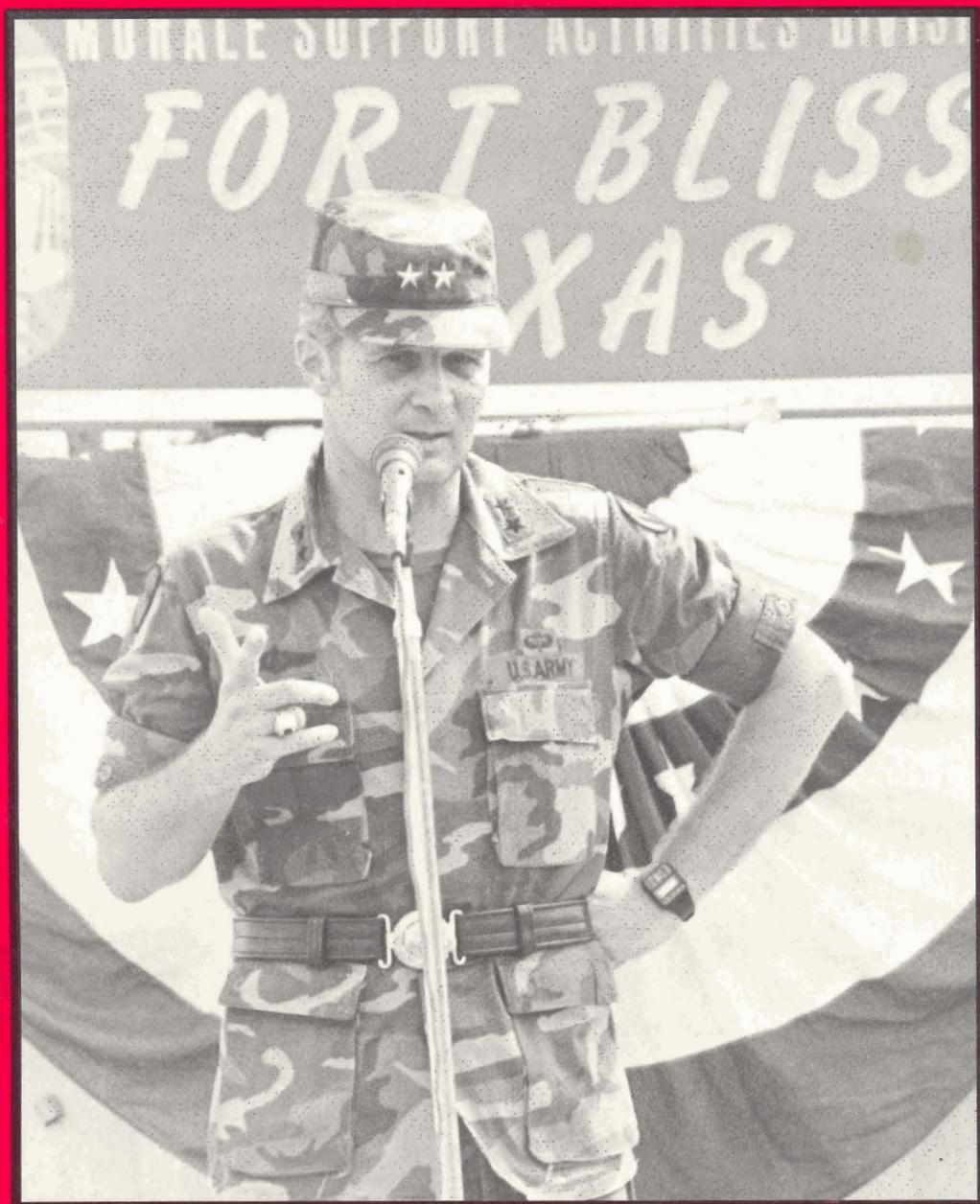


AIR DEFENSE ARTILLERY



HQDA PB 44-89-4

SEPTEMBER-OCTOBER 1989



The Infante Years

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***“The four Infante years represent
20 percent of the branch’s history.
They were pivotal years highlighted
by the total restructuring of divisional
ADA and the evolution of ADA’s
ATM capability. ‘The Infante Years’
is the story of how Maj. Gen.
Donald R. Infante reshaped and
revitalized a battered and often-
maligned combat arm. They were
years of triumph and transformation.”***

**Brig. Gen. Jay M. Garner
Acting Commandant
USAADASCH**

Brig. Gen. Jay M. Garner
Acting Commandant, USAADASCH

Blair Case
Chief, ADA Publications Division

Jim Collins
Editor-in-Chief

Hubert Koker
Editor

Lisa Henry
Managing Editor

Air Defense Artillery is the professional bulletin of the United States Army Air Defense Artillery Branch. Approved for public release; distribution is unlimited. Headquarters, Department of the Army.

Air Defense Artillery (ISSN: 0740-803X) is an official professional development bulletin compiled by the U.S. Army Air Defense Artillery School, Fort Bliss, Texas. Articles appearing in this publication do not necessarily reflect the position of the U.S. Army Air Defense Artillery School or the Department of the Army. Material submitted for publication is subject to edit. Footnotes and bibliographies may be deleted due to space limitations. Use of the masculine pronoun is intended to include both genders where appropriate. Copyrighted or syndicated material may not be reprinted. Unless otherwise noted, photographs are U.S. Army photos. If material is reprinted, please credit the author, photographer and the bulletin. Information contained in this publication does not change or supersede any information in other official Army publications. Distribution: Special.

Air Defense Artillery is approved for the official dissemination of material designed to keep ADA Branch members within the Army knowledgeable of current and emerging developments in Air Defense Artillery for the purpose of enhancing their professional development.

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CARL E. VUONO
General, United States Army
Chief of Staff
Official**

**WILLIAM J. MEEHAN II
Brigadier General, United States Army
The Adjutant General**

POSTMASTER: Second-class postage paid at Laurel, Md. Department of the Army (ISSN: 0740-803X) Air Defense Artillery bulletin (USPS 307-010) and additional mailing offices. Send address changes to Superintendent of Documents, Mail List Branch (SSOM), Washington, D.C. 20402.

CORRESPONDENCE: Address articles and letters to: Editor, Air Defense Artillery Bulletin, USAADASCH, ATTN: ATSA-AC-PP, Fort Bliss, TX 79916-7004. Telephone (915) 568-4133. AV 978-4133.

SUBSCRIPTIONS: May be obtained through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. A check or money order payable to Superintendent of Documents must accompany all subscription requests. Subscription rates are \$8.50 for domestic (including APO and FPO) addresses and \$10.85 for foreign addresses for a one-year subscription (six issues). Individual copies are \$3 for domestic and \$3.75 for foreign addresses.

A Career Bio

Maj. Gen. Donald R. Infante was born in Youngstown, Ohio, on May 2, 1937. Upon completion of the Reserve Officers Training Corps curriculum and the educational course of study at Youngstown State University in 1958, he was commissioned a second lieutenant and awarded a Bachelor of Science degree in mathematics. He also holds a Master's degree in Operations Research and Statistics from Rensselaer Polytechnic Institute. His military schooling includes the Air Defense School, the Field Artillery School, the United States Army Command and General Staff College and the United States Army War College.

He has held a wide variety of important command and staff positions culminating in his assignment in August 1985 as commanding general, United States Army Air Defense Artillery Center and commandant, United States Army Air Defense Artillery School. Some of his other key assignments include commander, 69th Air Defense Artillery Group from June 1979 to April 1982; deputy commanding general, 32nd Army Air Defense Command from April 1982 to September 1983; and Patriot/Air Defense project manager, United States Army Missile Command from October 1983 to July 1985.

Infante's career began as a fire control and launcher platoon leader with C Battery, 4th Missile Battalion (Nike-Hercules), 1st Artillery, at the Army Chemical Center, Md. In 1962, he joined C Battery, 6th Missile Battalion (Hawk), 562nd Artillery, at Fort Bliss as a platoon leader and deployed with the unit to Germany where he served as the battery executive officer.

In 1963, he joined the 3rd Missile Battalion, 7th Artillery, in Germany, serving consecutively as battalion operations center commander, battery commander and battalion S-4. He served with the United States Military Assistance Command, Republic of Vietnam, as an adviser to G-3, III Corps, in 1967.

In 1970, he assumed duties as a staff officer in the Strategic Forces Division, Office of the Deputy Chief of Staff for Military Operations, Department of the Army, Washington, D.C. One year later he was assigned as a systems analyst, Strategic Programs Office, for the assistant secretary of defense (Systems Analysis) in Washington.

In 1973 he assumed command of the 2nd Battalion, 71st Air Defense Artillery, 38th Artillery Brigade in Korea and remained in command for over two years. In 1976 he was appointed as the director of the Studies and Concepts Division, United States Army Air Defense School, Fort Bliss, Texas, after which he served as commander, Division Air Defense Artillery, 1st Cavalry Division, at Fort Hood, Texas.

In February 1978, he was reassigned and appointed co-chairman, Army-Air Force NATO Fire Support Study Group, Office of the Deputy Chief of Staff for Operations and Plans, United States Army, Washington, D.C.

The Infante Years



"A tireless advocate." Maj. Gen. Donald R. Infante meets the press at the rollout of Boeing's Avenger, the line-of-sight rear component of the FAAD system.

No one has yet dared utter the word "irreplaceable," a word that has no proper place in the military lexicon. Soldiers are, by nature of their profession, expendable and, being expendable, had darn well better be replaceable.

Maj. Gen. Donald R. Infante is no exception to the rule.

Many will be quick to assert that the recently retired chief of Air

Defense Artillery will not be forgotten, but they will be wrong. Certainly, his memory will shine brightly for awhile, but then it will recede from living memory and exist only in yellowing pages of historical reports and stacks of fading microfiches. But there is a bridge between past and future generations that transcends human memory. Infante's legacy — if not the memory of the man himself — will endure.

Generations from now, when today's new weapon systems have become scrap iron, newly commissioned ADA officers may pause before the photographs of former commanders which adorn the entrance to the U.S. Army Air Defense Artillery School. They will peer at the antiquated uniforms, and, perhaps, wonder what sort of man was Maj. Gen. Donald R. Infante. They will little understand



"Events may have put ADA on DoD's 'front burner', but it was Infante who made sure it stayed there." At left, Maj. Gen. Donald R. Infante briefs Army Chief of Staff Gen. John A. Wickam Jr. At right, Infante explains ADA weaponry to Bobby Ortiz, civilian aide to the secretary of defense.

nor appreciate his influence on their careers as soldiers and as air defense artillerymen, but the influence will be there in hundreds of subtle ways.

Infante served four years as chief of Air Defense Artillery. They were years of crisis, charismatic leadership and considerable achievement. Infante led his followers out of a wilderness of self-doubt and defeatism into a promised land pretty much of his own making.

Events conspired, as they often do in the building or demolishing of reputations, to make the Infante years special. Circumstance, indeed, practically dictated that the new branch chief's reign would be either miraculous or disastrous.

Infante assumed command during the summer of 1985, a time of crisis in which Air Defense Artillery's ability to accomplish its Airland Battle mission was in dispute and its future as a combined arms branch very much in doubt. The termination of the Sergeant York Gun program, upon which the branch had staked much of its fu-

ture, left gaping holes in ADA's role on the battlefield.

The same media critics who had savaged the Sergeant York had turned their attention to Stinger, a system they said was too complex for ordinary soldiers to effectively operate. Branch morale was at a low ebb, its lack of self-esteem a reflection of its standing in the eyes of other combat arms.

A panel of Army and Air Force experts, meanwhile, was meeting to decide whether Patriot, the cornerstone of the branch's high- to medium-altitude air defense capability, should be turned over to the Air Force.

Some of the negatives, however, tended to work in Infante's and the branch's favor.

The termination of the Sergeant York Gun, painful as it was, laid bare the Army's inability to protect its maneuver forces from air attack — an unpleasant reality hammered home by the results of realistic, three-dimensional combat simulation at the National Training Center. This set the stage for the intro-

duction of the forward area air defense (FAAD) system and ensured the acquisition and fielding of the new family of weapon systems would be assigned a top priority, a priority Infante's predecessors as chief of branch did not enjoy.

Mujahideen freedom fighters proceeded to provide dramatic proof that Stinger works perfectly well.

OPFOR aviation operating at the NTC demonstrated that Blue task forces didn't work well at all, unless they were protected by a strong and mobile air defense.

"You might say my timing was good," Infante told *Air Defense Artillery*. "I knew coming into the job that there was a great opportunity to turn things around. The reason we were able to turn things around was because the user, the developer and the military industrial complex worked together as a team. Each member of the team had to make sacrifices and they made them. We achieved more with FAAD, with regard to duration, than any other Army program has achieved to my knowledge."

Infante On The Future

The Threat

"Everyone would like to believe that the threat has gone away. That fits in with cutting military spending, and cutting military spending fits in with cutting taxes. But the threat isn't going away; it's merely changing. The Soviet Union has traditionally sought a quantitative edge while we've sought a qualitative edge. Today, the Soviet Union is seeking a qualitative edge. They can't afford to maintain military expenditures at current levels. Meanwhile, we are also going broke trying to match the Soviet quantitative edge. The pendulum has swung full measure. Neither one of us can afford to continue doing business as usual. The focus in the future will be on establishing roughly equivalent forces. The emphasis will be on quality rather than quantity. Given American innovative genius, I think we'll win."

Glasnost

"We should encourage trends toward the lessening of offenses, but we must remember that we can't be sure how long Mr. Gorbachev will be around. We can't for one moment stick our heads in the sand. While the Soviets may continue to reduce forces, they can rely on

their ability to quickly mobilize vast numbers of reserves and on their ability to get them quickly to the battlefield.

This is a capability we lack. They will also maintain their quick-strike capability which, by the way, is largely a fixed-wing capability which, by the way, will continue to make air defense and its role on the battlefield extremely important."

ATBM

"We will continue to develop our anti-tactical ballistic missile capability no matter what happens to the Strategic Defense Initiative or Star Wars. We have to. It's not just a matter of what the Soviet Union is doing. At the moment, 10 third-world countries have tactical ballistic missiles. Others are developing tactical ballistic missiles that can deliver conventional, nuclear, chemical or biological munitions. The Iranian-Iraqi conflict shows that they are willing to use chemical and biological weapons. If they use them on each other, are they going to hesitate to use them on us? Do they like us any better? If we go ashore in a third-world country with no ATBM capability, we are going to get our clock cleaned. We had better be prepared."

Events may have put air defense on the DoD front burner, but it was Infante who made sure it stayed there.

"As commander of the Army's Air Defense Artillery School at Fort Bliss, Texas, for the past three years, the energetic Infante has guided the revival of a branch of the service laid low by the failure of the Sergeant York Air Defense Gun," editorialized *Army Times*. "From the ashes of a program that came to symbolize not only Pentagon procurement problems but also the Army's singular ineptitude with the press, Defense Department bureaucrats and Congress, Infante has shaped a forward area air defense plan that in time will give the U.S. soldier an umbrella that will move as

rapidly about the battlefield as tanks and fighting vehicles. We wonder what will become of this effort without Infante's tireless advocacy.

"Infante also played a major role in the development of the Patriot missile," the newspaper continued. "Though the Patriot had a long gestation period, the missile is so successful that it will be called on to carry out an expanding array of missions. As much as anyone in the Army, Infante has helped make the air defense school's motto — 'If it flies, it dies' — a reality.

"Ironically, the very qualities that helped Infante revitalize Army air defense — his candor and enthusiasm — may have prevented him from climbing to higher rank.

"We think the Army could use

more leaders like this. Now more than ever, the service needs people who can articulate its missions," the *Army Times* concluded.

The *Army Times* editorial writers weren't the only ones who pondered the reasons for Infante's departure. The common assumption was that the chief of branch had somehow been passed over for promotion. "It makes you wonder what you have to do to get promoted," said a former chief of ADA. Infante's third star, however, was apparently there for the asking.

"It's like the Kenny Rogers' song," Infante told *Air Defense Artillery*, "You've got to know when to hold them, know when to fold them and know when to walk away. I looked at the few lieutenant general

Of Air Defense Artillery

ASAT

Infante viewed the future of the Army's anti-satellite mission as extremely uncertain.

"The future of our anti-satellite initiative is extremely difficult to predict," he said. "It's highly political. If we do go ahead with the ASAT program, will it be sea-based or land-based? Will it be a mobile or a static system? Treaties in the making would ban ASAT testing. How do you develop a system you can't test?"

M-SAM

Infante predicted that the medium range surface-to-air missile (M-SAM) will be paid for mostly by Eurodollars. He expects U.S. military industrialists to play a role similar to that played by foreign industrialists in the manufacturing of the FAAD system.

"The future of the medium range surface-to-air missile is European," he said. "If M-SAM is developed and fielded, it will be through NATO funding. Given current resource constraints, we simply can't afford to do it ourselves. Besides, we have a different mission than our NATO allies. Our mission is worldwide.

"It is extremely important that, in developing M-SAM,

they make sure it meshes with Patriot. They will have to do that anyway, since Patriot is the system our NATO allies are buying," he said.

Force Reduction

"Because of the high priority given to air defense after the termination of the Sergeant York Gun program, ADA has enjoyed a relative immunity to budget cuts. This immunity will not continue. There will be a reduction in force. We will wind up with a smaller but higher quality air defense force."

MOS Consolidation

Infante said force reductions will allow ADA to maintain the soldier quality necessary to make MOS consolidation work despite a shrinking manpower pool.

"ADA MOS consolidation will work because of today's high quality soldier and because today's air defense systems are much simpler to operate and much simpler to maintain than older systems. You don't have the system-peculiar technology you once had. Forcercution will also work in our favor. With a smaller force, we won't have to work with lesser quality soldiers."

slots which were available, considered the contribution I could make in those slots, compared it to the accomplishment of the past four years, and decided to walk away on a high note."

The *Army Times* got the part about the motto wrong. During his tour of duty, Infante made "First to Fire" the official branch motto. The new motto replaced the unofficial but widely accepted "If it flies, it dies" motto, which looked great on T-shirts but smacked of fratricide to Army Aviation and U.S. Air Force ears. Infante also commissioned the composition of an official branch song, the "ADA March." He cared about such things and thought they helped build branch pride. He made rebuilding ADA branch pride

his top priority, ahead of weapon system acquisition and development.

"Pride," he wrote in one of his "Intercept Point" columns, "is the soul of any organization." He preached branch pride at every opportunity, taking advantage of his considerable communicative talents, which included a strangely intimate public speaking style and an abbreviated writing style which, while it often trampled basic rules of composition, got the message across. He viewed his "Intercept Point" column as his personal communicate to ADA soldiers and, rather than relying on ghostwriters, insisted on writing every word himself. The restoration of branch pride ranks as one of Infante's major

achievements.

A few months before his own retirement, Maj. Gen. Donald R. Infante went directly from a Fort Bliss retirement ceremony to a briefing at the Office, Chief of Air Defense Artillery (OCADA) — the U.S. Army Air Defense School directorate responsible, among other things, for managing the ADA force structure. "Today, while viewing the retirement ceremony, I couldn't help thinking that we have just lost 840 years of experience," began the OCADA briefing officer, alluding to the number of years served by the retiring officers, warrant officers and noncommissioned officers.

