require soldiers to work long hours, possibly in extremes of temperatures and climate, often in chemical protective clothing while carrying 40 or more pounds of equipment, arms and ammunition. This will be debilitating to unfit soldiers. Soldiers suffering from this sort of physical debilitation will not have the requisite levels of mental alertness to make decisions in a complex, fast paced environment, or to operate highly technical systems. Soldiers will also have to possess the physical stamina to withstand the rigors of a fast paced tactical environment as well as an increased strategic operational tempo. Back to back deployments are becoming more prevalent today and given the general missions from the QDR, this trend will likely continue.

Additionally, the Army has a tradition of physical fitness. Soldiers take great pride in being a member of an Army or a unit that looks and is physically fit. The fitness standard is an important part of Army discipline and individually achieving the standard is an important right of passage in belonging to the whole.

Soldiers of the future will man the most sophisticated, lethal weapons systems ever developed.¹⁷ However, a weapon system is only as good as its crew and the crew will only be as good as the sum of the integrated teams that operate the total system. For example, today we think of crews in terms of a four man M1 Abrams tank crew or a three man Bradley Fighting Vehicle crew. The Future Combat Systems (FCS) will be more complicated than our current systems and will rely on both vertical and lateral coordination and integration for mission success. A forward sensor, perhaps unmanned, will acquire a target. Information will be relayed to a remote team who will analyze the information and pass it on to the crew who will engage the target. The weapon system crew can not be considered in isolation. The crew is part of a bigger network and the sum and synergy of the parts will determine the overall value.

Soldiers will create the synergy. FCS will have little or no intrinsic combat capability. Soldiers are the ingredients from which combat capability is ultimately derived. In order to fight the future battle and add lethality to the FCS, the Army will require soldiers with specific skills and these soldiers will have to work effectively as a team.

The Future Force will require values based soldiers who accept responsibility, are disciplined, mentally conditioned and agile, and who are physically tough with a high degree of stamina. Also, they must effectively handle complexity and act decisively and innovatively in a fast paced environment. They must have an aptitude for highly technically equipment and they must be able to work as a member of team. This is the soldier of the Future Force. Where will the Army find such soldiers?

FUTURE ARMY'S HUMAN RESOURCE POOL

Having established the Army's future requirements we must next determine what human resources will be available to man the Army.¹⁸ Success of the future Army will, in many respects, hinge upon the Army's ability to attract, retain, and sustain the best possible fit of personnel to requirements. The soldiers who will man the Army's FCS will be drawn from the Millennials recruited over the next seven years and beyond.¹⁹

Millennials have a different perspective on life than those of preceding generations. This perspective is largely derived from their experiences. For example a Class of 2000 survey conducted in 1999 asked students what events have made the biggest impression on their life? Their top ten answers are as follows:

- 1) Columbine
- 2) War in Kosovo
- 3) Oklahoma City Bombing
- 4) Princess Di's death
- 5) President Clinton Impeachment trial
- 6) O.J. Simpson trial
- 7) Rodney King Riots
- 8) Monica Lewinsky scandal
- 9) Fall of the Berlin Wall
- 10) Mark McGuire-Sammy Sosa homer derby²⁰

A member of a previous generation may be surprised at how recently these events that shaped the Millennials outlook occurred. The Millennials are, indeed, very young. Certainly they will not have the depth of experience of an older person and this may seem like a disadvantage. On the other hand, what is new, cutting edge technology to an older person is the norm to a young Millennial and that can actually be an advantage.

So, what are the characteristics of the Millennials? First, it is important to note that the Millennial generation is large. As a result of increased fertility rates and the large families of a recent immigration surge, the Millennials already outnumber the Baby Boomers (the generation born from 1943 to 1960).²¹ By the year 2000, the Millennials were already 76 million strong and are expected to be America's first 100 million-person generation.²² By the time Millennials begin to enter the work force in large numbers, around 2015, Baby Boomers will be mostly gone from the Army. The American work force will begin to get significantly younger at this point as retirees are replaced by 20-25 year old Millennials.²³

Millennials tend to be much more optimistic than their predecessors in Generation X. And why not? Millennials grew up in an America experiencing unprecedented prosperity. This optimistic attitude may have been enhanced by the period of relative peace that Millennials experienced in their childhood. Although the United States military was very busy throughout this period, most of these operations were portrayed as routine by the American media. Based upon their experience, Millennials expected life to get better, because it always had. This relative peace was shattered by the attacks of September 11th. Logically, we can expect these events to dim that optimism somewhat or at least provide the Millennials with a dose of reality.

Millennials have grown up with a less traditional parental family structure. Traditional parental family structure is defined as either two biological parents or two adoptive parents. Since 1970, the percentage of children 17 years old or younger in a traditional parental family structure has steadily declined. In 1970, 85.2% of children were members of a traditional family. By 1980, this rate had declined to 76.7% and by 1990, the rate had further declined to 72.5%. By 1998, the rate was 68.1%.²⁴ Isolating teenagers from 15-17 years old also provides interesting data. In 1996, 54.9% of teenagers lived in a two parent home (either biological or adoptive); 11.5% lived with one biological and one step parent; 27.7% lived with only a single parent, and 6% had no parental presence.²⁵ Additionally, three of four Millennials have working mothers.²⁶

Not surprisingly, Millennials seek out groups and believe that belonging to a group is important. Often without strong parent/role model relationships, they tend to be heavily influenced by group behavior and have a strong belief in teamwork. They use the means available to communicate, including email and the internet. Group chat rooms are the most popular choice. As a result, they are more globally oriented than any previous generation in that chat rooms are not restricted by continental boundaries or proximity.²⁷

Soldiers entering the Army in 2010 are in grade school today. Compared to the previous three decades, they show slightly greater academic achievement, compare favorably to children

from other nations, and are more familiar with technology. However, despite increased familiarity with technology, academic achievement is expected to remain relatively constant between now and 2010.²⁸ The National Center for Education Statistics reports that testing scores have increased only .20 standard deviations over the past 20 years. This projects out to a relatively insignificant increase in scores over the next decade.

