

NOVEMBER 1979/\$1

AIR FORCE

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MAGAZINE



In this issue:

- A Report on AFA's
33d National Convention**
- Turbulence in the Pacific**
- Defense Against Chemical
Warfare**

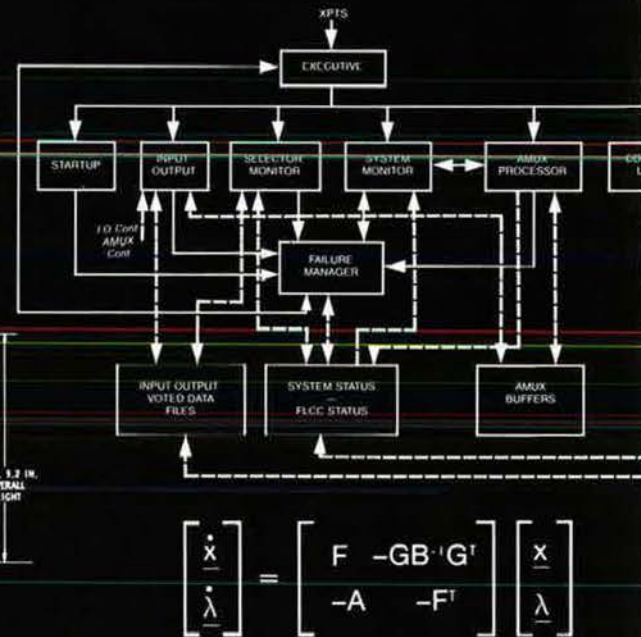
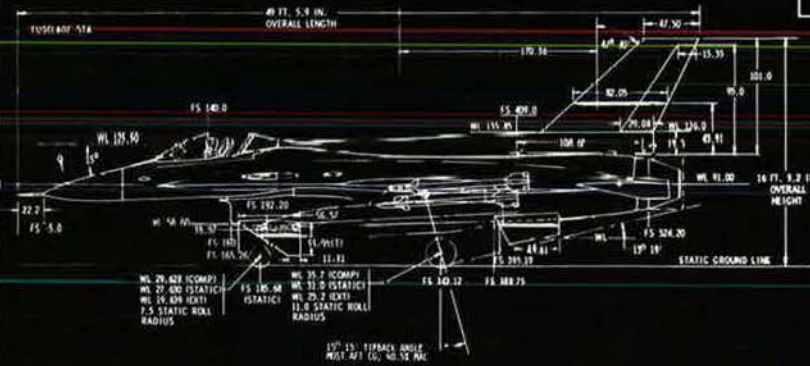
F-4s at Osan AB, Korea

Our engineers are developing, integrating, demonstrating and validating advanced fighter technologies for the AFTI program.



"The Advanced Fighter Technology Integration (AFTI) program at General Dynamics is a pure, technical, research project designed to advance the state of the fighter aircraft art. It's a learning situation. Working on the AFTI program, engineers have the opportunity to do unrestrained technical work in redundancy management, digital computer self-test, control law synthesis, avionics systems architecture and systems hardware integration."

Larry Lydick
AFTI-F-16 Chief Engineer



$$\begin{bmatrix} \dot{x} \\ \dot{\lambda} \end{bmatrix} = \begin{bmatrix} F & -GB^{-1}G^T \\ -A & -F^T \end{bmatrix} \begin{bmatrix} x \\ \lambda \end{bmatrix}$$

The Advanced Fighter Technology Integration (AFTI) program now underway at General Dynamics' Fort Worth Division will explore promising technologies for future tactical fighter options. Says Larry Lydick: "We're looking at a triplex digital flight control system that will give required redundancy while yielding significant improvements in air-to-air and air-to-ground combat effectiveness." A modified F-16 will be used as a test vehicle to demonstrate digital-controlled flight

refinements and integrated flight and fire control (IFFC). Featuring task-tailored multi-modes which include weapon line pointing and direct force control, the digital flight control system plus IFFC will improve lethality and survivability in the air-to-ground mode. In air-to-air combat scenarios it will provide faster, more accurate target alignments over a wide range of encounter geometries. Lydick and other AFTI engineers see this program as more than just an opportunity to participate in flight test

synthesis. They also feel it is "a firsthand chance to advance the state-of-the-art." AFTI key disciplines include electronics reliability, control laws, avionics integration, digital processors, redundancy management, self-test, software aerodynamics and more. Interested? Write:
R. H. Widmer
Vice President, Science and Engineering,
1519 Pierre Laclède Center,
St. Louis, MO 63105

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The system features reliable performance which has been achieved by drastically reducing the complexity of the scanning antenna and by employing digital electronics throughout. All solid state, with full system BITE, the equipment has demonstrated that it will operate in excess of 2300 hours in adverse environmental conditions without experiencing a component failure.

For additional information write to: The Singer Company, Kearfott Division, 1150 McBride Ave., Little Falls, N.J. 07424.

Ground System

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- Relative Vertical Position of Obstacle
- Ground Station Identification
- Automatic "Soft Course"
- Weight—23.2 lb, Volume 0.5 f³
- Power—95 watts

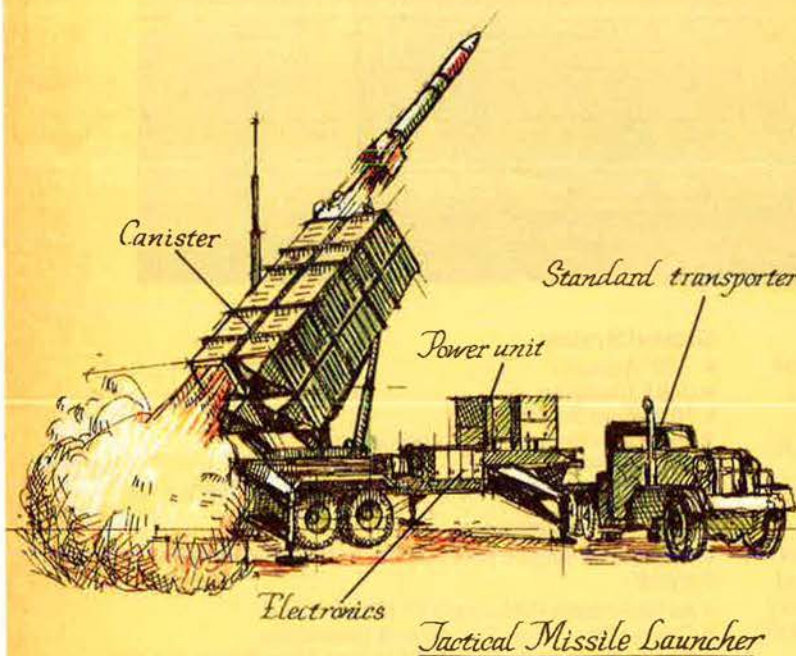
System Characteristics	Azimuth/Elevation	DME
Operational Frequencies	15.450 to 15.700 GHz	960 to 1213 MHz (TACAN Band)
Range	10nmi with 25mm of rain/hour	40nmi with 25mm of rain/hour
Data Rate	7.5 scans/second	30 second (track) 150/sec. acquisition
Number of Channels	20	252
Accuracy	0.2° Az, 0.1° EL	100 ft

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Today, the precision delivery of guided missiles and mini-munitions holds promise of being a most effective defense against attack by combined ground forces of infantry and armor.

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guided submunitions and mini-missiles.

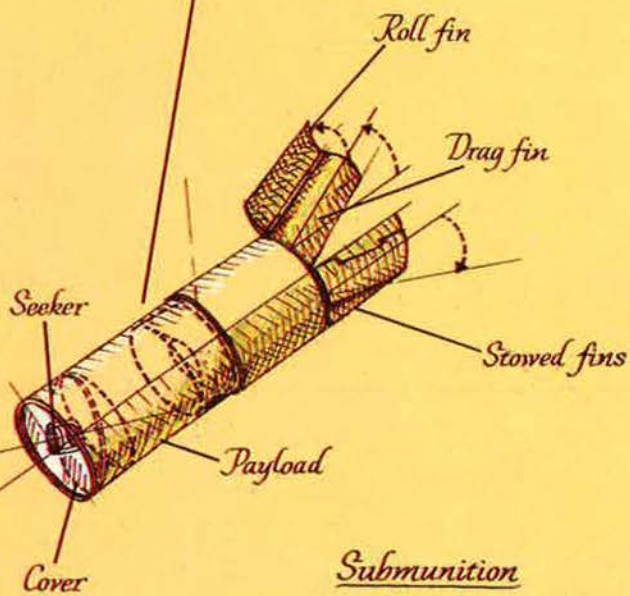
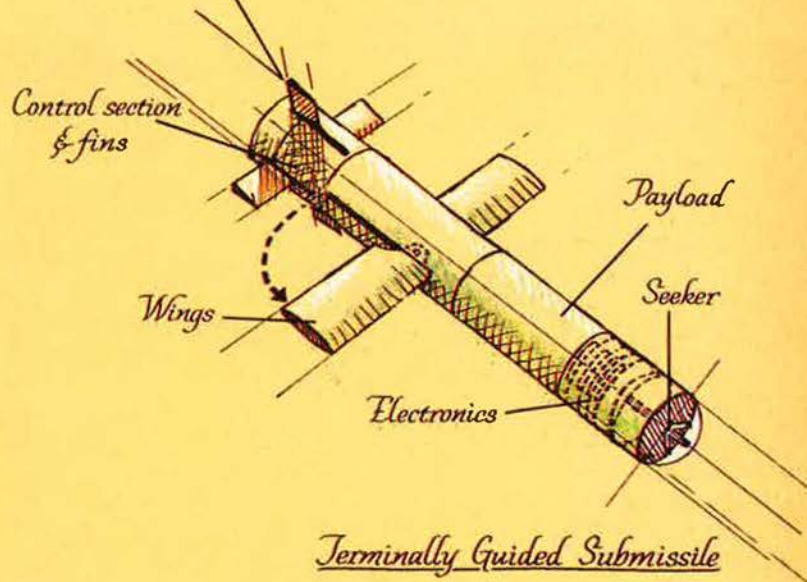
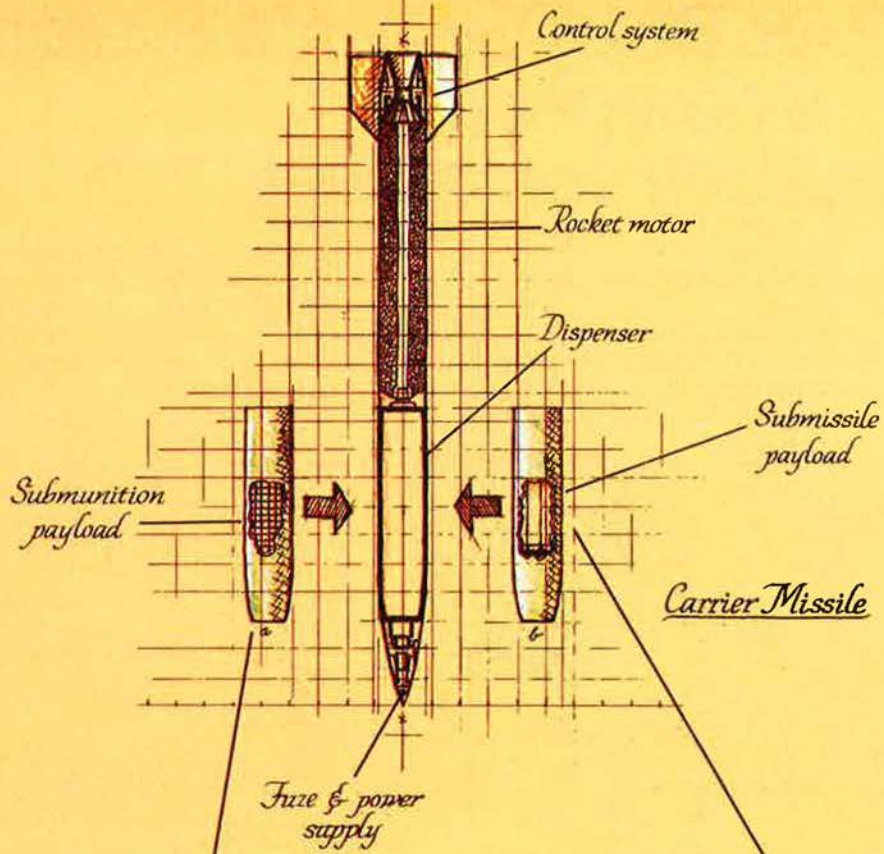
Important to the success of these concepts is the application of advanced, proven technology. The experience base at Martin Marietta in the areas of launchers, missiles and guidance systems using lasers, millimeter wave, beamrider devices, infrared anti-radiation homing, and radio-metric sensing has been proven and is being directly applied.

Concurrently, in our missile development we are advancing the forefront of technology in munitions and submunitions to permit multiple targeting under most battlefield conditions, through the innovative use of sensors and target recognition devices.

At Martin Marietta we have established the credentials and the technology base to conceive, design, and produce future generations of defense against ground assault force

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See us at AFCEA Western Conference, Anaheim, Jan. 9-11.

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ABOUT THE COVER

AIR FORCE



Pictured on the cover are USAF F-4s stationed at Osan AB, Korea—a key element of our overcommitted forces in the turbulent Western Pacific. For a report on US military stature in that area, where American interests continue to grow in inverse proportion to US military/diplomatic strength, see p. 92.

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Statement of Policy

Adopted unanimously by delegates to AFA's Annual National Convention, September 17, 1979.

ONE generation ago, the United States of America excelled spiritually and materially. The Republic, the standard-bearer of freedom and champion of the rights of man, was without peer militarily. American industry and productivity were the world's envy, often emulated, rarely duplicated. Recent years have seen an erosion of these strengths. Too often there has been more drift than resolve, more compromise than commitment, and a preference for self-indulgence and mediocrity over sacrifice and excellence.

Despite a relative decline in power and influence, America remains the world's strongest nation and the only one capable of checking Soviet adventurism and safeguarding international stability. Therefore, restoring self-confidence and unity of purpose must be America's highest priority. It is time for the nation to put the self-doubts caused by the Southeast Asian war behind it and resume its role as the responsible and resolute leader of the free world.

America's defense policies and strategies must be scaled as accurately as possible to its global objectives. In short, the nation must be willing to pay the price for the military capabilities needed to support its global and national security objectives.

Once set, neither the geopolitical goals nor the associated military strategies and force levels should be changed for light and transient reasons. Military posture, especially, must not be shaped by political opportunism, economic fluctuation, or the uncertain promises of arms-control negotiations. The temptation to bend strategy, standards of adequacy, and force levels to satisfy arms-control objectives makes for both weak treaties and poor defenses.

To negotiate and ratify strategic-arms control agreements *before* fundamental national security objectives and strategy are formulated—and before the associated requirements in terms of military capabilities and force levels are determined—puts the cart before the horse. Yet SALT threatens to become the central and overriding national security objective to which all strategic and other military planning and doctrines could be subordinated. Moreover, legitimate and essential military requirements are being deferred, canceled, or modified in order to conform more closely to the provisions of arms control.

The reverse is true in the Soviet case. Moscow formulates nonnegotiable military master plans and doctrines against which SALT is then negotiated. Thus, SALT poses the risk of unilateral arms control, inhibiting US military and technological development and producing a tranquilizer effect on the West. Yet the accord does not achieve significant reductions in the Soviet Union's vast military arsenal. It would also be naïve to expect SALT to curb the Soviet appetite for interventionism, promotion of terrorism,

aggression and subversion by proxy, and expansion of its global network of military bases.

This Association consistently has favored carefully crafted arms-control arrangements that meet rigorous standards of evenhandedness, precise terminology, greater strategic stability, and improved Soviet international behavior. This support continues.

But we also have warned, equally consistently, against substituting the symbolism of arms control for the only reality that can bring about stability—adequate modern military forces and weapons for the US and its allies.

We therefore urge that—prior to and independent of the Senate giving or withholding its advice and consent to ratification of the SALT agreement—the Administration and the Congress together revise in substantial form the Five-Year Defense Plan to redress the worsening imbalance between US and Soviet military capabilities.

After fifteen years of slighting vital defense needs—and with Soviet military superiority a distinct possibility—it is time for a broad and sustained national effort to ward off impending US military inferiority. The current Five-Year Defense Plan, as Administration witnesses before Congress have made abundantly clear, will not reverse the imbalance. As the Joint Chiefs of Staff reported to Congress, defense expenditures for at least the next five years must be increased by no less than five percent annually in real dollars if major deficiencies are to be corrected. Revision of basic US defense objectives and of the Five-Year Defense Plan is urgent and vital.

Further, the Air Force Association is concerned that a five percent annual increase in real defense dollars may not be sufficient. If a greater increase is required to meet force modernization and other essential defense needs, the nation must pay the price.

If SALT continues to distract attention from Soviet expansionism and to rationalize the military deficiencies of the West, it will encourage global upheaval and imperil world security. Moscow must not be permitted to have it both ways: Western accommodation and unabated Soviet adventurism. The arms-control process must be redirected to serve world security and the legitimate security interests of both signatories fairly and evenhandedly. The SALT I Agreement, in its present form, is unacceptable to the Air Force Association.

With or without SALT, the Republic faces grave and dangerous shifts in the military balance against the United States and the free world. We Americans have the responsibility to restore unity of purpose and spirit. Only then can the nation achieve the economic and military strengths without which peace cannot long endure.

THE EXPERIENCE OF THE FEDERAL RESERVE WITH DATA TRANSMISSION



Today, computers at the Federal Reserve transmit data, over a Bell System network, at 240,000 characters per minute.

Bell was chosen for this high-speed data transmission system because of the magnitude of the Fed's requirements—and because of Bell's technical capabilities. Bob Dunlap, Bell System National Account Manager, worked closely with the Fed to meet their special needs.

Mr. Dunlap explains: "This system eliminates flying computer tapes from one Federal Reserve bank to another. No more delays, no more getting fogged in. Banking transactions speed up.

"The Fed does a lot of payroll data transmission over the system," Mr. Dunlap explains. "This gets payrolls distributed on time, eliminates theft of checks from mail boxes, provides better service to banks and the larger commercial community. And," he concludes, "it helps arrest

the staggering growth of checks."

If your agency is interested in data transmission, talk to your Bell System Account Executive. He/she can bring Bell expertise to your problem, and is the point of contact that opens the resources of the Bell System to your needs.



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Tornado – the Western World's most advanced multi-role combat aircraft (with Aeritalia and MBB).