"Well, it is a young man's business," Infante answered. We will

Continued on page 31

In **1985**

The first Patriot battalion deploys to Germany, but the rest of the year's news is gloomy. DoD cancels the Sergeant York Gun and the Air Force vies for custody of Patriot. It was the "winter of our discontent."



A new guy on the block often brings an uncertainty that results in a waste of time as folks "try to feel the new man out." Nothing is more precious than a soldier's time except soldier care. To save time over the next few editions, "Intercept Point" will contain my thoughts on a broad range of subjects about soldiers and soldiering. Nothing is directive. However, my intention is to use the column to partially fulfill my responsibilities as a teacher and mentor. Be assured, they are my thoughts, not a ghost-writer's. My sincere hope is that they help make you a better soldier.

Our mission, simply stated, is to be ready to go to war on short notice. In four words: shoot, move, communicate and sustain. Our top priorities are training and maintenance. However, our most important resource is our soldiers. Their care is paramount. Take care of them in every way. Soldier care builds confidence in their leadership. Individual confidence adds up to unit cohesion — an esprit that makes the difference when all else fails.

We are about to spend approximately \$11 billion over the next five years on new and improved air defense weapons. Without trained, motivated, well-led soldiers, this is wasted money. Superb soldiers with good weapons of war, not weapons alone, make the difference.

First, a few words about soldier care. You take care of soldiers in all ways. Hard training, conducting a tough physical training program, keeping the billets secure, paying them on time, listening to what's on their minds — all these are ways of showing true soldier care. In this regard, you may fool generals as they pass through, but you can't fool soldiers. They know when you're blowing smoke. Be sincere about soldier care. If it is not in your heart to be sincere, find a new occupation. The Army has no room for uncaring leaders at any grade. Our soldiers and their lives are too precious.

Next, a few thoughts on establishing standards. A most difficult area. One which requires the highest degree of professionalism. One where you pay a price if your standards are either too low or too high. My operations research training taught me to think in graphs. The graph on the next page illustrates the importance of setting challenging but realistic training. What this says is:

- Standards that are too high are just as bad as standards that are too low.
- Soldiers will do what you ask of them to a point. Ask nothing and you'll receive nothing.
- Set your standards so high as to be unachievable,

Infante Takes Charge!

Despite the uncertainty that seems to face ADA, Infante is convinced from the beginning that the problems confronting the branch really represent opportunities for growth. As it turns out, his expressed convictions prove to be closer to reality than many pessimists can perceive or accept. In Infante's lexicon, the problems are real, but solutions exist.

This, the first Infante "Intercept Point," introduces Infante's leadership philosophy and opinions on soldier care.

and your soldiers will doubt your leadership abilities. Why try to do the unachievable?

- High standards that are doable — that push soldiers to the limits — are what set an “exceptional” unit apart from just a “good” unit.

How about the total leader? What makes one? My mathematical mind divides characteristics of the total leader into one who fulfills his responsibilities and takes the time to interact with soldiers.

A total leader is one who fulfills individual responsibilities. Individual responsibilities include:

- Setting the example. Leaders have a “fishbowl” existence. Realize it and accept the challenge.

- Being tactically and technically proficient. Knowing the training manual. Knowing the capabilities and limitations of your weapons. Knowing how to deploy them so as to best support the AirLand battle.

- Taking pride in your physical appearance. Leaders cast an image. Pride in your uniform indicates

pride in yourself and in being a professional.

- Having a sense of inner peace and strength. Honesty in all dealings. Selflessly placing unit and mission above all personal needs. Allowing others the freedom to fail. Knowing “zero defects” is an unrealistic and unachievable goal.

A total leader is one who takes the time to interact with soldiers. In this interaction, the leader —

- is honest, just and fair. He renders equal treatment to all and knows that every soldier who works for him can do at least one thing better than he can.

- treats soldiers as mature professionals. We ask them to risk their lives for their country, a supreme sacrifice which, by itself, merits adult treatment.

- takes a personal interest in soldiers as individuals. Everyone is someone, and his contribution is important.

- tells the reasons why. Understanding why a task is important

ensures the best possible effort. The American way is to explain why, which helps foster individual initiative when the plan goes wrong. This one difference in the way we treat our soldiers, compared to the Soviet army’s demand for blind obedience, is the biggest force multiplier we have!

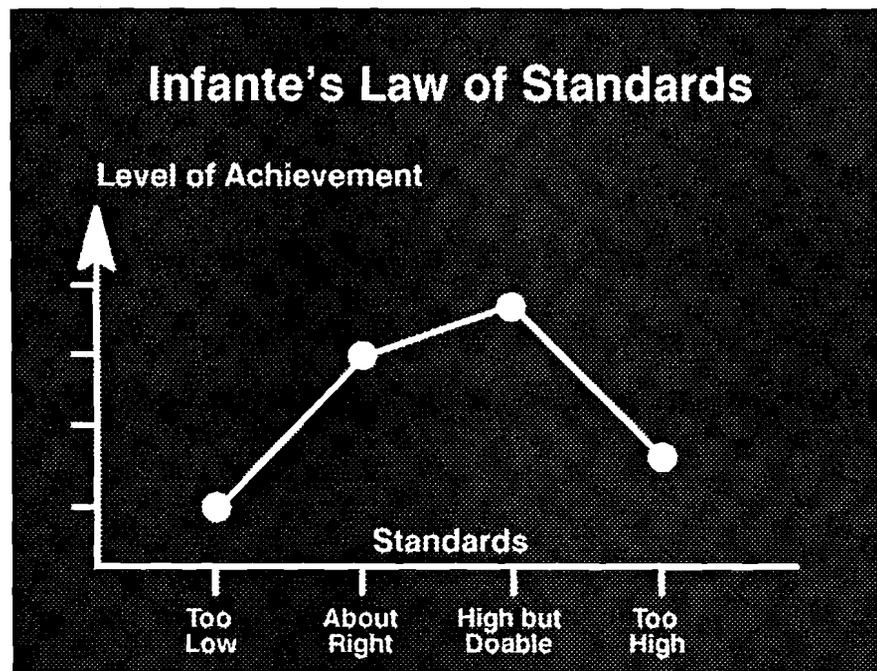
Last, there are some time-honored truisms that build good units. Rules that never fail. Rules that will always result in success and create a unit that does all things excellently or better. Try this list:

- Be statistics conscious. Look at what the numbers say. If your unit is far below other units in one area, such as re-enlistment rates, or far above in others, such as Article 15s and courts martial, ask yourself why. Why can the other unit do it and we can’t? Could it be a matter of leadership?

- Ensure a sense of discipline. Without discipline, including discipline in small things, a military unit will collapse under stress. Discipline is the foundation upon which a good unit is built. Without discipline, excellence in all things is impossible.

- Have a good soldier-focus. Spend 90 percent of your time helping good soldiers become all they can be. Spend 10 percent of your time convincing “fence walkers” to become good soldiers and kicking out bad soldiers. You are better off without bad soldiers, no matter how badly you need their MOS skills. They have no place in our Army. Get rid of them.

- Create a good balance between work and play. Have a good physical training program, fun runs, unit parties, special suppers, prayer breakfasts and time off for a job well done. Don’t be bashful about asking for time off for your soldiers. If you don’t ask, no one else will.



• Never pass a wrong. Now there's an important rule. Go back and re-read it. The moment you pass a wrong, you become an accomplice. You are as guilty as the offender. A new standard has been set. One you don't want and won't like, but you'll be stuck with it unless you take corrective action.

• Establish a ratio of 10 pats on the back to one kick in the tail. If the ratio in your unit is backward, you're in big trouble. Make sure that awards are given on time, in a formation of some sort, in front of associates who saw the soldier earn the award.

• Establish a "we care" environ-

ment from the barracks to the housing area to the dining facility to the motor pool. "Cleanliness is next to Godliness." Keep things looking nice. Put everything in its proper place. There is no excuse for mail or pay being late. Establish an aggressive self-help program. Engineers can't do it all alone. You appreciate most what you do yourself.

The bottom line: soldiers. There isn't anything else. Our soldiers are the best. Take care of them. Do all in your power to make them happy, and they will train better. More importantly, if the time ever comes, they'll fight better, and you'll bring them home. Superior officers pro-

duce superior NCOs and vice versa. Superior officers and superior NCOs mold superior soldiers. All three together build superior units and will win wars, not by dying for their country, but by making the other guy die for his country.

Where do superior units come from? They come from units just like yours. Every unit has about the same amount of talent. The superior unit is that which has the lower half doing upper-half work.

Glad to be aboard. Be all you can be. Ensure that your soldiers become all they can be. Our Army is a place, today, where true professionals meet.



"Be sincere about soldier care. If it is not in your heart to be sincere, find a new occupation."

In **1986**

A turning point. The forward area air defense concept emerges to restructure ADA's future. Everyone breathes a little easier when a joint study group recommends that the Army retain Patriot. Things begin to look up.



The British author Rudyard Kipling said "The backbone of the Army is the noncommissioned man." He was right then, and his statement today remains true even to a greater degree. The key to victory remains initiative at the lowest levels of the battlefield. This is especially the case in Air Defense Artillery.

On Nov. 22, 1985, a historic event occurred at Fort Bliss, Texas. In a colorful ceremony, I took the post guidon from CSM Fred Stafford and passed it to CSM Ray Godfrin. This ritual involves much more than the passing of a guidon. More important was the passing of standards for the 18,368 noncommissioned officers and enlisted soldiers at Fort Bliss, and their 22,368 ADA brethren deployed throughout the world.

Being a standard bearer is not easy. A standard bearer leads from the front, not from the rear; sets mental, physical and ethical examples of leadership; and keeps his or her personal and professional life in good shape. The leadership of human beings makes a difference in our Army in peacetime as well as war. Napoleon said it well with his phrase that morale is to materiel as three is to one. Leadership is a big responsibility, especially if your sphere of influence is as described above.

Command Sergeant Major Stafford was up to the challenge. In all respects he was a superb noncommissioned officer. I've known him since my battery CO days in 1963. Some highlights from his selfless career include 35 years of dedicated service to our country, to our Army, to our soldiers and to their families. He served 14 years as a command sergeant major, almost seven of these years as the Fort Bliss command sergeant major.

But what was it that really made Fred Stafford a great noncommissioned officer and soldier? I've singled out the following five traits:

- He was tactically and technically proficient. But, more importantly, he developed this trait in his subordinates. He instilled in them a desire for knowledge and a desire to win.

- He truly cared — deeply and sincerely, not just for his soldiers, but for their families. He realized the stronger the families, the better Air Defense Artillery and Fort Bliss would be. His soldier-care philosophy also covered every aspect of a strong training and maintaining program.

- He created a climate where subordinates took responsibility for their actions, whether good or bad, right or wrong. He allowed a climate of command to exist which gave subordinates the freedom to fail and grow.

NCO Change of Command

Fort Bliss CSM Fred Stafford, the last of Air Defense Artillery's Korean War veterans, retires and is replaced by CSM Ray Godfrin.

Infante uses the occasion to illustrate the importance and continuity of NCO leadership — a theme he returns to three years later during the "Year of the NCO."

- He listened to subordinates and acted on what he heard. His listening typified the loyalty he had to both superiors and subordinates. After listening, he made things happen.

- He was a teacher and mentor. He shared his experience, maturity and judgment.

But as great as Fred Stafford was, he was replaced by another superb soldier — Ray Godfrin, a close friend of mine for almost a decade; my brigade command sergeant major; a member of my family. His record speaks for itself. Ray Godfrin has rendered 33 years' service to our country, Army, soldiers and families. He has served 10 years as a command sergeant major at battalion, brigade and division level. Prior to reporting to Fort Bliss, he was the command sergeant major of the 32nd Army Air Defense Command

where he and Maj. Gen. Victor J. Hugo Jr. made soldier care a top priority. Ray Godfrin is unquestionably the right man for the job of Fort Bliss command sergeant major.

Upon asking myself what it is that makes Ray Godfrin so great, I arrived at the logical conclusion — the same traits which made Fred Stafford great.

- He is tactically and technically proficient. He instills the spirit to achieve and win.

- He truly cares. In 26 years' service I've never met a command sergeant major who truly cares more about soldiers and their families.

- He allows them the freedom to fail. He teaches subordinates to step forward and take credit for their actions, good or bad.

- He is a teacher and a mentor, a master at what today we term "footlocker counseling," which is no

more than talking to soldiers where they live and work.

Where does this leave us concerning these two superb soldiers? Just as Fred Stafford made history and made a difference on his watch, so will Ray Godfrin! If we could instill throughout the Noncommissioned Officer Corps these traits, our Army would be a great Army. Those of you who believe only generals make history don't understand soldiering. The fact is that it's non-commissioned officers and soldiers who make history. Command sergeants major like Stafford and Godfrin are the ones who get things done and make the Army great.

Command Sergeant Major Stafford was a superb standard bearer. I know you join me in wishing him all the best and Godspeed. However, know that CSM Godfrin is also a great standard bearer and that he will make a difference. I am super pleased to be serving with him again as we write a new chapter together in our branch history.

It's another sign of our talented Army where no one is indispensable, where you can truly be all you can be. Which of you ADA noncommissioned officers is up to the challenge of replacing Ray Godfrin? Do you, as a professional non-commissioned officer, have these traits? If not, what are you doing about improving yourself? Our quality soldiers deserve the best. Leadership in peacetime and wartime makes a difference. Being a standard bearer is a tough and demanding business.

But that's what we're all about as an Army — taking care of soldiers, and setting realistic and achievable standards. Command Sergeant Major Godfrin will show the way for the ADA Noncommissioned Officer Corps. Your challenge is to keep up.

CSM Characteristics

Tactically and Technically Proficient

Instills the Spirit to Achieve and Win

Truly Cares About Soldiers

Allows Soldiers Freedom to Fail

Serves as a Teacher and Mentor

Air Defense Artillery has reached an important milestone in its proud history. In my lifetime, two past milestones stand out — the transition to missiles in the late 1950s; and the deployment of division air defense in the mid-1960s. A third is now added — the forward area air defense (FAAD) concept and system.

The FAAD concept and its supporting system is the centerpiece of this issue of *Air Defense Artillery* magazine. "Forward Area Air Defense" by Col. John Little and Maj. Mike Vane, is required reading for every air defender from general to private. It should be mandatory reading for all combined arms brethren. As this is unlikely, we air defenders must help in the educational process because the success of our Army in any future AirLand battle depends on our successful implementation of the FAAD concept and system. So, now that we're all on the same sheet of music, let's review some basics about the mission of Air Defense Artillery.

Two aspects to burn in your memory.

Ensure the freedom to maneuver. The thread of logic woven throughout our AirLand Battle doctrine is the freedom to maneuver. Without freedom to maneuver, our chances for success against an enemy that outnumber us are slim to none. This freedom can be taken from us by enemy ground forces, or hostile air power, or a combination of both. ADA is charged with the important mission of ensuring it's not lost as the result of attack by enemy aircraft.

Sustain the battle. We can't let the bastards grind us down. Whether it's beans or bullets, or air power, or protecting our C²I centers to allow us to exert combat power at the right place at the right time. ADA is charged with enduring so we can sustain the battle. Fighting against an enemy who has almost more airplanes than we have bullets and missiles means we must kill him the first time. He cannot come back tomorrow. If he comes today, he dies today.

Folks will argue for years about the whys and wherefores of the Sergeant York Gun's demise. The fact is that it was canceled. In August '85, we had no concept for accomplishing the forward battle aspects of our mission. Much to the credit of our Army and the insight of Gen. Max Thurman, Army vice chief of staff, immediate action was taken to regroup our forces. Two parallel and complementary efforts were undertaken.

Formation of the Forward Area Air Defense Working Group (FAAD-WG) at Fort Leavenworth, Kan. Headed by Brig. Gen. Dave Maddox, a cavalryman who has an appreciation of combined arms rarely found in our

FAAD Concept Arrives!

"The Branch Lives," proclaims the cover of the Air Defense Artillery magazine in which this "Intercept Point" appears. Infante terms the emergence of the FAAD concept an "important milestone" in ADA history, comparing it to the transition to missiles in the late 1950s.

"The success of our Army in any future AirLand battle depends on our successful implementation," he writes.

Army, this selfless grouping of professionals realized the air defense problem is bigger than ADA. They recognized it as a joint and combined-arms problem. The result is a counterair concept that involves our Air Force and all the combined arms of our Army. We air defenders owe Brig. Gen. Maddox an immeasurable "thank you." He was recently inducted into the Order of Saint Barbara, reserved for those special "artillerymen" who make an outstanding contribution to our branch. Brig. Gen. Maddox has my personal thanks and professional admiration.

Formation of the ADA Laydown Group at Fort Bliss. Our branch's best and brightest could be found late at night and on weekends in the basement of the Air Defense Artillery School's headquarters building. They were working on how best to implement the ADA portion of the counterair concept. This dedicated group of professionals, working in conjunction with the FAAD-WG, helped formulate the FAAD concept and system. We as air defenders owe every team member a sincere thanks for service beyond the call of duty and for having the courage, at a time when branch morale was at its lowest, to fight back and believe in our mission — at great personal sacrifice. They also have my personal thanks and professional admiration.

These combined efforts resulted in the following achievements:

- The secretary of defense, on Jan. 8, approved the FAAD concept and system in principle.

- The funds required to begin making the FAAD system a reality were included in President Reagan's FY 1987-1991 budget and submitted to Congress.

- Army Chief of Staff Gen. John

A. Wickham Jr. briefed Congress on the FAAD concept and system. In his closing comments, Gen. Wickham singled out three programs he wants Congress to give highest priority. FAAD ranked second only to the Bradley.

During the brief period of August '85 to January '86, the professionals who worked on the FAAD concept and system team formulated and won approval of the Army's plan to fight the forward area battle. No small feat. Goes to show when the going gets tough, the tough get going. Another example of how — when our Army is unified on a cause — there is nothing we cannot accomplish as a team.

Read the "Forward Area Air Defense" article for details, but note the following highlights about the FAAD concept and system:

- The FAAD system is analogous to an aircraft carrier in that, while there are separate components, they all fit together in a complementary fashion. The result is only undesirable attack options for the enemy.

- Our combined-arms brethren share with us the responsibility for countering the forward area direct-fire helicopter threat. While we contribute to the close-in helicopter battle, our focus is on the helicopter threat beyond the range of the other combined arms. The same helicopter tactics that limited the effectiveness of the Sergeant York will limit the effectiveness of any direct-fire replacement that cannot be deployed in substantial numbers. A combined-arms approach is required.

- There exists a need for an indirect, non-line-of-sight weapon to destroy enemy helicopters masked by terrain deep in enemy territory. Our leading candidate is a system

developed in-house by the U.S. Army Missile Command's labs, termed the fiber-optics guided missile (FOG-M). When not killing helicopters, FOG-M kills tanks. Exciting times and a new mission for air defenders!

- In our zeal to counter the helicopter, we have not forgotten the fixed-wing threat. Countering the fixed-wing threat across the entire battlefield remains an ADA mission. In the rearward areas beyond enemy direct-fire range, we will deploy pedestal-mounted Stinger. Eight Stingers on a high-mobility, multipurpose vehicle integrated with improved acquisition and identification devices will result in our realizing Stinger's full potential.