Similarly, the Armed Forces Qualification Test (AFQT) scores are expected to remain stable. The purpose of the AFQT is twofold. First, applicants must meet or exceed minimum scores to be eligible to apply for service. Once their scores exceed the minimum threshold, they are used to classify the applicant into a particular specialty. Since 1985, the mean AFQT score has ranged from 57.79 to 59.32. Future mean scores are expected to remain within or close to the past mean scores.²⁹ However, the AFQT does not capture a measurement of aptitude for information technology. That would be a valuable measurement, even though indications are available from other sources.

A key component of technological familiarity among Millennials is an unprecedented degree of computer literacy, documented through a recent survey of almost 2,000 Millennials that found 93% had accessed the internet within the past month and more than half had internet connections at home. Over 40% use Instant Messaging and 82% use email daily.³⁰ The increased computer literacy is assuredly the result of their current environment in which there is significantly more opportunity to access these technological tools. In 1984, 27.3% of students used computers at school and 11.5% used them at home. By 1997, these percentages had increased to 68.8% and 45.1% respectively. According to the Army Science Board, children of today are much more computer literate and this trend will continue in the future as accessibility increases. In addition to increased computer use, children today are much more familiar with video games and its associated technology which further enhances their familiarity with computers and their components.³¹

Perhaps the increased literacy is a result of experience rather than cognitive ability. Never-the-less, this ability is a key attribute of the Millennials. At a young age they have already demonstrated an aptitude for highly technical information systems and they are practicing fundamentals which will be an integral part of learning to fight the Army's FCS.

Education is an important factor in the quality of the potential recruitment pool. Current high school graduation rates are 93.0% for whites, 88.7% for blacks and 61.6% for Hispanics. The Hispanic rate is troubling given the Army's increased Hispanic population and their propensity for military service, both discussed below.³²

Millennials are more likely to go to college. High school graduates today enroll in college at a 63% rate which is an all-time high.³³ This trend is expected to continue for several reasons, some positive and some negative. On the positive side, Millennials understand the value of higher education, and recognize that it is an investment in themselves. On the other hand, they are characterized by a reluctance to make long term commitments and, thus, opt for college rather than committing to a job.³⁴

College attendance will tend to drive up the average age of the initial entry soldier, so by 2010, initial entry soldiers will likely be slightly older. The preponderance will probably still be the 18 or 19 year old recent high school graduate. But more will have some college before considering military service.

Central to the lifestyle of the Millennials are parents, family and religion. They have a healthy respect for authority, both parental and institutional, and the people they generally respect the most are mom and dad. They value honesty and integrity, tend to volunteer their time to worthy causes and they believe that helping others is more important than helping themselves.³⁵ Thus, their value system appears in line with current Army values.

To date, Millennials have shown a desire for achievement and a reasonable degree of modesty and good conduct. They prefer jobs that are fun (which may be a reflection of their age and maturity rather than an enduring trait) and they are expected to look first for a preferred lifestyle and then for a job that will support that lifestyle.³⁶ The new Millennial soldier has an expectation of more flexibility with respect to their work. They also seek more portable retirement benefits and more balance between time on duty and off.³⁷ Millennials accumulate many items to include designer clothes and electronic gadgets, and they expect to continue to accumulate possessions as adults.³⁸ These trends are expected to continue when the Millennials enter the work force in larger numbers.

Whereas Generation X teenagers had the highest rates of suicide, homicide, alcoholism, drug abuse, and teen pregnancy ever, the Millennials have reversed those trends.³⁹ This behavior portends positive accomplishment in either military service or the civilian sector.

With respect to the ongoing war with Iraq, a recent MTV poll asked Millennials for their views on the war. About 60% supported both the troops and the war, 37% were opposed to the war but supported the troops, and only 3% were opposed to both.⁴⁰ Similarly, recent United States Marine Corps research concluded that Millennials are more receptive to military service than Generation X.⁴¹ This, in conjunction with the expected generation size of 100 million, will be a boon to the recruitment effort of the near future. On the other hand, Millennials have

exhibited a mistrust of major brands and seem to resent advertisement targeted towards them. But this resentment is appeased if the advertisement appears truthful and sincere.⁴²

Millennials' propensity to enlist is, therefore, difficult to predict.⁴³ Generally, the military competes with the civilian sector for human resources. As the youth unemployment rate decreases, so does enlistment propensity.⁴⁴ This could result in a recruiting challenge, but will most likely be offset by the magnitude of the Millennial cohorts, which will provide a large recruiting pool as well as drive up the youth unemployment rate.

A greater recruiting challenge will be the Millennial's propensity towards obesity. As use of computer and video technology increases, Millennial children spend less time outdoors participating in physical activity. In 1972 only 4% of children aged 6 to 11 years were categorized as obese. By 1999 the percentage had more than tripled to 13%.⁴⁵

In summary, Millennials--the potential soldiers of the future--tend to be optimistic, values oriented and have a desire for achievement. They are educated, familiar with emerging technology, and computer literate. They are well behaved and work well in a team environment. They believe in themselves, invest in themselves through education, and tend to be benefits oriented. They look for a balanced life and, although they are favorable towards the military, they can have a reluctance to long term commitments. Millennials tend to be less physically fit and more obese than previous generations. Like the generations that preceded them, if they come into the Army, they will come in to succeed, not fail.

ANALYSIS

The success of the Future Force is largely dependent on how well the Army can leverage the aptitudes and attributes of the Millennials. Thus, it's important to compare and contrast the aptitudes and attributes of the Millennial generation with the requirements of the Future Force. Table 1 summarizes the comparison.