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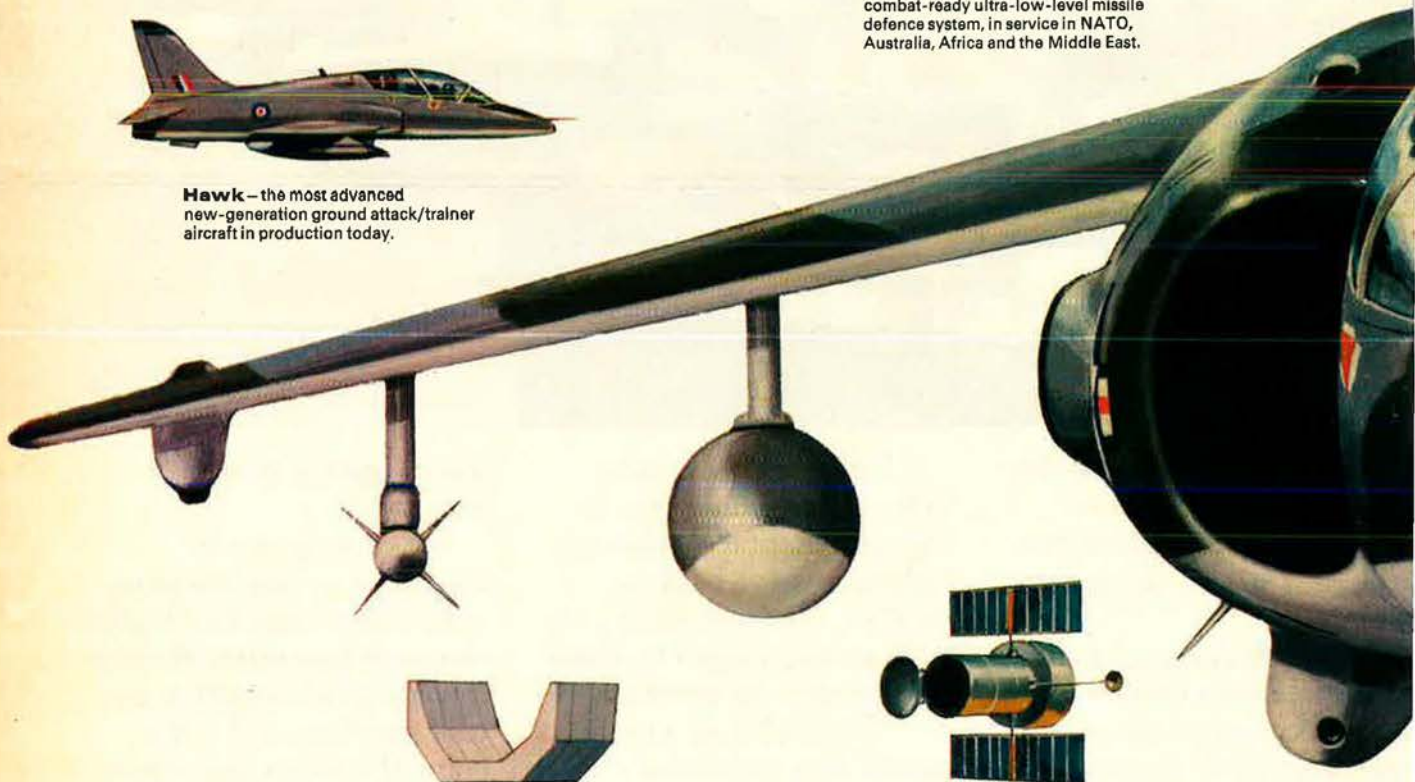
Sky Flash – the Western World's most advanced radar-guided, all-weather, air-to-air missile, based on the Raytheon Sparrow.



Seawolf – the Western World's first shipborne point-defence system with proven anti-missile capability, now in Royal Navy service.



Rapier – the Western World's first combat-ready ultra-low-level missile defence system, in service in NATO, Australia, Africa and the Middle East.



Spacelab Pallets – designed and built by British Aerospace as a member of the 9-nation European Spacelab consortium.



Space Telescope – to be powered by solar arrays designed and built for the NASA/ESA programme by British Aerospace.

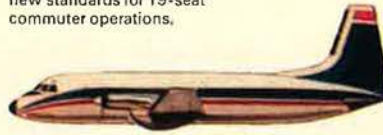
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British Aerospace 146 – powered by US-built fanjets – will bring ultra-quiet, wide-body services to commuter and feeder routes from 1982.



Concorde – the world's first supersonic passenger airliner (designed and built with Aérospatiale).



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equalled in its range of aerospace programmes

ISA Headquarters: British Aerospace Inc, PO Box 17414, Dulles International Airport, Washington, DC 20041

SCIENCE/SCOPE

Weapons equipped with electro-optical sensors can be guided with pinpoint accuracy from an aircraft by a specialized communications system. The new AN/AXQ-14 data-link weapon control system, developed by Hughes for the U.S. Air Force, performs two functions. First, it receives pictures from the electro-optical seeker in the nose of a GBU-15 guided weapon so the operator can guide the weapon to a target. Second, it transmits guidance signals from the aircraft to the weapon. Tests have been made in launchings from F-14, F-111, and B-52 aircraft.

Two weapon-locating radars have achieved significant cost savings by being equipped with a computer using current microprocessor and memory technologies. The AN/TPQ-36 mortar-locating radar and the AN/TPQ-37 artillery-locating radar, in production at Hughes, are designed to track enemy shells in flight and determine their origins in an instant. Though the original computer easily met most requirements, Hughes developed a new one that would be more effective and cost less to build and maintain, while still being compatible with existing hardware. Estimated savings over the life of the program are \$28.7 million to the Army.

A ground-based radar now being developed will be so "quiet" that anti-radiation missiles will be less likely to home in on its beam. The new radar will have two antennas, one to transmit low-energy beams continuously and the other to listen for returns. (Conventional radars differ by transmitting high-energy pulses so that one antenna can alternately transmit and receive.) A new antenna technique reduces the radar's side lobes -- the secondary patterns of energy that enemy missiles can home on. Hughes is building a prototype quiet radar antenna for evaluation by the U.S. Army.

Advanced radar techniques will allow the F-18A Hornet to detect, track, and draw a bead on airborne targets under almost any condition. The radar, designated the AN/APG-65, can vary and mix the rate at which signals are transmitted. Its velocity search mode uses a high pulse repetition frequency (PRF) to detect targets at long range. The range-while-search mode interleaves high and medium PRFs to furnish range information on detected targets in any aspect. The track-while-scan feature allows the pilot to track as many as 10 targets simultaneously. Hughes builds the radar for the U.S. Navy and Marine Corps aircraft. The Hornet itself is being manufactured by McDonnell Douglas.

A telescopic sight modified with an infrared sensor will allow TOW anti-tank missiles and other weapons to be fired from the U.S. Army's Cobra attack helicopter at night. The sight is modified to include a forward-looking infrared (FLIR) device, which creates TV-like pictures by sensing small temperature differences between targets and their backgrounds. Besides detecting targets at night, the system can see through smoke or haze in daytime. Hughes developed the unit, called the FLIR Augmented Cobra TOW Sight (FACTS), with advanced electro-optical and mechanical hardware, as well as the Army's FLIR common modules.

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HUGHES

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and Respected Voice . . .

so much for the very handsome edition of your 1979 Soviet Almanac issues. Being routed through the Library, it's on my shelf and most useful reference.

ter gave me an excuse to say besides thanks for a most gesture. I also want to recall writing the high regard I AIR FORCE Magazine and endous good it does for the states Air Force. You remain a respected voice for subjects as vital to not only those of us in uniform, but for the general and security of this great well. We all owe you a debt for that.

you for being the magazine people—you are. On behalf of the faculty, I wish you continued success.

Gen. William A. Orth, USAF
of the Faculty
Air Force Academy, Colo.

Security

able function AIR FORCE performs is to keep its aware of the overall military in light of which many international policies seem narrow and sometimes foolish. To call attention to your readers R&D community of one I'm early concerned about: Executive Order 11652 and its successor. These EOs cover downgrading of classified informa-

the main thrusts of our security program at Wright-Patterson is to ensure that no sensitive information is classified longer than it has to be. We are told that we go through channels and special permission . . . no information should remain classified for more than six years. Furthermore, extensions are allowed, they usually for a maximum of twenty years. Furthermore, we have been given guidance: When in doubt, declassify! . . . Let's examine the effectiveness of our military R&D and our national

any reader of AIR FORCE knows, DoD is trying to re-

main competitive with our military adversaries . . . by maintaining a qualitative superiority. Our qualitative gap is narrowing by the sheer size of Soviet R&D activities. Need we also help them along by offering them the fruits of our R&D labors? The problem, however, is bigger than this.

Consider the technologies currently being developed in the laboratories. They will not likely see operational use before ten years hence . . . and may continue in operational use up to an additional thirty years (example: B-52). How can a scientist look that far in the future and determine in absolute terms . . . how long the technology he's developing will be sensitive? Some of my coworkers feel it's all right to release the underlying basic research of a twenty-year-old system if the engineering application is still protected. . . .

They are ignoring an important concern: Once an enemy can precisely define what we can do and cannot do, or how well we can do it, he can develop effective countermeasures and tactics. Our capabilities and limitations can usually be inferred from the basic research, especially in my area of human performance measurement. As an example, our tactical strike missions in heavily defended areas are completely dependent upon a twenty-year-old automatic terrain-following technology. An effective countermeasure against it developed from basic terrain-following radar technology we've released could render our air-to-ground strike force totally useless.

What to do? One option at least temporarily open under EO 12065 is to use a review date instead of a mandatory declassification date, no matter how far in the future that date is. Then one still would have the option later of keeping sensitive information protected. (On the other hand, it is relatively easy to declassify things ahead of the mandatory date.) Another option is to use good common sense whenever a decision is made about the value of new research data. Take the trouble to get exemptions from the General Declassification Schedule when warranted. Finally, all those who share my concerns should try to make upper-level

military and the White House aware that the R&D community has unique classification requirements, which should not be lumped together with those of the rest of the military. . . .

If others are concerned with this problem and have suggestions for coping with it, please write to me.

Capt. Donald R. Loose, USAF
AFAL/RWM-1

Wright-Patterson AFB, Ohio 45433

Linebacker II Bomb Casualties

I was very interested to read Capt. Robert E. Wolff's fine article on Linebacker II, and particularly in his discussion of the "area terror bombing" issue. I was sufficiently disturbed at the time by some of the charges about "terror bombing" and "extermination raids" to move me to do some research into bombing casualty rates.

Linebacker II resulted in about eighty casualties on the ground per each thousand tons of bombs dropped. I compared this with World War II figures developed from the Strategic Bombing Survey and found that it was lower by a factor of ten to 100 than the casualty rates for raids on population targets! I could not find any World War II strategic raid of any consequence which resulted in fewer than 150 deaths per thousand tons.

So far as I could see this can only have resulted from extraordinary care on the part of the mission planners and crews.

William D. O'Neill III
Falls Church, Va.

Thanks, General Holloway

General Holloway's lyrical memory piece on his experiences with the Flying Tigers gave me some of the most enjoyable fifteen minutes of reading in a long time.

As a kid who was thrilled with the exploits of the Flying Tigers as reported during the early '40s, a collector of bubble-gum cards depicting Japanese atrocities in China, and long an admirer—like him—of the Chinese people, his story was a particular pleasure.

I've read the various books about the 23d Fighter Group, and seen more than one movie trying to tell their story. But he did it best, and briefest. Thanks, General Holloway!

Lt. Col. Alan C. Davis, NYANG
Granite Springs, N. Y.

Hail and Farewell

I would like to take this opportunity, on the eve of my retirement, to thank the many people who have made out-

Airmail

standing contributions to search and rescue in the United States. Without your dedicated work and support, we could not have come so far in developing a comprehensive SAR network. During my tenure as Commander ARRS, the combined efforts of all those involved in search and rescue resulted in the saving of more than 3,600 lives.

Even though I am retiring, I will continue to provide strong support to the furtherance of search and rescue and remain personally involved in this most humanitarian endeavor. While we have made great strides, we must continue to face and overcome the challenges of the future. You have my heartfelt gratitude for a super effort. Good luck and Godspeed.

Maj. Gen. Ralph S. Saunders,
USAF
Commander
Hq. ARRS (MAC)
Scott AFB, Ill.

The Price of Freedom

Capt. Thomas Johnson's letter in the March '79 issue states in its last paragraph: "Perhaps if American culture really has lost its vitality, the world will spend a generation or two under Soviet domination to relearn the value and price of liberty."

I could not agree more with Captain Johnson. I was born and raised in East Germany. After completing basic school, I escaped to West Germany. One who has lived under Communist domination does not take certain rights for granted. I would like to ask the people in this country who complain about our democratic form of government, who think that they may be deprived of any freedom, how would you like it if you were not able to criticize the government and were not allowed to voice your opinion?

How would you like it if you could not freely travel, even within your own country? What would you think if you had no control over your children and their activities? How would you like it if you could not freely speak in the presence of your children? Children are trained in the schools to report any incident of criticism of the government or antigovernment activities by people, including their own parents.

How would you like being pressured or even forced to belong to

a Communist youth organization, such as the Young Pioneers or the Free German Youth? What would you call an election that has only Communist candidates on the ballot?

I am sure that my fellow Americans do not want to trade their free system for a dictatorship such as East Germany's. Some Americans think that they have it pretty bad in this country. Under Communist rule it would be a lot worse.

The United States of America, as a leader of the free world, must remain a strong nation and lead as a military power to prevent communism from spreading over the entire globe. We must be willing to do whatever that takes. No price should be too high for freedom.

H. Dieter Beger
Ogden, Utah

MTI Monument

The Alamo Chapter of AFA would like to enlist the support of individual AFA members and chapters for a project undertaken by the Lackland Air Force Base Gateway Chapter of the Air Force Sergeants Association. This AFSA Chapter—recently named the AFSA Chapter of the Year—is conducting a fund-raising project to erect a monument to Air Force Military Training Instructors, past and present, on the parade ground at Lackland AFB.

The proposed monument will be a first-class work of art, designed by the same artist who created the Missing Man Monument at Randolph AFB. . . . The project is expected to cost about \$25,000.

AFA members who would like to make tax-deductible contributions to this monument honoring the people who train the world's finest enlisted force should send a check or money order made out to "AFSA MTI Monument Fund," c/o Gateway Chapter 1076, P. O. Box 27008, San Antonio, Tex. 78227.

Walter T. Galligan
President, Alamo Chapter
San Antonio, Tex.

More on Specialization

I found the article by Lt. Col. Raymond R. Fisher in the August 1979 "Perspective" column quite interesting, and readable; however, while I think his contention that the officer promotion system should be changed is valid, I do not believe that "specializing" the officer corps is the answer. . . .

It has been my observation that far too many of our officers, particularly

the less senior ones, are too specialized now. When one is committed into the Air Force, it is as a pilot, weapons control officer, administrative officer. I think the tendency to be specialists and to consider oneself as a particular AFSC to many of the serious leadership problems the Air Force is facing today. Most officers do not try to consider the "big picture" and do so for no other reason than it fits their job descriptions.

It has become very easy to get specific in writing job descriptions and functional outlines for various career fields because in no one can be mistaken about what they and their functional areas are. From this has developed a lack of initiative and concern as a "that's not my job" syndrome that pervades the Air Force to my contention that officers who are specialists for long periods of time cannot be officers.

If anything, the Air Force must study and rethink the role of the officer and make some plans for the future of the century. What is the proper legitimate role of an officer, not just in the Air Force, but in the Air Force Military Establishment? . . .

Lt. Col. Walter N. Aguilar
APO New York

Air Combat Tapes

The Air Force Human Resources Laboratory is undertaking research on pilot stress assessment using voice spectral analysis. As part of this research, a data base of audio recordings from air combat operations is currently being assembled. We would appreciate help in establishing this data base and would particularly appreciate the opportunity to make copies of any tape recordings made during air combat operations. All recordings will be duplicated and returned within thirty days. Sender confidentiality will be guarded if requested.

Jeffrey E. Kantor
Supervisory Personnel Psychology
Personnel Research Division
USAF Human Resources Laboratory
Brooks AFB, Tex. 78235

Looking for Tail Codes

I am attempting to compile a complete list of the two-letter tail codes (officially known as "Distinctive Aircraft Identification Markings") used on PACAF, TAC, USAF, AFRES, and ANG aircraft that began in Southeast Asia during the Vietnam Information from anyone who



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Airmail

knowledge of the development or use of these codes from the beginning to the present time would be appreciated. If possible, data concerning the unit, location, type of aircraft (including variant), and the approximate dates the codes were used should be included.

Of particular interest is information concerning the code combinations used on F-4C aircraft from the 366th TFW at Da Nang in early 1967 prior to the assignment of codes from Hq. PACAF. These codes consisted of an "A," "B," or "C" to designate the Squadron (389th, 390th, and 480th respectively) and a second letter to identify individual aircraft within the Squadron.

Thank you very much for your help.
William R. Peake
584-A Valerie Lane
Addison, Ill. 60101

Langley Residential History

My Langley Field Project (a chronological listing of former residents in quarters at 3A Eagan Ave., 16B Sagan Ave., and 53 Dodd Blvd., outlined in April '79 "Airmail") is making good progress. Data now totals at least half of all officers who ever lived permanently on-base. I still need solid data for 1920-29, 1942-49, and 1951-55. Best information is in specific memory or old Langley telephone books, officers club rosters, or organizational rosters with addresses.

Anyone with such items, especially from the above periods, please send a copy.

Lt. Col. Charles L. Weidinger
6437 Eastleigh Place
Springfield, Va. 22152

Attention 8th and 15th Vets

I am compiling two books which concern the activities of the Eighth and Fifteenth Air Forces in WW II. The first is called *Castles in the Air*—a history of the B-17 Flying Fortress groups that flew from England and Italy. The second book is called *Home By Christmas?*—a collection of POW-escape-evasion stories relating the experiences of RAF and American personnel during WW II.

I would very much like to hear from readers who served in the B-17 groups, especially those who were in the 97th, 306th, 305th, 92d, 303d, and 91st Bombardment Groups. I would

also like to hear from those who flew to England with the original cadres of these groups in 1942, and who might have participated in the first USAAF raid on August 17, 1942.

I would also be most interested to hear from any ex-American Air Force personnel who were shot down over Europe and made prisoner or evaded.

All correspondence will be answered, and any material kindly sent will be very carefully handled and returned.

Martin W. Bowman
131 Aylsham Rd.
Norwich, NR3 2AD, England

22d TFS Insignia

I am writing to you because of my concern for a great Air Force fighter pilot tradition that some young Eagle drivers at Bitburg AB, Germany, are trying to change. My concern is *changing* of the squadron insignia of the "Big 22" or 22d TFS.

On a recent trip I noticed the proposed new insignia of a modernistic Eagle that is to replace the Bumblebee, which was created by Walt Disney. Will these young hot shots be allowed to change a very highly decorated and distinguished squadron emblem without official concurrence from the Air Force?

I urge the jocks from Fursty and Bit to join in protest. This history needs to be preserved!

Timothy J. Roels
Fort Worth, Tex.

Uniforms, Memorabilia Sought

I am seeking past and present full dress uniforms of enlisted and officer personnel with rank and service ribbons. These items will be displayed annually at the California State Fair, the World's Fair in Los Angeles in 1981, and on permanent exhibition at our school district for 17,000 school children to enjoy and appreciate. We would appreciate any photograph of the former wearer so it could be framed and added to the exhibition.

Please direct inquiries to:

Dr. Ray L. Ferguson
Project Director
International Costume Exhibition
P. O. Box 86
Burlingame, Calif. 94010

Pilot Class 55-N

Next May marks the twenty-fifth anniversary of the graduation of USAF Pilot School Class 55-N on May 16, 1955, at Bryan, Laredo, and Reese Air Force Bases. A reunion is under consideration on that occasion, but it is necessary to develop a mailing list of

class members. Readers who are either themselves members of 55-N or know of someone else who was a member of the class can assist in establishing this list by sending a note giving the class member's name and address, along with any other comments or suggestions, to

Mrs. John W. Lawrence, Sec'y
Ad Hoc 55-N Committee
975 Sumpter, Apt. 406
Bellville, Mich. 48111
Phone: (313) 699-1078

We also would be interested and grateful to hear from next-of-kin or friends of class members who might have died since May 1955.

Further information will be sent out once a class mailing list is established.

Henry O. Malone, Jr.
Washington, D. C.

RAF Bentwaters Assignments

I am looking for any patches of units or squadrons that were assigned to RAF Bentwaters during the history of its use by the USAF. I also need the new A-10 patch and the reactivated 510th TFS patch. I am hoping to display my collection in the near future.

Randy A. Edens
7105 Twin Oaks Dr., Apt. C
Indianapolis, Ind. 46226

Class 51-B

I am writing a history of Class 51-B, Williams AFB, and wish to get in contact with as many members as possible.

Maj. Eugene W. Garges, Jr.,
USAFR (Ret.)
142 Mill Spring Rd.
Manhasset, N. Y. 11030

363d Fighter Group

A history of the 363d Fighter Group, WW II, which served at Rivenhall Air Base, Essex, England, in 1944, is being written. Would like to correspond with any former members of the group.