- Increased emphasis on C²I and the need for both ground and airborne sensors. Additionally, there's an increased emphasis on the use of passive, non-imaging techniques for both acquisition and identification. The C²I component is the foundation for integrating the combined arms effort in the forward area air battle.

- A change in concept. Our old conventional concept, which was reactive in nature and clustered our weapons, said "You all come!" Our new combined-arms concept, which is proactive in nature and distributes our weapons while retaining the ability to weigh the main effort, states "You come; you die!"

A new milestone for Air Defense Artillery — the FAAD concept and system. Make it your business as a professional to read the article. Ask your questions. Give us your comments. Air Defense Artillery, as a branch, remains a valuable member of the combined-arms team. We cannot do it alone. But, they can't do it without us. Air Defense Artillery remains the "First to Fire."

Values — the Army's theme for 1986. A simple two-word definition of values is "what's important." One thing we all have in common that I would hope is important to all of us is that we are soldiers.

Being a soldier is something special. Soldiering is not meant for everyone, but only a select few. Soldiering is not a job, but a way of life. Soldiering is one of the few occupations that could require you to give your life for your country. The preferred option is that the other fellow gives his life for his country, which could mean that the one who takes it is you. But, you would be doing it for a reason — to maintain our free way of life in the greatest nation on God's earth.

Something all soldiers have in common is their initial enlistment and commissioning oath. Let's recall a few phrases: "solemnly swear to support and defend the Constitution of the United States;" "will well and faithfully discharge my duties;" and "do so without any mental reservation or purpose of evasion." Compare now the similarities below between this oath and the values the Army has stated in this, the Army year of values:

- Support and defend — loyalty to Army and country.
- Faith and allegiance — loyalty to unit.
- Faithfully discharge duties — personal responsibility.
- Without reservation or evasion — selfless service.

The point is something we already knew — underlying our oath is an ethic, a set of values, which makes a soldier something special. What our Army has done in the year of values is remind us of values we already possessed. Values that are important to each of us as soldiers.

With these values go a set of personal qualities which I recently heard Army Chief of Staff General John A. Wickham refer to as the four "Cs" and an "I." They are commitment, competence, candor, courage and integrity. These personal qualities form the building blocks of our values. Let's expand briefly on these personal qualities.

Commitment. Means never passing a wrong no matter how tired you are or what the situation. Means having for your soldiers a good training and maintaining program that ensures the other SOB dies for his country.

Competency. Means knowing your soldiers and what they can and can't do. Means knowing your equipment and what it can and can't do. Means knowing how to integrate them both on a dangerous battlefield to pro-

A Year of Values

"We must retain our belief in our Army, in our sense of values, in living up to the oath we all took," writes Infante in support of the annual Army theme.

The chief of branch cites the examples of an ADA unit which refused a "cheap victory" in annual service practice and the testimony of a Medal of Honor winner to illustrate his points.

duce the maximum destruction of the enemy with minimum loss of our soldiers' lives and equipment.

Candor. This quality is two little baby steps away from bluntness. Candor means not destroying a soldier's self-esteem but in private telling both the good and the bad — hopefully more good than bad. Means in private suggesting to your boss a better way to do things and, if you can't convince him your way is best, keeping your mouth shut and supporting the boss' way. While candor is the first cousin to honesty, it must be practiced with care.

Courage. Two types, moral and physical. Moral courage is the true test of inner self. No one is perfect and no one is ever totally pleased with one's self. But moral courage is knowing your faults and doing something about them. Physical courage is doing the right thing when scared as hell. However, one of my heroes, Command Sergeant Major Gary Lee Littrell (U.S. Army, retired) states it a little differently. Littrell, who is quoted at length later in this article, says that courage comes from being so well trained and having so much confidence in your abilities because you're so well trained that you can deal with any situation under any conditions. Littrell's training and concomitant courage made him one of the surviving members of a select fraternity made up of one in every 32,000 soldiers who have worn the uniform since 1903 — the brotherhood of those who wear the Congressional Medal of Honor.

Integrity. Means being honest with yourself and others. One of the best things about the Army is we believe our soldiers are honest and assume soldiers tell the truth. When dealing in a business where others' lives are at stake, we can have it no

other way.

Personal responsibility. Accepting responsibility for our actions and those who we lead. Doing what's best for the unit and soldiers when it's not necessarily what the boss wants.

Selfless service. Remembering the two reasons for rank: (1) to help get the job done and (2) to serve others. Placing the good of your soldiers and their families ahead of personal good.

Loyalty to unit. Best told by the example of Delta Battery, 2nd Battalion, 62nd ADA, while at Crete in 1985 for annual service practice. Every other unit in the battalion had fired honor battery. The pressure was on but the system was not cooperating. From the first day, a struggle. Finally, on Wednesday, pushed the fire button twice. Nothing! Two misfires. Evaluation showed not the unit's fault — They could quit and have their honor battery and the highest Hawk ASP score for a U.S. unit. Unit officers and NCOs huddled. Short huddle — answer obvious: they came to fire. And fire they did. Two good missiles. The unit still achieved highest Hawk ASP score for U.S. unit — but up front, with dignity and pride.

Loyalty to Army and country. Let me quote a powerful talk by my favorite hero. Gary Lee Littrell, in an address he helped me make to the noncommissioned officers of Fort Bliss, Texas, on values:

"Values," he said. "I didn't have a mother, I didn't have a father, I didn't have anyone to teach me values. I found my first family at the age of fifteen when I joined the Army, and then I was separated from my family for two years. I rejoined my family on my seventeenth birthday when I was allowed to come back into the Army.

"Loyalty. Loyalty to unit and loyalty to country are very important to me. My first loyalty to a unit was when I was in basic training. I had loyalty to the unit because we were Bravo Company. We had our guidon. Our drill sergeants instilled in us that 'We're brave! We're the best!' True loyalty to a unit did not actually start until I joined my first regular unit. I think loyalty to a unit is not loyalty to a number. Headquarters, 503rd Combat Team, no longer exists. But the people of that unit still exist.

"That's loyalty — the inbred loyalty to a unit. I knew at the time the responsibility men take into combat. Not only the possibility, but the probability of dying. My loyalty to a unit was with my friends, and I hoped no one would have to die, because I knew I would never let my fellow soldiers or therefore, my unit down.

"So loyalty to a unit takes deeper and deeper meaning. Loyalty to a unit took on the deepest meaning when I was in combat for the first time. That loyalty was not to the number 23 — the 23rd Ranger Battalion. That loyalty was to 473 because there were 473 people in our battalion. That loyalty number decreased rapidly over the next eight days from 473 to 41. The loyalty then was that no more men would have to die because I would do my job, or I would die in the process. That's loyalty to a unit. People make units. Units do not make people. Unit designations go away; people grow and people continue to develop.

"Loyalty to our country. The first loyalty to our country is much different. Sergeant Major of the Army Van Autrey taught me that — I didn't have values taught to me by family or friends. I don't remember

the exact date, but I remember the occasion when I first became aware of loyalty to my country. It was the first time I turned to a flag — our flag of the United States of America. I placed my little hand over my heart and I recited words — words I didn't quite understand then: 'I pledge allegiance to the flag of the United States of America and to the republic for which it stands: one nation under God, indivisible with liberty and justice for all.' That stuck with me. Why? I didn't realize why. But I loved that flag, and I loved my country, so I enlisted in the Army. When I see the lifestyle and the lack of freedom some countries have, I realize what they are missing. They are missing what we have.

"I remember landing at Travis Air Force Base when I came back from Vietnam. Coming down the stairwell of the aircraft, I put my feet down on the ground of this great nation. I got down in the front-leaning rest position and gave the ground a big kiss. I was so glad to be home. So happy to be home because I knew we had so much, much more than they had in other countries.

"Loyalty to our country started taking on meaning, real meaning for me, when I saw my fellow soldiers dying. And when you have a 17- or 18-year-old kid lay in your arms and take his last breath and take it with pride ('I died for a reason; I died so my fellow countrymen could have freedom; that my family could grow up and have freedom') then loyalty to your country takes on a very deep, deep meaning — an entirely new dimension, because you are in touch with reality.

"I think my loyalty to my country took on its deepest meaning when I became a father. Now I had a sec-

ond family.

"I missed what would have been my first family. I joined my first family, which was the Army, and from that I made my second family: my wife and two boys. When I look in the eyes of that big-brown-eyed little boy, I say, 'Now Lord, I know why.' My child will grow up in the land of the free. He'll have freedom of religion without worrying about which side of town he lives on. He'll have freedom to go to the voting booth and elect our leaders without having to worry about being shot in the process.

"So, loyalty to our country and religious freedom takes on deep, deep meaning. We get reinforcement today when we feel a part of this great nation that we serve. We went through a time in this country when this country wasn't proud of itself. It wasn't proud of its people and it wasn't proud of its servicemen. We went through a phase when America laughed and made fun of the flag. They cut it up and sewed it on the hip pockets of their blue jeans. We went through a stage when the National Anthem was no longer played at sporting events because of the disrespect to our great Nation. Those times are behind us,

"I was driving down the interstate from Colorado Springs a few months ago, and at one point on the interstate I could see three American flags flying — and flying proudly. I walked into a restaurant in San Antonio last March and I saw three soldiers walk in, in uniform, and I remembered the days after the commanding general forbade us to wear our uniforms off post. A chill went up my spine — here are three soldiers coming into a public restaurant. Were they going to be disgraced or humiliated? I turned to my wife and said, 'Sweetheart, be

prepared to leave this scene because if someone messes with those soldiers, I'm going to be here for a while!'

But you know what? Someone from across the room shouted, 'Buy that soldier a drink for me.' From the other side of the room came another shout, 'Buy that soldier a drink for me.' You know those soldiers got up and staggered out of that bar. And I remember a young couple that was sitting there. They stood up, and the gentleman said, 'Son we love you; we love what you're doing, and God bless you for helping to keep this great nation free.' That's loyalty! That's loyalty to our country, and it's coming back to our country stronger and stronger every day.

"Probably the greatest words I have ever heard were written by country and western singer Lee Greenwood:

**I'm proud to be an American
for at least I know I'm free.**

**I won't forget the men who
died, who gave that right to me.**

**And I'll gladly stand up next to
her and defend her still today.**

**There ain't no doubt I love this
land.**

God bless the USA."

The bottom line is we must retain our belief in our Army, in our sense of values, in living up to the oath we all took. Lt. Gen. Julius Becton said it well: "Honesty, integrity, moral courage, selfless dedication and personal self-discipline are absolute requirements for every officer and leader in our Armed Forces — their compromise destroys the individual's ability to lead."

Being a soldier is something special. Make every day in your unit the day of values in this, the Army's Year of Values.

First to Fire!

In the Spring 1986 issue of *Air Defense Artillery* magazine, our focus was on the forward area air defense (FAAD) system. That focus continues in this issue with articles on the pedestal-mounted Stinger shoot-off and FAAD command, control and intelligence (C²I). FAAD, as every red-blooded air defender knows, resulted from the Sergeant York Gun demise. The FAAD system is a system of weapon components that will be deployed primarily on our division battlefield. Working together, they will give the enemy only unattractive attack options.

FAAD contributes to our combined-arms Army mission of preserving the peace four ways:

- By ensuring our Infantry, Armor and Aviation brethren the freedom to maneuver that is essential to success against a numerically superior enemy.
- By protecting our C²I centers so vital to placing the required combat power at the right place at the right time.
- By protecting our division logistical centers so essential to sustaining the war.
- By attriting enemy aircraft transiting to attack rearward air bases and depots, thus alleviating the load on our rearward air defense.

FAAD consists of the following components.

Combined Arms. Within their range limitations, our combined-arms brethren must contribute to the defeat of the enemy helicopter threat.

Line-of-Sight Forward (LOS-F). The LOS-F component is the Sergeant York replacement. Operating near the forward line of own troops, it adds its fire to that of combined-arms range, but concentrates on engaging enemy aircraft beyond the range of our combined-arms brethren.

Non-line-of-Sight (NLOS). NLOS destroys helicopters behind hill masks as well as those deep in enemy territory as they transit to the front. Primary contender is the fiber-optic guided missile (FOG-M) designed by engineers at the U.S. Army Missile Command (MICOM). When no helicopter threat appears, FOG-M kills tanks.

Line-of-Sight Rear (LOS-R). Primarily designed to kill fixed-wing aircraft, it usually deploys no farther forward than the battalion rear. The near-term, nondevelopmental solution is pedestal-mounted Stinger. Eight Stingers mounted on a high-mobility, multipurpose wheeled vehicle or "Humvee." Comes equipped with a forward-looking infrared radar, laser rangefinder, passive identification devices and a C²I hook-up. Shoot-off to select a

FAAD Made Simple

Infante works as hard to sell the forward area air defense system to ADA soldiers as he did to the high-level DoD bureaucrats who control the FAAD purse strings.

This "Intercept Point" offers an inside view of the Army acquisition and procurement system, a departure from past Army information policies which deemed it unwise to publish information about weapon systems during their developmental stages.

winner begins Oct. 27.

Command, Control and Intelligence. The FAAD C²I component is the combination of hardware and software, and active and passive sensors that draws it all together. We are about to sign a contract to begin the hardware and software integration effort. "Sense-off" to select a new ground sensor scheduled next summer.

If you sense progress, you're right. The Army's periodic reviews are important milestones in the development of new weapon systems. On July 22, the Army completed the first FAAD Joint Requirements Management Board (JRMB) review. The JRMB is a panel of VIPs in the Office of the Secretary of Defense whose names read like a "Who's Who" gathering. Tough, inquisitive, with no drums to beat, they care only about what's best for the country. The Army did a good job at this review. The result is substantial progress, even in an environment of shrinking budgets. Outcomes of the JRMB review:

- Proceed with full-scale engineering development on FAAD C²I. What this means is we finally sign a contract for automating FAAD C²I — a giant step forward for our Army and Air Defense Artillery.

- Proceed with the purchase of 17 nondevelopmental item ground sensors. This translates to the first step toward replacing the forward-area alerting radar. A "sense-off" next summer will be the first step. Again, a giant step for the Army.

- Return to the JRMB this November for an LOS-F (heavy) interim status review. Our discussion will focus on the Army's requirements for this component. Also, we'll present our test plan for the June-September 1987 shoot-off that will determine the winner from among 27 contractors who have submitted system responses to MICOM.

- Return in March 1987 for a full JRMB update on the other FAAD components. By then, we will be almost ready to pick a PMS shoot-off winner, and we'll have more details on NLOS acquisition planning.

While we air defenders should be pleased and justly proud of our FAAD accomplishments, we must recognize the debt we owe to those outside the branch who have contributed so much to our success:

- The Army and its senior leadership remains totally committed to the FAAD program. The Army chief of staff continues to rank FAAD as the Army's No. 2 priority, behind only the Bradley. I am a

witness to the support the undersecretary of the Army and the Army vice chief of staff gave FAAD as they did battle in our behalf with JRMB members.

- The TRADOC-Army Materiel Command teamwork was the best I've ever seen. Brig. Gen. William J. Fiorentino and his team from the MICOM Air Defense Program Management Office were superb. Especially commendable was the performance of Col. Ken Brown, the project manager of air defense command and control.

- The Army's functional area approach makes infinitely more sense than the "each's" approach of the past. We should never expect one system to win the war. A family of complementary and synergistic components such as those found in FAAD needs to be addressed as a whole, and managed as a whole. For this common sense management approach, which is a drastic departure for a system that adores micromanagement, we owe "the Under," the Honorable James R. Ambrose.

Much work remains to be done, but FAAD has momentum. We are on the way to meeting the needs of our Army in the forward area air battle.

First to Fire!

FAAD Components

LOS-F-H: Operates near forward line of own troops. Concentrates on engaging enemy aircraft beyond the range of the combined arms team.

NLOS: Destroys masked helicopters and can also destroy tanks.

LOS-R: Primarily designed to kill fixed-wing aircraft, it will usually deploy no farther forward than the battalion rear.

FAAD C²I: A combination of hardware, software and active and passive sensors that serve as the FAAD nerve center.

In **1987**

The FAAD system continues to gather momentum. Boeing's pedestal-mounted Stinger, the Avenger, wins the LOS-R competition and Martin-Marietta's air-defense anti-tank system comes out on top of the high-stakes LOS-F-H competition.



Every so often it's a good thing to stop and ask where you've been and where you're going. Americans are in the habit of doing this at the start of a new year. In this "Intercept tercept Point" let me, as chief of branch, share with you these types of thoughts for Air Defense Artillery.

For ADA, the past year has, indeed, been exciting and rewarding. My overall assessment is that we, as a branch, have made progress, and projections for the future are positive. Although much remains to be done, our vision for the future is clear. Most importantly, we have made this progress while taking care of our officers and soldiers.

While there are many specifics to address regarding progress, there is an over-arching area of progress that merits special attention. The Army and its senior leadership in 1986 gained an increased sense of understanding of ADA and its important contribution to the combined arms AirLand battle. Our Army as a whole realizes more keenly that we cannot win without a combined arms team of which ADA is an important member. While ADA cannot win the war alone, our Army cannot win the war without ADA.

Strangely enough, a large part of this increased awareness was caused by cancellation of Sergeant York. However, a large part of this credit goes to the field, the 32nd Army Air Defense Command and our divisional units which continue to educate our combined arms brethren. This education mission, which all air defenders share, remains important in the future. The facts remain:

- We do not simulate the air part of AirLand Battle (ALB) as well as the land part, either at the National Training Center or in major field training exercises.

- We, as an Army, have not experienced in combat since World War II a situation in which we did not have air superiority. Our generation of leaders grew up thinking about the third dimension only in a friendly sense. We are all victims of our experience.

- Perception is reality. Until we can accurately simulate all aspects of ALB in our combined arms training, other means must be used to raise the awareness of ADA's contribution to the ALB. A job for all air defenders. It's a challenge we must all continue to face together in 1987, not just for the good of the branch, but for the good of the Army.

In this education mission, don't be bashful! No other combat arm directly contributes to ALB success the entire length and depth of the battlefield as does ADA.

In the close combat zone, we ensure that the freedom

New Year's Perspective

"There's no job too tough for air defenders to handle," Infante concludes in this January 1987 "Intercept Point."

He points to the continued progress of forward area air defense systems, the continuing deployment of Patriot battalions to Europe and resurging branch pride as evidence.

to maneuver is not lost due to the air threat. This freedom to maneuver is absolutely essential to our success.

In the division and corps area, we protect vital C²I centers which ensure that the right forces arrive at the right time at the right place.

Throughout the theater, we protect key logistical centers and airfields essential to sustain the war. In most theaters, considering the length of our support lines, this is the key to preventing an early defeat. The bottom line message: be proud of your role as an air defender in the combined arms team. Important today and becoming more important tomorrow.

In 1986, we all shared in the following accomplishments:

- Signing of a C²I contract for the forward area air defense (FAAD) system. TRW was selected as the prime contractor on this important effort and work is underway to fix a long-standing battlefield deficiency.
- A shoot-off to select the pedestal-mounted Stinger (PMS) winner: The Air Defense Board at Fort Bliss, Texas, augmented by some of our finest officers and soldiers, is conducting a professional test which will lead to the selection of the best three PMS candidates.
- Finalization of plans for conducting a shoot-off to select the successor to Sergeant York, the line-of-sight forward heavy component of the FAAD system. Extensive reviews were conducted with senior leadership within the Office of the Secretary of Defense and Department of the Army. We are hopeful that we will select a winner by the end of 1987.