A comparison of the Army requirements and characteristics of the Millennials shows many areas of compatibility: values, responsibility, discipline, teamwork, and an aptitude for highly technical systems. The Millennials' predilection towards education and their belief in themselves indicates they have the potential to excel in several other key areas. The one obvious delta is in physical fitness. Millennials are more likely to be deficient in this area and the Future Force will need an intervention to overcome this characteristic. The Army's ability to navigate this friction point, successfully intervening where necessary, will ultimately determine the success or failure of Millennials in the Future Force.

FUTURE SOLDIERS	MILLENNIAL TRAITS
ARMY REQUIRES QUANTITY	100 MILLION STRONG
ARMY REQUIRES QUALITY: VALUES ORIENTED	RESPECT BOTH PARENTAL AND INSTITUTIONAL AUTHORITY. VALUE HONESTY, INTEGRITY, SELFLESS, OPTIMISTIC
ACCEPT RESPONSIBILITY	BELIEVE IN THEMSELVES AND THEIR ABILITY TO MAKE A DIFFERENCE. DESIRE ACHIEVEMENT
DISCIPLINE	CONDUCT IS BETTER THAN PREVIOUS GENERATIONS
MENTALLY CONDITIONED AND AGILE	EDUCATION FOCUS PROVIDES POTENTIAL IN THIS AREA
PHYSICALLY TOUGH WITH STAMINA	LESS PHYSICALLY FIT, MORE OBESE THAN PREVIOUS GENERATIONS
ABLE TO HANDLE COMPLEXITY	EDUCATION FOCUS PROVIDES POTENTIAL IN THIS AREA. COMPLEXITY THE NORM
ACT DECISIVELY AND INNOVATIVELY	EDUCATION FOCUS AND BELIEF IN THEMSELVES PROVIDES POTENTIAL IN THIS AREA
APTITUDE FOR "HIGH TECH"	"HIGH" TECH" IS THE NORM
ABILITY TO WORK ON A TEAM	STRONG BELIEF IN TEAMWORK. ACTIVELY SEEK TEAM MEMBERSHIP

TABLE 1. COMPARISON OF FUTURE FORCE SOLDIER REQUIREMENTS AND MILLENNIAL TRAITS

ACQUISITION

What must the Army do to recruit Millennials? Recruiting is both a quantity and a quality issue. The Millennials offer a large potential recruiting population. This coupled with what appears to be a favorable impression of the military and a relatively strong propensity to enlist portends that the Army should be able to recruit sufficient quantities of Millennials. If otherwise qualified for Army service, quality is measured by education, aptitude test results (Armed Forces Qualification Test—AFQT), and disciplinary incidents such as arrests identified through a background check. The Millennials will make the quality grade as well. They are completing high school and entering college in numbers greater than previous generations, have demonstrated an aptitude for highly technical information systems, and have the values and positive behavioral trends that the Army is looking for. Given recruiting programs that appeal to Millennials, the Army ought to be able to recruit sufficient quantity and quality Millennials to man the Future Force. Competition with the civilian sector (and unfortunately with the other services) will be stiff.

Despite the population size and quality of the Millennials as a whole, it is important that the Army competes for the best of the generation rather than its lower educational percentiles. Claire Raines states that the Millennials have a “digital divide.” She asserts that about 16% of Millennials are growing up apart from the experiences of the rest. They are more apt to live in poverty, without a computer at home, and without educational advantages.⁴⁶ Those on the wrong side of the digital divide will not mesh with the requirements of the Future Force. They will naturally default to the lowest bidding employer, as the more qualified Millennials go elsewhere. The Army cannot afford to be the lowest bidder. Instead, the Army must leverage several areas in order to compete successfully for the more talented Millennials.

Table 2 depicts the growth of the Hispanic and Asian market by decade from 1990 to 2000 and projected for 2010. Table 3 then derives the potential recruiting population from the projected 2010 population.

	1990	2000	2010
WHITE	75%	69%	64%
BLACK	12%	12%	13%
HISPANIC	9%	13%	16%
ASIAN	3%	4%	6%
OTHER	1%	2%	1%

TABLE 2. U.S. ETHNICITY BY DECADE

	AGE 17-24	HS GRAD	MEDICAL/MORALLY	ENROLL IN	ENTER
	2010	ASVAB > 30	QUALIFIED	COLLEGE	WORKFORCE
WHITE	12.45	11.3	8.4	5.6	2.8
BLACK	2.53	2.2	1.6	1.1	0.5
HISPANIC	3.11	2.3	1.7	1.1	0.6
ASIAN	1.17	1.1	0.8	0.5	0.3
OTHER	0.19	0.2	0.1	0.07	0.03

Note: figures are in millions

TABLE 3. PROJECTED RECRUITING POPULATION FOR 2010⁴⁷

Since the Millennials will be more ethnically diverse than any previous American generation, the Army will have to focus recruiting efforts on underrepresented markets--those where service demographics lag behind those of the civilian population. These markets are

expected to include both the Hispanic and Asian populations.⁴⁸ The Army must assign more Hispanic and Asian recruiters to these markets to better attract the more ethnically diverse Millennials.

Indications are that Millennials will choose college in record numbers. Until very recently college students were not targeted as a recruiting population, but they must be today. Today, the four year graduation rate from college is only 42%. The 58% that do not graduate in four years constitute a lucrative recruiting market for the Army.⁴⁹ In order to successfully recruit Millennials, recruiters will have to harvest the college market to a greater degree than in the past. Some believe the junior college and community college market will be the most fertile in that those institutions tend to attract students who are still undecided about their future.⁵⁰ Recruiters with a college background will probably be most successful in this environment as they will have more in common with collegiate Millennials and will serve as excellent role models for the college bound Millennials.⁵¹

Since Millennials tend to be wary of long term commitments, and many will opt for college, it makes sense to combine these elements into a recruiting option. The Army needs a recruiting option that offers a shorter active duty enlistment for college students. An eighteen month enlistment will be more attractive to the Millennials. It will allow them to accomplish both basic training and Advanced Individual Training and then serve a one year tour in a current hot-spot.⁵² Today, this enlistment length would lend itself well to Bosnia, Kosovo, Korea and a number of other locations. Deployment to a combat zone, such as Iraq, in which units would require a longer collective train up period, could require an enlistment of slightly greater than 18 months for soldiers in some skills. For example, an Infantryman who requires up to 25 weeks of training (9 week Basic + 14-16 week Advanced Individual Training (AIT)) would not get sufficient unit collective training time while for many other skills, such as Armor (Basic + 7 week AIT), allow for a unit manning deployment to Iraq.