Jack D. Stovall, Jr.
4065 Mickey Dr.
Memphis, Tenn. 38116

405th Memorabilia

The 405th Tactical Training Wing will be activated soon at Luke AFB, Ariz. The Wing was formerly designated the 405th Bombardment Group (Dive), 405th Fighter-Bomber Group, and most recently, at Clark Air Base, P. I., the 405th Tactical Fighter Wing. We are seeking such 405th memorabilia as pictures, documents, awards, etc., to complete the Wing history prior to reactivation at Luke.

Any items contributed will be greatly appreciated and should be sent to:
 Col. Peter T. Kempf, USAF
 58th TTW/CC
 Luke AFB, Ariz. 85309

Caltrop Drop
 I would like to hear from aircrews that dropped the four-pointed tubular tire-puncturing devices (caltrops) used in WW II and Korea. Anecdotes, photos, and data on effectiveness and extent of usage, etc., will be appreciated and will be returned.
 Col. G. C. MacDonald, USAF (Ret.)
 55 Warwick Dr.
 Shalimar, Fla. 32579

Lost Color Slides
 I have a large collection of 35-mm color slides that apparently were lost during a PCS move of an Air Force family. Many of the photos were taken at Cheju-Do Air Base, Korea (K-39), in 1963-64. Others are hunting scenes in Southeast Asia and at the K-39 hunting lodge. The apparent owner was a lieutenant colonel and an F-100 pilot when the photos were taken. I'll be happy to send the slides to the owner on proper identification.
 Joseph R. Belvin
 4200 Colebrook Rd.
 Charlotte, N. C. 28215

606th AC&W Squadron
 I am interested in hearing from members of the 606th AC&W Squadron who were in Korea in 1954-55, especially those who served with me on the mountain relay site in Kangnung.
 Martin Wein
 Box 448
 Grand Lake, Colo. 80447

152d Bomb Group
 A book is being prepared on the Douglas B-26 Invader, and the author would like to hear from members of the 452d who served in Korea and flew, crewed, or serviced the B-26.
 So, if you have any photographs, log books, anecdotes, etc., concerning the group's exploits in Korea with the B-26, I would like to hear from you.
 John Horne
 15/20-22 Speed St.
 Liverpool, N. S. W.
 Australia, 2170

UNIT REUNIONS

Ordre Pour le Merite
 The honorary aerospace organization will hold its annual "muster" in Las Vegas, Nev., November 30 through December 2, 1979. **Contact:** Col. James J. Kamp, Jr.,

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High Council Chairman, 909 Ridgewood Ct., Bellevue, Neb. 68005, or Ordre Pour le Merite, 2469 Foxwood Dr., Chapel Hill, N. C. 27514.

UPT Class 65-C
 Vance AFB. Ski reunion at Park City, Utah, January 13-19, 1980. **Contact:** Wayne DeLawter, P. O. Box 104, Holicons, Pa. 18928. Phone: (215) 794-5165.

Rec III
 November 9-12, all past and present recon types and friends, Gunter Hotel, San Antonio, Tex. For registration forms, **Con-**

tact: Col. Tex McVeigh, RRIII, P. O. Box 888, Randolph AFB, Tex. 78148. Phone: (512) 661-7150.

F-100 Pilots
 The 181st TFG Indiana ANG will officially retire the last F-100 Super Sabre with appropriate ceremonies on November 10 at Hulman Field, Terre Haute, Ind. 47803. All F-100 pilots and any others associated with the F-100 are invited. For further information, **Contact:** Col. Frank L. Hettlinger, Detachment Commander, (812) 877-2551 or AUTOVON 634-1581.

InFocus...

BY EDGAR ULSAMER, SENIOR EDITOR

Washington, D. C., Oct. 9 No Consensus on New Manned Strategic System

Various elements of the Air Force and the Defense Department continue to probe—with laudable avoidance of sacred cows and preconceptions—the options for a manned strategic system to take over from the aging B-52. The quest has been narrowed to three or four candidates, none of which has reached a front-running position. The present state of affairs lends itself to divergent interpretations. Some traditionalists tend to bemoan the absence of a consensus and warn of ensuing procrastination. The less orthodox, and probably stronger faction, seems to consider this painstaking, open-minded approach both healthy and necessary.

The most publicized option probably is the conversion of sixty-six FB-111s and eighty-nine F-111Ds to the proposed FB-111B/C configuration. Two levels of modification are under consideration. One level, estimated to cost about \$6 billion, would be confined to retrofitting the 155 aircraft with F101 engines (developed for the B-1) and stretching the aircraft to increase its fuel load. The other proposal includes also upgraded defensive avionics and would increase costs to about \$8 billion. Either way, the 155 modified aircraft could be available for operational service by 1984 or 1985, if the program is launched this year. Range and payload of the FB-111B/C, with one refueling, would approximate that of the B-52G.

While the proponents of the FB-111B/C can cite significant advantages accruing to this approach—in the main, relatively low costs and short leadtime—several senior Air Force leaders question its underlying wisdom. They are concerned that even though the FB-111B/C is being portrayed as an interim, "quick-fix" solution, its adoption would rule out a new and optimized manned strategic system for at least the rest of this century. There is a solid body of evidence that recent technological progress in a range of fields makes possible dra-

matic advances in the performance, utility, and survivability of future manned strategic systems.

Another factor that might militate against the FB-111B/C is that it could limit availability of F-111s for conversion to the EF-111 tactical jamming systems. Operationally, the FB-111B/C suffers from one intrinsic weakness: its categorical dependence on tankers to execute its mission. Since tankers clearly are vulnerable to SLBM and cruise missile attack on their bases, they must be considered the weakest link of the chain.

Another major option under consideration for a follow-on manned strategic system is known as the Large Warfighting Aircraft (LWA), a concept as yet not fully defined. Its basic traits include long range, a large and diverse weapons load, some form of self-defense capability, and the ability to respond to human judgment over or near the target.

A third option, the Strategic Weapon Launcher (SWL), is basically a fixed-wing version of the B-1, also not defined completely. Some Air Force planners treat SWL as well as the Cruise Missile Carrier Aircraft as variants of the Large Warfighting Aircraft concept. All of the designs meet a criterion of major concern to senior defense officials—the ability to accommodate strategic as well as tactical payloads.

The fourth option, which probably has the most support from both the Pentagon's leadership and the technologists, involves a new-from-the-ground-up strategic manned system. While studies of what such an aircraft should look like and whether it should be a standoff or penetrating platform are still going on, two areas of major promise are evident. Technologies boosting stealth and other forms of electronic wizardry are in a state of dramatic advance. In simple form, these new and reliable techniques cause the defense to "see" the aircraft where it is not and, conversely not to see it where it is. Thus the option to return to "high-and-fast" operation, dormant since the cancellation of the B-70, is being resurrected. If this operating mode is chosen, it

probably would entail a design capable of outdistancing the B-70 in terms of both speed and altitude.

Senior defense officials are expected to review the various options for a manned strategic system in the near future.

Another SALT Loophole

A senior Administration official who declined to be named told this writer recently that the White House views as inconsequential Soviet Defense Minister Dmitriy Ustinov's statement to Defense Secretary Harold Brown and JCS Chairman Gen. David Jones that the USSR considers the proposed basing mode for the MX ICBM incompatible with SALT II. Under these circumstances, would work on the "race-track" shelter system in the early 1980s, when US ICBM vulnerability to a Soviet first strike will peak, enable the Soviets to abrogate—or threaten to abrogate—SALT II with cause? The official says the option to do so is open to Moscow one way or another.

It is puzzling that the US SALT negotiators would sign a treaty that the other signatory declared from the outset prohibits deploying a weapon system the US considers paramount to its strategic force modernization. It is especially troubling that Moscow could legally abrogate SALT II without sullying its image in the third world if that became attractive in the early 1980s. By then the Soviet ICBM throw-weight advantage—with nearly all fourth-generation ICBMs operational—will peak. Yet, until SALT II expires in 1985 or is terminated earlier, Moscow can't reap the full benefit of this advantage. The accord's fractionation limit that restricts the number of warheads a given ICBM type is permitted to carry helps neutralize somewhat the Soviet throw-weight advantage.

Additionally, it is almost certain that because of age, major changes in the Soviet leadership will occur at about that time. Most US Kremlinologists, while short on hunches concerning specific personalities, predict confidently that the new hierarchy will be more aggressive and more willing to take risks than the current leaders, whose experiences in World War II are thought to have imbued them with caution and conservatism.

The same Administration official acknowledged that arms-control programs other than SALT II are in a state of limbo. The recent Defense Science Board study of the effects of a Comprehensive Test Ban treaty on US security (see p. 24, October '79 is-

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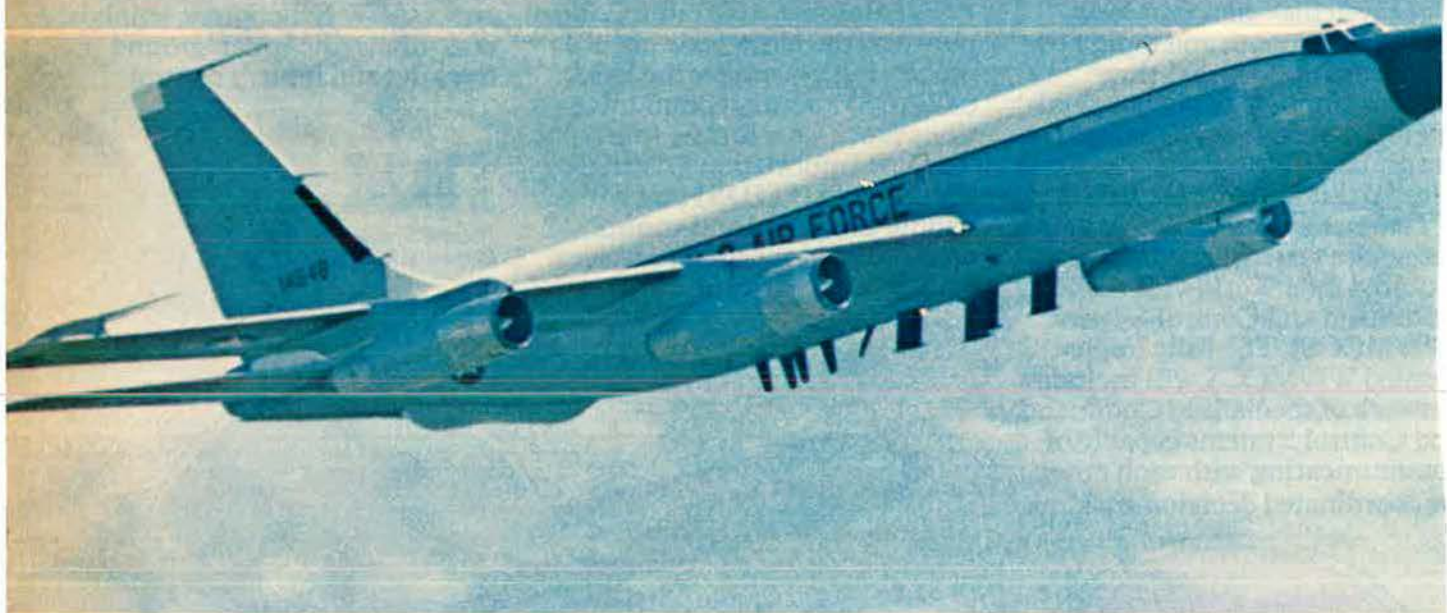
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the Air Force has awarded Simmonds Precision a contract to develop a PAS system for the KC-135 tanker aircraft military version of the 707.

In the commercial airline world, a similar system with autothrottle coupling called the Performance Management System (PMS), is saving fuel on six TWA 727's. Both TWA and Eastern Airlines have signed letters of intent to purchase a total of 197 systems for their 727's.

In the meantime, system development for the DC-10 is nearing completion.

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InFocus...

sue) concludes that such an accord would create grave risks. The initial Administration ardor for an ASAT treaty (barring space warfare weapons) reportedly also has cooled off. In the case of MBFR (Mutual Balanced Force Reduction) negotiations, the chronic impasse over baselines persists. The US/NATO figures for the Warsaw Pact's force levels remain markedly at odds with the claims of Soviet MBFR negotiators. Some progress on MBFR is being made within the US government, with almost universal acceptance of the Joint Chiefs of Staff position that theater nuclear forces (TNFs) should be dropped from MBFR negotiations.

The entire issue of US arms-control objectives and policies reportedly has been brought into a sounder, less ideological frame of reference by PD 50, a Presidential Decision memorandum. The document, this column was told, was authored largely by National Security Advisor Dr. Zbigniew Brzezinski and his immediate staff and represents a major setback for some of the more unbridled arms-control enthusiasts in the State Department and elsewhere. Defense supporters in Congress are encouraged also by the appointment of Dr. Fritz Ermarth, a highly respected defense analyst with Rand and CIA background, as head of the National Security Council's task force setting goals and policies for SALT III negotiations.

Communist Penetration of Latin America

Brazil, Argentina, and Chile are well on the way to—or may already have—a capability to quickly produce nuclear weapons, according to the ranking US commander in Latin America. Army Lt. Gen. Dennis P. McAuliffe, outgoing Commander of the US Southern Command and the prospective Administrator of the new Panama Canal Commission, pointed out to this column that whether any of these countries will go beyond the "option" to field quickly nuclear weapons depends on future political developments—in the region and globally.

With the exception of Cuba and Peru, Moscow's massive attempts to increase its influence in Latin

America through arms sales so far have not been successful, according to General McAuliffe. Neither has the recent US policy of cutting off security assistance to such nations as Brazil (for pursuing with Germany's help nuclear power generation technologies deemed by the Carter Administration to violate nonproliferation rules) and Argentina (for allegedly violating human rights).

Argentina, the head of "Southcom" said, has spent "literally hundreds of millions of dollars" over the past three years on purchases of military equipment from Western European countries, Israel, and others. One of the consequences of the US refusal of security assistance to former recipients in Latin America is that US military equipment, especially aircraft, is being operated without adequate spare parts. This is endangering flight safety and is "of great concern to me," General McAuliffe said. Over the long term, he added, there are "an awful lot of countries willing to step into the gap" created by withholding US security assistance.

One of the seemingly enduring characteristics of Latin America, in the view of General McAuliffe, is a generally strong anti-Communist orientation and the concomitant disinclination to become dependent on Soviet military equipment. The staunchly religious makeup of most Latin Americans in part accounts for communism's failure to make significant inroads in Central and South America. Offsetting this bias is the susceptibility of many Latin American countries to political turbulence and violent changes of government. The recent overthrow of the Nicaraguan government by the revolutionary Sandinistas manifested what General McAuliffe sees as the usual byproduct of such change: "A decline in US influence." He said that both Cuba and Panama apparently aided the Sandinistas. While the US has no evidence that Cuban military units were involved in Nicaragua, there is the suspicion that "many [Cuban] advisors" were on the scene, he said. While there is no evident "master plan of revolution" for Central and South America, he predicted that El Salvador, rent by internal strife and plagued by violence, would become Cuba's next target for interference and for fomenting insurgent groups.

A tangible side effect of the stepped-up Soviet arms-selling campaign throughout the region—which involves nearly irresistible credit terms—has been the growing inclina-

tion on the part of some Latin American countries to use the *threat* of dealing with the Soviets to gain leverage with Washington, General McAuliffe suggested.

US knowledge of why the Soviets have stationed a brigade of combat troops in Cuba appears to be spotty and circumscribed on the basis of what General McAuliffe and others told this writer. Two principal but hypothetical suspicions center on Soviet insistence that their own people guard sensitive intelligence facilities for eavesdropping on the US and nuclear weapons depots in Cuba if such depots were set up. Nuclear munitions could be delivered to Cuba by Soviet ships or aircraft and maintained there under tight Soviet control. There is evidence of a Soviet nuclear weapons handling facility at Cienfuegos, according to congressional sources.

General McAuliffe feels that the military significance of the Soviet MiG-23s in Cuba is far greater than that of a single brigade. The MiG-23 force, even though small in number and probably involving early, relatively range-limited models, nevertheless is a "threat to the Panama Canal" and other countries in the region, he said. He expressed concern, however, that if the Soviets were to introduce newer, longer-range versions of the MiG-23, the United States probably would be unable to detect the difference.

Washington Observations

- Presidential Review Memorandum bearing the designation PRM-47 currently is circulating at the highest levels of government and could turn out to be political dynamite. Premise of the document is that the deficiencies of the All-Volunteer Force policy require remedies, probably in the form of some selective service.

- The battle lines are forming over attempts by elements of OSD to force four wings of F-5s on the Air Force. The big push for this scheme—aired so far as a trial balloon—is expected for next summer. OSD advocates of the F-5 are the same senior civil servants who were the godfathers of the F-16 and A-10. They propose to use the F-5s on NATO's flanks and as an element of the currently in-vogue Rapid Deployment Force (RDF), largely a paper force with a high media profile and little else. USAF is resisting the F-5 scheme vehemently on grounds that the last thing the Air Force needs is a short-legged, visual-range fighter. The consensus

InFocus...

within the Air Force is that more F-15s are needed because "we can't beat the other side in the numbers game or by fighting air-superiority battles within the constraints of visual range." Hand in glove with the F-5 advocacy are renewed efforts to force USAF to accept low-cost, limited capability "blitzfighters," including the P-51-like "Enforcer," for the ground-support mission. On the latter score, USAF lost the first round when Congress allocated \$6 million for testing the propeller-driven "Enforcer" this year.

- A highly classified National Security Council report to Congress documents several instances of Soviet deception and tardiness in connection with SALT I which may prove an albatross for SALT II ratification. Even more alarming is the admission that the US for fifteen years—from 1960 to 1975—had lost track of one out of a total of eight 328-foot-long "Hotel" class SLBM-launching Soviet nuclear submarines. The US found the "missing" sub only after Soviet SALT negotiators, apparently unaware of the US miscount, declared that they had eight "Hotel" class subs in operation. The same report also adds new details about the Soviets outnegotiating the US in SALT I in connection with the SS-19 ICBM. The Soviet negotiator sanctimoniously asserted that there was no need to define "heavy" ICBMs because, as the report puts it, it was the Soviet view that both sides had a clear understanding of what light and heavy ICBMs were and there was no reason to believe that during the period of the Interim Agreement (SALT I) this understanding would not continue to prevail. Because of this loophole the Soviets were able to bring the SS-19 ICBM into the inventory even though it far exceeds the US definition of a light ICBM. Ironically, SALT II continues this failure to define light and heavy ICBMs. Lastly, the NSC report confirms that the Soviets repeatedly have been and probably still are behind in dismantling ICBMs that were and are in excess of the limits set by SALT I.

- One of the options for countering the Soviet/Warsaw Pact lead in theater nuclear forces (TNFs)—gained through deployment of the MIRVed Soviet SS-20 intermediate-range ballistic missile—envisions use of two

Mk-12A 335-kiloton warheads on the US Army's new Pershing II missile. Administration officials think the current impasse over TNF modernization—resulting from the initial hesitance of NATO member countries to have these weapons stationed on their soil—will be overcome soon. Several European NATO countries are believed ready to accept US-operated TNFs.

- According to a senior Administration official, the White House is firmly committed to five major military programs: MX, ALCM, improving C³I, developing the rapid-deployment force, and modernizing theater nuclear forces.

- Congress has decided to withhold funds for developing the Strategic Satellite System (SSS). Proposed by the Air Force as a means for assuring long-term survivability of vital US command and control capabilities in space, the SSS satellites were to operate at about five times geosynchronous altitude—some 100,000 miles up—where the Soviets presumably could not detect them easily and where they are virtually immune from attack. Congress rejected these arguments by hypothesizing that the Soviets indeed could detect the SSS even that far out in space and place "space mines" in the same orbits. In case of crisis or war, according to this contention, these maneuvering space mines could be made to close in on and destroy the SSS spacecraft. As a result of the congressional action, plans for a survivable command and control capability in space once again are in limbo.