- Patriot deployments to Europe on time, and in a combat-ready status. We have four Patriot battalions in Europe and one at Fort Bliss in training for European deployment. Patriot continues to set new records in operational readiness.

- Patriot deployments within Europe in combat exercises are verifying its substantial capabilities. Most notable of these was 32nd AADCOM's Operation Hammer which featured the deployment by air of a Patriot battalion to England for a realistic exercise with our NATO air forces. The results were spectacular. Patriot truly has sent the enemy back to the drawing board to revise his attack tactics.

- Officer Advanced Course (OAC) revision. Small group instruction at Fort Bliss is now a reality as our first revised OAC course kicked off last November. Initial indications are extremely favorable. Our challenge ahead is to institute the same for the Advanced Non-commissioned Officer Course and the Officer Basic Course.

- Selection for promotion and schooling. For all ranks, both officer and enlisted, air defender selections in 1986 compared favorably to the rest of the Army. A clear sign we are taking care of our most precious resources.

- Branch esprit and cohesion. Membership in the ADA Association is up by a factor of 10 compared to 1985, but still only one-tenth of what it could be. Our branch motto, "First to Fire," is becoming a byword. A first cut at a branch song was accomplished.

On the other hand, much remains to be done. Our main challenges for 1987:

- Further institutionalization of the FAAD system. In a dollar-tight environment, this is no easy task.

- Picking a successor to Sergeant York. This is, with some, an emotional issue, as the wounds of previous battles are not yet healed. Our challenge remains selection of a system that will meet our requirements.

- Ensuring that our ADA schoolhouse has a programmed and budgeted plan for obtaining modern simulators that focus on ADA in the combined arms arena. This is especially important for all the components of FAAD.

- How best to handle the tactical missile threat. A joint and combined arms problem in which ADA is a major player.

- What is the future medium surface-to-air missile (M-SAM) system? How best do we "grow" Hawk, considering our needs in this area for the next 20 years? Whatever we do, it needs to be done with full consideration of our NATO allies.

- Continue to build ADA branch esprit and cohesion. A good first step is increased ADA Association membership. Do you belong?

- Continue to care for our people. By far our most important asset. The real strength of our branch.

I remain optimistic, excited and confident. There is no problem too tough for air defenders to handle. The year 1987 will be a great year of progress. The secret to our success remains continued teamwork and communications that allow us to share better ways of accomplishing our mission.

First to Fire!

Sixty-four percent of the Active Army Officer Corps received their commission through ROTC. Of the ADA Officer Corps, 66 percent are ROTC graduates. On a recent branch selection board, 81 percent of those selected for Air Defense Artillery picked Air Defense Artillery as either their first or second choice. It is just as significant that no ROTC graduate this year will be "force-branched" into Air Defense Artillery.

When this article hits the street, ROTC summer camps will be in session. The season and the statistics lead me to reflect on what it was that motivated me to select Air Defense Artillery over other branches. Perhaps this, then, would provide some insights to youngsters in ROTC camps as to why Air Defense Artillery is not only, as its motto attests, the "First to Fire," but also the "First Choice."

As I surveyed my reasons for selecting Air Defense Artillery more than a quarter century ago, I discovered there hasn't been much change. I would pick Air Defense today for the same reasons I picked Air Defense Artillery years ago.

A Leadership Challenge

Air Defense Artillery, by the nature of its mission, requires decentralized execution. An ADA platoon leader finds himself either as the chief air defender for a battalion combined arms task force, or on a hill — perhaps in a remote location — providing vital asset air defense. In either case, the problem confronting a young ADA lieutenant is not over-supervision! The youngster must know his stuff and his soldiers. He's in charge and they look to him for leadership. Maybe he can look to his captain in certain situations, but more times than not, it's the platoon leader who must make the decisions. It adds up to an enormous responsibility which is fun, exciting and challenging. Leadership is, by far, Air Defense Artillery's overriding challenge.

A Technological Challenge

Air Defense Artillery is, by any measure, a high-tech branch — some parts more than others. For example, the Patriot is the world's most sophisticated and capable air defense weapon system. Computer-driven with "Star Wars" displays, Patriot can counter tactical missiles as well as enemy aircraft. On the other end of the spectrum is Stinger, the deadly shoulder-fired air defense missile system that will soon be off the soldier's shoulder and vehicle-mounted on a high-mobility, multipurpose wheeled vehicle called the "Humvee."

The First Choice

"I would pick Air Defense Artillery today for the same reasons I picked Air Defense Artillery years ago," writes Infante.

In this "Intercept Point," aimed at West Point and ROTC cadets preparing for summer camp, Infante stresses the unique blend of technical and leadership challenges that await future lieutenants in Air Defense Artillery.

Pedestal-mounted Stinger will integrate a mixture of infrared devices, laser-beam riders, TV cameras, other widgets and a weapons control display that reminds one of games found in today's arcade. Supplement the Stinger missiles with a mixture of missiles and guns borrowed from armored tracked vehicles or towed guns from our light and airborne divisions, and pedestal-mounted Stinger provides a technological challenge to suit everyone. If you're looking for a branch that integrates soldiers and sophisticated warfighting machines into a fast-moving AirLand Battle unit, you can find your niche in Air Defense Artillery.

Diversity

Diversity in weapon systems from

Stinger to Patriot; diversity in levels of assignments from platoon to echelons above corps; diversity in division types from light, airborne or airmobile to heavy divisions; and diversity in locales including the continental United States, Korea, West Germany or Hawaii. Whether in an overseas or stateside division, within the 32nd Army Air Defense Command in the Federal Republic of Germany, or at the sprawling home of Air Defense Artillery at Fort Bliss, Texas, fun and excitement with diversity abound.

Opportunity for Growth

Air defenders are required to know the other combined arms jobs to do their own. Air Defense Artillery integrates the two dimensions of the land battle with the third

dimension of the air battle to ensure success on the AirLand battlefield. Assignments at all levels of command as you progress through the ranks will allow you to grow, learn and mature.

Under Maj. Gen. Bob Wagner's dynamic leadership, ROTC and the quality of the ROTC officer have dramatically improved and will continue to improve in the future. Air Defense Artillery needs and wants its fair share of these quality youngsters. A challenge awaits them in Air Defense Artillery. The question the youngster must ask himself is, "Do I measure up?" As some other service almost said, "We, in Air Defense Artillery, are looking for a few good men and women."

Air Defense Artillery — *First to Fire!*



Summer camp cadets at the Patriot air defense missile system exhibit.

ment, as our new ADA bible. Those of you who thirst for doctrine should see an ADA Commanders' Conference attendee or write the Director, Directorate of Combined Arms and Tactics, U.S. Army Air Defense Artillery School, Fort Bliss, TX 79916, for a personal copy of the draft.

Combined arms integration and acceptance. No matter what your branch, educating other branches about your branch's capabilities and acting as a salesman for your branch is a continuing way of life. Accept it as a reality. Learn to talk about our ADA's AirLand Battle role in the combined arms "language." Join the fray. Our Army, in fact our American way of life, is an advocacy system. Become an ADA apostle. Don't be bashful about our contribution. My assessment of how we're doing with the other combined arms (in alphabetical order):

- **Armor:** Gangbusters! The Armor community understands a Hind is a flying tank. Also, they realize there is not enough air defense to go around.

- **Aviation:** Gangbusters! Integrated as a full-fledged member. New FAAD C²I software routines being written as you read. An asset that, where "chopped" to the air defense commander, gives us a new flexibility to weight the defense.

- **Field Artillery:** Making headway. Positive attitude. Redlegs realize the importance of air defense and some momentum is building.

- **Infantry:** Long way to go. Our infantry brethren have their own fires to douse, and the diversity of their mission, from low-intensity conflict to World War III, gives them a unique challenge. The fact remains that freedom to maneuver is essential to success, no matter what the level of conflict. Threat

aircraft traveling at 250 meters per second don't take too long to change the level of intensity.

ADA school revitalization. A reality. Hinman Hall at Fort Bliss bubbles with activity. The move to small group instruction in the Officer Advanced Course, 40 percent of Officer Basic Course, and Advanced Noncommissioned Officer Course is paying big dividends. Not that we're satisfied, but it's a giant step forward in learning excellence. We are doing a much better job of training our students to meet field realities. And hear this — we're going to get even better.

FAAD fielding. Eighteen months of progress! Our most recent success: a dynamite briefing in July for the Honorable Casper Weinberger, the Secretary of Defense. Again, the FAAD Program Executive Office and Fort Bliss teamwork paid off. Mr. Weinberger reaffirmed his strong personal commitment to doing all possible to fill the gap in forward area air defense left by the departure of the Sergeant York Gun by fielding the FAAD line-of-sight forward (heavy) component. The "shoot-off" involving four line-of-sight forward contenders began in July. Some other highlights:

- A C²I software contract was signed Sept. 29, 1986, and work is underway.

- The pedestal-mounted Stinger "shoot-off" to determine whether Boeing's Avenger or LTV's Crossbow will become the FAAD system's line-of-sight rear component is complete. The winner was to have been announced in late August, too late to make this edition of *Air Defense Artillery*. The November-December issue will feature an entire section on the winner. No matter which one wins, the PMS, featuring improved fire control and

sensors and eight Stinger missiles mounted on a high-mobility, multi-purpose vehicle, will be pure dynamite!

- The line-of-sight forward competition winner is to be announced in late November. Look for more news about the shoot-off next issue and for a full-scale feature section on the eventual winner in the bulletin's January-February issue.

- The FAAD ground radar "sense-off" for the forward area alerting radar should start early next year.

- The fiber-optic guided missile, or FOG-M, the sole candidate to become FAAD's non-line-of-sight component, admits air defense to an exciting new dimension. It shoots over hills. The request for proposals to industry is due out shortly.

Credit for the lion's share of FAAD progress belongs to Brig. Gen. Bill Fiorentino, his FAAD Program Executive Office and the respective program managers. Those of you who hunger for excitement should consider the wonderful world of project management.

Build on Patriot Success. Patriot fielding is unquestionably the Army's largest success story. Five battalions in Europe. Two more in training at Fort Bliss. Readiness rates for 32nd Army Air Defense Command far exceed expectations. Two deployments in major exercises from Germany to England with superb results. And an anti-tactical ballistic missile (ATBM) mission for Patriot may be just around the corner.

In summary, exciting times for professional air defenders. Tough challenges and high stakes. But you must help by doing your part. Your Army, your branch, is counting on you.

First to Fire!

Shortly after this issue of *Air Defense Artillery* goes to print, we hope to know the answer to the hottest question of the year — who is the winner of the line-of-sight forward (heavy) (LOS-F-H) competition? While the focus of this issue is on Avenger, the line-of-sight rear (LOS-R) winner, the focus of this “Intercept Point” is on the LOS-F-H question.

Any follower of air defense history knows that following the demise of the Sergeant York Gun in September 1985, the Army developed the forward area air defense (FAAD) system. This five-component family of systems works together in the forward area to accomplish the air defense mission as a member of the combined arms team. The air defense mission is to —

- ensure that our combined arms brethren retain the freedom to maneuver that is crucial to implementing our AirLand Battle doctrine;
- ensure sustainment of the AirLand Battle by protecting key logistical complexes;
- protect vital C²I centers that allow us to “see” the battle and employ reserves correctly; and
- kill enemy aircraft the first time.

We have a C²I contract signed and work is underway. We have a LOS-R contract signed and work is underway. We have a source selection and candidate test underway for LOS-F-H. Let’s expand on this last area of source selection and candidate tests as all air defenders need to know about this important process.

First, why do we need a LOS-F-H system? The answer to this question is essential in understanding the structure of the test and selection process. We need the LOS-F-H for two reasons.

Kill enemy helicopters in clutter at extended ranges. While the LOS-F-H contributes to the killing of helicopters within the range of other combined arms elements (e.g., M-1 tanks, TOWs, etc.), its helicopter focus is beyond the range of the other combined arms.

Kill enemy fixed-wing aircraft in the close combat arena. The LOS-F-H is the only fixed-wing killer deployed with the forward maneuver forces. One sure rule of war — give the enemy a free ride option and he’ll exploit it. The LOS-F-H shuts down his fixed-wing option, leaving only undesirable air attack options.

Second, how do we propose to go about finding out if the LOS-F-H is a system that fulfills the above requirements and many others listed in a document termed the LOS-F-H “ROC” (Required Operational Capabilities)? The basic approach is one of competitive nondevelopmental procurement. We invite industry to submit pro-

LOS-F-H Focus

While the branch eagerly awaits the announcement of the line-of-sight forward (heavy) competition, Infante takes time out to lecture ADA soldiers on forward area air defense system basics.

The cover of the magazine in which this “Intercept Point” appeared featured the Avenger, winner of the line-of-sight rear shoot-off.





posals and come to a "shoot-off" to prove to us that their candidates perform as claimed. Following the guidance of Congress, the candidates' test started July 1. Our plan is to complete the test by Oct. 31 and make the selection announcement by Nov. 26. The Army is totally committed to meeting these dates and a miracle is half unfolded as these words are written. Key players are making air defense history and deserve kudos.

The candidate test team. Headed up by Col. William "Wild Bill" Pedigo. Most spending their 80-hour plus weeks in the desert at Oscura Range, 150 miles northwest of Fort Bliss, Texas. When the dust settles, we'll all owe thanks to the entire team of more than 350 dedicated "soldiers" (I include DoD civilians and contractor personnel) for service "far beyond."

The source selection evaluation team. Working under the guidance of Brig. Gen. Bill Fiorentino, the FAAD program manager, and Col. Mike Gamino, the LOS-F-H pro-

gram manager, this dedicated team of military and civilians work out of the U.S. Army Missile Command, Redstone Arsenal, Ala. They also are putting in more than 80 hours a week evaluating the test data as it unfolds along with other engineering and cost aspects. One tricky part of their job is evaluating a system's growth potential from prototype to "objective system." For example, the initial system will be a missile and a gun.

There are four candidates competing in the test. As evidenced by the table below, this is indeed an international competition.

While in every case the team leader is U.S., there is also substantial foreign involvement. The key issues that need to be resolved as we pass these candidates through an extremely challenging test and rigorous source selection process are:

- Do they do what the Sergeant York wouldn't do — kill helicopters in clutter at extended ranges?
- Do they meet the spectrum of initial source requirements designed

to counter the mid-1990s threat?

- Do they possess the growth potential needed to meet the spectrum of objective system requirements designed to counter the mid-1990s and beyond threat?

- If some fall short in either initial or objective requirements, are we better off to accept this shortfall and proceed, or should we initiate development of a complete new system?

Each candidate has furnished two fire units. The Army has furnished to each candidate nine of the finest, yet representative, soldiers in our quality Army.

Exciting times to be an air defender. When the going gets tough, the tough get going. The air defense community continues to excel and meet the challenges of fielding systems essential to our AirLand Battle success. Subsequent issues of *Air Defense Artillery* will continue to cover what is without doubt an action-packed route to a new system selection.

First to Fire!

LOS-F-H Candidates

| Name | Evolved From | Contractor Team |
|---------|----------------|--|
| ADATS | Canadian ADATS | Martin Marietta (Prime)/Oerlikon Aerospace |
| Liberty | Crotale | LTV (Prime)/Thompson CSF |
| Paladin | Roland | Western Alliance Air Defense (Prime) Hughes Aircraft Aerospatiale MBB |
| Rapier | Tracked Rapier | United Aerospace Defense Systems (Prime) British Aerospace FMC Norden |

Continued from page 5

just have to keep finding ways to replace them.”

ADA has found a replacement for Infante, but his act will be a hard one to follow:

• **Patriot.** The Patriot air defense missile system is often referred to as the Army's greatest success story. Infante now seems destined to receive full credit for the Patriot. While this is, perhaps, more credit than he deserves, he definitely deserves quite a lot. Although the Patriot project began decades ago, while he was still a battery commander, Infante served as the Patriot Project Officer during its test and evaluation phase, and then presided as chief of branch over the highly successful fielding and deployment of Patriot units to Europe.

• **Forward Area Air Defense.** His name will be indelibly linked to the fielding of the FAAD system. It was Infante who sold the concept and Infante who stubbornly insisted its wildly enthusiastic acquisition and fielding schedule could be met. Critics said adherence to the FAAD timetable would require an acquisition and procurement miracle. To date, a miracle is pretty much what Infante has delivered.

• **MOS Consolidation.** Infante made the controversial decision to consolidate ADA MOSs, set the eventual goal of compressing 23 ADA MOSs into four (two high- to medium-altitude and two forward area air defense MOSs) and set the force restructuring wheels in motion. MOS consolidation, which has its detractors and promises to be monumentally difficult to implement, is widely seen as the salvation of an ADA corps of NCOs victimized by slow promotion.

• **ADA School Revitalization.** “The ADA school sets the standard of excellence and, today, there is no service school doing a better job than the ADA School,” Infante told *Air Defense Artillery*. Students have



“Pride is the soul of any organization.” Maj. Gen. Donald R. Infante preached branch pride at every opportunity.

been unanimous in the praise of the small-group instruction methodology introduced to Officer Basic, Officer Advanced and Noncommissioned Officer Education System courses at the U.S. Army Air Defense Artillery School during Infante's reign as chief of branch. The school's cadre of hand-picked instructors are convinced they are producing a new breed of junior officers, noncommissioned officers and warrant officers whose impact on the branch will — in the long run — be more dramatic than the impact of new ADA weapons systems.

Infante chose Air Defense Artillery as his branch of preference for a combination of “technological and leadership opportunities.” He set high goals for himself as well as for the branch. “My ambition was to make full colonel, attend the War College and command a brigade,” Infante said. “An ADA officer who makes full colonel and attends the War College is extremely successful. An ADA colonel who also goes on to command a brigade — especially

in a branch as small as ADA — is extraordinarily successful. This exceeds normal expectations. Anything beyond that is an act of God.”

Infante said his plans for a future career may lie in corporate America, perhaps within the military industrial complex, or even a return to an abbreviated career as a junior high school basketball coach.

“I will always love the Army, and I will always love Air Defense Artillery,” Infante told *Air Defense Artillery*. “They are the ‘First to Fire’ branch, and they will remain the ‘First to Fire.’ ”

Some will say that Infante's greatest achievement has nothing to do with hardware or force structure, but a lot to do with the way Air Defense Artillery perceives itself and the way it is perceived by the other combat arms branches.

“Perception is reality,” Infante once wrote.

He put a little swagger back into the step of air defense artillerymen.

He gave Air Defense Artillery a new reality.

In **1988**

The FAAD system acquisition “miracle” continues to take shape as ADA celebrates its 20th anniversary. FOG-M becomes the sole candidate for the FAAD non-line-of-sight component.



On Aug. 26, 1985, the Sergeant York program was canceled. On Nov. 30, 1987, the Army announced the selection of ADATS as the winner of its line-of-sight-forward (heavy) competition. Both historical events for our Army.

The ADATS (Air Defense/Anti-tank System) is not the replacement for Sergeant York even though it will fight in the same environment and counter basically the same threat. The Sergeant York replacement is the forward area air defense (FAAD) system of systems. However, the key component of the FAAD system of systems is LOS-F-H. Our focus today is LOS-F-H — but always in the FAAD system context.