In combination with the shorter term enlistment, the Army should offer a Reserve Component option. The primary intent of the program would be to offer an enlistment option that attracts Millennials while providing a secondary benefit to help fill Reserve Component units with experienced soldiers on the back end of an active duty enlistment. For example, a soldier's initial enlistment contract could offer specifics of the soldier's post initial active component utilization--upon completion of the active duty tour, the soldier would revert to a Reserve Component unit of his choice, designated in his enlistment contract. Most likely, the unit of choice would be near the soldier's home of record. The soldier, while on active duty retains ties to his hometown while the unit can look forward possibly filling a vacancy with a Military

Occupational Specialty Qualified (MOSQ) soldier who has Active Army experience. If the soldier subsequently opts to remain on active duty instead of reverting to a Reserve Component unit, he should be able to cancel this portion of his contract.

Millennials value teamwork and seek group membership. These two attributes lend themselves to bringing back the recruiting "buddy system" where a recruit and his or her buddy are accessed together and stay together from training through their first assignment. Combining the Millennials' desire for team membership with their respect for authority indicates that they will find a Unit Manning system attractive, where the entire unit, to include its leaders, are formed, trained and assigned as a unit, rather than as individuals. The Army must move forward quickly to adapt a Unit Manning System to replace the current Individual Replacement System (IRS) in order to capitalize on this Millennial trait.

The Millennials are benefits oriented and value self improvement. The Army must develop (or refine) a benefits package that can compete with those provided in the civilian sector. Not all of these benefits have to be monetary. They must also include attractive Quality of Life (QOL), opportunities for further education and advancement, as well as flexible assignment and career opportunities.

The Army of the future will need soldiers with an aptitude for working with highly technical systems, especially information systems. Although Millennials as a group will possess these aptitudes, not every individual will possess them to the same degree. The Army will need a means to discriminate with respect to this aptitude. Currently the military uses the Armed Forces Vocational Aptitude Battery (ASVAB) as the primary tool for measuring aptitude. Over time the ASVAB has proven to be a simple, normed, reasonable measure of aptitude. However, the Army needs to coordinate a modification to the ASVAB with the other services. The ASVAB must focus more on the aptitudes required in the future, such as the aptitude for being able to comprehend highly technical systems. Recruiters will need a tool to identify those that will be most capable of operating these systems in the Future Force. A modified, modernized, better targeted ASVAB is that tool.

The Millennials offer the Future Force a great acquisition opportunity. The Army must focus recruiting programs to take advantage of the Millennials demographics and predilection towards college. An 18 month enlistment option with a college package will be attractive to Millennials. So will a competitive benefits package, the opportunity for teamwork, advancement, and self improvement. Given a program that includes these opportunities, and a modernized ASVAB, the Army will successfully recruit Millennials from the positive side of the digital divide.

SUSTAINMENT AND TRAINING

Sustainment includes two key friction points with respect to Millennials: attrition and retention. Attrition, especially before completion of the first term of service is a troubling issue in the Army today. Presently the Army loses about 15% of soldiers prior to completion of Initial Entry Training (IET) and another 7% annually from units.⁵³

Attrition occurs for many reasons, to include pre-existing medical conditions, misconduct, and failure to meet other various standards. Although the Millennials do not exhibit unusually high tendencies for these disqualifying conditions, they, no doubt, will be prone to suffer attrition as a result of being overweight and in poor physical condition. Currently, 10% of trainees are separated due to failure to meet physical or weight control standards.⁵⁴

This is clearly a training issue and an area where the Army needs to focus an intervention. Millennials, more than previous generations, will require guidance and direction on physical fitness. Millennials will join the Army with a goal of succeeding and, despite their physical shortcomings, they will have a strong belief in themselves. Once the Millennial is accessioned, the Army can leverage their attributes with many of the fitness methods already in place. Army leaders must strongly focus on fitness and aggressively apply the present programs. In Basic Training, initiatives such as the Fitness Training Unit⁵⁵ need to be continued and even expanded if necessary.

Fitness intervention could, and probably should, begin prior to accession, while the Millennial is in the Delayed Entry Program (DEP). Recruiters could assist their Millennial applicants by leading them through an introductory physical training program that will prepare them for the rigors of basic training. This program can be accomplished by developing a partnership with a local gym or fitness facility. The Army, taking advantage of economies of scale, can contract with these fitness chains at the national level to offer their services, at a reduced rate, to Army applicants. The applicants can take advantage of the fitness professionals at these organizations to learn proper workout and fitness habits. Recruiters can monitor progress and advise the professional trainers as to the Army's specific fitness requirements. This partnership is a win-win situation. The Army accesses a soldier with improved fitness habits, and the fitness chain receives current business with the potential that soldiers will continue to use their services throughout his lifetime.

In summary, Millennials will tend to join the Army deficient in the area of physical fitness. The Army has the fitness programs in place to correct this deficiency. The risk for Army leaders in the Future Force is not anticipating the Millennials fitness deficiencies early on. Millennials will require aggressive physical training starting in the DEP. Early intervention in this area is

paramount to the success of the Millennials in the Army. As such, it needs to be a primary leader focus of the Future Force.