- US intelligence officials confirmed press reports emanating from Israel about massive Soviet airlift maneuvers this summer during which elements of seven Soviet combat divisions were deployed to air bases in Ethiopia and South Yemen. At the end of the operation, Soviet Prime Minister Alexei Kosygin visited both countries. The Soviet equivalent of the C-5, the turboprop An-22, was used in the operation. Administration officials, meanwhile, report that the Soviet profile in Afghanistan is rising. More than 3,000 Soviet military and civilian officials are stationed there and play "a central role" in running the country, according to these sources.

- Joint US-Federal Republic of Germany efforts to develop the Locust low-cost expendable harassment vehicle are encountering serious problems because of divergent views about the pace and scope of the

program. Locust is envisioned as an unmanned, ground-launched air vehicle equipped with a self-contained navigation system, a radar homing system, and a fragmenting warhead, which can loiter over enemy radars for long periods and homes on the emitter when transmitting. USAF wants to develop this defense suppression weapon as cheaply and quickly as possible. The Germans, on the other hand, want a thirty-six-month program to develop a more sophisticated system.

- One of the troublesome aspects of the latest Alpha submarine, which outruns and outdives the best US submarines by a considerable margin, is the fact that its titanium hull is not detectable by magnetic sensors. Also, when operating at depth, the Alphas are out of range of current and presently planned US torpedoes.

- A recent Congressional Budget Office study of SALT II's effect on the cost of modernizing US strategic forces concluded that many of the gains from the treaty can be realized only "if the limits are extended into the deployment period of MX," which occurs after the expiration of the accord.

- Former Secretary of State Henry A. Kissinger, speaking recently at a conference on the future of NATO in Brussels, sent tremors through the structure of the alliance when he imperturbed the European members not to "keep asking us to multiply strategic assurances that we cannot possibly mean or if we do mean we should not want to execute because if we execute we risk the destruction of civilization." He coupled a scathing attack on the absurdity and ineffectiveness of the US assured destruction policy to the warning that the US nuclear umbrella has lost all relevance to NATO's defense. "I believe," he said, "that it is urgently necessary either that the Soviets be deprived of their counterforce capability in strategic forces or that a US counterforce capability in strategic forces will be rapidly built; it is also necessary that either the Soviet nuclear threat in theater nuclear forces against Europe be eliminated—which I do not see is possible—or an immediate effort be made to build up [NATO] theater nuclear forces." He excoriated in similar fashion the tendency on both sides of the Atlantic to treat détente as "an exercise in psychotherapy, [thus making it] a corollary to the assured destruction theory in the sense that it always provides an alibi for not doing what must be done."

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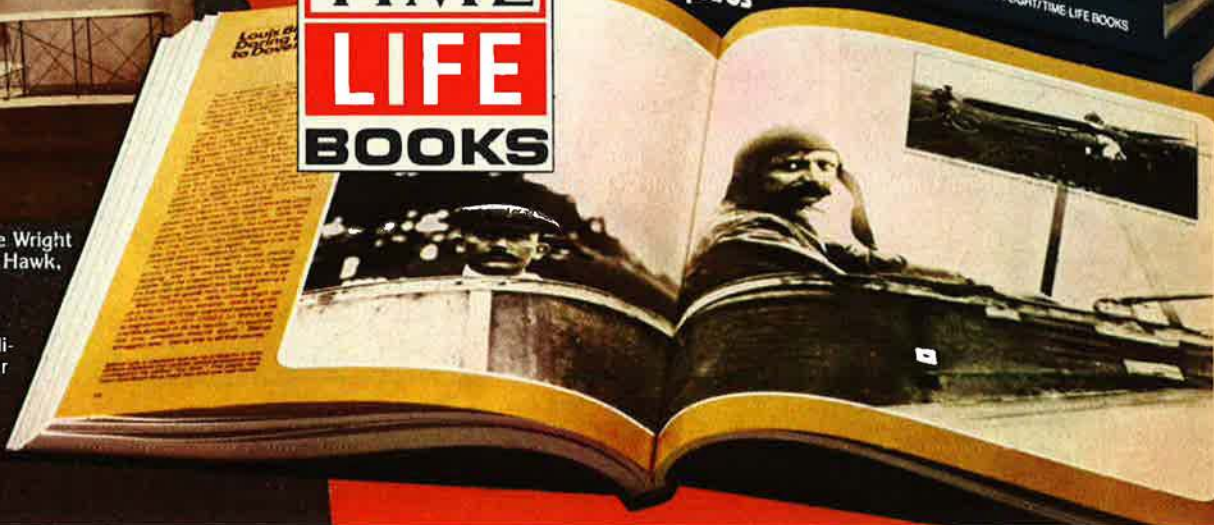
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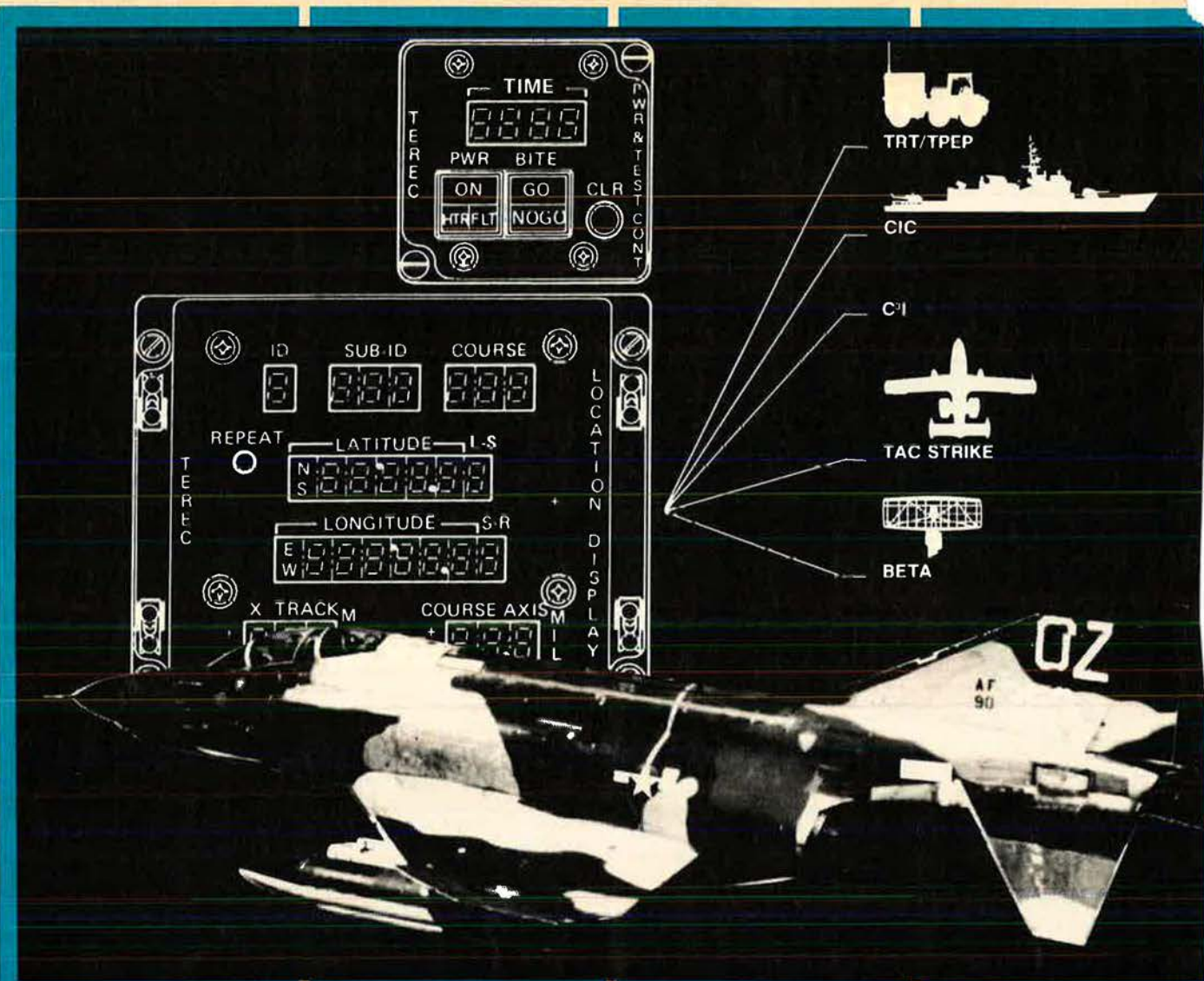
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Aerospace World News, Views & Comments

By William P. Schlitz, ASSISTANT MANAGING EDITOR

Washington, D. C., Oct. 9

★ Defections from Communist societies to the West have been very much in the news of late. The people involved ranged from ballet dancer to bricklayer.

While it is unknown how many have been deterred by the barbed wire and machine guns, searchlights and minefields of heavily guarded borders, others have escaped in ingenious and spectacular fashion.

Entire families have crossed by glider and cropduster. One escapee used a snorkel to swim a canal from East to West Berlin. A couple and their two-year-old child floated across the Baltic Sea in a dinghy.

But Hans-Peter Strelzyk, a thirty-seven-year-old East German electrician and aircraft mechanic, devised the most novel method of all: Build a hot-air balloon and float out.

It was not a decision to be made lightly. Strelzyk and twenty-four-year-old Günter Wetzel, a bricklayer, each had a wife and two children. "Otherwise," Strelzyk later said, "we would have been gone long ago."

With a balloon stitched together from bed sheets and other bits and pieces of cloth, the two families made their first attempt on July 4, but were forced down by weather 200 yards from the border.

Undaunted, they returned safely home and the two wives began to sew again.

In the predawn darkness of September 16 they tried again. With the adults perched on the corners of a metal-plate gondola the men had fashioned, and the children huddled around propane cylinders in the center, they flew twenty-eight miles (forty-five km) from Pössneck in East Germany to Naila in Bavaria.

They arrived in the West with nothing but the clothes on their backs. "Things were pretty good for us over there by East German standards,"

Strelzyk later told reporters, but it was time to get out of "that hermetically sealed Workers and Farmers Republic."

★ The first of thirty-five F-4E Phantom IIs destined for the Egyptian Air Force began arriving in Cairo in late September, ferried there by TAC and Egyptian crews.

The F-4Es were refueled by SAC tankers nine times during the thirteen-hour, fourteen-minute flight between Homestead AFB, Fla., and Cairo. The aircraft and other military equipment, including armored personnel carriers, are part of the package the US agreed to provide Egypt under terms of the Mideast peace agreement.

Because of the short lead time that precluded the production of new aircraft, the Phantoms were taken from USAF's active inventory. The Air Force announced that these F-4s and others in active service are to be replaced by F-15 Eagles and F-16s.

★ According to *Wing*, Japan's weekly aviation newsletter, the nation's Ministry of International Trade and Industry will "launch Japan's first indigenous satellite in 1985 to investigate the distribution of resources and energy in the world."

Japan will use the data collected by the satellite to draft its international policies on resources and energy for future industrial activities. The satellite is being developed under the urging of the Japan National Oil Corp. and the Metal Mining Agency, MITI said.

Being equipped with the most advanced sensors, the satellite will have almost three times the analysis capability of the US's Landsat resources survey satellite.

"While promoting positive policies on resources and energy on the basis of information to be obtained from the satellite, Japan plans to increase its resources diplomacy by furnishing developing countries with the information," *Wing* said.

★ In mid-September, the Air Force gave the green light for major steps in the development of the MX next-generation ICBM.

Under a \$259 million contract, Rockwell International's Autonetics Strategic Systems Division, Anaheim, Calif., will proceed with full-scale engineering development of the missile's guidance and control system. Under a five-year contract, the company initially will provide guidance and control systems for the first eight R&D flight test missiles, and ground support equipment for the first five.



In a field near Naila, West Germany, lie the remains of a homemade balloon, a unique method used recently by two East German families to defect to the West (see above).

—Wide World Photos

Aerospace World

And under a \$192.8 million contract, Rockwell's Rocketdyne Division, Canoga Park, Calif., will conduct full-scale engineering development of the missile's fourth stage. Extending through 1983, this contract covers the flight proof test and production readiness review of the fourth stage, and delivery of the first ten fourth stages for flight tests.

MX flight tests are to begin in 1983, with initial deployment of operational systems three years later.

★ NASA and Canadian and French officials have agreed to evaluate a Satellite-Aided Search and Rescue System (SASRS), based on a fifteen-month orbital demonstration to begin in 1982.

What's more, negotiations are also under way with Soviet officials for cooperation in the venture. The USSR is developing a similar system that



The attempt to cross the US from west to east in a balloon ended with a forced landing in a field in northwest Ohio on October 2. The only casualty of the ill-fated flight of the DaVinci Trans-America was its pilot, Vera Simons of McLean, Va., who suffered a broken leg. The crew vowed to try again.

—Wide World Photos

would be compatible with the SASRS. Integration of Soviet satellites into the program would enhance alert and response time.

The trial system is expected to reduce rescue response time by improving monitoring coverage, cutting detection time, and providing more ac-

curate initial location of distress sites.

Under the three-nation agreement, Canada will supply spacecraft transponders. France will provide receivers/processors to equip US National Oceanic and Atmospheric Administration polar-orbiting satellites, and the US will integrate and launch the

Intelligence Briefing...A Roundup

According to *Foreign Report*, published by London's *Economist*, the basic mission assigned to the Russian troops [in Cuba] is hotly disputed in Washington:

It has been suggested that they have been deployed to protect the complex of highly sophisticated electronic espionage equipment that the Russians have transferred to Cuba—possibly as early as 1974—in order to intercept radio and telephone communications in the United States. Other, unconfirmed possibilities include the following:

1. That the Soviet military force, although prepared for an independent combat role, could also function as the core and command structure of a mixed Russian-Cuban expeditionary force of up to 44,000 men.

2. That the force may have been assigned to defend a stockpile of Soviet nuclear weapons, which the Russians have either already smuggled into Cuba or are planning to transfer at some future stage.

While there is no evidence that the Russians have decided to station strategic weapons in Cuba, in violation of the 1962 understanding with the Americans, there is much concern in Washington today about the capacities of the United States to monitor what is actually going on on the ground. The first clue to the presence of nuclear weapons is likely to be the system of physical defense adopted by the Russians; this usually follows a standard pattern. However, if the Russians departed from routine in order to disguise (say) a missile base, it might be difficult to detect. This whole question gains immediacy from other aspects of the Soviet military buildup in Cuba.

When it was learned last year that the Russians had transferred MiG-23 fighter-bombers to Cuba, there was speculation that they might be nuclear-armed; the American Defense Department finally concluded they were not. However, the MiG-23s are nuclear-

capable—which means that they could be armed with nuclear weapons within about thirty-six hours of a decision in Moscow to change their role. This point has so far been almost entirely neglected in the Washington debate.

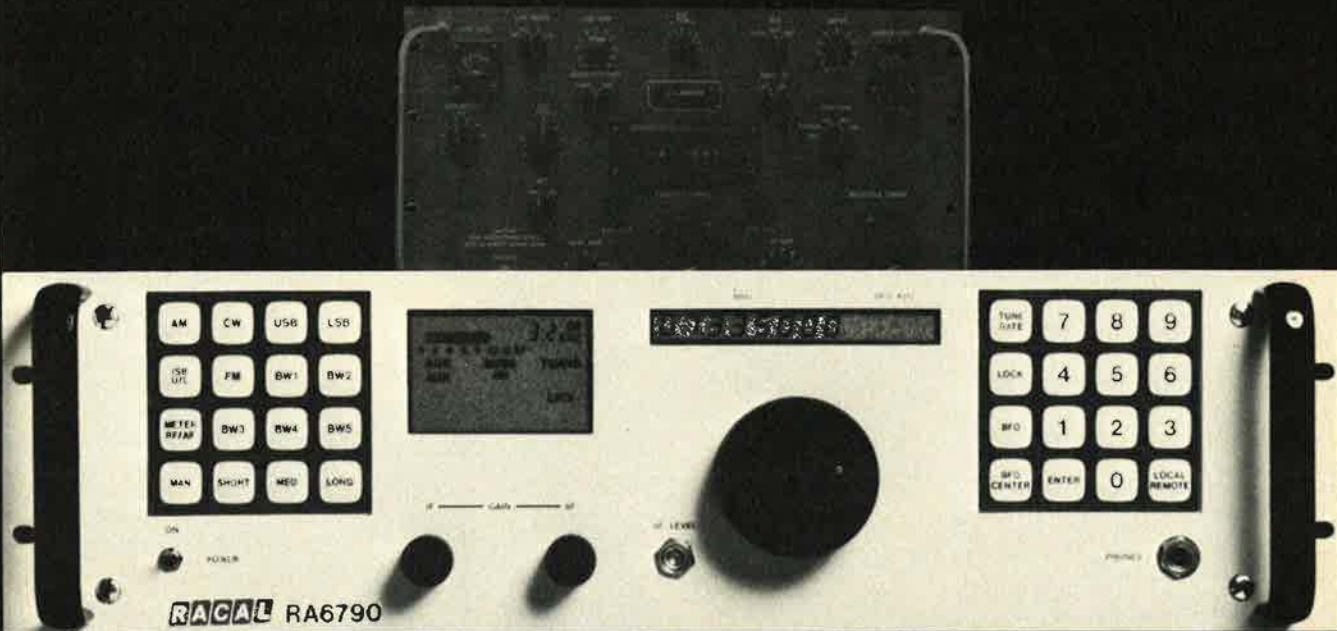
The delivery of a *Foxtrot*-class submarine to the Cuban navy is equally disturbing. This advanced diesel-electric submarine is extremely quiet and difficult to detect. It is regarded by naval experts as ideal for mine-laying. Two of the Americans' most important submarine bases—at New London, Conn., and Charleston, S. C.—are within comfortable striking range of the *Foxtrot* submarine that is now in Cienfuegos. With a relatively small number of "smart mines" it would be possible to bottle up both American ports.

While the presence of a single *Foxtrot* submarine in Cienfuegos may appear, at first glance, to be a relatively minor issue, the following points should also be taken into account:

1. According to American intelligence sources, there is no evidence that the Russians provided any training for Cuban naval personnel in handling *Foxtrot*-class submarines (or, indeed, in any aspect of submarine warfare) prior to its delivery to Cuba. It is considered all but certain that the submarine is manned by a Soviet crew, and that, even if Cubans are trained in handling it, it will remain under Russian command; the Russians are most unlikely to entrust such a sensitive piece of equipment into the hands of a client state.

2. The size of the Soviet naval training mission that was dispatched to Cuba at the same time as the *Foxtrot* is greater than would be required to train local personnel for one submarine. This is considered to be circumstantial evidence that more *Foxtrots* for Cuba are in the pipeline—making the scenario for a preemptive Soviet strike (in event of war) against American naval bases significantly more plausible.