Establishing the Requirement

Those in the trade call this the “ROC” (required operational capability). The purpose of the ROC — state the Army’s need. What do you expect this weapon to do? Where do you expect it to fight and what do you expect it to fight with? Where do we need this weapon in the field? One of the important jobs of our Directorate of Combat Developments at Fort Bliss is to write ROCs. In the case of the LOS-F-H ROC, Lt. Col. Tom Bailey and Maj. Dave Stone were our lead heroes backed by many. Also another superb effort between Fort Bliss and Brig. Gen. Bill Fiorentino’s folks at the FAAD Program Executive Office (PEO) shop at Redstone Arsenal. Remember, the Army has an urgent near-term need, thus we are willing to accept our “initial” system with less than “full” capabilities, but the system must have growth capabilities.

Requesting Proposals from Industry

Those in the trade call this the “RFP” (request for proposal). The RFP adds to the operational statements of the ROC the technical specifics required to make the system a reality. The RFP tells industry the performance details of what we want to buy, where we want what qualities in the field, and about what it should cost. One important part to the contractors is Section M, Evaluation Criteria — what factors are more important than others in the selection process. LOS-F-H is about a \$4-billion program. The key drivers behind the RFP are the folks in the LOS-F-H Project Office. Kudos to the whole team headed by program manager (PM) Col. Mike Gamino and Deputy PM Mr. John Spano.

Candidate Evaluation

Since our acquisition strategy was one of “off-the-shelf” now with growth as required, we had to determine

Tracking ADATS

The selection of Martin-Marietta's ADATS as the FAAD line-of-sight forward (heavy) component climaxes what many observers term an "acquisition miracle."

In this "Intercept Point," Infante pays tribute to the key players in and out of uniform who made the miracle possible.

from where we start. This was accomplished by what is termed the "NDICE" (Nondevelopmental Item Candidate Evaluation). The idea is simply to put together a test plan and evaluate the candidates against the criteria in the plan. Easier said than done! Especially when you have to build a test range, train soldiers to operate the systems, integrate the million details needed to conduct the test and analyze the data, and do it all in less than eight months. That this was accomplished, and done so with class, ranks as a miracle.

The test was the most impressive feat I've seen in my time as a soldier. Kudos here must begin with Col. "Wild Bill" Pedigo, the boss at the Air Defense Board; Mr. Joe Chavez from the White Sands Missile Range Army Materiel Test and Evaluation Directorate who ran the firing phase; Maj. Bob Reynolds who ran the acquisition and tracking (acq-track) phase and Maj. Mike Kennedy who ran the data analysis phase. Col. Gary Bridgewater, the Operational Test and Evaluation Agency (OTEA) honcho, and Mr. Rafael Ramirez, the software guru at the Air Defense Board, can't be forgotten.

What we said was come fire 10 missiles and conduct about 1,200 acq-track trails in an intense countermeasure environment. We'll put our soldiers on your system for the acq-track part (all of whom performed spectacularly), gather all the data and pass it to the source selection evaluation folks. Mission accomplished! An understatement at terming a miracle.

Evaluating Proposals and Test Results

The job of our august body termed the SSEB (Source Selection

Evaluation Board). Membership of the SSEB is secret. Thus the work of this dedicated team of about 200 folks who worked over 167,000 man-hours selecting the winner can be recognized only as a body.

This dedicated team of experts evaluated the proposals for each of the four contractors, integrated the test results, assessed risks associated with each system for both the initial and full systems and made a recommendation to the senior Army leadership. Dedication and professionalism throughout. A job well done which will serve our Army well. Mr. James Ambrose, the undersecretary of the Army who also serves as the Army acquisition executive, without doubt had all the information he required to make his decision.

In sum, a tough process requiring teamwork on the part of the total Army. But well executed. The Army's ability to preserve the peace will be substantially enhanced by the addition of ADATS. Three key figures remain to whom we all owe a big thanks — the integrators of this whole operation: my "spaghetti brother" and FAAD PEO Brig. Gen. Bill Fiorentino, his deputy, Mr. Clarence Tidwell, and the FAAD TRADOC system management officer Col. Vinnie Tedesco.

What then does this give us for our Army and branch? Here are personal perceptions of ADATS:

- Overall a superb system. The laser beam-rider (LBR) technology is well suited for killing helicopters at extended ranges in clutter. Any helicopter threat will have extreme cause to worry. Against fixed-wing maneuvering aircraft, the speed and agility of the missile will cause any enemy pilot to have thoughts about his future. The enemy will not return a second time.

- Ability to perform in counter-

measures especially impressive. The acquisition radar and suite of tracking sensors (IR or TV) complement each other. The acquisition radar with its frequency agility is a work of art. Countering the LBR missile is next to impossible. I feel good about its ability to do its job in the toughest environment.

- Growth to full system capability is minimal. What was tested most nearly matches what we want as the initial system, and growth to a full system is nominal. With the addition of the 25mm Bushmaster gun, we will have our system requirements.

- Ability to contribute to the anti-tank mission. ADATS, as its name so states, has a significant anti-tank capability, thereby giving the task force commander built-in flexibility for the unknowns of battle. Complicates a little the training of our air defense soldiers, but they are up to the challenge. Makes us even more valuable to our combined arms brothers.

- Readiness for operational test is maximum. While we take joy in our "battle" victory the "campaign" is not over. The soldier is not served until the system is deployed in the field. For that to happen, the system must in mid-1989 undergo a rigid combined arms operational test. ADATS, because of its design maturity and readiness for production, is almost ready for this key test.

A big decision for the Army. A big decision for Air Defense Artillery. A good decision for both. The role of Air Defense Artillery in ensuring our combined arms Army accomplishes its Airland Battle mission significantly enhanced. The challenge now remains for the Army team to put ADATS in the hands of the soldier.

First to Fire!

Wearing my hat as the ADA branch proponent and writing as one who sincerely cares about what happens to air defenders, I personally share the hurt and disappointment of those noncommissioned officers in air defense MOSs who received non-selects on the recent promotion to E-7.

We're going to do more than just say we're sorry. The present system is unfair. Too many ADA soldiers who deserved to be promoted weren't promoted. The system, however, can be fixed. We intend to fix it before the next promotion board convenes. This article explains how we're going to make sure this doesn't happen again.

Just so we're all on the same sheet, we need to ensure an understanding of the selection process. The Army promotes to E-7 based on its projected needs by MOS. The list just published projects the Army's needs by MOS through FY 89 and is based primarily on force structure requirements and projected retirements. Air Defense Artillery has many weapon systems and a total of 16 air defense MOSs. This compares to four MOSs for Armor and four MOSs for Infantry. Our large number of MOSs and relatively small number of soldiers is the crux of the problem. The issue is how to solve the problem in both the near and long term.

Let's first examine our eligible for E-7 promotion population and a few comparative statistics to understand the scope of the problem.

Some points that may get lost in the numbers:

- Less than 20 percent of the total 16-series population (16H, J and T) received more than 70 percent of all 16-series promotions.
- Almost 60 percent of the total 16 series (16D, E, R and S) received only one promotion.
- Almost 60 percent of MOSs 24M, N, T, U, 25L and 26H received less than 30 percent of the promotion for their CMF.
- Almost 25 percent of the 24 series (24M, N, T and U) received a total of two promotions.
- We did poorly as a branch compared to the Army average. Only 5.6 percent of ADA soldiers eligible for E-7 stripes were selected for promotion compared to more than 14.6 percent for the Army.

What is driving these statistics?

- The inactivation of three Hawk battalions coupled with the simultaneous slippage of two years for Patriot activation had a dramatic impact on the force structure for high- to medium-altitude air defense (HIMAD).

- The change of the Hawk MTOE to a biad configuration.

Slow Promotion

"Too many ADA soldiers who deserved to be promoted weren't promoted," declares Infante in this "Intercept Point" devoted to the plight of ADA soldiers trapped in overstrength or imbalanced MOSs.

His column advances MOS consolidation as the ultimate solution to the slow promotion problem.

- A reduction of ADA personnel from 20,000 spaces in FY 82-83 to 15,000 in FY 88.

- The conversion of 73 16R40 spaces to 16P40.

Enough crying over spilt milk. We must start from where we are and begin fixing now before the next board convenes in September-October 1988. Let's examine the near-term solutions first.

Near-Term Solutions

MOS Groupings. Need to examine grouping by HIMAD and short-range air defense (SHORAD) MOSs. This would allow all 16Ds, Es and Ts to compete equally. The major disadvantage of this approach is that an individual selected could wind up as a platoon sergeant on a similar but not the same as the weapon he grew up on. For example, an NCO selected to become a Chaparral platoon sergeant (16P) might come from a Stinger background (16S). This problem can be partially fixed through Basic Non-commissioned Officer and Advanced Noncommissioned Officer Course adjustments.

Promotion Floors. Need to examine the pros and cons of establishing a minimum promotion floor for each competing MOS before the next board meets. Briefings to the promotion board should include specific problems affecting the ADA force structure. The disadvantage would be assigning some good soldiers over for promotion in one MOS to meet the promotion floor requirements of another MOS.

Long-Term Solutions

The long-term answer is MOS consolidation. A sporty course but one which must be run to prevent perpetuating the current problem of no or low selection rates.

Hawk/Patriot presently has four operator and five maintainer MOSs. Our goal is to reduce the number to one operator and two maintainer MOSs.

Some actions are already underway:

- MOS 16H has been included in MOS 16D, 16E and 16T.

- MOSs 24C, G and R are combined under Hawk Phase II into a single maintainer MOS.

While no decision has yet been made, we are studying the following alternatives:

- Combine Hawk launcher (16D) and fire control duties (16E) into a single Phase II Hawk MOS while shifting Patriot operator duties from missile system mechanics (16T) to crew members (16T). If feasible, combine these two MOSs into a single HIMAD MOS.

- Establish a generic HIMAD launcher crew member MOS by combining MOSs 16E and 24T (operator duties only); no further combinations using this approach are recommended.

- Evolve MOS 16T (first termers only) into a new MOS (operator/maintainer at Skill Level 2).

Command, control and intelligence (C²I) ties HIMAD and maneuver forces air defense (MFAD) — our effort to consolidate Chaparral and Vulcan with our new forward area air defense systems. Three MOSs presently comprise C²I. They are 25L, 16H and 16J. Our goal is to determine the best MOS configuration to enhance C³I.

We are looking at the following alternatives:

- Embed operator and maintainer tasks and skills into existing and objective weapon system MOSs.

- Redefine existing MOSs 25L and 16J to perform operator and maintainer duties needed for C²

and C²I across Air Defense Artillery.

MFAD has four operator and two maintainer MOSs. Our goal is to reduce the two operator and two maintainer MOSs. Current consolidation efforts include identifying 16R as the operator for Vulcan and ADATS; embedding 16H duties into 16P, 16R and 16S; identifying 24M as the maintainer MOS for Vulcan and ADATS; and identifying 24N as the maintainer for Chaparral and the pedestal-mounted Stinger.

Other possibilities include combining MOSs 16P and 16S into a single MFAD MOS. We are after a combination of MOSs that —

- ensures equitable promotion opportunities to all MOSs,

- provides viable career progression opportunities,

- fields soldiers able to operate and maintain ADA equipment in a battlefield environment and

- facilitates battlefield reconstitution by less specialization on only one weapon system.

You have the personal commitment of Gen. Carl E. Vuono, the Army chief of staff, and Maj. Gen. Donald W. Jones, commander of the Total Army Personnel Agency, and me. I have personally discussed the problem with both, and we intend to fix it. They, like me, cannot and will not tolerate a system that gives our dedicated professional noncommissioned officers no hope of promotion.

When the going gets tough, the tough get going. Professionalism, dedication to excellence and caring for our quality soldiers demand nothing less. Keep charging. Be proud of being an air defender and a valuable member of the combined arms team.

First to Fire!

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1988 — the Year of Training. Training is eighth in the series of Army themes. This is the first of a series of "Intercept Points" on training to support this year's theme.

Our business is warfighting. By being good at our business, we accomplish our primary objective of preserving the peace. If this objective is not achieved, we must then show we know our business of warfighting by fighting, winning and returning. Anyone who has soldiered for more than a day knows the essential ingredients are well-led, well-trained soldiers manning modern weapons of war and fighting as a combined arms team.

All of the above ingredients are important, but the most important is the soldier. High quality soldiers who are well trained will consistently outfight poorly trained soldiers armed with more modern equipment. Witness the National Training Center where the highly skilled OPFOR, using Sheridans (long ago phased from our inventory), routinely whips lesser trained units with M-1s (the top tanks of our line).

Anyone who doubts the dramatic increase in the quality of our soldiers should look carefully at the entry test results for ADA career management field (CMF) 16. Seven years ago about two-thirds of our youngsters were in the lower half of national averages. About two-thirds of our youngsters are now in the upper third of national averages. High school degrees for new entries are up from about 50 percent to more than 95 percent. At the Basic Training Center here at Fort Bliss, almost 85 percent are signing up for the latest version of the GI Bill. High quality youngsters. Best I've ever seen.

These high quality youngsters pose to us leaders a tough challenge. In an era of declining resources they are saying, "challenge me or lose me." *U.S. News and World Report* quoted Col. Ralph Allen, commander of the 6th ADA Brigade, as saying, "Most of today's soldiers are so outstanding that they sometimes scare their sergeants to death, not because they are undisciplined, but because they are so smart."

Our youngsters want to be well trained. They want to be stretched. Our training programs must be built to do both, even with fewer bucks. If we don't, we'll lose them. An unacceptable alternative. Our job — train and retain high quality soldiers for less.

Everyone's training program must have at its foundation a philosophy. Basics that are always in everyone's program, regardless of whether you are a divisional or EAC unit. Many elements, some of which a few ADA units tend to relegate to the back burner. Examine your training program. Does it include these basics?

Training Part I

"High quality soldiers who are well trained will consistently outfight poorly trained soldiers armed with more modern equipment," states Infante in this first of three "Intercept Points" devoted to the Army "Year of Training."

This column presents Infante's thoughts on training philosophy and training management.

Individual training proficiency and common tasks training. Everyone's job is important. No one ever knows enough about their MOS. Regardless of MOS, there are common tasks that every soldier must know from NBC to first aid to map reading. To stay good and get better, soldiers must practice both.

Individual and crew-served weapon qualification. ADA units must be more proficient in small arms than front-line infantry. The most lucrative target for a strike is a Patriot unit that can change the course of the air battle.

Collective training in a 3-D ALB setting. No ADA unit should ever go to the field without a complete AirLand Battle setting. Know the land battle and the land battle commander's objectives. Anticipate future land battle operations. Pass total ALB information out to the soldier in the rear ranks. If you see any type of unit playing less than 3-D ALB, chastise them.

The full battlefield environment. From NBC to EW to OPSEC to night operations, the one thing you can be sure of is that night will come once within every 24 hours. One must assume the Warsaw Pact emphasizes NBC training for valid reasons. If every time your unit goes to the field you do less than practice the full battlefield environment, you are cheating your soldiers.

Logistics and maintenance operations. Do these in the environment in which you will fight. Visited the support unit for a Patriot unit recently and asked where they performed maintenance on the 150-kilowatt generator, which requires near operating room conditions. The wrong answer was "we take them back to the base." Get your maintenance folks the proper tentage and equipment to work in the

field and keep them in the field. Don't forget operator maintenance. Maintain as you will fight. The war will likely drag on more than a few days. Develop long-term maintenance and logistic habits.

New equipment training. Our Army, and particularly ADA, is in the midst of the most intensive modernization since World War II. From radio maintenance test sets to vehicles to ADA systems, new equipment probably will change for the better the way you do business for your unit. To realize the full potential of a new item, your soldiers must be trained on what it does and doesn't do. This includes the leadership. There is absolutely no substitute for hands-on!

Train to standard. Every task for every weapon, whether individual or collective, has a standard. In most cases, the task is listed in an Army document (for example, ARTEP 44-325 for Chaparral/Vulcan and ARTEP 44-635 for Patriot units). Dig it out. Pass it down. Hold the sergeants responsible. Check to see if standards are being met. Accept nothing less. Good units exceed standards in all things.

The issue is, of course, how to put it all together: how to accomplish your training program in an environment that requires support to the post or the community but never has everyone available. Follow these guidelines for training management.

Establish priorities. You will never have enough time or resources to do it all. Priorities must be established. The mission essential task list (METL) must be used as the basis for prioritization.

Define and schedule specific events. Get it on the calendar far out and don't change! Time is your most precious resource. Remember

your priorities in your scheduling and check to see if your schedule reflects your priorities. Commander visibility is absolutely essential. Your troops will not believe training is important until they see you personally checking. The commander must know what's going on — technical and tactical proficiency.

Use the building block approach. This is not to say focus only at a given time on individual skills or collective training. Both go on all the time. Evaluate what's best for your unit based on where they stand at a particular time. We are moving a Hawk unit (3-1st ADA) to Fort Hood this summer. The training program needed at the conclusion of this move will be dramatically different from a European Hawk unit that has just got all "1s" on an AAFCE tactical evaluation. Evaluate and structure your program based on unit needs.

Schedule prime time training. Block the calendar. Get all the medical appointments on the same day of the week. Put your paperwork aside and make it happen! Insist on maintaining chain of command integrity. Be selective about what's being trained. Go back to METL and prioritization.

Insist on stability. What the chain of command gets paid for. If you have a problem with stability, don't stop until it's solved. Publish a plan. A good unit maintains a reasonable level of training proficiency in a wide spectrum of tasks and avoids peaks and valleys.

Gen. Carl E. Vuono, has repeatedly stated, "Training is our number one priority." Make it yours. Our business is warfighting. The secret to surviving, winning and returning is being well trained. You owe it to your soldiers.

First to Fire!

This is the second "Intercept Point" in a series on training — in this the Year of Training. I have been blessed across the years with mentoring from some superb trainers. My earnest hope is that this series captures most of the training thoughts of these great soldiers and trainers.

The last "Intercept Point" focused on the training challenge, training program musts and training management guidelines. This "Intercept Point" builds on these areas by addressing the following:

- Training objectives. In the broad sense, why do we train?
- Training truisms. Thoughts from old soldiers with the focus on leader responsibilities.
- Combined arms training. Why it is especially important in Air Defense Artillery and some bases to assume it happens.

Let's begin by discussing the broad training objectives of any unit in our Army. They are especially important to air defenders who, at times, tend to become enamored with only the technical aspect. Here's one view of why we train — four simple training objectives.

Leader development. If your training is top based (for example, the officers do all the teaching), shame on you. The key to success in combat is effective sergeant leadership. Every soldier has a sergeant. Hold sergeants responsible for training their soldiers. Get your leaders involved in training if you expect them to grow and develop.

Technical proficiency. Every soldier must know their individual weapons and their crew-served weapons (Stinger, Vulcan, Chaparral, Hawk and Patriot). They must know what they can and cannot do, and how to fix something quick when it breaks. They must know how to do this in a dangerous place — on the battlefield. They must know this so well that, under great stress, their reactions are instantaneous and correct. This requires repetition, repetition, repetition and more repetition. Train a defined standard in a realistic environment.