RETENTION

Millennials can be retained in the Army if the Army offers options that appeal to them. Many of the programs the Army has now will appeal to Millennials. Reenlisting for a unit of assignment or for specific training will appeal to a Millennial who values membership on a team and self improvement. Even a basic reenlistment for Present Duty Assignment (PDA) would offer the ability to remain with the team.

Retention though, is much more than just reenlistment options. It is primarily a function of leadership. Leaders in the Future Force must know their Millennial soldiers. Awards and other forms of recognition will be important to Millennials who value achievement. QOL, benefits and the chance for advancement, mentioned above as important to acquisition, are also important to retention. Millennials will respect leaders who understand teamwork, challenge and respect soldiers, but have the flexibility to let the Army be fun too.⁵⁶

Sustainment of the Millennial force will require the continued focus on physical training begun in the acquisition phase as discussed above. It will also require sound leadership, effective QOL programs, and opportunity for advancement and education. These concepts are not new, but they will be crucial to the retention of Millennials in the Future Force.

CONCLUSIONS

The Millennials have many aptitudes and attributes that the Army of the future will be looking for, to include an aptitude for highly technical information systems, a strong values base, and a belief in themselves and in the power of teamwork. The majority of their characteristics mesh with Future Force requirements. Early intervention and sustained emphasis to improve physical fitness will allow the Army to mold a force capable of achieving success on the complex, fast-paced, physically demanding battlefield of the future.

Acquiring and sustaining Millennials in the Future Force will require programs and leadership targeted to their needs. Accomplishing these tasks will provide the Army with its most critical transformation requirement—capable personnel for the Future Force.

WORD COUNT=6,550

ENDNOTES

¹The terms Future Force, Objective Force, Army of the future and future Army are used interchangeably throughout this project.

²Thomas E. White, "Transforming the US Army," November 2002; available from <<http://search.epnet.com/direct.asp?an=8597345&db=mth>>; Internet; accessed 29 Aug 2003. To date, Acting Secretary of the Army, R. L. Brownlee has not changed this target date.

³Sources are slightly inconsistent as to the exact dates of the generational cohorts. Neil Howe and William Strauss, *Millennials Rising* (New York: Vintage Books, 2000), 414, characterizes them as Generation X born between 1961 and 1981, and the Millennial Generation consisting of those born 1982-2002. In a 1999 interview with Michael McSwain, William Strauss indicates that "we're very close, within 5 years or so, to the time when rank-and-file military will be millennial." This is a very general statement but could be interpreted as sliding the start of the Millennial Generation to 1983 or 1984. For the complete interview see "Millennial Markers, the Class of '99, and the Legacy of Columbine—An Interview with William Strauss;" available from <<http://www.millennials.com/lm/strauss.html>>. Internet; accessed 12 October 2003. In a 2003 article Gregory P. Smith categorizes Generation X as between 19-34 years old (born between 1969-1984) which makes Millennials those born after 1985. For this article see Gregory P. Smith, "Baby Boomer Versus Generation X, Managing the New Work Force." Available from <http://www.chartcourse.com/articlebabyvsgenx.html> Internet; accessed 28 August 2003. This is the latest interpretation and several other sources began the Millennial Generation in the late 1970s. I accept the Howe and Strauss dates for no better reason than those dates put the first Millennial high school graduation class around the start of the new millennium.

⁴Neil Howe and William Strauss, 414.

⁵The Personnel Life Cycle Management Functions are: acquisition, individual training and education, distribution, deployment, sustainment, professional development, and separation. These functions are described in Department of the Army, *The Army Personnel Proponent System*, Army Regulation 600-3 (Washington, D.C.: U.S. Department of the Army, 28 November 1987, 51-52.

⁶Gene Cole, Richard Smith and Laurie Lucas, "The Debut of Generation Y in the American Workforce," Fall 2002,. Available from <http://jbao.atu.edu/cole_smith_lucas.htm>; Internet. Accessed 12 October 2003.

⁷Betty D. Maxfield, *FY02 Army Profile* (Washington D.C.: Office of the Deputy Chief of Staff of Personnel, G-1, 2002).

⁸Department of Defense, *Transformation Planning Guidance*, (Washington, D.C.: U.S. Department of Defense, April 2003), 4-5.

⁹Ibid., 3-6.

¹⁰ Thomas E. White and GEN Eric K. Shinseki, *Transformation Roadmap* (Washington D.C.: Department of the Army, 2002), 3-4.

¹¹ *Quadrennial Defense Review Report* (Washington D.C.: Department of Defense, 30 September 2001), 17-21.

¹² Thomas E. White, "Transforming the US Army, Goals, Schedules and Programmes," November 2002; available from <<http://web5.epnet.com>>; Internet. accessed 29 August 2003.

¹³ Dennis Steele, "The Army Magazine Hooah Guide to Army Transformation," *Army Magazine*, (2001): 2.

¹⁴ Thomas E. White.

¹⁵ James A. Knowles, *Manning the Future Army*, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 9 Apr 2002), 3.

¹⁶ Army Science Board, 2001 Special Study, Final Report: *Manpower and Personnel for Soldier Systems in the Objective Force*, Washington, D.C., Army Science Board, June 2001), 10.

¹⁷ *Ibid.*, 1.

¹⁸ Typically requirements are expressed as Knowledge, Skills and Attributes (KSA). At the risk of being less precise and specific, I refer to them simply as requirements.

¹⁹ The Millennial Generation has many other labels. These include Generation Y (or Generation Why?), Generation Tech, Generation.com, Echo Boomers and Boomer Babies to name a few. For a comprehensive description and analysis of the Millennials see Neil Howe and William Strauss.

²⁰ Neil Howe and William Strauss, 19.

²¹ Neil Howe and William Strauss, 14-15.