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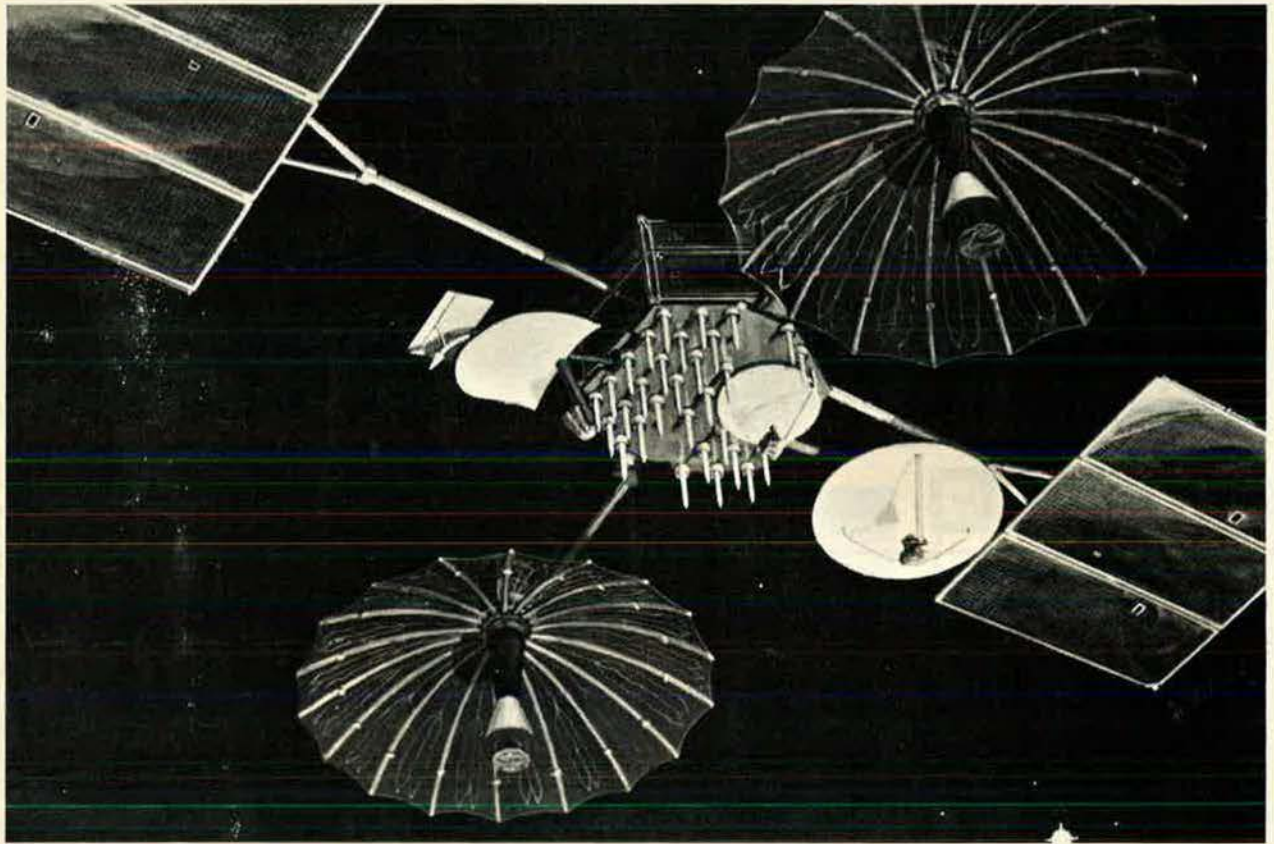
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from France and several Eastern European countries. The US contingent was made up of forty scientists representing eighteen universities and research organizations. They contributed thirteen experiments to the mission.

Aboard the modified spacecraft were thirty-eight laboratory rats that were to spend twenty days in space before returning to earth.

The scientists conducting the experiment hope that any changes in the rats' muscle fibers and bone formation will provide insights into the reasons for calcium loss and muscle deterioration of astronauts and cosmonauts during prolonged spaceflight. The animals would be allowed to mate in orbit, the first time mammals have been bred in space, so that their offspring can also be studied to determine if weightlessness affected their growth.

Tracking the satellite's return to earth and landing, the Soviets planned to transport a mobile lab to the site to perform immediate dissections of a number of the animals to determine any tissue changes resulting from weightlessness. The remaining animals were to be flown to Moscow for later dissection. Any carrying young would be allowed to come to term, officials said.

To validate the procedure, the Soviet scientists set up two control groups of laboratory rats prior to the Cosmos launch: one group in cages on a normal diet; another—the "syn-



Dr. Edwin B. Stear was sworn in on October 3 as Chief Scientist of the Air Force. He'll serve as top advisor to Air Force management in all areas of research and development.

chronous control"—in a Cosmos spacecraft on the ground. The latter was to be subjected to the same vibration and gravity forces of launch and reentry as the orbital craft and any changes aboard the satellite indicated by instrumentation transmissions. Thus, any marked difference in the orbiting animals' muscle or bone structures could be attributed to weightlessness.

An Air Rescue and Recovery "Save" of a Different Kind

The 67th Aerospace Rescue and Recovery Squadron, stationed at RAF Woodbridge, UK, launched a unique rescue mission this past summer. Instead of scrambling to save lives, two of its HH-53 Super Jolly Green Giant helicopters assisted in saving a historic Welsh island.

Bardsey island is remarkable in its natural beauty, undisturbed wildlife, and Christian heritage—the resting place of Celtic saints that draws many pilgrims each year.

However, the island's boat slipway, the only entry port, was in urgent need of repair, threatening future access to the island.

"We received a letter from the Chairman of the Prince of Wales Committee, Mr. Charles Quant," explained project officer Maj. Roderick S. Cross. "He was asked by Prince Charles, who had visited the island, if something couldn't be done to make the necessary repairs." Supplies and manpower were no problem for the Bardsey Trust, but the required transportation capability was lacking.

The 67th ARRS gladly took on the project.

Assisted by US military volunteers, including maintenance, aircrew, pararescue, and Army Pathfinders, the two helicopters airlifted more than 200,000 pounds of concrete, sand, fresh water, mixers, and other equipment.

The helicopters ferried 3,000-pound sling-net loads at fifteen-minute intervals to the island, several miles off the Llyn Peninsula. "As for training," said mission commander Lt. Col. Robert J. Lovretich, "aircraft commanders and their copilots gained invaluable experience, practicing air refueling, sling loading, and low-level navigation all in unfamiliar territory." In all, the Jollys hauled sixty-one loads totaling 223,000 pounds.

In appreciation, 67th Commander Col. Charles M. Teed received a telegram from Prince Charles thanking the unit personally for helping to preserve a historic landmark.

satellites and develop emergency beacons for aircraft and ships.

All three countries will provide ground stations and conduct evaluations, including performance tests and simulated search-and-rescue demonstrations.

From this could stem an international SASRS that could be more effective in saving lives and sharply reduce the costs entailed in prolonged search operations, officials said.

★ The Air Force has initiated the conversion of surplus F-100 aircraft to controllable, unmanned flying targets under its Full-Scale Aerial Target (FSAT) program. The converted F-100s are to be designated QF-100.

Heretofore, the F-102 has been performing the role of unmanned aerial targets, but at current use rates the supply of these aircraft will run out by mid-1983. F-102s have been in use as flying targets since 1975.

The last of the operational F-100s, flown by the ANG, will be phased out this year (see also p. 15).

Nine F-100s are scheduled to be committed to a development conversion program undertaken by Sperry Flight Systems, Phoenix, Ariz., under a \$6.4 million contract that gives the company the option of converting an additional seventy-two to production QF-100s. The first of these should be available by April 1983.

Ultimately, competitive production contracts will be awarded for the some 228 F-100s remaining in storage at Davis-Monthan AFB, Ariz.

The QF-100s are to be used by TAC, the US Army (a partner in the FSAT program), and others to test air-to-air and ground-to-air missile, as well as to develop and evaluate tactics. Remotely controlled, each QF-100 will average about eight missions. They can be destroyed in practice missile firings or brought back and prepared for additional missions.

★ In mid-September, the Soviets orbited an unmanned Vostok spacecraft as the third in its Cosmos series in cooperation with US scientists to study the effects of weightlessness on physiological processes.

Also participating were scientists

Aerospace World

★ In search of adventure, excitement, travel? Well, USAF has a standing need for experienced pilots to fly U-2 aircraft on a wide variety of challenging missions, including photoreconnaissance, atmospheric sampling, and systems development.

Operated by the 99th Strategic Reconnaissance Squadron at Beale AFB, Calif., the high-altitude, single-seat plane is flown from there and from temporary-duty sites around the world. Follow-on to the U-2 will be the TR-1, two of which are expected to be approved in the FY '80 budget. The TR-1 will open additional slots for pilots, whose qualifications and training will be virtually the same as for flying the U-2.

USAF is seeking captains or lieutenants with 1,500 total flying hours, or 1,350 flying hours with 1,000 as first pilot or instructor pilot, eighteen months as an aircraft commander, and at least one year on station. Contact Maj. John Mangels or TSgt. Dave Wilson of SAC Personnel, AUTOVON 271-4298 or 4260.

★ The USS *Vulcan*, the first Navy vessel to deploy abroad with women crew members, sailed for the Mediterranean in September.

The *Vulcan*, a repair ship, is scheduled to call at ports in the Med where major US naval forces resupply. The ship has a crew of 733, of which fifty-five are women. Six of the ship's officers are women.

As a test case, the voyage of the *Vulcan* will demonstrate generally how women fare confined to shipboard and faced with the rigors of sea life and while on liberty in foreign ports.

Playing down the ship's departure to create "as near normal operating conditions as possible," Navy officials said that women have proved capable of serving aboard ships Stateside and should do so overseas as well.

★ USAF is looking into ways to minimize or eliminate contrails—those telltale streams of condensation produced by aircraft or missiles at high altitudes.

Contrails are particularly pesky

when fighters launch their tactical missiles, pinpointing not only the missile but the launching aircraft as well.

In a series of test firings sponsored by the Air Force Rocket Propulsion Lab at the Arnold Engineering Development Center, Tenn., as part of the overall program, scale-model missiles were used in an attempt to find a solid rocket propellant that won't form contrails.

Using various mixes of solid propellants, technicians gun-launched the models in AEDC's 1,000-foot hyperballistic range at about Mach 2 under conditions simulating a full-scale missile's flight in the subzero upper atmosphere. High-speed cameras recorded the results.

Data from the low-cost ground-testing techniques are to be used in computer analyses to arrive at an optimum solid propellant for later testing in full-scale missiles.

★ SAF/OI to become SAF/PA. To bring Air Force terminology in line with DoD and the other services, USAF's Secretary of the Air Force/Office of Information has been redesignated Secretary of the Air Force/Office of Public Affairs. Its Director of Information, Brig. Gen. H. J. Dalton, Jr., will now be known as the Director of Public Affairs, and the office's Information Officers are to be called Public Affairs Officers.

Likewise, the former Public Affairs Division is to be known as SAF/PA's Media Relations Division. And while the Resources & Projects Office has become the Plans & Resources Office, the Community Relations Division, Office of Security Review, and Internal Information designations have been retained for those units.

Other than the name changes, the functions of SAF/PA will remain the same. The Public Affairs program is the Air Force's effort to communicate with its military and civilian workers, civilian organizations, and the general public. It does this within the Air Force through base newspapers, *Airman* magazine, American Forces radio and television stations, and the monthly "Air Force Now" film series used at regularly scheduled Commander's Call troop gatherings. The Public Affairs program communicates with the general public through such community relations activities as speaking engagements, displays, base Open Houses, museums, tours of Air Force facilities, band concerts, and performances of the Thunderbirds aerial demonstration team.

In addition, Public Affairs through its media-relations responsibility provides Air Force information and assistance to news media. This includes such activities as responding to queries, arranging interviews with key personnel, releasing information during contingencies, and otherwise keeping the media informed about significant developments.

★ T. A. Wilson, Boeing Co. Board Chairman, has been selected to receive the 1979 Wright Brothers Memorial Trophy, the sponsoring National Aeronautic Association announced. Presentation of the award will be on December 14 in the nation's capital.

Mr. Wilson joined Boeing in 1943 as an aeronautical engineer and has spent his entire career with the company, becoming Chairman in 1972. He has been the driving force behind the development of many successful aircraft, both military and civil, and of the Minuteman ICBM. Mr. Wilson played a key role in returning Boeing to economic health following the 1970 recession.

Today, Boeing jetliners dominate the world's airliner fleets and their sales to airlines overseas help to offset the nation's balance-of-trade deficits.

At Mr. Wilson's behest, Boeing has begun development of two new airliners—the 757 and 767—which hold promise of continued US leadership in commercial aircraft over the next twenty years.

John R. Alison, NAA President and former AFA National President and currently a member of AFA's Board of Directors, cited Mr. Wilson for "his significant public service of enduring value to the United States."

★ **NEWS NOTES**—The C-130 Herk flies on and on. **Thailand will become the forty-sixth country** to operate the propjet transport when the three advanced model "H"-version Herks it has ordered for its air force are delivered by Lockheed-Georgia late next year.

Japan announced that **its first astronaut**—a payload specialist overseeing several yet-to-be-determined experiments—is to be aboard a **Space Shuttle mission in 1985**. Japan will pay NASA cost of the venture.

Under US/Japanese defense cooperation guidelines, **the first joint air exercise in Okinawa** took place this past summer involving USAF F-4Ds and Japanese Air Self-Defense Force

F-104J fighters. Another such simulated air battle is slated for later in the year.

The Air Force Academy is seeking qualified **junior officers as French, Spanish, and Russian language instructors.** Contact Capt. Reiner H. Schaeffer, Department of Foreign Languages, USAFA, Colo. 80840; AU-TOVON 259-3820/1.

The Air Force Sergeants Association's **Gateway Chapter**, Lackland AFB, Tex., is hoping to raise \$25,000 to erect a memorial at the base in **honor of Military Training Instructors** (see also p. 12). "As far as we can tell, it will be the first monument to a group of enlisted personnel in the Air Force. It will be viewed by thousands of visitors a year," said CMSgt. Robert Carter. Tax-deductible donations made payable to the AFSA MTI Monument Fund can be sent in care of the Chapter, P. O. Box 27008, San Antonio, Tex. 78227.

Died: Aviation pioneer Col. John A. Macready, USAF (Ret.), a three-time Mackay Trophy winner for high-altitude experimental flights, a world flight endurance record of more than

Caution: Misuse of Mails

An unidentified person once again has been mailing obscene letters, some of them containing what is purported to be classified defense material, and using as a return address the name and residence of Air Force Association elected officials. The letters we have seen recently were mailed in Phoenix, Ariz. The matter has been referred to the Postal Service for investigation.

Readers receiving these letters are asked to send both the envelope and the letter to AIR FORCE Magazine for transmittal to the Postal Service.

thirty-five hours, and the first nonstop flight across the US. Several of Colonel Macready's aviation achievements took place at McCook Field, Dayton, Ohio, where the official record keeper on his altitude flights was Orville Wright, a personal friend. Colonel Macready died at Castle AFB, Calif., in September. He was ninety-two. ■

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The Air Force Association's 1979 National Convention, marking the thirty-second anniversary of the founding of the Air Force, served as a showcase of the achievements, prospects, and challenges of US aerospace power.

AFA's 33d National Convention: A Searching Review of USAF's Requirements

BY EDGAR ULSAMER, SENIOR EDITOR

THE Air Force Association's thirty-third annual National Convention—held in Washington D. C., September 16–20—brought focus and meaning to a host of challenges and problems confronting US aerospace power.

The keynote of the Convention was struck with rare clarity and dramatic impact by a young C-141 pilot, Capt. Kathy LaSauce-Arlington: "America has to be told by someone," she asserted, "that our nation must pay the price for the best national defense, the best Air Force, manned by the best people. We cannot settle for anything less. The alternatives . . . are unacceptable." And she gave this charge:

"The Air Force Association has a big job to do and better get on with it." (See p. 86 for excerpts.)

Getting on with the job was what the 1979 National Convention was all about, undeterred by the presence of assorted antidefense groups who ringed the Sheraton-Park Hotel in a vain attempt to disrupt the AFA meeting. Because of efficient security arrangements—including both security personnel employed by the Association and the Washington, D. C., police department—no serious incidents or disruptions occurred.

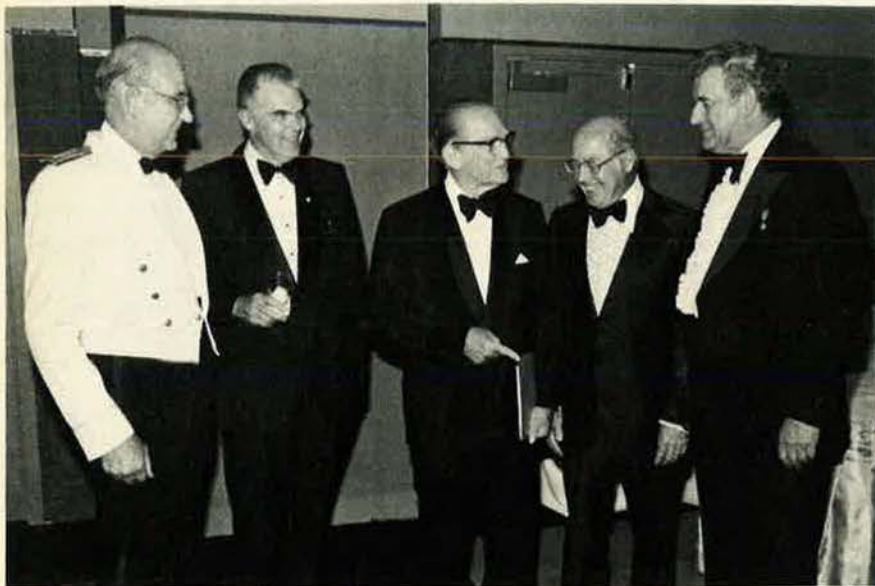
The nation's capital at Convention time was the scene of intense political activity. The AFA meeting

was in step with two principal contemporary developments: the Senate's debate of SALT II and its vote to counter the rapidly growing Soviet threat by boosting defense spending five percent annually over the next two fiscal years.

On the day before the Senate's surprising vote to increase defense spending above the level sought by the Administration, the Convention delegates unanimously adopted the AFA Statement of Policy for 1979–80 (p. 6) that highlighted the same point:

"We . . . urge that—prior to and independent of the Senate giving or withholding its advice and consent to ratification of the SALT agreement—the Administration and the Congress together revise in substantial form the Five-Year Defense Plan [that sets proposed funding levels over that period] to redress the worsening imbalance between US and Soviet military capabilities." Specifically, the Statement held that "defense expenditures for at least the next five years must be increased by no less than five percent annually in real dollars if major deficiencies are to be corrected."

A supporting document, AFA's Policy Paper on Force Modernization and R&D (p. 46), also accepted unanimously, made a similar point: "We see the clear need to maintain real growth of the Defense and Air Force budgets at a rate of at least five percent annually to offset the Soviet lead. This growth must include full compensation for all cost increases outside the control of the Defense Department and the Air



Gen. Lew Allen, Jr., Air Force Secretary Hans M. Mark, Sen. John C. Stennis, AFA's new President Victor R. Kregel, and outgoing President Gerald V. Hasler are shown prior to the Dinner Dance. Senator Stennis, the chairman of the Senate Armed Services Committee, received AFA's highest tribute, the H. H. Arnold Award for 1979.

Force. . . . And it must not be bought at the expense of further reductions in flying hours and curtailment of spares." Further, the delegates asserted that "keeping US defense spending at a rate of less than five percent of GNP while the USSR's ratio is above fourteen percent and gaining, in our view, does not constitute thrift but a prescription for eventual military inferiority and geopolitical paralysis."

The SALT II Issue

Concerning the pending SALT II accord, the delegates to the Convention, following a thorough and conscientious review of the pertinent factors, anchored AFA's new Statement of Policy on the assertion: "The arms-control process must be redirected to serve world security and the legitimate security interests of both signatories fairly and evenhandedly. The SALT II Agreement, in its present form, is unacceptable to the Air Force Association." At the same time, the Statement points out that "this Association consistently has favored carefully crafted arms-control arrangements that meet rigorous standards of evenhandedness, precise terminology, greater strategic stability, and improved Soviet international behavior. This support continues."

The Statement warns that "SALT threatens to become the central and overriding national security objective to which all strategic and other military planning and doctrines could be subordinated. Moreover, legitimate and essential military requirements are being deferred, canceled, or modified in order to conform more closely to the provisions of arms control. . . . SALT poses the risk of unilateral arms control, inhibiting US military and technological development, and producing a tranquilizer effect on the West. Yet, the accord does not achieve significant reductions in the Soviet Union's vast military arsenal."

USAF Chief of Staff Gen. Lew Allen, Jr., speaking at the Convention luncheon in his honor, took a position differing from AFA's on SALT II (see p. 63). The treaty, he said, "if placed into effect, can contribute to the maintenance of our security. It will place an upper

bound on the potential threat posed by the Soviets, particularly in the key area of ICBM capability, while permitting us to do what we must to match them in nuclear strength." Pointing to the importance of the treaty per se, General Allen said that equally significant "is the fundamental appraisal of our defense posture—and of the US-Soviet balance—that has been sparked by the SALT II ratification debate in the Senate. . . . It has sharply defined the central challenge of the 1980s: Maintaining the military balance with the Soviet Union."