Tactical proficiency. Being at the right place at the right time is nothing to leave to chance in war. Combat power, to be effective, must be synchronized and integrated. That requires knowledge of the bigger set of objectives. An example is the case of the Vulcan platoon leader who requires the task force commander's objectives (present and future) and the case of the Patriot battalion commander who requires the Army commander's objectives (past and present). Our focus in ADA is on allowing our combat arms brethren to accomplish their objectives by saving combat power. AirLand Battle

Training Part II

ADA trains to develop leaders and to develop individual technical proficiency and tactical skills to ensure winning and surviving on the battlefield.

Training, Infante writes, is all-encompassing and is a five-phase operation. Units are truly tested only in a combat environment — the reason for being as realistic as you can in peacetime training environments such as the National Training Center.

(ALB) knowledge at every level is an absolute essential.

Battlefield Survival. The battlefield is an extremely unsafe place. To survive on the battlefield requires the highest degree of mental preparedness. The type that comes only from being tactically and technically proficient. The type that comes from knowing the environment because it's familiar. Also required is the highest degree of physical preparedness. Battles are not fought on an eight-to-five schedule, five days a week. To be physically tough requires a tough physical training program. How's your unit's?

The bottom line. We train our soldiers to fight effectively and confidently, as part of the combined arms team, and live. Does your unit's training program accomplish this over-arching objective?

The Year of Training leaves an indelible imprint of basic truisms on any professional soldier. The following truisms are those that any commander must pass through his training program to begin to evaluate its quality.

Training is all-encompassing. Everything a unit does or experiences is training. Training may be either bad or good, but it will never be neutral. Good training requires the execution of a sequence of operations.

Training is a five-phase operation. Regardless of the level, these five phases must occur: think, plan, organize, conduct and evaluate. If your unit follows this sequence, chances are your training program is pretty good. I guarantee that those units that don't follow these five phases have inadequate programs.

Units are truly tested only in a combat environment. Anything less does not put it all together. All the

stresses, all the integrations, all the little "got-ya's" that sum up to losing are not caught. That's why events such as the National Training Center or a NATO tactical evaluation (TACEVAL) are so important. They are as close as we come to combat in peacetime. Training in a combat configuration is essential to winning in combat. NTC and TACEVAL results usually portray how your unit would do in combat. Believe it. Learn from them. For example, no one to date has died from a NATO TACEVAL, but applying the lessons learned from them has potentially saved many lives.

Good training occurs only in a good atmosphere. The person who creates the training atmosphere is the commander. If there is an open environment that allows for learning from mistakes, training will flourish. If the training atmosphere is one of "no defects," the team will be up-tight and good training is doubtful. Think back to Super Bowls past and great teams who stayed tight and lost. Units who train tight will fight tight — and lose. The converse is also true.

If you don't agree with the above, you are still a training rookie no matter how many years of service you have. Training should not only be pertinent to the mission, it should also be fun!

Air defense for air defense's sake is almost irrelevant and immaterial. For air defense to be effective, it absolutely must be part of the combined arms. Combined arms thinking must be a way of life for every soldier — especially air defenders. The following are some thoughts on institutionalizing combined arms in your training program.

Synchronization is what war is all about. Achieving the synergy that comes from synchronization is not

quite as easy as winding a Timex. The key is putting all the parts together so that they work when required, as required. This also produces ductility which, when the unexpected occurs (which in war is almost always), allows the team to bounce back without breaking and win.

Combat power is all encompassing. Give an enemy a preferred attack option and he will exploit it to his advantage. Our goal is a force that leaves the enemy with equally horrible, disastrous options. Witness the difference of Stinger in Afghanistan. Stinger is combat power — enough to make the difference between winning and losing for the Afghan rebels. The point is that combat power is much more than tanks and artillery. Engineers explaining obstacles and electronic warfare jamming an enemy radio is combat power. Use every bit you can get. Think all encompassing. Those that want to know the value of air defense at the right time and place must read about the Remagen Bridge in WWII.

Night, as a general rule, comes once within every 24 hours. The side that controls the night controls up to half of the day. Combined arms synchronization must be practiced in both day and night environments, as must every aspect of training.

AirLand Battle is a 3-D term. Those who think in 2-D cannot win. Those who think and plan for a 3-D capability stand a chance. Remember the little missile that could and did in Afghanistan.

Enough for this "Intercept Point." I will close by reminding each of you of Gen. Carl E. Vuono's guidance: "TRAINING IS OUR #1 PRIORITY."

First to Fire!

This is the third and last "Intercept Point" in a series on training — in this the Year of Training. However, as our Chief of Staff of the Army, Gen. Carl E. Vuono, recently emphasized, 1989, 1990 and 1991 will also be the Year of Training. The logic is obvious. Chief of Staff quote: "Training is the cornerstone of readiness."

Previous "Intercept Points" focused on the training challenge, training guidelines and training objectives. I want to close out this series with some thoughts on the following:

- Quality training — how to achieve and how to ensure.
- Feedback — the essence of improving combat capability.
- Rewards of good training — payback far beyond the investment.

Quality training, like good Italian wedding soup, has all the right ingredients. The trick, of course, is in knowing when and how to use each ingredient. The commanders who know are the commanders who succeed. A few tips and thoughts might help to clarify this area.

First, quality training has as its focus practicing how to fight, and sustaining soldiers and their equipment during the fight. Quality training always relates to a mission — leaders must clearly state why training is being conducted. Quality training also realizes that war is a protracted event; therefore, we must take a long-term approach.

Second, quality training merits the commander's personal presence. There is no substitute for personal presence which, of course, means that knowledge on the commander's part is essential. This allows the commanding officer to evaluate unconfirmed levels of proficiency and ensure the training corrects identified weaknesses.

Third, quality training reinforces the chain of command. Training together is the best way known to build trust, confidence and unit cohesion. By the way, the "checker" should always be one level higher than the unit level undergoing training; for example, the battery commander checks platoon-level training. To do otherwise robs the leader of fulfilling his role. Always train as you will fight.

In my opinion, based on 20 years in the training business, the one area that remains today as our Achilles' heel is feedback. Especially true in the Air Defense business where we overly focus on execution. This does not apply, however, to the 69th ADA Brigade,

Training Part III

Infante explains how to achieve and ensure quality training, how to improve combat capability by feedback and how good training rewards everyone.

Needing the most attention is feedback. Feedback must begin first with the voice of the noncommissioned officer and flow up. Leaders must be willing to "sweat" in peacetime training to ensure that in times of war troops will fight, win and return.

where Col. Bob Hardy has whipped the "feedback" problem by institutionalizing a training program that is second to none.

Feedback begins with the non-commissioned officer being trained and flows up. Nothing is more upsetting than to view an after-action review (AAR) where the officer starts with, "Let me tell you" AARs should always first hear from the NCO being trained. The voice of the NCO must be heard first.

Feedback focuses on the future. Focus on those things that need more emphasis in the future. Remind folks of all the essentials and those they need to continue doing well, but remember, most units don't have time to train on those things they do well.

Feedback must be practiced. A good AAR must be practical and does not come automatically. The best AAR I've ever witnessed was conducted by Col. Jarrett Robertson, the commander of the 3rd

Armored Cavalry Regiment (the "Brave Rifles"). The environment and tone of the AAR was one of learning with a combined arms focus. No threatening or harassment, just how to do it better and right. A tone that left everyone anxious to get on with doing it again so they could demonstrate the lessons learned. AAR is a real art. Practice is essential.

Time to close out by discussing the rewards of good training. Have decided that the best way to summarize these rewards is in chart form; thus, in the chart that follows are these many rewards. Note that good training touches every aspect of a unit. Note that a really good unit will have good training.

This is a powerful chart. Study it. Copy this chart and carry it with you to remind yourself daily of the rewards of good training.

There is no excuse for not conducting good training. Lack of training areas, money, et cetera, are all

cop outs. Gen. Vuono relates the story of viewing a superb platoon-level exercise, then asking the platoon sergeant after the exercise, "What did this cost you?" The sergeant replied, "Nothing, Sir, just sweat."

Are you willing to "sweat" in peacetime training to ensure that in time of war your troops fight, win and return? If so, you're our type of leader. If not, try pumping gas or selling shoes or some occupation where others' lives don't depend on you.

Our business, if we have not preserved the peace, is warfighting. To preserve the peace requires readiness. As the chief of staff of the Army, Gen. Carl E. Vuono, stated earlier, "Training is the cornerstone of readiness."

The choice is yours. Will you train to fight, win and return — or will you be a soldier who does not come home?

First to Fire!

Infante on His Career

Infante told an *El Paso Times* reporter that his career had its ups and downs. He singled out racial tensions and funding shortages.

"The Army is a great place to work. It wasn't always that way. There were a couple of low points, one being the racial problems the nation faced in the early and mid 1970s. It carried over into the military and made command a lonely thing," he said.

"The second would be when I first hit Germany in 1970 and saw the low state of readiness of our armed forces there. The funding was down. There were holes in the

walls and no money to repair them. The [out of service] rates of the trucks and other systems was so high that it was evident to me that if we were called to war we'd be lucky to make it out the damn gate.

"If you wonder why the military loves President Reagan so much, you had to be in Germany and see what happened when they passed that first supplemental [military spending] bill.

"You could fix the holes and, in a short time, you began to have an Army that could go out and win. God bless President Reagan."

Air Defense Artillery and our Army are the proud owners of a new weapon system — the pedestal-mounted Stinger (PMS). Boeing delivered the first two production model Avenger PMSs in record time and under cost. The Army accepted delivery at a Nov. 1 rollout ceremony at Boeing's Huntsville, Ala., manufacturing facility.

New weapon systems don't come along often. PMS' entry into the air defense family of weapons merits some reminiscing and some visioning.

Before doing either, we need some background for the uninitiated. PMS is the line-of-sight rear (LOS-R) component of the five-part forward area air defense (FAAD) system. FAAD, a system-of-systems solution to the critical forward air defense void, was approved by former Secretary of Defense Caspar Weinberger following the Sergeant York's demise in January 1986. Weinberger directed full speed ahead on FAAD because of the urgent need to fill the forward air defense void. PMS, the first FAAD component to be fielded, is a reality 34 months following the Secretary's order.

PMS' role in FAAD is primarily to defend against fixed-wing aircraft attacking our C³ centers and sustaining elements (e.g., ASPs and POL centers). Also, PMS will contribute to the destruction of transiting enemy aircraft targeted at our more rearward targets such as air bases and POMCUS sites. PMS' presence will certainly complicate the enemy's attack planning. To come low and fast brings destruction by PMS. To come high and fast brings destruction by Hawk and Patriot. The results — unattractive attack options.

PMS will usually be deployed no farther forward than the battalion rear boundary. Manned by a two-man crew but fully integrated into the FAAD C³I network, PMS yields optimum savings in manpower while maximizing the Stinger missile's potential.

With eight ready-to-fire missiles, PMS is to divisional air defense what the six-shooter was to the Old West. The "Texas Colt," as the first six-shooter was known, was a cumbersome affair. To reload, it had to be broken into three component parts, a tricky business, especially when mounted on horseback. But it fired six times. This was an important advantage in highly mobile Indian warfare, considering that a Plains Indian warrior could ride 300 yards and fire up to six arrows in the time required to reload.

The Texas Rangers, more Indian fighters than lawmen in those days, were understandably upset when Colt stopped making six-shooters. Ranger Capt. Sam Walker took a train to New York City, looked up Sam Colt, and

PMS On Time — Under Cost

The pedestal-mounted Stinger arrives in record time and under cost. The Army accepts delivery at a Nov. 1 rollout ceremony in Huntsville, Ala.

Infante predicts that PMS has the same revolutionary potential as Sam Colt's revolver had for the Texas Rangers. "Add 24-hour, day and night, and shoot-on-the-move capabilities... to PMS' multiple-shot capability and you begin to realize what a substantial contribution PMS can make to the AirLand battle," Infante says.

persuaded the manufacturer to make some product improvements and resume production. Colt was hesitant at first. He had gone bankrupt trying to sell his six-shooter in the East where people had little need for a revolver. Walker promised Colt that the Texas Rangers would supply the market if Colt would supply the weapons. There being fewer bureaucratic roadblocks in those days, the two sealed the agreement with a handshake. The six-shooter revolutionized plains warfare by putting mobile firepower in favor of the Indian fighter.

The PMS has the potential to revolutionize air defense in much the same way. Add 24-hour, day and night and shoot-on-the-move capabilities for missions such as convoy protection — none of which exist in the manportable version — to PMS' multiple-shot capability and you begin to realize what a substantial contribution PMS can make to the AirLand battle.

Now for some reminiscing. PMS originated in the 9th ID as a nondevelopmental item (NDI) suggested by the Boeing Corporation. Boeing was also selected as the manufacturer after a tough, close competitive shoot-off conducted at Fort Bliss in the spring of 1987. Brig. Gen. Donald Lionetti, then a colonel in command of the 9th Infantry DIVAD, did some daring shots with a Boeing PMS prototype to include a nighttime shoot-on-the-move. He showed this prototype to Gen. Max Thurman, then Army vice chief of staff, who immediately realized its battlefield potential.

Thurman, upon his return to the Pentagon in August 1985, ordered the Department of the Army to buy PMS. That started things moving. When the FAAD concept was origi-

nated by Maj. Gen. Dave Maddox in late 1985, PMS became the NDI candidate to fill the LOS-R role.

Brig. Gen. Bill Fiorentino then picked up the development as the FAAD program executive officer. Under his leadership, we had a shoot-off. Boeing, the winner, built a plant in Huntsville, Ala., and — *voila* — a new system! An integral part of all this was Col. Vinnie Tedesco, then FAAD TRADOC system manager, and — the real heroes in this saga — the soldiers of the PMS Platoon from A/2-6th ADA.

As you sort through the essential ingredients that caused this PMS miracle — and make no mistake, 34 months is a miracle in the weapon acquisition business (Patriot took 16 years to reach a comparable point!) — three come to the forefront.

Dedicated program management. Lt. Col. Jim Patterson, as the PMS program manager, tenaciously overcame numerous bureaucratic roadblocks. Jim focused on making it happen and never took no for an answer. In this effort, he had an equal partner in Alex Henschel, the Boeing program manager. Alex pulled together the Boeing team and was as much or more a soldier as any green-suited member of the PMS shop.

Professional soldiers. User involvement early in the program brought to light many small items that needed improvement before turning on production. You can't fool today's quality soldier. The PMS platoon's efforts heavily influenced the final design. So far they have successfully put PMS through two rigorous tests.

Leadership. Nothing great happens, especially in our profession, without leaders molding and building the greatest of soldiers like those who serve in the PMS platoon. The

commanding officers of 2-6th ADA and A/2-6th ADA, Lt. Col. Mike Putnam and Capt. Mike McAllister, deserve a share of the spotlight. They kept the azimuth true and developed PMS warfighters.

Some visioning about our new system now seems appropriate. Three major challenges in the form of operational and technical tests lay ahead in 1989. The two fire units that rolled off Boeing's assembly lines are the first of 20 ordered by the Army as part of a \$16 million first production lot. These two systems will be used in two operational tests that will take place in a combined arms environment at Fort Hunter Liggett, Calif. The technical test to verify production qualification will be at White Sands Missile Range, N.M. Both will involve the leaders and soldiers of the PMS platoon of A/2-6th ADA.

PMS, at this time, is programmed for the division's air base defense units. The current projection for the divisional FAAD battalion contains 36 PMSs with 18 in a separate battery and six in each of the three composite line-of-sight forward (heavy) (LOS-F-H), non-line-of-sight (NLOS) and LOS-R platoons.

The air base defense battalion will be pure PMS with three batteries of 18 each. My prediction is that, due to the combat capabilities and resource savings of this superb system, we will see two to three times this number eventually fielded in U.S. and allied forces.

The weapons will also eventually be purchased by our allies. Reasons are three: firepower, manpower (only two soldiers vs. four in most other comparable systems) and cost (about \$1 million driving into battle).

Welcome aboard PMS!
First to Fire!

Perception is reality. Much to the credit of many hard working folks, the senior leadership throughout the Army and the Office of the Secretary of Defense perceive ADA as healthy and improving. Much progress in many areas. Much remains to be done. Where to go? What are the fundamentals to which we, as a branch, must adhere?

After two-and-a-half years as the ADA branch chief, I am certain we must make five essential fundamentals and their concomitant objectives and goals, our guide: nurture branch pride, build a strong doctrinal foundation, emphasize the combined arms focus, institutionalize Air Defense Artillery School excellence and field quality equipment and quality soldiers.

Branch Pride

Pride is the soul of an organization. Without pride, true professionalism is unachievable.

ADA branch pride is built in many ways. Some of the ways every air defender can help are listed below:

- Understanding AirLand Battle doctrine and the role of ADA. While we cannot win the war alone, the Army cannot win it without us. When you realize the importance of ADA contribution to AirLand battle, you cannot help but be proud to be an air defender.

- Supporting the ADA Association both passively and actively. Passive support is joining — a must for all ADA professionals. Active support is displaying a visual reminder of your branch pride.

- Holding events that build cohesion and esprit de corps such as St. Barbara's Day dining-ins and dining-outs, ADA balls and mixers at the various schools. Camaraderie, like anything else in life, must be nurtured and cultivated if it's to reach its potential.

- Displaying the branch "First to Fire" motto in correspondence, on bumper stickers, in offices and everywhere ADA folks gather. At retreats, change of command ceremonies, et cetera, play the "ADA March." Grows on you!

- Reading and contributing to *Air Defense Artillery*, your branch's professional development publication about your business — being a professional air defender.

As a branch, we must continue to actively build pride. Some progress. Still some way to go. The younger set is doing better as a group. Everyone must contribute.

Doctrinal Foundation

Our business is warfighting. To preserve the peace, we must be ready to fight, win and return. That's the essence of warfighting. Warfighting has as its foundation

ADA Essentials

"The senior leadership of the Army and the Office of the Secretary of Defense perceive ADA as healthy and improving," writes Infante in this, the 1988 ADA Yearbook capstone article.

Infante lays down five essential fundamentals — the blueprint for future ADA development.

the doctrine that tells us how we must fight.

Doctrine is important business for warfighters. Air defenders must understand AirLand Battle doctrine and, from it, derive ADA doctrine. This focus is on ADA as a member of the combined arms team.

This leads me to the general mission of ADA. Our inferred mission is to kill aircraft. We kill aircraft at the right time and place in support of the AirLand Battle commander's objectives. Primary in our basic mission is ensuring we retain the freedom to maneuver — the thread of logic that is interwoven in every aspect of our AirLand Battle doctrine.

As the war will most likely last longer than one day, combat power — from beans and bullets to airfields and tactical operations centers — must be sustained. Without the ability to see the battlefield, our combat power will be wasted; therefore, command, control and intelligence (C²I) centers must survive.

The emphasis on each component of our mission varies as a function of where we fight on the battlefield. Air Defense Artillery is one of the few branches that fights from the forward line of own troops (FLOT) to the echelon above corps (EAC). Many figures providing the doctrinal foundation for future force structures will be found in the soon to be published FM 44-100, *U.S. Army Air Defense Operations*. This will be our new capstone manual. We've done the work of building a strong combined arms doctrinal foundation. Now comes the hard part — institutionalization and education.

Each air defender can help make Air Defense Artillery a branch of excellence by emphasizing the combined arms focus, serving as a sales-

man for the branch, setting standards of excellence and caring for our ADA soldiers.