²² *Ibid.*

²³ Gene Cole, Richard Smith and Laurie Lucas, "The Debut of Generation Y in the American Workforce," Fall 2002,. Available from <http://jbao.atu.edu/cole_smith_lucas.htm>; Internet; accessed 12 October 2003. It is interesting to note that the work force in America will be getting younger during the same period the Army is projecting to get older.

²⁴ Army Science Board, 10.

²⁵ *Ibid.*

²⁶ Gene Cole, Richard Smith and Laurie Lucas.

²⁷Ibid.

²⁸Army Science Board, 2001 Special Study 14-15.

²⁹Office of the Under Secretary of Defense for Personnel and Readiness, *Military Personnel Human Resources Strategic Plan, Change 1* 14.

³⁰Carol A. Mangis, "Gen Y Online; Generation Y has gone digital like no generation before it.," 6 May 2003; available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=00000034>. Internet; accessed 12 October 2003.

³¹Army Science Board, 14.

³²Army Science Board, 2001 Special Study, 14.

³³Office of the Under Secretary of Defense for Personnel and Readiness, *Military Personnel Human Resources Strategic Plan, Change 1* (Washington D.C.: Office of the Under Secretary of Defense for Personnel and Readiness, August 2002) 2.

³⁴James A. Knowles, *Manning the Future Army*, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 9 Apr 2002), 10.

³⁵David Demko, "Millennium Manifests Gen-X Moral Majority," available from <<http://www.demko.com/cx000608.htm>>; Internet; accessed 12 October 2003 and David M. Griersmer, "Recruiting success assisted by effective marketing," June 2003; available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=00000035>; Internet: accessed 12 October 2003.

³⁶Gene Cole, Richard Smith and Laurie Lucas.

³⁷Office of the Under Secretary of Defense for Personnel and Readiness, *Military Personnel Human Resources Strategic Plan, Change 1* (Washington D.C.: Office of the Under Secretary of Defense for Personnel and Readiness, August 2002) 2.

³⁸Karen Benezra, "Alter-bound, Wallets open," 19 May 2003; available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=00000034>; Internet. Accessed 12 October 2003.

³⁹"A Satire of Generation Y," Internet. Undated; available from <http://www.americansportsdata.com/pr_08-01-02_2.asp>; Internet; accessed 12 October 2003.

⁴⁰"Taste—Review and Outlook: Gen Y Goes to War," 28 March 2003; available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=00000031>; Internet; accessed 12 October 2003.

⁴¹David M. Griersmer.

⁴²"A Satire of Generation Y," Internet. Undated; available from <http://www.americansportsdata.com/pr_08-01-02_2.asp>; Internet; accessed 12 October 2003.

⁴³The rate for 2001 was 29% which is presented as a negative trend in Office of the Under Secretary of Defense for Personnel and Readiness, *Military Personnel Human Resources Strategic Plan, Change, 2*. From my research on the Millennial Generation I believe their propensity to enlist will be better than that of Generation X. I'm always skeptical of comparing data points on trend lines that tend to fluctuate both upwards and downwards over time. Depending on the chosen start point the trend line can be interpreted as either positive or negative. My research uncovered both optimistic and pessimistic projections for propensity to enlist. I believe the optimistic versions.

⁴⁴Office of the Under Secretary of Defense for Personnel and Readiness, *Military Personnel Human Resources Strategic Plan, Change 1* (Washington D.C.: Office of the Under Secretary of Defense for Personnel and Readiness, August 2002) 2.

⁴⁵Ibid., 12.

⁴⁶Claire Raines, "Managing Millennials," 2002; available from <<http://www.generationsatwork.com/articles/millennials.htm>>; Internet; accessed 28 August 2003.

⁴⁷ 1990 and 2000 data in Table 2 is U.S. Census data contained in "Demographics," available from <<http://www.diversityresources.com/rc21d/compadvan.htm>>; Internet; accessed 6 December 2003. 2010 data projection is contained in "Gaining Competitive Advantage: The Case for Diversity," available from <http://www.cabrillo.edu/publications/masterplan/EnvScan%20summary_Demogr.pdf>; Internet; accessed 6 December 2003. The Age 17-24 figures in Table 3 are derived from Commander Janet Marnane et al, "Winning the Recruiting Battle: Solutions to Current Shortfalls," available from <http://www.web.milt.edu/ssp/Publications/working_papers/wp_00-1.pdf>; Internet; accessed 2 January 2004. Commander Marnane uses a constant graduation rate across all ethnic groups. That seems overly simplistic so the High School graduation column uses the rates by racial/ethnic categories in "Fact Sheet on Demographics: Children & Adolescents," available from <<http://youth.ucsf.edu/nahic/img/Demographics.pdf>>; Internet; accessed 23 December 2003. This source uses 1997 as a base and heavily penalizes Hispanics as a result of their 25% high school drop out rate. The source states that rates are declining, however, in this table the rates are held constant. Asian rates are not broken out separately and are assumed to be the same as the white rate. The remaining columns in table 3 are mathematical computations based on the Janet Marnane source.

⁴⁸Michael L. Waclawski, *Recruiting a Quality Force for the 21st Century Army...Challenges and Opportunities*, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 7 April 2002), 7.

⁴⁹Office of the Under Secretary of Defense for Personnel and Readiness, *Military Personnel Human Resources Strategic Plan, Change 1*, 2.

⁵⁰Waclawski, 12.

⁵¹*Ibid.*, 10.

⁵²*Ibid.*, 12.

⁵³Actual rates for September 2002 were 14.55% attrition from the training base and 6.98% annual unit attrition. See Sheila B. Hickman, *Army Enlisted Attrition: Where are we, and where do we go from here?*, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 7 Apr 2003), 13.

⁵⁴*Ibid.*, 3.

⁵⁵*Ibid.*, 13.

⁵⁶ Claire Raines.