As a result of this debate, General Allen said, "the public is coming to realize that the United States is no longer the world's preeminent power. Gone is the strategic superiority that we long enjoyed. . . . Given the momentum of Soviet arms programs, there is a real danger that the entire balance of military power will shift in favor of the Soviets." The imperative of the moment, he added, is to "convince the Soviets that an unconstrained arms race will not yield them superiority. This will require a difficult, often painful commitment by the American people." Although supporting arms-control agreements that maintain comprehensive military parity at reduced force levels, the USAF Chief of Staff acknowledged that "the Soviets are unlikely to agree to limit, let alone reduce, their forces unless they are convinced that the US can and will maintain parity. Consequently, I believe that we should pursue a course that combines resourceful negotiations to achieve equitable arms limitations where we can and vigorous strategic force modernization to ensure parity where we must."

MX—A Central Strategic Requirement

The need to modernize the strategic forces—and in particular the urgency of assuring the viability of the land-based ICBM force over the long term—received special emphasis during the Convention. The policy paper on Force Modernization and R&D makes this point: "The Air Force Association, now more than ever, views as the nation's foremost military priority the expeditious development and deployment of a survivably based

ICBM force. Further, we believe that such a force must provide for sufficient throw-weight to counter the dangerous tilt that the strategic balance has taken with the introduction of wave upon wave of new and exceedingly lethal Soviet ICBMs. We urge the Senate to remove all ambiguities from the SALT II accord that might impede or preclude development and deployment of a survivable American ICBM in optimum configuration and basing mode."

Asking for staunch, sustained support of the MX program by the Executive Branch and the Congress, the delegates warned that to do otherwise "would signal a lack of commitment and a lack of national resolve to maintain an adequate strategic posture and could weaken nuclear stability and strategic deterrence."

General Allen told the Convention that "MX is the first US strategic weapon system that has been explicitly designed to support both arms-control and force-modernization goals. Less costly to deploy than the Minuteman force, it will provide a potent, survivable ICBM capability, fully comply with SALT II constraints on new missile design, and allow the Soviets to verify the number of missiles deployed. . . . Our decision to proceed with the MX will make it clear to the Soviets that they will gain no strategic advantage in pursuing a nuclear arms race. MX will contribute to our key long-term SALT objective of maintaining ICBM survivability at significantly reduced force levels. . . . Full support for MX is essential to the pursuit of a combined arms-control and force-modernization strategy of the 1980s."

Brig. Gen. Guy Hecker, Hq. USAF's Special Assistant for MX, briefed the delegates in detail on the nature, status, and scope of the MX program. Underscoring the essentiality of survivable ICBM forces to US strategic deterrence, General Hecker listed a range of unique traits of these weapon systems and explained that only "ICBMs possess the characteristics of independence from warning since they are, by nature, highly survivable in their hardened shelters. . . . Without tactical warning, all the bombers

will perish on their bases, and a high percentage of the submarines, about fifty percent, will perish in the ports, as only fifty percent are at sea at any one time.

"The ICBM has flexibility in war-fighting in that it can be used at any time and it gets to the target in about thirty minutes. It takes as much as ten hours for the bomber. The ICBM is not subject to the same attack modes as the other [elements of the strategic triad]. That means that weapons and tactics used to attack aircraft and submarines are ineffective against the ICBM. ICBMs also have the lowest operating and support costs, and this is important when you are looking at a twenty- to thirty-year program. . . . They don't use fossil fuels [and] they can

withstand a Soviet first strike and be used during that strike, immediately after that strike, or in the months and years after."

Turning to the MX system as authorized for full-scale engineering development by the White House this summer, General Hecker pointed to its intrinsic ability to separate "force size from force survivability. . . . In previous times, to get more bombers to survive, you built more bombers. To get more MX to survive we don't introduce more missiles into the basing system, but rather we expand the number of shelters in which to conceal the missile. This is significant in that proliferation of the basing system through a large number of shelters in fact 'deMIRVs' the expand-

ing Soviet ICBM threat so that he never has enough MIRVs, or warheads, to attack our entire system. . . . The concept removes the incentive of a Soviet first strike since he will know that he cannot overwhelm the system."

The survivably based MX ICBM also provides an otherwise unobtainable, safe springboard for significant future arms reduction, according to General Hecker: ". . . with an MX system fully deployed, with our full confidence that it could never be overwhelmed by the Russians, and with the Russians having [an] MX system deployed in full confidence that they could not be overwhelmed, we then might find ourselves in a state of true equilibrium—so balanced that it might be

"THE LAST, BEST HOPE . . ."

Following are the remarks of nationally syndicated columnist George F. Will as he accepted AFA's Gill Robb Wilson Award for excellence in arts and letters. The award was made at the Secretary of the Air Force luncheon on Tuesday, September 18.

Thank you very much, Mr. Hasler, ladies and gentlemen, officers of the AFA, honored guests. I want to be as brief as possible—as brief as is consistent with expressing the full gratitude I feel for this honor. I want to thank you for the honor, and I want to thank you as a citizen for the kind of work you are doing for our country. These have been, as you know better than I, difficult years for those who support the armed services through thick and thin—or even through thin and thin. There is, however, at work in the country today a great corrective process. You are, I think, a principal cause of this. The country today feels, and ought to feel, and ought to be encouraged to feel, anxiety about the drift of events during the last few years. The American people are struggling in an inarticulate way to express the anxiety they feel.

It could be expressed in the six words that appear—all alone—as an epitaph on a tombstone in a rural churchyard in England. The six words on the tombstone are: "I told you I was sick." Evidently no one listened to the deceased.

It is still an open question whether people in government will begin to listen to the swelling of opinion from the American people in time. The people in this town are the ones who must do the listening. I know it has been fashionable, and comfortable, and painless to be dogmatically and systematically antidefense. I'm frequently reminded of the acerbic remark of George Orwell when a British pacifist left Great Britain in 1939 to live in California, where, said Orwell, the pacifist could preach pacifism behind the guns of the American Navy.

Today, a number of Americans, including some in my profession, practice free speech and free press beneath the sheltering umbrella of the American Air Force.

And it is time for people to understand how much depends on the success of our armed services. I am convinced from my experience as a communicator with large segments of the American public that the people are ready



The Gill Robb Wilson Award for Arts and Letters was presented to George Will for his incisive coverage of defense and foreign policy issues in his nationally syndicated column.

to hear, and, indeed, are eager to hear, the evidence about our current position, even though the evidence is disturbing.

That is, I think, a lesson of the SALT debate. It is a lesson of the current argument about events in Cuba. Indeed, events in Cuba crystallize in a fortuitous way the American people's understanding of the radical shift in the correlation of forces between 1962 and 1979.

But it still is clear to Americans that the United States is, in Jefferson's words, "the last, best hope" of the world, and it is clear to me that groups like AFA are the last best hope of the United States. I thank you for the honor you've conferred.

possible for us to then start reducing arms since further increases could not gain any strategic advantage. Therefore, why build more weapons?"

US Unity of Purpose and Spirit

"Restoring self-confidence and unity of purpose must be America's highest priority. It is time for the nation to put the self-doubts caused by the Southeast Asian war behind it and resume its role as the responsible and resolute leader of the free world. . . . Only then can the nation achieve the economic and military strengths without which peace cannot long endure," the Convention delegates avowed in AFA's new Statement of Policy.

Dr. Hans M. Mark, the Secretary of the Air Force, in similar fashion told the Convention that shifts in how the nation sees itself have taken America from the "optimism of the Eisenhower and Kennedy years to what today seems almost . . . a desire on the part of many people to withdraw from our status as a global power." But America is endowed with three strengths that assure she will remain a predominant power for the foreseeable future, according to Secretary Mark.

He cited "our nation's strength in agriculture and our people's strength in the creation and the application of new technology," and then added: "But most important of all is our third strength: We are the only nation . . . in the world that has succeeded in understanding what human freedom is and how to maintain it. As long as the 'boat people' of the world—and yes, the ballet dancers, too—want to come here rather than elsewhere, we shall be a force that simply cannot be ignored."

Touching on the same subject, Pulitzer Prize-winning columnist George Will, this year's recipient of AFA's Gill Robb Wilson Arts and Letters Award, told the Convention that there is at work today a corrective process countering the skeptical public attitudes toward defense requirements prevalent over the past decade and a half (see box for text). The American people, he suggested, "are ready to hear, and, indeed, eager to hear, the evidence about our current position, even



Lt. Gen. Lawrence A. Skantze, Commander of AFSC's Aeronautical Systems Division, and Senate Armed Services Committee staff member George H. Foster at Chief Executives Buffet.

though the evidence is disturbing." Americans are still convinced, he added, that the United States "is, in Jefferson's words, 'the last, best hope' of the world, and it is clear to me that groups like AFA are the last best hope of the United States."

Secretary Mark told the Convention of three fundamental goals he hopes to realize during his tenure of office:

"First, is to enhance our strategic deterrent forces;

"Second, is to improve our military airlift;

"Third, is to define the Air Force's new role in space operations and to help develop the appropriate organization to carry out this mission."

The Spotlight on People

The delegates minced no words in AFA's Policy Paper on Defense Manpower Issues (p. 50): "The Air Force is facing its most serious personnel problems in its history." General Allen stressed that "ultimately our capability rests not on weaponry but on people. . . . I am most concerned by recent evidence

that our ability to retain quality people is declining. . . . The problems of our sister services, particularly the Army, are even more serious. In the view of the Joint Chiefs of Staff, these recruiting shortfalls which affect both active and Reserve Forces constitute an alarming deficiency. However, the recent vote by the House of Representatives not to reestablish [Selective Service] registration clearly indicates that the American people are not persuaded that even this step is needed at this time."

USAF's manpower problems extend beyond enlisted recruitment, the Chief of Staff said: "We will not meet this year's recruitment goals for scientific and technical officers. Thus, we are losing ground in our efforts to close an already existing gap in these critical skills. Finally, we face an extremely serious problem in the retention of rated personnel. The exodus of young pilots and navigators has affected every aspect of our force planning."

USAF's first requirement, therefore, General Allen asserted, is to "reverse these people concerns. . . . This means responding to the doubts about pay and benefits which, left unanswered, erode our ability to attract and retain quality people. This does not mean creating a life of luxury. The military profession entails sacrifice, and Air Force members understand that. . . . In return, they ask nothing more than a fair standard of living and support for those benefits, explicit and implied, which they took into account in their decision to pursue an Air Force career."

Not only is pay comparability with the civilian sector falling behind, General Allen said, but "benefits are under attack on virtually all fronts, affecting not only service members but their dependents as well. I am especially concerned about the recent pressure to shift our policy of accompanied overseas tours, where possible, to shorter, unaccompanied tours." Proposals of this type, he warned, feed the climate of uncertainty and disillusionment and prompt people to leave the service. Calling for a better understanding by policymakers throughout government of the problems affecting military personnel, General Allen cited on the positive

side the President's recent decision to increase military pay by seven percent.

He added, "However, I recognize that these efforts [of raising pay] have not dissipated—indeed cannot dissipate entirely—the uncertainty that leads to current retention and recruiting problems. This will require a broader recognition by the American people that a strong national defense must be based on quality men and women as well as quality weapons."

Secretary Mark also recognized the people problem of the Air Force with eloquence and insight: "Nothing of real and lasting value can be accomplished without people who have imagination, ingenuity, and the drive to get things done. For my own part, and also for my colleagues here today, let me pledge that we will do whatever we can to make certain that such people join and remain in the Air Force. We will then be able to draw on the rich intellectual power of the Air Force and of this nation to make certain that we continue to have an Air Force that is second to none in the world."

Air Force people, appropriately enough, were the theme and subject of the Convention's first gala event, AFA's festive dinner honoring the twelve Outstanding Airmen of 1979. The evening's key speaker, Vice Chief of Staff Gen. James A. Hill, underscored the critical dependence of the Air Force on the excellence of its personnel by pointing at three "constraints that shape [USAF's] size, complexity, and vitality." Over the past ten years, the uniformed force was cut thirty percent; the greater technological sophistication of new equipment requires corresponding greater skills on the part of the people who operate these systems; and, lastly, the austerity in defense spending, compounded by spiraling inflation, placed yet another stress on Air Force people. As a result, he said, "ingenuity, efficiency, and willingness to sacrifice have become premium commodities in this environment, and that means quality people, pure and simple."

A Successful, Memorable Event

The thirty-third National AFA Convention continued an upward

trend. Attendance, once again, grew over previous years, from the Opening Ceremonies to the highly successful "Salute to Congress" program on Capitol Hill and the full house at the Aerospace Development Briefings. The quality of the latter event was captured vividly by General Allen, who, after a tour of the exhibits, remarked that he wished he could spend "two days" attending the extremely informative briefings. Pioneered by the Air Force Association to provide show-and-tell instruction on the latest developments in aerospace technology, this year's Aerospace Development Briefings were attended by congressional staff experts from the two Armed Services and other pertinent committees, in addition to a record turnout of government and industry officials, including a number of National Security Council staff officials.

The Chief Executives Reception and Buffet brought together congressional, White House, Pentagon, and defense industry leaders to honor Dr. Mark as the new Secretary of the Air Force. The event was preceded by AFA's "Salute to Congress" reception on Capitol Hill. Some 200 members of Congress attended to exchange views and information with Convention delegates.

Climax and finale of the 1979 National Convention was the black-tie dinner commemorating the founding of the Air Force as an independent service in 1947 and of the Air

Force Academy twenty-five years ago. The event served as the backdrop for the presentation of the Association's highest official tribute, the H. H. Arnold Award, to US Sen. John C. Stennis (D-Miss.), the venerable Chairman of the Senate's Committee on Armed Services and of the Defense Subcommittee of the Appropriations Committee. The Association cited Senator Stennis for his "brilliant national leadership . . . in fostering concern over the growing military threat to this nation and the widening world imbalance of power, thus inspiring Congress, the Executive Branch, and the public toward commitments to modernize our strategic forces."

In accepting the award, Senator Stennis pledged his "unrelenting support" of national defense requirements and praised USAF as the "greatest combat-ready . . . air force in the world today." The Air Force, he said, faces major challenges: "You will have to muster all your ingenuity to bring [the] complex [MX] system to fruition." Other difficult tasks confronting the Air Force include solving the "very difficult manpower problem" and, in the face of mounting inflation, finding ways to get more return from the shrinking defense dollar, he said.

The event's entertainment, a musical tribute to the Air Force Academy, featured the Singing Sergeants and the US Air Force Concert Band under the baton of Col. Arnald Gabriel.



USAF's Concert Band and the Singing Sergeants, directed by Col. Arnald Gabriel, were the stars of the Convention's Anniversary Dinner Dance.

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The 436th Military scores a big



Two Mackay

Flying crewmen of the 436th Military Airlift Wing, with their giant C-5 Galaxy airlifters, may be getting used to glory.

They've won the Mackay Trophy, oldest Air Force award, two years in succession. It's the first time any wing has done it.

The Mackay Trophy, presented annually for the most outstanding and difficult mission of the year, went to men of the 436th in 1977 for hauling an 85-ton "super-magnet" package nonstop from Chicago to Moscow.

The unique flight required 12 hours, with two in-flight refuelings, and a total of 20 sleepless duty hours for most of the 18 crew members.

Now, the 436th has won the Mackay Trophy for 1978. The award was made for extraordinary performance in the emergency airlift of supplies and soldiers to beleaguered Zaire during four critical days in May, 1978. The C-5 crews were cited for overcoming hazards of fatigue, limited en route support, and adverse operational conditions in a hostile environment.

Airlift Wing "first."



Trophies in a row.

In presenting the 1978 Mackay Trophy, USAF Vice Chief of Staff General James A. Hill said,

"The aircraft involved, the C-5, made the most meritorious flight for two years in a row, and that indicates that this unique airplane—whether in peacetime, in crisis situations, or in combat—is often the best aircraft and the only aircraft for the job.

"It also indicates that we can always count on a valiant effort from a group of men who are dedicated and mission-oriented and determined to get the job done.

"We sent these men halfway around the world into a very difficult situation—delivering vitally needed munitions and equipment. They completed that task and in the process overcame a series of very tough obstacles to bring their aircraft safely home."

The thousands of airlift workers at Lockheed salute the flying crew members of the 436th Military Airlift Wing for their superb achievement. And congratulate them on being the first two-in-a-row Mackay winners.

Lockheed C-5

Force Modernization and R&D

Adopted unanimously by delegates to AFA's Annual National Convention, September 18, 1979.

IT IS unrealistic and dangerous to expect the Air Force to go on doing more with less. The need to give the nation the best possible return on its investment in national security is clear.

The United States cannot afford to continue to live off past investments—in trained military people, operational readiness, force levels, weaponry, and research and development—in the face of growing Russian military might and increasing technological prowess, with Soviet military and geopolitical superiority clearly the end objective. The nation must not get caught short.

As the financial squeeze intensifies under inflationary pressures, compromises affecting people, readiness, force levels, and force modernization become unavoidable. Yet the budget provides no buffers for these changing realities and worsening prospects.

Clearly, the Air Force, at all costs, must preserve its most vital asset, the dedicated, irreplaceable professionals that are its core and its future. The choice, then, lies between deferring investments in readiness, or in force modernization, or in both. The alarming growth in Soviet/Warsaw Pact capabilities across the compass of military might, however, makes the latter less of a viable choice and more of a gamble with national survival at stake.

In short, we believe that Soviet levels of investment in strategic capabilities at three times our own rate over a protracted period are intolerable. This nation, whose military strengths pivot on qualitative rather than quantitative superiority, cannot allow the broad and consistent Soviet lead in military R&D investments to go unanswered. Lastly, keeping US defense spending at a rate of less than five percent of GNP, while the USSR's ratio is above fourteen percent and gaining, in our view does not constitute thrift but a prescription for eventual military inferiority and geopolitical paralysis.

We remain convinced also that budgetary gambits that defer spending in one mission area in order to shore up another that has greater political prominence won't cure the deficiencies of our defense capabilities.

We see the clear need to maintain real growth of the Defense and Air Force budgets at a rate of at least five percent annually to offset the Soviet lead. This growth

must include full compensation for all cost increases outside the control of the Defense Department and the Air Force. In particular, this *real* growth must be assured and buttressed in all phases of readiness such as war readiness materiel stocks and Operations and Maintenance (O&M). And it must not be bought at the expense of further reductions in flying hours or curtailment of spares.

MODERNIZING THE STRATEGIC FORCES

Central to national security, and undergirding all other elements of defense, are strategic forces. Yet, this pivotal area has been neglected most, first because of the Southeast Asian war and, thereafter, because of a series of program deferrals and cancellations motivated by political and economic factors.

Coloring the nation's view of what needs to be done in the strategic sector are hopes, promises, and illusions about the moderating influence of strategic arms control. To date this Association sees no evidence of SALT having curbed the growth in Soviet strategic might—already at a level far above legitimate defense needs.

SALT I has failed dismally in assuring the survivability of silo-based US ICBMs. At the root of SALT I's failure was the formal acceptance of a Soviet lead in the numbers of ballistic missiles that enabled the USSR to enhance and perfect its potential first-strike posture. Hence, we feel compelled to warn that arms control must not become an alibi for unilateral strategic arms reduction.

The Administration has acknowledged that the Soviet Union, over the next several years, is likely to surpass the US in the number of warheads carried by its strategic weapons and that these Russian warheads will be of far greater weight, size, and destructive power than our own.

The consequences of the continuing rapid proliferation in Soviet MIRVs, combined with dramatic, unanticipated gains in their accuracy, assures the Soviet Union of the ability by about 1981 or 1982 to destroy the bulk of our Minuteman ICBMs through a first strike.