Combined Arms Focus

Internally air defenders must retain their combined arms focus. Every aircraft killed must contribute to the objectives of the AirLand battle commander from battalion task force to theater.

This means knowing the doctrine. As a branch, Air Defense Artillery must retain its combined arms focus from the FLOT to the theater rear boundary.

Eventually, every air defender must be a salesman. Many of our combined arms brethren will not understand our role, nor our valuable contribution to AirLand Battle success, until hostilities have commenced. That's too late. Everyone loses. Since World War II, our nation has enjoyed air supremacy in every hostility. The result is many two-dimensional combat arms brethren. Your mission — add to their decision process the third dimension.

Salesmanship for an air defender must be a way of life.

ADA School

If we are to continue to prosper and flourish as a branch, we must have a center for excellence. This center of excellence must be the Air Defense Artillery School at your home, Fort Bliss, Texas.

Excellence through high standards is an acquired skill. Excellence in warfighting is our business. Teaching excellence in warfighting is the business of your ADA School.

Proud to report that, in most arenas, your schoolhouse is doing great things. A key reason is the shift to small group instruction.

The Officer Advanced Course

(OAC) and Advanced Noncommissioned Officer Course (ANCOC), with the exception of lectures by subject-matter experts, is 100 percent small group instruction.

The Officer Basic Course (OBC) is about 60 percent small group instruction with strong mentorship by experienced leaders throughout.

In all courses, the focus is on combined arms knowledge, leader development and technical excellence. The basic curricula has been changed to emphasize combined arms knowledge.

Technical excellence is ensured by technical modules designed for the specific officer. For example, officers destined for assignment to Patriot units attend the entire 12-week Patriot module.

Leadership development is inherent in everything we do from the PT field to the classroom. Our Combined Arms and Tactics Department (CATD) is totally integrated with the organizational chain of command. CATD majors give PT to their OBC platoons and teach them by example.

Your challenge in the field is to take the motivated officers or non-commissioned officers that leave your schoolhouse and continue to challenge them to exceed or, as a minimum, maintain the standards they acquired in the schoolhouse.

Equipment and Soldiers

Quality soldiers deserve quality equipment — which won't win the next war for us unless we field and care for quality soldiers.

We are doing our best to sustain the soldier by fielding quality equipment and by maintaining quality equipment through product improvement programs. We are also determined to restructure ADA career management fields (CMFs) to

see that ADA soldiers get an even shot at promotions.

ADA must maintain the proper balance between fielding new systems and product-improving those already fielded. This continues as our basic approach for both the forward area air defense (FAAD) system and the high-value air defense (HIVAD) family of weapons.

FAAD is an arena of amazing progress, the result of many dedicated soldiers found on the DA staff, at Fort Bliss and at the FAAD Program Executive Office, Huntsville, Ala. Some of the highlights:

- Pedestal-mounted Stinger. Boeing's Avenger under contract. First PMS unit fielded April 1989, about three years from requirements definition — an Army record!

- Air Defense/Anti-Tank System (ADATS). Under contract. First unit fielded FY 90, about three-and-a-half years from requirements definition.

- C²I. Software under contract and good progress made by quality firm. With luck, a radar "sense-off" within the next year. Emphasis continues on fielding a suite of active and passive sensors to solve the identification problem.

- Fiber-Optic Guided Missile (FOG-M). Some dollar reductions held up publishing the request for industry proposals. Plan is to have a request for proposals on the street soon and a prototype under contract by September 1988.

- Combined Arms Initiative. Bradley gun improvements cut into production line. Soon to be fielded — improved tank ammo for the anti-helicopter mission.

The HIVAD family, a new term for some, consists of Patriot and Hawk. Both must work together. Both complement each other.

Patriot fielding is on schedule. Six

battalions in Europe and three in CONUS. Operational readiness rates exceeding expectations. A superb system that can easily grow to handle both the air-breathing and short-range ballistic missile threat. The Army has a substantial investment in this system and its growth potential is yet barely tapped.

Hawk Phase III fielding is scheduled for early 1989 with the first unit at Fort Bliss. A quantum leap forward, especially in the training arena. Each platoon has its own built-in trainer. Platoon leader and section sergeant training is soon to be a reality.

Money is tight. We can expect that, while ADA modernization will progress, fielding time will be stretched out. Everyone should take an appetite suppressive pill! Our challenge will be to retain our quality soldiers, care for them and their families, ensure they are well trained — and then modernize the force. We will still have a great Army, but dreams of overnight fielding for our many new weapon systems are no more.

We must care for our air defenders. As the branch chief, I truly care about what happens to our soldiers and their promotion and schooling. We must continue to work toward a goal of achieving ADA selection rates equal to or better than the rest of the Army. This will be tough in an environment that is extending time-in-grade and reducing total force strength. Throw in the turbulence associated with fielding our many new weapon systems and we have a real challenge. This is a problem we can whip, but one that must be carefully managed.

In the officer arena, we continue to do reasonably well. The ADA Officer Corps, like the entire Army, is trying to work its way through the

new requirements for joint duty. Obvious to me that, sooner or later, we are going to have to ask our majors to choose a command or non-command track. Just too much expected and not enough time to accomplish. PCS fund shortages will increase time on station. I'm proud of our ADA Officer Corps.

Our Noncommissioned Officer Corps is the most professional I've seen in 28 years plus! Dedicated, technically and tactically proficient, and superb leaders. The benefits of the Noncommissioned Officer Education System are tremendous!

On the selection-for-promotion rates, we have serious problems at the E-7 level. A special column in the March-April 1988 issue of *Air Defense Artillery* details the problem and proposes solutions. We will fix the problem before next year's E-7 board. On selection for E-8 and E-9, we're holding our own in CMF 16. It's tough going in CMF 23.

We must reduce the number of MOSs in Air Defense Artillery. Today there are 16 MOSs in CMFs 16 and 23. As we field our new systems, my goal is to reduce the total number of MOSs to, at most, seven. More responsibilities for each MOS but we have quality soldiers who are up to the challenge.

The future of ADA is bright and positive. The professionalism of our people is at an all-time high. We have a warfighting focus and a strong doctrinal foundation that will allow us to make our full contribution to the combined arms team on the AirLand battlefield. Many improvements to existing weapons and several new ones right around the corner. Pride in ourselves as a branch is strong and growing. Good times, still, to be a soldier and an air defender.

First to Fire!

In **1989**

32nd AADCOCM fine-tunes the Hawk-Patriot mix while the final Patriot battalion deploys to Germany. FOG-M prototypes complete the FAAD family and Maj. Gen. Donald R. Infante announces his retirement.



The 1989 Army theme — “The Year of the NCO.” One every soldier can identify with as every soldier has a sergeant. What better theme to build on the 1988 Army theme — “The Year of Training.” Long overdue recognition for those whom every professional soldier knows are truly the backbone of the Army.

This “Intercept Point” will focus on the division of responsibilities between the commanders and the Army’s top NCOs — the command sergeants major (CSMs). CSMs are special folks. They represent only .03 percent of the total Army. They are so special that little is written about their responsibilities. But you can’t talk about their responsibilities without also discussing commander (CO) responsibilities.

A good CO/CSM relationship is like a good marriage. And from this good marriage will come great organizations. A poor organization, at best mediocrity, is the result of a poor marriage.

I learned that while serving as a battalion CO. Early in my command, no matter how hard I worked, things just didn’t seem to happen fast enough. A series of events, which makes a good story over a beer, led me to dismiss my CSM. My words in firing him:

“This marriage is not working; I hereby declare us divorced.” After some gnashing of teeth and appeals all the way to the four-star level, he stayed fired, and I got the next CSM off the plane. Enter Joe Lupyak who taught me what a good CSM does and — more importantly — what a difference a good CSM makes.

As Joe got off the plane and I introduced myself, his first words were: “There must be some mistake.” You see, Joe was special forces. In fact, he had led the Sontang raid into North Vietnam which attempted to rescue our POWs. Never served a day in ADA. Wouldn’t have known a Hawk missile if it had bit him you know where. But he became a great ADA command sergeant major.

Early on in his tour, he spent every weekend with the “hot” battery learning system operator and mechanic checks and what TAC site life was all about. Inside of two months, he was among the most knowledgeable systems NCOs in the battalion. A great soldier. A great NCO. A great CSM. This one’s for you, Joe, and all you taught me.

Before getting to specifics, let’s paint the bigger picture. There are basically three things soldiers expect from their COs and CSMs.

Be good at their job. Technical and tactical proficiency (T²) — the reason Joe Lupyak was on the tactical site

HQ Marriage

“A good CO/CSM relationship is like a good marriage,” writes Infante in this “Intercept Point” dedicated to the Army “Year of the NCO.”

Infante draws upon an early “divorce” to illustrate what happens when the marriage doesn’t work.

every weekend. Work hard on leader development to make subordinates all they can be. Make soldier and family care a reality.

Have a high sense of duty. Selfless, always doing what is best for the unit regardless of the personal price and continually looking for better ways. They must visibly show they love our Army, their unit and their soldiers.

Be courageous. Not just in a physical sense but also in a moral sense. Allow subordinates the freedom to fail without decapitation. Thus, establishing a command climate that permits innovation and development to full potential. Take responsibility together for all the unit does or fails to do. Tell higher (respectfully) when it makes no sense and why.

In listing below what I consider the CO/CSM division of labor, let me first state there is no 100 percent rule. Both must know about the other's duties. At best, the duties listed below are a 70/30 to 60/40 division:

- *Tactician vs. technician.* The CO is the tactician, the CSM the technician. The CO must know enough about his weapons and where they fit into the AirLand Battle scheme to maximize his unit's combat power. The CSM must know all the things it takes to realize his weapon's full potential and — when they are not at full potential — how to get them to that state rapidly.

- *Collective vs. individual training.* From the mission flows the mission essential task list, which drives collective tasks, which drives individual tasks. The point here is that, as stated in the recently published FM 25-100, *Training the Force*, collective training is primarily officer business and individual

training is primarily NCO business. Linkage is essential. But so is a focus. Without proficiency in individual tasks proficiency in collective tasks is not possible. The NCO — the backbone and foundation of our Army.

- *Planner vs. executor.* The commander's intent is his vision as to what needs done when. But someone must execute that intent and bring it to reality — that's the role of the CSM. Sometimes the commander's vision may be a little cloudy. This calls for a closed door session between the two folks who care most about their unit — the CO and CSM. The azimuth to be followed is the CO's responsibility. Bringing the unit to that azimuth and keeping it there is the CSM's responsibility.

- *Officer vs. NCO leader development.* The CO is responsible for executing officer leader development and for assisting as needed in NCO development. The CSM is responsible for executing NCO leader development. Both must be the role models for both corps. The CO teaches the officers "how to." The CSM teaches the NCOs "how to." The really good CSMs also actually share willingly in officer leader development.

The following are what I consider shared responsibilities, at least shared at the 51/49 percent level as the commander is always responsible and there can be only one commander.

- *Soldier and family care:* The business of all concerned leaders. Both the CO and CSM must have this at the top of their priorities. Which does not mean making life easy. There is no higher form of soldier care than tough, realistic training which will lead to the soldier surviving on a dangerous place

— the battlefield.

- *Discipline and standards.* Both officers and NCOs follow the example of the CO and CSM. Whenever either one passes a wrong, a new standard is set because the CO and CSM are the standard setters for the unit.

- *Command climate.* A place for soldiers to grow with the freedom to fail. The temperature will be as hot as the CO and CSM desire. Too hot stifles initiative. Too cold leads to no initiative. The secret is just the right temperature. Young officers and NCOs need to be taught, not submerged. Our doctrine asks for bold, audacious and daring leadership. Guarantee none of that with a smothering command climate. High probability of occurrence in a climate that makes soldiers come to work smiling.

- *Organization balance.* A truly good unit is one that does all things excellent or better. Not just firing. Not just good barracks. Not just re-enlistment. But a "B" or better wherever you look. Better to be straight "Bs" than failing in one critical area and being outstanding in the rest. The maintaining of this balance is a shared CO and CSM responsibility.

- *Safety.* Everyone's business. Soldiers care for soldiers on and off the battlefield. Unit safety and discipline are equitable. A good safety record is a clear sign of unit cohesion. Unit cohesion is a shared CO and CSM responsibility, as is a top-rate safety program.

No better place to start the year of the NCO than by thinking about the Army's top NCOs — the CSMs.

Welcome to the Year of the NCO. Let's all make a New Year's resolution to make an already superb NCO Corps even better in 1989.

First to Fire!

For more than three and one-half years I've had the privilege and honor of being the chief of Air Defense Artillery. Because of the selflessness and dedication of many air defenders worldwide, exciting and great things have happened to our branch. This article summarizes the state of the branch and includes a vision of the future. We've done well — but we're still improving!

When evaluating branch health and setting branch goals, consider these six essential areas:

- Branch pride.
- Combined arms focus.
- Doctrinal foundation.
- ADA schoolhouse.
- Equipment modernization.
- ADA soldier care.

Let's walk our way through each area.

Branch Pride

Pride is the soul of any organization. Without pride, true greatness is never achieved.

I'm proud to say that pride is back!

A quick check of ADA Association Gift Shop revenues reveals that the sales of ADA memorabilia have almost doubled. This is a clear indication of resurgent pride. Most importantly, you can see it in the eyes of our youngsters (and those not so young). Our standing in the eyes of our combat arms brethren also improved. Clearly, the U.S. Army has rediscovered they can't win the war without us. Equally important, we know we can't win it alone: we must fight as a member of the combined arms team.

There are some tangible things each of you can do to further ADA branch pride.

Belong to the ADA Association. Cost for a lifetime membership is \$30.00. Absolutely no reason why all officers and noncommissioned officers should not join. Gifts that go with the membership are valued at \$15.00. A reasonable goal for membership is about 9,000. Our present membership is about 3,250. We have a ways to go. Encourage soldiers to join. ADA Association membership is leader business.

Display the "First to Fire" decal. In your office, your study, your room and even its intended place — your car bumper. The "First to Fire" motto reminds us of the reality that, in time of war, we will be the first to engage.

This reality has with it a concomitant responsibility to be especially vigilant and ready to fight and win.

Play the "ADA March" at all functions. At Fort Bliss, when you get the band, you get the "ADA March!" A

State of ADA

In this "State of ADA" address, Infante envisions a maturing air defense force with anti-tactical ballistic missile and anti-satellite capabilities.

His "ADA Report Card," shown on page 53, leaves plenty of room for improvement.

reminder of who we are and what we stand for. Each unit up to battalion level has a complete score. Get on your colonels — guarantee I will. No excuse accepted for not playing the “ADA March.” At a recent Fort Leavenworth ball, Capt. (P) Earl Sutton — with minimal warning — played the march on the piano with only fragments of the score.

Salute with the “First to Fire” motto. The response is “On Target.” Helps to remind us that we are not only soldiers but soldiers with a special mission.

Hold pride building events. Dining ins and dining outs, Saint Barbara’s Day ceremonies and organization days to name a few. Tradition is good. Tradition builds cohesion and belonging. Stand up for and display your branch. A proud past, a bright future!

Combined Arms Focus

Air Defense Artillery is an essential member of the combined arms team. For others to recognize this requires first that we recognize it ourselves!

Being a combined arms team air defender carries with it a responsibility to understand AirLand Battle (ALB) and how our Army fights. Absolutely impossible for air defense to realize its full contribution to ALB without knowledge of the bigger set of objectives. A Vulcan platoon leader must be inside the mind of the task force commander. A brigade commander must be inside the mind of the corps commanding general. Heady stuff! Big responsibilities! Air defenders must know much more than just air defense.

When determining your METL, begin with the mission of ADA which is applicable at every level through echelon above corps

(EAC) for every ADA weapon. The mission of each of our units is much more than killing aircraft. This, as the figure below indicates, is only an inferred mission.

The logic that holds FM 100-5 together is the freedom to maneuver. Superior enemy ground or air power can rob us of this freedom. The prime mission of Air Defense Artillery is to prevent loss of the freedom to maneuver due to enemy air. Because beans and bullets and airplanes and secure airfields must be available throughout the war, ADA sustains the battle. ADA also protects key C² nodes to ensure commanders do the right thing at the right time. These are our missions — engrave them in your mind.

I see much progress in our combined arms focus. Division folks especially doing good in most places. Corps and EAC units batting about 50 percent . . . need to do better.

Doctrinal Foundation

Our business is warfighting. Warfighting has as its foundation the doctrine which tells us how we must fight.

We’ve made good progress in doctrine with a giant leap ahead in publishing FM 44-100. This manual is the ADA “Bible.” Every air defender should be intimately familiar with the contents of this manual — no exceptions! Every ADA “household” must have at least one copy (preferably two). When reading, pay special attention to the appendix titled Intelligence Preparation of the Battlefield (IPB). Good stuff!

ADA doctrine evolves and changes just as our Army ALB doctrine evolves and changes. Three shifts in ADA doctrine merit mention as they will impact on future force structure and equipment requirements.

Deep operations. Our Army will fight deep in enemy territory. ADA must support that fight. Killing standoff jammers, whether they be HIP-J and Ks or Cubs, is an ADA mission associated with deep operations.

Tactical ballistic missile (TBM) defense. Since ALB is a strategy that is heavily dependent on POMCUS stocks, we must mount a high confidence defense against all means of attack — including TBMs. At this time, an enemy TBM targeted against our valuable assets is almost guaranteed success. This must change, and the responsibility for making it change belongs to ADA.

Anti-satellite (ASAT) mission. While potentially a long way off and a political hot potato, the Army recently assigned the ASAT mission, which will in turn be assigned to ADA. At the minimum, ADA links to what is commonly called “Star Wars” will pick up in tempo. Good linkage for technology transfer to a high-tech branch.

Notice that these new missions are in addition to those missions we discussed in previous paragraphs. Notice also that ADA is the only combat arms that has a mission from the FLOT to EAC (and perhaps soon a strategic mission). Exciting times!

FM 44-100 is being modified to reflect these changes.

Doctrinal proficiency is everyone’s business. We are doing better, but can get better.

ADA Schoolhouse

Your schoolhouse at your home, Fort Bliss, exudes excellence! And it should and must as it is the foundation of our future.

Even in times of diminishing resources, there are some things to

which we must hang on. Small group instruction in your schoolhouse is non-negotiable. The reasons for which your schoolhouse exists and the grades I give are shown below.