BIBLIOGRAPHY

- Agency Group 09. "White Briefs New Leaders on Personnel Transformation." Available from <<http://search.epnet.com/direct.asp?an=32w2913246631&db=mth>>. Internet. Accessed 29 August 2003.
- "A Satire of Generation Y." Undated. Available from <http://www.americansportsdata.com/pr_08-01-02_2.asp>. Internet. Accessed on 12 October 2003.
- Assistant Secretary of the Army for Acquisition, Logistics and Technology. *Manpower and Personnel for Soldier Systems in the Objective Force*. Washington D.C.: U.S. Army Science Board, June 2001.
- Association of the United States Army. *How Transformational is Army Transformation?*. Washington D.C., Association of the United States Army, February 2003
- Barbour, Bo and Bill Hix. "Dominant Warrior: An Objective Force at War in 2015." *Military Review* (January/February 2001): 81-1.
- Bednarik, J. Michael, *Force Fitness Requirements to Meet the National Military strategy for the Army After Next*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 1999.
- Benezra, Karen. "Alter-bound, Wallets open." Brandweek Magazine, Volume 44, Issue 20. Available from: <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=0000034>. Internet. Accessed 12 October 2003.
- Brzezinski, Matthew. "The Unmanned Army." *ROA National Security Report*, (July/August 2003).
- Cole, Gene, Richard Smith, and Laurie Lucas. "The Debut of Generation Y in the American Workforce." Fall 2002. Available from <http://jbao.atu.edu/cole_smith_lucas.htm>. Internet. Accessed 12 October 2003.
- Colley, Jeffrey G. *Army Transformation How Recruiting Command's Theme Needs to Change*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 10 April 2001.
- "Demographics." Available from <http://www.cabrillo.edu/publications/masterplan/EnvScan%20Summary_Demogr.pdf>. Internet. Accessed 6 December 2003.
- Devlin, Theodore E. *Recruiting and Retention, A Force Planning Dilemma*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 7 April 2003.
- "Force XXI." January 1999. Available from <<http://search.epnet.com/direct.asp?an=1541169&db=mth>>. Internet. Accessed 29 August 2003.
- Friedman, Thomas L. *The Lexus and the Olive Tree*. New York: Farrar, Straus, Giroux. 2002.

- "Gaining Competitive Advantage: The Case for Diversity." Available from <<http://www.diversityresources.com/rc21d/compadvan.htm>>. Internet. Accessed 6 December 2003.
- Gawrych, George. *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*. Fort Leavenworth, Kansas: Combat Studies Institute, U.S. Army Command and General Staff College, 1996.
- Griesmer, David M. "Recruiting success assisted by effective marketing." June 2003. Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=00000035>. Internet. Accessed 12 October 2003.
- Hickman, Sheila B. *Army Enlisted Attrition: Where are we, and Where do we go from here?*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 7 April 2003.
- Horback, Robert R., and Christopher L. Ellis. *Training Future Army Forces, A Survey of Force XXI Training Requirements and Recommended Capabilities*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 1 May 1999.
- Jones, Reuben D. *U.S. Army Recruiting: Problems and Fixes*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 1 December 1999.
- Kindlon, Dan. "Tough times call for strong parents; Drawing lessons of strength and stability from generations who grew up under greater stress than today's." 7 April 2003. Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=0000032>. Internet. Accessed 12 October 2003.
- Knowles, James A. *Manning the Future Army*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 9 April 2002.
- Koucheravy, Richard J. *Whence the Soldier of the Future? Recruiting and Training for the Objective Force*. Monograph. Fort Leavenworth, Kansas: U. S. Army Command and General Staff College, AY 2000-2001.
- Leo, John. "A Kinder, Gentler Army." 11 August 1997. Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=00000013309410>. Internet. Accessed 28 August 2003.
- Mangis, Carol A. "Gen Y Online; Generation Y has gone digital like no generation before it." 6 May 2003. Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=0000034>. Internet. Accessed 12 October 2003.
- Marnane, Janet et al. "Winning the Recruiting Colse Battle: Solutions to the Current Shortfalls." Available from <http://www.web.milt.edu/ssp/Publications/working_papers/wp_00-1.pdf>. Internet. Accessed 2 January 2004.

- Marsh Christine T. and Leonard J. Samborowski. *Seamless Total Recruiting: A Concept for Army after Next*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 1 May 1999.
- Matthews, Anna Wilde. "To Join or not to Join--Wrestling with Fear and Duty, Teenage JROTC Student Considers Life in the Military," 18 October 2001. Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=000000084737890>. Internet. Accessed 28 August 2003.
- Military Intelligence Professional Bulletin. "Transforming the Army for the next Century—The Future is Here Today." Oct-Dec 2000. Available from <<http://web5.epnet.com/citation.asp>>. Internet. Accessed 29 August 2003.
- "Millennial Markers, the Class of '99, and the Legacy of Columbine—An Interview with William Strauss." Available from <<http://www.millennials.com/ltn/strauss.html>>. Internet. Accessed 12 October 2003.
- Morin, Richard. "Gen Y Goes AWOL." 8 April 2001. Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=000000070975921>. Internet. Accessed 28 August 2003.
- National Adolescent Health Information Center. "Fact Sheet on Demographics: Children & Adolescents." Available from <<http://youth.ucsf.edu/nahic/img/Demographics.pdf>>; Internet. Accessed 23 December 2003.
- Office of the Deputy Chief of Staff for Personnel. *Women in the Army Policy Review*. Washington D.C.: U.S. Army Office of the Deputy Chief of Staff for Personnel, 12 November 1982.
- Office of the Under Secretary of Defense for Personnel and Readiness. "Military Personnel Human Resources Strategic Plan Change 1." August 2002. Available from <http://dticaw.dtic.mil/prhome/docs/military_hr_stratplan2.pdf>. Internet. Accessed 17 August 2003.
- Raines, Claire. "Managing Millennials." 2002. Available from <<http://www.generationsatwork.com/articles/millennials.htm>>. Internet. Accessed 28 August 2003.
- Reimer, Dennis J. "Soldiers are our Credentials." Undated. Available from <http://call.army.mil/products/spc_prod/cofs/reimer.htm>. Internet. Accessed 23 August 2003.
- Ricka, Thomas E. "More than Rank Splits Army's Stars and Bars: Study Says Generation Gap Drives Junior Officers Away, Creating Future Leadership Vacuum." 19 November 2000. Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=0000000164757>. Internet. Accessed 28 August 2003.