The consequences—in the eyes of the world and in terms of the effectiveness of the nation's strategic deterrence—would be intolerable if there are no offsetting improvements in the composition of US offensive strategic forces. Not only could the USSR threaten the wholesale destruction of the only type of US weapons theoretically capable of confining nu-

clear war to military targets, but the Soviet Union—after such a first strike—would retain ample reserves of warheads for blackmail, coercion, or attacks on US and allied population centers and industry. Additionally, the Soviet Union would be able to destroy US cities and industry *without* even having to resort to its powerful and growing SLBM and bomber forces.

The Air Force Association, now more than ever, views as the nation's foremost military priority the expeditious development and deployment of a survivably based ICBM force. Further, we believe that such a force must provide for sufficient throw-weight to counter the dangerous tilt the strategic balance has taken with the introduction of wave upon wave of new and exceedingly lethal Soviet ICBMs. We urge the Senate to remove all ambiguities from the SALT II accord that might impede or preclude development and deployment of a survivable American ICBM in optimum configuration and basing mode.

Further, we urge Congress to provide the means for and to assure the continuing political commitment to vigorous development and deployment of a survivably based ICBM force. This Association, last year, expressed deep concern over intensifying trends toward a policy of gradually abandoning this nation's ICBM force—and thus the strategic triad. Our apprehension was then—and is today—that such an action represents a reckless tampering with a strategic peace-keeping mechanism that has stood the test of time and logic. We deplore the predilection of some US policymakers to retreat to an inflexible minimum assured destruction posture that could be overcome by a single Soviet technological advance.

The Air Force Association is heartened by the Administration's long-overdue acknowledgment of emerging threats to our silo-based ICBM force and by the President's concomitant decision to develop the survivably based MX ICBM. We urge, however, accelerated development of this vital weapon system. MX will provide for the continued viability of our ICBM force by combining the traits of concealment, hardening, and dispersion.

There must be no further delays in the development, flight testing, and deployment of the MX weapon system. To do otherwise would signal a lack of commitment and a lack of national resolve to maintain an adequate strategic posture and could weaken nuclear stability and strategic deterrence.

TRIAD'S AIR-BREATHING ELEMENT

The air-breathing element of the strategic triad will have to provide an increasing share of the deterrence role from the early 1980s on. With the cancellation of the B-1 production program, a major share of the deterrence burden has shifted to the air-launched cruise missile (ALCM) and its "shoot-and-penetrate" carrier—the B-52. The Association applauds the steady progress and well-coordinated development program for ALCM now under way.

We are confident this cruise missile will upgrade significantly the effectiveness of US strategic forces and provide a reliable hedge against possible Soviet breakthroughs in strategic offense and defense.

We remain convinced that only the *penetrating manned bomber*, in concert with the ALCM—the so-called "mixed-force concept"—can provide an enduring, effective means to thwart the growing Soviet defensive forces. Facing a range of bomber attack modes and penetration tactics combined with large numbers of low-flying, hard-to-detect ALCMs, the Soviets will be forced to develop a variety of defensive systems of high cost and limited effectiveness.

But the nation's commitment to the ALCM/B-52 system as the keystone of the air-breathing force demands a corresponding commitment to the continued viability of these weapon systems in the face of increasing sophistication of Soviet defenses. With a Soviet spending lead in the total area of RDT&E of about seventy-five percent, this won't be easy.

For the foreseeable future, a manned strategic penetrator, capable of making on-the-spot decisions and of reattacking specific targets, remains an essential element of deterrence. Similarly, the bomber force remains the only element of the triad that can be recalled after launch. Thus, an urgent requirement for the US is to upgrade the avionics and electronic countermeasure capabilities of the B-52 force to prolong its ability to operate in hostile airspace and to penetrate to Soviet targets. Upon completion of current Air Force and Defense Department studies of technological options for an advanced penetrating bomber, this Association believes, work on development and deployment of such a weapon system should be started promptly. With lead times what they are, we cannot expect to see operational deployment before the end of the next decade. Therefore, the nation must begin *now* to prepare for replacement of the aging B-52/FB-111 fleet.

It must also continue development efforts that ensure the survivability and enhance the effectiveness of our family of cruise missiles. Intensified efforts are needed to upgrade propulsion systems for longer range and greater maneuverability, reduce missile detectability through radar and infrared signature reduction, and provide high-payoff avionics enhancements such as lightweight ECM and retargeting sensors.

We believe that a sufficient supply of nuclear weapons (fissile) material must be provided for to prevent a slowdown in cruise missile deployment in the early 1980s and, subsequently, in MX deployment in the late 1980s.

COMMAND CONTROL AND COMMUNICATIONS

Because of cancellation of the B-1 and repeated delays in the development of MX, this nation must improve its "launch-on-assessment" option in the 1980s—until MX becomes operational toward the end of the decade. But a commitment to launch our ICBM force *before* the Soviet ballistic missiles can destroy

them constitutes a cosmic throw of the dice on a hair-trigger basis.

Hence the need to boost US warning, surveillance, and raid characterization far above their presently limited and inadequate levels. Both our surveillance and communications capabilities must be improved and expanded to provide the National Command Authorities (NCA) the flexibility to formulate alternate strategies and doctrines. Energetic R&D in surveillance systems—eventually—could lead to reliable, wholesale detection of ballistic missile-launching submarines and thus add a new dimension to this nation's strategic deterrence.

America's commitment to "deterrence through strength," in the view of this Association, must encompass an integrated space attack warning system, along with measures to improve the survivability of our space-based command control and intelligence assets on a comprehensive, long-term basis.

The Air Force's ASAT space weapon program—confined for the time being to research and development—represents a unique and vital insurance policy against unilateral Soviet advantage derived from that country's arsenal of operational space interceptor weapons. Without a vigorous US ASAT program—and the ability to counter Soviet space threats—the Soviet space weapons could shatter quickly the notion that space can remain a sanctuary from warfare. Even the national technical means of verification—in the main, space-based US systems for monitoring SALT—could become Soviet targets in the absence of countervailing US capabilities in space interception. It is regrettable, therefore, that the Administration has not given the Air Force permission to actually deploy a US space defense weapon system.

Also, this nation's quest for an agreement with the Soviet Union prohibiting test and deployment of space weapons must not cede unilateral advantages to Moscow. The USSR has capable, fully operational satellite killer weapons in its inventory. The US has not even completed the design of such systems. Signing such an accord now would leave the US extremely vulnerable, should the Soviet Union decide to abrogate the accord at some future date.

The US must support an effective national intelligence structure, with strong capabilities in military, political, economic, and technical fields, and possess assets for the conduct of covert political actions against hostile foreign governments or parties when deemed necessary in the national interest by the President and the appropriate congressional authorities.

STRATEGIC DEFENSE

The Soviet Union evidently plans to complement the emerging lead of its strategic offensive forces by further improving its strategic defenses and civil defense. The Soviet Union's ability to deploy rapidly its stored ballistic missile defense systems that can intercept the warheads of US ballistic missiles, especially from SLBMs, is evident and growing.

Thus, it becomes essential that the US develop the capabilities to assure that our ICBMs can reach their targets even in the face of strong Soviet ballistic missile defenses. Equally important, the US must carry out the necessary research and development to enable us to take appropriate action should the Soviet Union abrogate the SALT I antiballistic missile agreement of 1972.

Further, the tragic imbalance in air defense capabilities between this country and the Soviet Union takes on added, grim importance as Moscow moves toward a massive buildup—basically unchecked by SALT II—of its Backfire strategic bomber force. Also Soviet development and deployment of strategic cruise missiles appear to be only a matter of time and dictate the revitalization of US air defenses.

Essential here is that a sufficient number of E-3A AWACS systems be available to the air defense mission in wartime. We therefore believe that Congress should fund the programmed buy of E-3As as requested by the Air Force. Further, there is a clear need to modernize the manned air defense interceptor force involving aircraft configured for the air defense role and manned by crews proficient in this demanding mission.

STRATEGIC AND TACTICAL AIRLIFT ENHANCEMENT

US airlift and refueling forces are the basis of force projection and global mobility. At this time, major shortfalls jeopardize the nation's ability to meet fully its commitment to the defense of Western Europe, or to cope with contingencies in the Middle East and elsewhere. A near chronic condition of underfunding or denied funding of vital airlift and air-refueling enhancement programs caused these shortfalls. Continued procrastination will cause serious harm to the national defense posture. This Association sees fundamental airlift enhancement requirements in the following areas:

- The C-5 fleet must be modified expeditiously to restore service life and full operational capability. The C-5 is the only aircraft capable of airlifting outsize cargo, and any delays will seriously degrade the nation's force projection capabilities.

- The stretch and aerial refueling modification of the C-141 must be carried out without delay in order to enhance US strategic airlift capabilities.

- Continuation of USAF's C-X advanced medium STOL transport (AMST) program is likewise essential. The unique and much-needed capabilities of AMST must be added to our tactical and strategic airlift fleets without further delay, to redress critical shortfalls in outsize cargo capacity. Until that time, the C-130 procurement program must be continued.

- The incorporation of emergency cargo-convertibility features in civil wide-body aircraft of CRAF (Civil Reserve Air Fleet) is urgent and vital. Further, we urge Congress to provide the legislative means for a long-term program to increase the cargo-carrying capacity of the US civil airline industry.

- Reengining and modernization of the KC-135 tanker force should be undertaken at once to bolster force projection as well as airlift.

- Recent readiness exercises have underscored the far-reaching consequences of shortfalls over a range of airlift support equipment that, combined, reduce the nation's strategic and tactical airlift capabilities. This Association urges prompt correction of these deficiencies to restore the total airlift system to its full capacity.

TACTICAL AIRPOWER

Since USAF launched its broad-gauged tactical airpower modernization program in 1974, Soviet tactical airpower has advanced qualitatively and quantitatively at a rate far greater than anticipated at that time. Yet, our production rates are being reduced. We believe that meeting increasing threats with decreased capability, over the long run, is untenable.

Stretching out aircraft buys may keep production lines open longer, but that advantage often will be canceled by the sharply increased risk of an under-strength force. Soviet tactical airpower already outnumbered the equivalent US forces by about forty percent. Failure to maintain scheduled production rates will increase costs as well as the danger of the US losing its qualitative lead and at the same time increase the handicap of age creep, obsolescence, and an ever-shrinking force structure.

Aircraft delivery into the operational inventory of USAF's twenty-six active-duty and eleven Reserve and Guard fighter wings must be speeded up to safeguard the effectiveness of tactical airpower. Equipping the Air National Guard and Air Force Reserve with the authorized numbers of F-4s, A-7s, and A-10s is essential to improve the combat capability of the Total Force.

This Association considers the Advanced Tactical Fighter an urgent and critical requirement. There is in our view a need for a dynamic two-pronged program. First, the Air Force ability to carry out its tactical air mission under night/adverse weather conditions is dangerously limited. The first priority, therefore, is to modify one or more tactical fighter designs—either in production or under development—for night/adverse weather operation to provide aircrews with enhanced avionic subsystems for terrain avoidance and target acquisition under adverse weather conditions.

Secondly, the time to define the mission and performance characteristics of a follow-on tactical combat aircraft for the 1990s is now. Delays in this design definition—in light of lengthy lead times—could cause serious gaps in USAF's tactical air capabilities in the years ahead.

In short, attainment of an accurate adverse-weather weapon delivery system emphasizing development of a munition capable of effective multiple kills per pass against mobile targets is imperative. There also is an increasing need to concentrate on suppression of Soviet/Warsaw Pact defenses—and on standoff weapons in case these defenses can't be

suppressed—in order to meet the Air Force's basic tactical objectives.

In the area of theater nuclear forces, the requirement to counter the Soviet Union's massive deployment of highly capable MIRVed SS-20 intermediate-range ballistic missiles predominates. US medium-range ballistic missiles and ground-launched cruise missiles in Europe would redress the present imbalance and free USAF's nuclear-capable combat aircraft for other, equally vital, missions.

We see other top priorities in the areas of chemical-biological defenses, survivable and jam-resistant command control and communications (C³), air-base defense, and counter-C³ capability.

Similarly, there are pronounced needs in electronic warfare and the defense suppression area. The overriding requirement here is the expeditious development and acquisition of the EF-111 tactical jamming system.

This Association sees a similar urgency with regard to shortfalls in the availability and performance of air-to-air munitions. The advanced medium-range air-to-air missile (AMRAAM) should be developed and entered into production as soon as possible.

Also, modernization of the ARRS (Aerospace Rescue and Recovery Service) force to cope with an increasing threat environment must be started at once. The HH-53 force should be retrofitted with the Pave Low III (night and adverse weather) system. The H-X helicopter, the replacement of the aging H-3, should be developed and deployed as soon as practical to improve USAF's rescue and recovery capabilities.

RESEARCH AND DEVELOPMENT

The foundation of US national security is a sound, dynamic technology base consisting of basic research complemented by exploratory and advanced development. Since the mid-1960s, there has been an alarming erosion of this technology base relative to that of the Soviet Union. This problem is made worse through transfer to the Soviet Union of complex US computer and manufacturing technologies, ostensibly for nondefense purposes.

This erosion can be attributed to reduced US R&D funding, as a percentage of GNP, and a decline in the number of scientists and engineers. From three percent of GNP in 1964, R&D funding has declined continually and is predicted by the National Science Foundation to drop to two percent by 1985. There is a growing shortfall of qualified scientists and engineers available for defense R&D efforts. The shortfall reflects in part the national picture where the current shortfall—pegged at 60,000 scientists and engineers—is expected to grow to 100,000 by 1985.

Before the mid-1960s, the US technology base was clearly superior to that of the Soviets. Since then the Soviets have made a determined effort to close this gap through increased R&D funding as well as through a significant increase in the number of Soviet scientists and engineers. Soviet funding for R&D has seen a steady increase since the mid-1960s, until today the USSR is outspending the US by twenty-five percent a year. Moreover, the Soviets are producing

scientists and engineers at four to five times the US rate.

Results have been dramatic. Although the US still maintains technological superiority in some areas such as computer technology and avionics, the Soviet Union is pulling ahead in other areas such as high-frequency radio wave propagation and explosive power generation. In high-yield nuclear weapons, aerodynamics, and high-energy lasers, the US and Soviets appear to be dead even.

This Association considers imperative dynamic and vigorous US R&D programs in high-energy laser, particle beam, and other exotic weapons technologies to prevent technological surprise and assure US predominance in this potentially revolutionary field.

It is imperative that the US technology base be rejuvenated if the US is to maintain parity with the Soviets and prevent technological surprise in the future. Defense R&D must remain as one of the nation's top priorities. At the very least, funding in real dollars must grow at ten percent for basic research and five

percent for experimental development. Yet, this year R&D probably will experience no growth because of inflation. Additionally, new initiatives must be sought and implemented to reverse the trend in the declining number of scientists and engineers.

These goals were not met last year and seem to be in jeopardy in the coming fiscal year.

Yet, a strong technology base is paramount to offset to some extent the long lead times required by modern military production and procurement programs.

A diversified, robust technology base also is a *sine qua non* in this age of deterrence that involves cycles of moves and countermoves. We not only must be able to understand and correctly forecast the next Soviet initiative but be prepared to start implementing a technological counter before Moscow has fully fielded this initiative.

In sum, failure to respond to steadily increasing Soviet research and development—now accounting for about one-fourth of all Soviet defense spending—is the surest way to long-term US military inferiority. ■

AFA POLICY PAPER

Defense Manpower Issues

Adopted unanimously by delegates to AFA's Annual National Convention, September 18, 1979.

THE Air Force is facing the most serious personnel problems in its history.

Among officers, the problems center in pilots, scientists and engineers, and medical people. In the enlisted ranks, recruiting and retention problems are becoming more acute.

The loss rate of experienced pilots is the highest in history, and could increase. Scientific and engineering officers are in short supply because of a technology-inspired demand for them in the Air Force and a concurrent demand—at higher starting salaries and more attractive benefits—in the civilian sector. The physician shortage is plagued by civilian compensation scales so much higher that recruiting has become an almost impossible task.

In the enlisted area, the Air Force has only recently acknowledged officially that prospective recruits are increasingly hard to find. Many factors, not the least of which is a declining pool of eligible applicants, contribute to this problem. If it were not for the successful recruiting of women, and a reluctant but necessary increase in the enlistment of non-high school graduates, the recruiting problem would be more acute.

Overshadowing the recruiting concern is the real-

ization that retention is worsening, a phenomenon that cuts across the entire spectrum of manpower, both officer and enlisted.

It used to be that a military man or woman who reenlisted, or an officer who elected to stay on past the initial five or six years of obligated service, was likely to be a careerist. No longer. Trained middle-management people, both in the NCO and junior officer ranks, depart in increasing numbers.

These trends are significant, not only because they presage a basic structural weakening of the Air Force but—vastly more important—because they could lead to a collapse of US defense capability. There can be no military might without quality people.

The symptoms are plain. The causes are many and varied.

Unless they are convinced of a military threat, thoughtful men and women are understandably reluctant to accept a career designed to counter that threat.

Thus, AFA is gravely concerned about the Administration's reluctance to acknowledge the extent to which this country faces a military threat.

In a nationwide television speech, the President made the point that America was not at war anywhere in the world. While technically true, AFA strongly believes that this view overlooks the continually eroding US position vis-à-vis the Soviet military capability. We

feel that war indeed is being waged by the Communists—by economic means, by aggression through surrogates, and at the negotiating tables.

We urge the President to be candid with the American people, to acknowledge that there indeed is a threat, and to reaffirm that those who serve as a bulwark against it deserve fair recompense and deeper appreciation.

On the recruiting side of the personnel problem, AFA's 1978-79 Defense Manpower Policy statement pointed out that the goals and the objectives of the All-Volunteer Force were not being met. We called for a return to some form of Selective Service. We have not altered that stand. Despite recent congressional action, we believe that there is a need for continued national debate on some form of obligated service for our young men and women. New ideas and new thoughts are needed. All can contribute.

For example, one source has suggested that a direct exchange of a year's education for a year's service (similar to the World War II GI Bill) could attract highly qualified people. Such an innovative idea ought to be given serious examination and consideration.

Retention, no less than recruiting, also cries for original thinking. Nevertheless, many concepts remain valid. Why are people leaving? It is axiomatic in personnel management that to get good people you must pay good money. A force that faces annual pay caps cannot consider itself adequately compensated. AFA believes that the pay caps are indeed "penny-wise and pound-foolish."

Others cite the continuing erosion of those benefits and customs that have made the military profession unique. For example, the number-one benefit cited in numerous surveys of military people is that of responsive medical care. Congressional testimony by the service medical chiefs indicates that this situation is worsening. Actual experience by military people, dependents, and retired people bears them out. There are no easy answers, but the "original thinking" alluded to earlier is desperately needed.

Some mention changing social mores and increased opportunities for women that tend to make spouses less mobile. A spouse's career opportunities must be weighed in the making of the career decision to stay with the Air Force and its attendant PCS moves—or to leave. Still, others cite lack of recognition and attempts to take away earned benefits from veterans and retirees who have served faithfully. Little wonder that many of the best and the brightest military people, looking at how their predecessors are treated, understandably opt to leave short of a full career.

The military people problem demands concerted and original thinking. It will not go away, either by fiat or wishing. AFA urges the political leadership, DoD officials, the Air Force itself, and the American public, to bring their minds to bear on the problem.

* * *

With the foregoing in mind, AFA urges support for

the following positions, designed to enhance the lives of those now serving in the Air Force, those who have served honorably, and the civilian work force.

SELECTIVE SERVICE

As stated in our 1978-79 policy paper on Defense Manpower Issues, unanimously adopted by our delegates in National Convention, "We must face up to the problems that pervade the All-Volunteer Force. A return to some form of Selective Service System is necessary."

In saying this, we realize full well that the Air Force is not experiencing the degree of recruiting and retention problems faced by the other armed services. However, our Association's concern is with the *overall* state of national security. We sincerely believe that the All-Volunteer Force—and the Air Force has always prided itself on being a volunteer service—would be immeasurably strengthened if a strong Selective Service were in being.