Tactical Proficiency = "B." Across the board from OAC to AN-COC, good warfighting focus and understanding of ALB and the role of ADA. The tactical problems in our branch are caused by our field grades who are not as knowledgeable as our youngsters. Homework

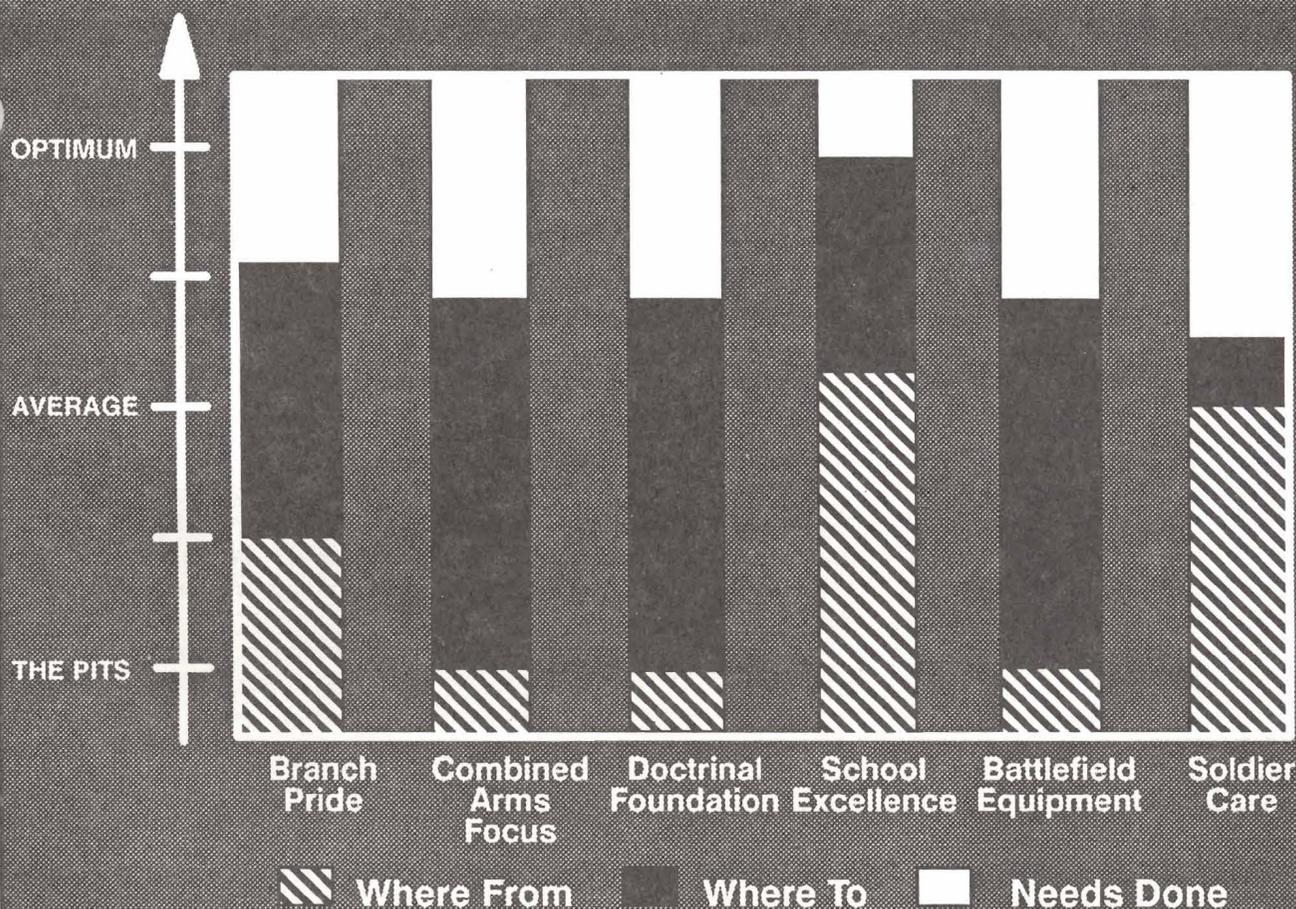
time for the field grades!

Technical Proficiency = "A+." Not enough time on equipment to provide more than a sound foundation. Equipment shortages in Patriot have become especially aggravating. We need to buy additional training devices for both the operator and maintenance courses. The expected large influx of allied Patriot students may help solve this problem. FAAD equipment shortages early on will also complicate training. But through dedication and good man-

agement, things will come out pretty good in the end.

Leader Development = "A+." No one in the Army is doing better in the area of leader development. Look into the eyes of lieutenants and captains leaving officer basic and officer advanced courses. Talk to your ANCOG graduates. These are leaders with high standards who know how to make things happen. From PT in the morning to the last class at night, these role models teaching by "Do as I do." Students

ADA Report Card



selected as OBC or ANCOC small group leaders or for student battery command obtain a high honor reserved for a select few. The dividends far exceed the investment.

Your schoolhouse has no walls. We publish the branch's professional journal, *Air Defense Artillery*, six times a year. The publication invites field input. Share with others your great ideas. Share others' great ideas by reading *Air Defense Artillery*.

In short, be proud of your schoolhouse. The foundation for our future is secure.

Equipment Modernization

ADA has more new equipment under contract for delivery than any other branch. As we move into the 1990s, we will have quality equipment for integration with our quality soldiers.

General Carl E. Vuono has clearly articulated our Army's priorities for the next decade:

- Retention of quality soldiers.
- Ensuring a trained and ready Army.
- Modernization of the force.

Note that modernization is ADA's No. 3 priority. This does not mean that modernization will not occur. This *does* mean that, with the budget decreasing, force modernization will occur at a slower rate than planned. ADA will need to pay its share of the decrease. "It ain't over until its over," so we can all watch the defense budget battles and the resultant impact on ADA modernization. We have a lot of new systems coming and progress within each one has been good.

Note our emphasis. Field what is now coming along. We must continue fielding Patriot and Hawk Phase III, and we must complete testing and deployment of our new FAAD

systems which include PMS, FOG-M, ADATS and FAAD C³I.

Emphasize product improvement of these systems. This means large new system starts, such as the medium surface-to-air missile (M-SAM) will be delayed. Deploy our new systems to the highest threat area and to those who will fight first. Recognize that in the next decade ADA can expect only that dollar level established in the past decade.

Threat trends such as small RCS/stealth aircraft will make our job more difficult. Note also the increased emphasis on the new mission areas mentioned above and our ability to support the corps commander.

FAAD, as we know, is a system of systems. Each system within the family has been progressing well. An overview:

Pedestal Mounted Stinger. Undergoing final operational tests prior to full-scale production and deployment to the field. A real success story.

ADATS. Initial production systems now on hand at Fort Bliss. Scheduled for series of technical tests leading to a full-scale operational test this fall at Fort Hunter Liggett. As this is the system that in some minds succeeded Sergeant York, expect a lot of media attention on this test.

FOG-M. Three prototypes are already at Fort Bliss. Learning is proceeding at an exponential rate! Exciting to watch a weapon that will revolutionize how we fight in the hands of air defense soldiers.

The Army success story, Patriot, continues to exceed expectations. The last planned battalion (number ten) is training at Fort Bliss and will deploy to Europe this fall. The first "roundout" batteries (which ex-

pand the firing batteries per battalion from three to six) are now in training at Fort Bliss.

Even more exciting is the tremendous potential growth remaining in Patriot. Patriot will remain the cornerstone of Air Defense Artillery into the year 2000 and will continue to send the threat back to the drawing board.

Caring for ADA Soldiers

Officer promotion and career development continues to be about as good or better than the remainder of the Army. Thus, officerwise, ADA is healthy.

What needs our overall attention is noncommissioned officer career and professional development. NCO promotions for a few MOSS will be far in excess of Army averages. However, for about one-half the force, promotion rates will be no better than equal to the Army averages. This imbalance remains by far the most serious problem in our branch. We must all address this imbalance. The chain of command must insist on officer involvement. Anticipate boards and make sure record EERs are completed on time and with the same care given OERs. Develop a logical rating scheme that rewards your good soldiers. Push the true "below the zone." Remember, soldiers are our most important asset.

In summary, Air Defense Artillery has made much progress over the past few years. Thanks to each of you for your great support. However, much remains to be done. Know you're up to the challenge. We'll make it happen. There is nothing air defenders can't do with class and style!

ADA — not yet perfect but improving.

First to Fire!

This "Intercept Point" looks back and ahead. As this will be my last "Intercept Point" as branch chief, I want to summarize the "State of ADA" and leave you with some challenges and a vision for the future.

Overall, ADA today is at about a "B" to "B+" state. I say this on an evaluation of the following four areas essential to our branch's health:

- Quality soldiers and their care ("B-").
 - Fielding of quality equipment ("B+").
 - Formulation of doctrine and supporting organizations ("B").
 - Development of future leaders ("A").
- Let's expand on these four areas.

Quality Soldiers and Their Care

Today we in ADA have, without doubt, the finest youngsters I've seen in 30 years of service. Compared to other combat arms ADA has fewer "CAT 4s" by up to 15 percent! I leave you with the challenge to retain this quality. This will not be easy: there will be up to a 20 percent decrease in the next three years as the 17- to 21-year-old resource pool from which we recruit begins to shrink.

A partial solution is an aggressive re-enlistment program. Does your unit have one? Don't let the good ones get away. Retain the quality. Value this among your highest priorities.

The NCO Corps is dynamite! The "Year of the NCO," showing our appreciation for the foundation of our great Army, is certainly deserved. But it is here in ADA that we have our largest problem — the slowness of promotions, especially to grade E-7. If it were within my power as branch chief to fix any one problem, this would be the one. While we've made some progress, we have a long way to go. Part of the answer is reducing the number of MOSs — a good plan that needs to be put to use. Our challenge is to, in a make-sense way, reduce the number of MOSs and continue to fight for increased promotion allocations. Prepare your NCOs for promotion boards — the best form of soldier care.

On the officer side, a brighter picture. We're doing well! ADA officers compete favorably when they go before promotion boards. The newly published promotion list shows ADA lieutenant colonels being promoted to full colonel at a rate equalling or exceeding the Army average.

Our officer corps is competitive. Our balance is not quite right in that we have too many "operators" and not enough "developers." More folks need to get into the

Infante's Farewell

Infante predicts Air Defense Artillery will become the "Army's link to the Strategic Defense Initiative" in this, his farewell "Intercept Point."

He forecasts that ADA soldiers will become more "generalized and more specialized."

materiel acquisition business. A natural for air defenders. Think on it.

Fielding of Quality Equipment

Solid progress. Not the same branch in this area as we were following the demise of Sergeant York. FAAD is institutionalized within our Army and good progress is being made on all components. Patriot is, without doubt, one of the Army's biggest success stories. Even in this era of decreasing budgets, the future is bright.

On the FAAD front, PMS is a reality! With the completion of the highly successful PMS IOT&E, we will increase the production rate and soon they will populate the field. The first ADATS platoon is on station at Fort Bliss, training for the same test to be conducted in the spring of 1990. My prediction is that the results will be the same as PMS. FOG-M prototypes are also on station at Fort Bliss and training, firings and learning continue. This dynamite system will revolutionize the battlefield. Our integrator, C³I, is progressing well on the software and hardware fronts, but we need to better sort out our near-term radar needs and let a radar contract.

On the HIMAD front, the last Patriot half-battalion is almost en route to Europe and backfill of the other half has begun. Patriot fielding and field performance continue to be a showpiece on how to do it right for the Army. Hawk Phase III is about to become operational at Fort Bliss and, although extended over about seven years vs. a desired four years, fielding is programmed. Working with 32nd AADCOC, we have formulated an EAC communications modernization plan which, when programmed, will keep ADA in step with the rest of our Army.

With a little luck, we will field a command control center for both Patriot and Hawk to support Europe's "cluster" concept in about 1992. A prototype of the automated command post has been wrung out at Fort Bliss and will be fielded and field tested by the 10th ADA Brigade this summer.

The ADA Modernization Plan is nearing completion. With its approval, we hope by early fall, our road map for the future will be solidly in place.

On the strategic force side, ADA will continue to be the Army's link

to SDI and "Star Wars." The Army has received the anti-satellite (ASAT) mission and the project manager is an ADA brigadier general. If SDI continues to be funded at healthy bites, we in ADA will be at the table receiving and contributing our fair portions.

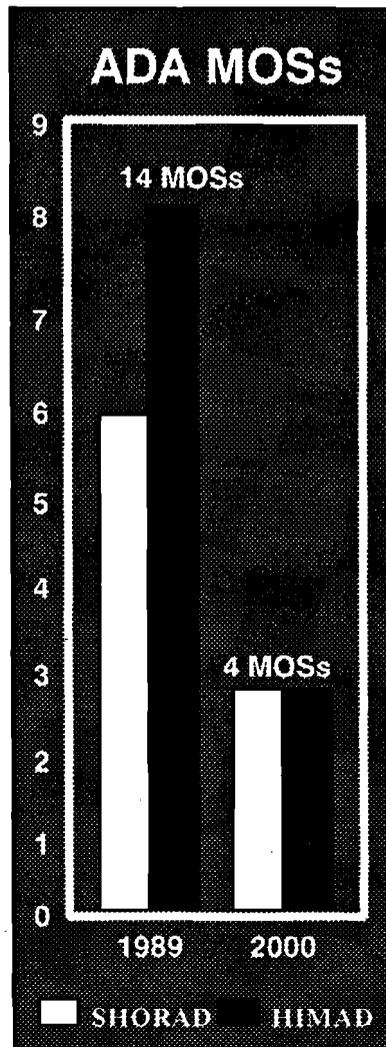
Formulation of Doctrine and Organizations

An absolutely essential part of keeping our branch vitality is doctrine that is in step with how our Army intends to fight the AirLand Battle. Our Army doctrine is changing. The thrust is on fighting deeper and increasing the role of the corps. Our ADA doctrine must keep pace — and it is.

Another key doctrinal area is supporting our new systems fielding. For example, PMS without some how-to-fight doctrinal base and association tactics, techniques and procedures will never realize its full potential.

What we have not been doing well is updating our fielded systems, especially in the HIMAD arena. For example, updated doctrine on fighting Patriot and Hawk together is long overdue. Much to their credit, the 32nd AADCOC has taken up the challenge and has done some super work in this area. The best excuse is no excuse. Our doctrinal plate runs over.

On the organizational side, FAAD is basically sound. While we may field initially with fewer ADATS (24 vs. 36), FAAD will support our divisional force. At the corps level, we've made some progress with the decision to begin corps ADA brigade fielding in 1991 in both V and VII Corps. The exact build-up rate will be a function of budgets and modernization rates, but we are getting started. The 31st



Brigade at Fort Hood is living proof that within two years a corps ADA brigade can be formed and make a substantial ALB contribution.

We have some way to go in integrating Patriot and Hawk, and integrating Patriot at the corps level. Composite Patriot and Hawk battalions are a must, and we must push hard in that direction. A composite Patriot/Hawk battalion as a part of the corps ADA brigade is essential. Work is ongoing at Fort Bliss to lay the foundation for these composite organizations.

Development of Future Leaders

Your schoolhouse at Fort Bliss is truly the center for excellence. The gains made in recent years through such innovations as small group instruction have paid us big dividends, but the investment has been substantial.

My second biggest concern — the schoolhouse budget — has dropped by more than one-third over the past two years. The picture ahead promises even fewer resources. The challenge is retaining this center of excellence even in times of decreasing resources. To do anything less is unacceptable as it mortgages our branch's future.

Your schoolhouse will continue to be the place where it's done and taught right. The challenge of the field is to sustain this excellence which, by the way, is pretty much being done today!

Challenges for the Future

So what are the challenges we face? Let me tick them off in rapid fashion to ensure they hit home and are retained for focus:

- Retaining quality soldiers in an environment of reduced dollars. A challenge both from a training and

soldier/family care perspective. A challenge that must be met. The one ingredient that above all else makes our Army and branch special.

- Providing a viable NCO career progression. Especially a challenge at grade E-7, but must be met if we are to retain quality NCOs.

- Fielding planned modernization systems. The next year with intensive testing is especially critical. Because ADATS is perceived as the Sergeant York successor (although, in fact, the FAAD system is), we will get a lot of "help" from agencies outside the Army.

- Making Patriot/Hawk composite battalions a reality. NATO is generally resistant to change, which is not all bad. We need to show our NATO brethren the value of composite battalions both at the EAC and corps levels.

- Fielding and using C³I improvements. A whole new world that our youngsters will relish. Field grades on up will have the hard adjustments. The potential is here for revolutionizing how we fight, and how efficiently and effectively we fight.

- Retaining our combined arms focus. As a branch, our focus now is ALB. As "Star Wars" and systems like ASAT gain momentum, their glamour may cause us to lose this focus. We must capitalize on these strategic gains but still remember that the Army, while a strategic asset, is a tactically-oriented force.

I have no doubt that with the quality force we have today these challenges will be met. But some perspiration will be required!

Vision for the Future

So where does this bring us as a branch through the year 2000? Yogi Berra stated: "Predicting the future

is risky business as it changes." But that never stopped me before! My vision for ADA:

- A growing importance in heavy force ALB execution. The multi-mission role of FAAD components battalions will be an integral part of the corps structure and link to other functional areas (e.g., counterfire). HIMAD units at EAC will form the basis for a substantial TBM defense which will support a national strategy much more dependent on CONUS reinforcements.

- Increased reliance by light forces on ADA. The Afghan model, expanded, will dominate. MANPAD systems will continue to be a dominant force on the light force battlefield. However, because of our increased capability in the anti-tank arena, our multimission contribution will grow.

- A growing role as the Army's strategic link. The changing national strategy, with increased reliance on CONUS-based forces, will drive derivation of a credible ATBM. ASAT and the necessity to deny enemy access to our strategic forces will drive ADA to become the Army's strategic link to SDI.

- The ADA warrior — more generalized and more specialized. Generalized in their ALB contribution and the role we will play. Specialized in the materiel acquisition process where we will be the master of our own destiny. NCO promotion rates exceed Army averages! In all cases, the ADA warrior will be several cuts above!

I have no doubt that Air Defense Artillery will continue to grow in importance in our Army. The quality of our soldiers will ensure that to be the case.

A big honor being your branch chief. Thanks for your support.

First to Fire!

DATES OF APPOINTMENT

| Promotions | Temporary | Permanent |
|--------------------|------------------|----------------|
| 2nd Lieutenant | | June 3, 1959 |
| 1st Lieutenant | December 3, 1960 | June 3, 1962 |
| Captain | June 3, 1963 | June 3, 1966 |
| Major | March 27, 1967 | June 3, 1973 |
| Lieutenant Colonel | April 10, 1972 | June 3, 1980 |
| Colonel | October 1, 1977 | March 15, 1982 |
| Brigadier General | | July 1, 1983 |
| Major General | | August 1, 1986 |

DATES OF APPOINTMENT

Commander, U.S. Army Air Defense Artillery Center & Fort Bliss (1985 - 1989)
 Patriot/Air Defense Project Manager, U.S. Army Missile Command (1983 - 1985)
 Deputy Commanding General, 32nd Army Air Defense Command (1982 - 1983)
 Commander, 69th Air Defense Artillery Group (1979 - 1982)
 Co-Chairman, Army-Air Force NATO Fire Support Study Group, DCSOPS (1978 - 1979)
 Commander, Division Air Defense Artillery, 1st Cavalry Division (1977 - 1978)
 Director, Studies & Concepts Division, U.S. Army Air Defense School (1976)
 Commander, 2-71st ADA, 38th Artillery Brigade (1973 - 1976)
 Systems Analyst, Strategic Programs, Office of the Asst Secy of Defense (1971 - 1973)
 Adviser, G-3, III Corps, U. S. Military Assistance Command (1967)

DECORATIONS AND BADGES



Legion of Merit (with Oak Leaf Cluster)
 Bronze Star Medal
 Meritorious Service Medal (with Oak Leaf Cluster)
 Air Medal
 Army Commendation Medal
 Parachutist Badge
 Army Staff Identification Badge
 Secretary of Defense Identification Badge