- Roos, John G. "Army Transformation," October 2002. Available from <<http://search.epnet.com/direct.asp?an=7535252&db=mth>>. Internet. Accessed on 29 August 2003.
- Rushkoff, Douglas. Excerpt from "Generation X Reader." Available from <<http://www2.hawaii.edu/jonhira/genX.html>>. Internet. Accessed 28 August 2003.
- Rumsfeld, Donald H. *Transformation Planning Guidance*. Washington D.C.: Department of Defense, April 2003.
- Schoomaker, Peter J. "Arrival Message." Available from <<http://www.army.mil/leaders/csa/messages/1aug03.htm>>. Internet. Accessed 23 August 2003.
- Shinseki, Eric K. "The Army Vision: Soldiers on Point for the Nation Persuasive in Peace, Invincible in War." Available from <<https://www.us.army.mil/csa/vision.html>>. Internet. Accessed 30 August 2003.
- Shinseki, Eric K. and Thomas E. White. *Transformation Roadmap*. Washington D.C.: Department of the Army, 2002.
- Smith, Gregory P. "Baby Boomer Versus Generation X, Managing the New Work Force." Available from <<http://www.chartcourse.com/articlebabyvsgenx.html>> Internet. Accessed 28 August 2003.
- Steele, Dennis. "The Army Magazine Hooah Guide to Army Transformation.," *Army Magazine* (2001).
- Stern, Seth. "Victory aside, war no boon to recruiters: Education and skills, not military glory, draw enlistees." 14 May 2003, Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=000000335818821>. Internet. Accessed 28 August 2003.
- Sullivan, Gordon R. Untitled thoughts from the Army Chief of Staff. Available from <http://call.army.mil/products/spc_prod/cofs/sullivan.htm>. Internet. Accessed 23 August 2003.
- "Taste—Review and Outlook: Gen Y Goes to War." 28 March 2003. Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=00000031>. Internet. Accessed 12 October 2003.
- Tomasi, Louis F. et al. "1995 Army Physical Fitness Test Update Survey, "Age, Gender and Performance on the U.S. Army Physical Fitness Test (APFT)." 1995. Available from <<http://www-benning.army.mil/usapfs/Research/1995APFTUpdateSurvey.htm>>. Internet. Accessed 17 August 2003.

- Tomasi, Louis F. and Gene Fober. "1998 Fitness Training Unit Study on Chance of Success Through the Army Physical Fitness Test Update Survey." 1998. Available from <<http://www-benning.army.mil/usapfs/Research/FTUStudy.htm>>. Internet. Accessed 17 August 2003.
- U.S. Army. Epidemiological Consultation Report Number 12-MA-5762-01, "The Victory Fitness Program: Influence of the US Army's Emerging Physical Readiness Training Doctrine on Fitness and Injuries in Basic Combat Training." Available from <<http://www-benning.army.mil/usapfs/Research/VFProgram.htm>>. Internet. Accessed 17 August 2003.
- U.S. Army War College Library. *Transformation Planning Guidance*. Carlisle Barracks: U.S. Army War College, April 2003.
- U.S. Department of the Army. *Army Training and Education*. Army Regulation 350-1. Washington D.C.: U.S. Department of the Army, 9 April 2003.
- U.S. Department of the Army. *Military Occupational Classification and Structure*. Army Pamphlet 611-21. Washington, D.C.: U.S. Department of the Army, 31 March 1999.
- U.S. Department of the Army. *Physical Fitness Training*. Army Field Manual 21-20. Washington, D.C.: U.S. Department of the Army, 30 September 1992.
- U.S. Department of the Army. *The Army Personnel Proponent System*. Army Regulation 600-3. Washington D.C.: U.S. Department of the Army, 28 November 1997.
- U.S. Department of the Army. *Training in Units*. Army Regulation 350-41. Washington D.C.: U.S. Department of the Army, 19 March 2003.
- U.S. General Accounting Office. *Military Personnel: Perceptions of Retention-Critical Personnel are Similar to Those of Other Enlisted Personnel*. Washington D.C.: U. S. General Accounting Office, June 2001.
- U.S. General Accounting Office. *Military Personnel: Services Need to Assess Efforts to Meet Recruiting Goals and Cut Attrition*. Washington D.C.: U. S. General Accounting Office, June 2000.
- Van Drie, Mark. *Infantry in the 21st Century*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 12 March 2000.
- Waclawski, Michael L. *Recruiting a Quality Force for the 21st Century Army...Challenges and Opportunities*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 7 April 2002.
- White, Thomas E. "Transforming the US Army, Goals, Schedules and Programmes." November 2002. Available from <<http://web5.epnet.com>>. Internet. Accessed 29 August 2003.
- Winkler, Mark A. "Objective Force 101," April-June 2003. Available from <<http://search.epnet.com/direct.asp?an=10260458&db=mth>>. Internet. Accessed on 29 August 2003.

Yamashiro, Neil. *Generation X*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 7 April 1998.

Zamichow, Nora. "Column One; Salesman Soldiers of the Army; Military recruiters find that wooing and winning applicants is complicated by the threat of war. Still, there are quotas to be filled." 7 March 2003, Available from <http://gateway.proquest.com/openurl?ctx_ver=z39.88-2003&res_id=xri:pqd&rft_val_fmt=ori:fmt:kev:mtx:journal&genre=article&rft_id=xri:pqd:did=000000303184851>. Internet. Accessed 28 August 2003.