We suggest, as a minimum, the following elements of a strengthened system:

(a) The system should be responsive to Department of Defense estimates of requirements for mobilization.

(b) The grass-roots control and monitoring system, *i.e.*, local draft boards, must be maintained. A system seen as "controlled by Washington" would not inspire credibility.

(c) Provisions for the registration and initial classification of all eighteen-year-olds would be necessary.

(d) A random sequence lottery, test-exercised each year, must be an integral part of this system. This would provide a sampling of the physical category of registrants. It would also let registrants know their status at all times. Primarily, it would ensure that the system be operable so that necessary induction for mobilization or for other categories deemed necessary, such as reserves, would be readily possible.

(e) The system should be capable of being integrated with a national service system.

COMPENSATION

AFA continues its strong opposition to "pay caps." Current law specifies that federal pay will be comparable to private sector pay. We acknowledge that the seven percent increase recommended this year is an improvement over last year's 5.5 percent. It is far short, however, of the comparability that the law specifies, that the federal work force deserves, and which AFA supports without reservation.

We support:

- Extension of full travel benefits to junior enlisted people both overseas and Stateside, and a family separation allowance for all married junior-grade EM.

- Enlisted per diem administered in a manner comparable to officer per diem.

- Equalized environmental differential pay for federal civilians.

- An increase of at least fifty percent in flight pay for officers and enlisted.

- Authority to pay needed pilots an annual bonus.

- Permanent authorization for enlisted flight pay.

- Equalized hazardous-duty pay for all ranks.
- Repeal of the law barring enlisted band members from performing for pay, off duty, as musicians.
- A variable Stateside housing allowance.
- Broader authority and more funds for enlistment and reenlistment bonuses, for both active-duty and Reserve component members.
- Educational and VA-type guaranteed home loan aid for Air Force Reservists and Air Guardsmen.
- Full reimbursement to mobile home owners for transfer expenses.
- Federal employee reimbursement of moving/travel expenses, upon retirement or death, to home of record (or equal distance), if the last move was for the convenience of the government.
- A program that would give enlisted members not accepted for continued service after their second or subsequent enlistment some separation pay similar to that now authorized for officers.
- A permanent system of flight pay for flight nurses similar to that now authorized for flight surgeons.
- An earned income credit within the income tax system for overseas-stationed people.
- An increase in government liability for personnel whose household goods are lost overseas by virtue of unforeseen evacuation.
- An increase in dislocation allowance rates. Current rates are rapidly falling behind the high cost associated with locating and settling in new quarters.
- The Technician Program for the Air Reserve Forces.

PERSONNEL POLICIES

AFA supports:

- The various innovative recruiting programs the Air Force Recruiting Service is pursuing.
- Enactment of the Defense Officer Personnel Management Act (DOPMA) as originally proposed by DoD, particularly the grade-stabilization provisions.
- Continuation of current military leave policies for federal employees who are also Reservists.
- A tax credit for employers who hire Reservists.
- A basic allowance for subsistence (BAS) for all enlisted personnel at all times.
- A cost-of-living allowance (COLA) for members overseas in a without-dependent status.
- Equitable military leave policies by employers that do not interfere with regular vacations for Reservists.
- Direct commissioning of qualified enlisted members.
- Adequate housing for all ranks or suitable reimbursement for the lack thereof.
- Payment of advance quarters allowance to personnel making a PCS move, a benefit that would cost the government nothing.
- An increase in military peacetime PCS compensation and allowances, equivalent to those available to federal civilian employees.
- Pending legislation to provide a statutory basis for the military legal assistance program.

We oppose:

- Imposition of parking fees on military installations for military and civilian employees.

SPECIFIC BENEFITS

Commissaries

We continue to oppose any actions that would reduce present commissary benefits.

Morale, Recreation, and Welfare (MRW) Activities

We support increased government support of USAF clubs, hobby shops, recreation centers, bowling alleys, golf courses, child-care centers, and other MRW activities so as to moderate user fee increases the service has been forced to adopt.

Military Health Care

We support:

- Improved incentives and professional support for military physicians and other health-care personnel, to attract and retain more of them.
- Dental care for retired members and for dependents of active and retired members.
- Continuation of current military veterinary manning levels and their vital functions.
- Lifetime coverage under CHAMPUS for military retirees without regard to Social Security, Medicare, or service-connected disability treatment by the VA, and removal of current nonavailability certificate requirements.
- Raising the CHAMPUS reimbursement rates from the eightieth to the ninetieth percentile.
- Improved administration of CHAMPUS to eliminate unnecessarily long delays in reimbursement.

Survivors' Benefits and Insurance

We support:

Improvements in the current Survivors' Benefits Plan (SBP) to include:

- Erasing the rule that requires survivors' benefits to be offset by proportionate amounts of the deceased spouses' Social Security.
- Amending the Federal Employee Group Life Insurance program to permit federal employees to contribute after retirement with continued coverage.
- Maintaining the goals of both the Air Force Enlisted Men's Widows and Dependents Home, and Air Force Village.

Retirement

The military pay studies conducted by a Presidential commission and within the Pentagon have produced the Administration-sponsored Uniformed Services Retirement Benefits Act. This proposed legislation, which awaits congressional action, contains a number of objectionable features, the worst being a nearly twenty-five percent reduction in lifetime retirement pay for members serving twenty years or more.

However, in accord with AFA's previous strong recommendation, the legislation would allow all members in service on the effective date to remain under the old system or elect the new one.

We oppose the reduction in long-term retirement benefits that would occur if the Defense Department's Uniformed Services Retirement Benefit Act becomes law. We also oppose the Act's Social Secu-

rity offset proposal.

We strongly oppose any action that penalizes retired service members working for the government by curtailing either their retired military pay or Civil Service salary.

We favor removal of the dual-compensation limitations for retired regular officers and oppose extension to other retirees.

We support:

- A new nondisability retirement plan on a reduced annuity basis for Reservists and Guardsmen who retire before age sixty.

- Lump-sum payments promptly on retirement for federal employees retiring for disability.

- A raising of the sixty creditable, inactive-duty training points ceiling for retirement purposes for Reservists and Guardsmen.

- Recomputation of retired pay to reflect changing military pay structure, especially for pre-1968 retirees.

- A three-year grace period for government-paid moves to home of choice upon retirement.

- Authorization for reserve enlisted people who have completed twenty active-duty years to retire regardless of attained age.

- The Air Force's retiree involvement program and call upon the Air Force to expand it and retirees to participate in it. Thus, the retiree, with his/her valued expertise, will continue to be an involved and contributing member of the Air Force family.

- Legislation that would permit receipt of immediate retirement pay to totally disabled Reservists who have otherwise qualified for Reserve retirement.

AFA opposes:

- The integration of Social Security and Civil Service retirement as called for in the Administration-recommended Civil Service Retirement program.

- Any reduction in the current semiannual cost-of-living adjustment formula for both military and federal retirees.

- The current so-called "Catch-62" provisions of federal law that require retired military people who have subsequently earned retirement from Civil Service to give up applicable credit for their military retired pay and replace it with Social Security at age sixty-two.

- The current guidance that requires members processing for retirement to "overcome the presumptions of fitness" together with the implicit assumption that if the retiree was "present for duty" or "fit for worldwide duty" the day before the processing, that person has, prima facie, no rateable disability. This slights the dedication that many members, of all ranks, have brought to their service and the fact that many have ignored physical discomfort and disability in order to accomplish the mission.

RESERVE OFFICER TRAINING CORPS

We urge an increase in the number of Junior ROTC units, and the full funding of authorized AFROTC scholarships.

We urge a review of the current monthly subsistence for AFROTC cadets to reflect the impact of inflation.

CIVIL AIR PATROL

We support continued federal funding of the Civil Air Patrol and favor increasing CAP's capability to perform its search and rescue missions.

We support increased disability and death benefits for CAP members injured or killed on operational missions.

VETERANS

We remain concerned about the public's inclination to forget, during peacetime, the sacrifices of both those who served during past wars and persons now serving on active duty. The problems encountered by Vietnam-era veterans, while moderating, remain a national concern. We specifically support:

- Greater government emphasis on training and jobs for Vietnam-era veterans.

- A continuing network of VA hospitals, fully funded and adequately staffed.

- An expanded National Cemetery system responsive to the needs of US veterans.

- Legislation allowing disabled veterans retired from military service on a longevity basis to receive both retired pay and VA disability compensation.

- Extension of time restrictions on eligibility for earned veterans education benefits.

- The current veterans preference system in federal employment.

- Increased emphasis on making psychological counseling available to veterans, especially Vietnam-era veterans.

- Retention of all records by the Veterans Administration of either veterans still living or eligible dependents still living within the present form or in some reduced format such as microfiche.

MIAs/POWs

We urge the government to continue to pursue the resolution of the status of all Americans identified as MIAs or POWs in Southeast Asia.

An insufficient, but increasing, body of knowledge exists concerning the long-term physiological and psychological effects of malnutrition, physical abuse, and apprehension as a result of prolonged imprisonment. Since some of these effects are starting to emerge, we support:

- A continued program for examination and monitoring of the former-POW population by recurring physical examinations, together with expanded centralized study efforts and an active exchange of information with other services, governmental and private agencies or organizations.

- A liberal presumption of unfitness, based chiefly on location and length of imprisonment, in connection with the services, Veterans Administration, and Social Security medical evaluation procedures to determine disabilities.

- Active encouragement of on-going and future legislative efforts by the Congress and initiatives by the Veterans Administration to further illuminate and provide for adequate care and benefits for this special population. ■

CAN YOU SPOT (C) HAVE IN

The answer is plain and simple — Boeing.

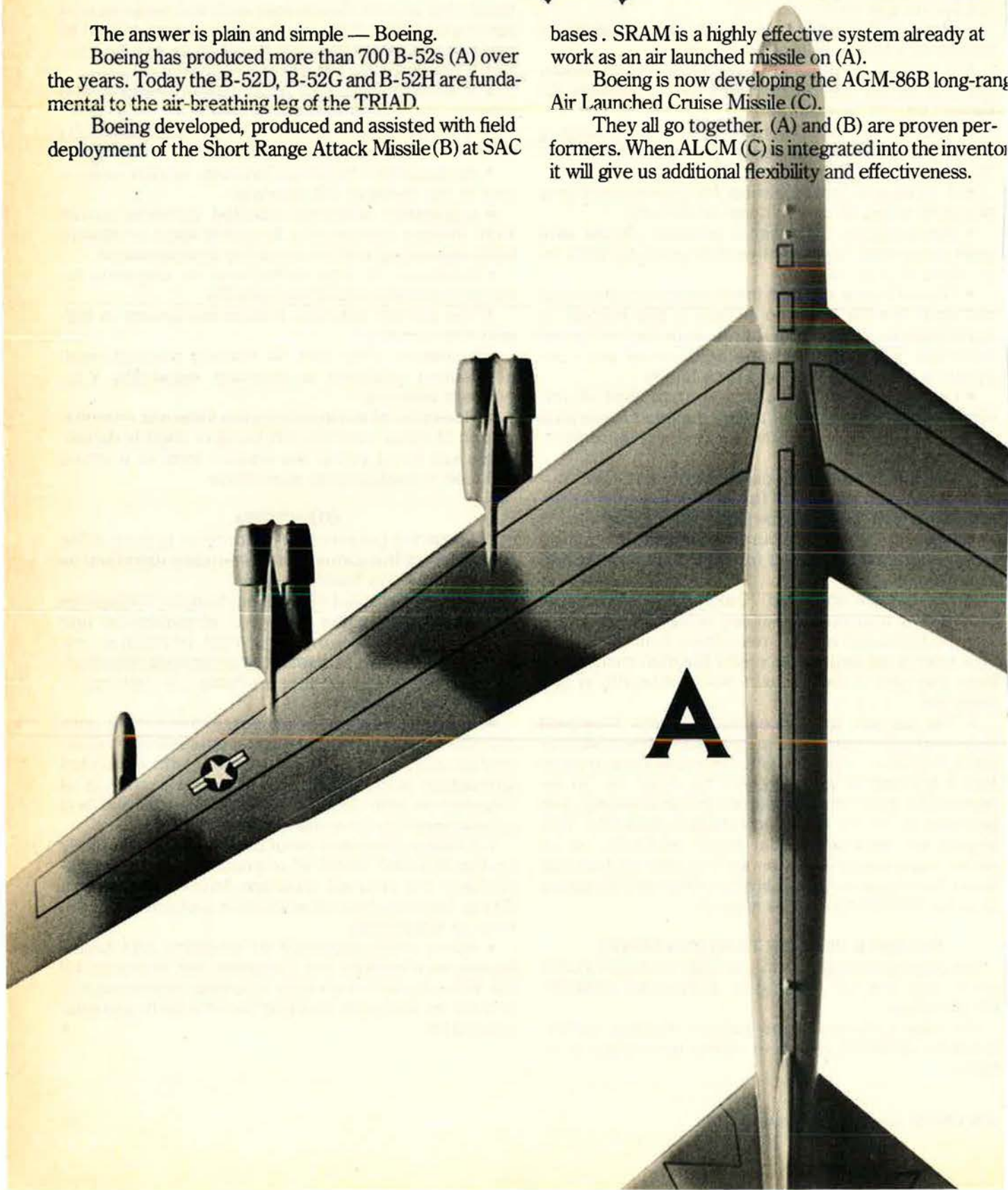
Boeing has produced more than 700 B-52s (A) over the years. Today the B-52D, B-52G and B-52H are fundamental to the air-breathing leg of the TRIAD.

Boeing developed, produced and assisted with field deployment of the Short Range Attack Missile (B) at SAC

bases. SRAM is a highly effective system already at work as an air launched missile on (A).

Boeing is now developing the AGM-86B long-range Air Launched Cruise Missile (C).

They all go together. (A) and (B) are proven performers. When ALCM (C) is integrated into the inventory it will give us additional flexibility and effectiveness.

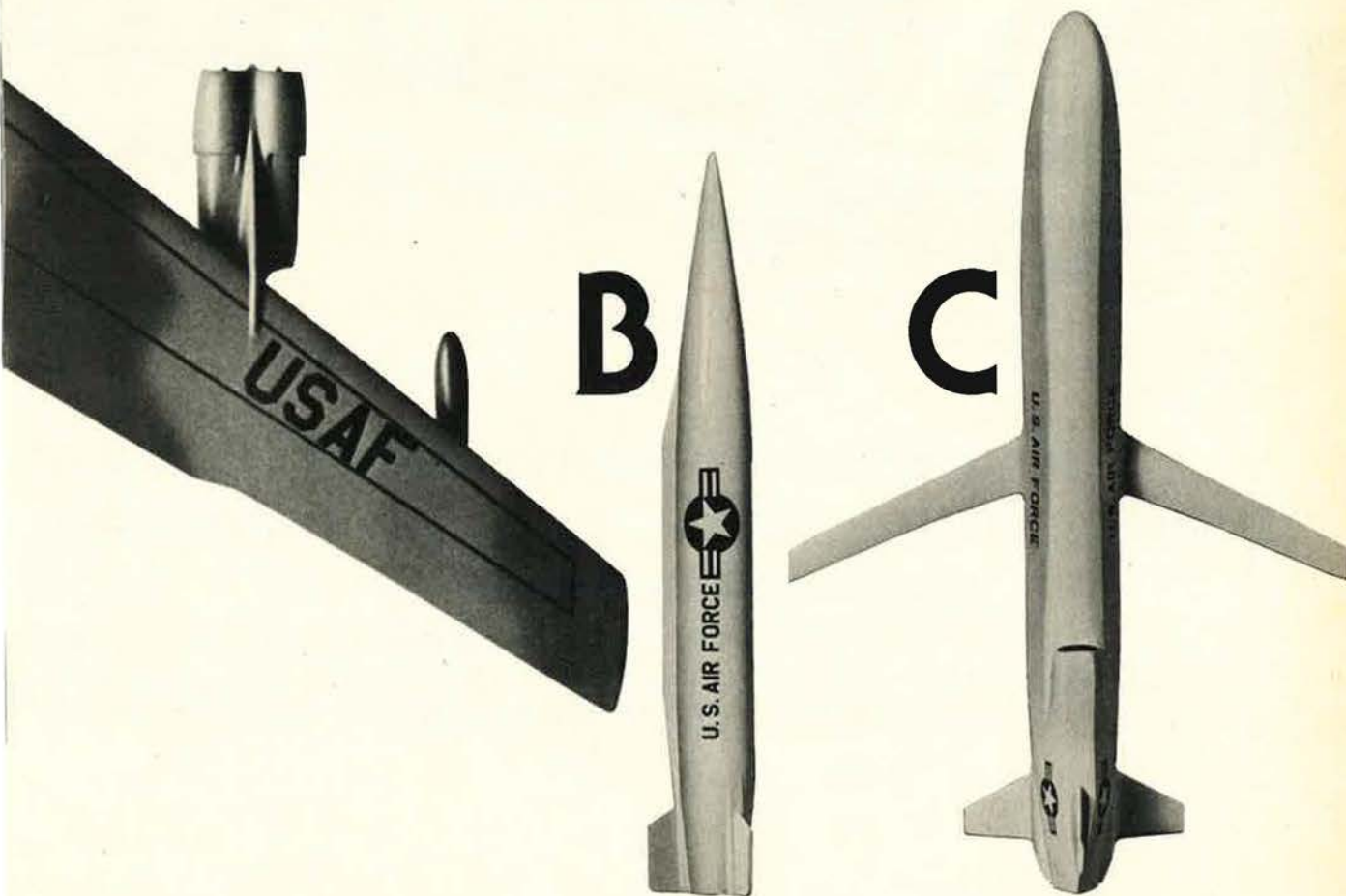


WHAT (A), (B) AND COMMON?

ALCM is more than an air launched missile that flies to target with pinpoint accuracy. It's a system of aircraft, support equipment, people, technical data and, of course, missile, designed to help B-52s destroy a wide variety of targets. All this has been tested in flights of the shorter-range ALCM-A during the ALCM advanced development program.

Result: The specifications were met or bettered. The experienced Boeing team now at work on the ALCM program is an unparalleled resource in the development and fabrication of air launched strategic missiles.

One thing for sure, if anybody is going to put it together right, (A), (B) and (C), it's Boeing.



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AWARDS AT THE 1979 AIR FORCE ASSOCIATION NATIONAL CONVENTION

AFA's AEROSPACE AWARDS

The H. H. Arnold Award (AFA's highest annual award)—To **Sen. John C. Stennis** (D-Miss.) for his brilliant national leadership, as Chairman of the Committee on Armed Services and of the Defense Subcommittee of the Appropriations Committee, in fostering concern over the growing military threat to this nation and the widening world imbalance of power, and thus inspiring Congress, the Executive Branch, and the public toward commitments to modernize our strategic forces. In so doing he has strengthened national defense and enhanced the nation's ability to safeguard peace.

The David C. Schilling Award ("The most outstanding contribution in the field of flight")—To **Maj. Dennis R. Mangum**, USAF, for applying his exceptional flying ability in fighter aircraft to the success of the F-15 Eagle, from conceptual design to operational employment, while serving as a test pilot and instructor pilot, and a developer of tactics.

The Theodore von Kármán Award ("The most outstanding contribution in the field of science and engineering")—To **Gen. Alton D. Slay**, Commander, AFSC, for inspired leadership and innovative management of the Air Force's research, development, and acquisition program, while serving as Commander, AFSC, thus providing the nation with a maximum return on its investment in new weapon systems, thereby enhancing national security and the national technology base.

The Gill Robb Wilson Award ("The most outstanding contribution in the field of arts and letters")—To **George F. Will** for his penetrating analysis and lucid coverage of defense and foreign policy issues in a nationally syndicated column that consistently heightens public understanding of and concern for the threats to our national security.

The Hoyt S. Vandenberg Award ("The most outstanding contribution in the field of aerospace education")—To the **USAF Special Operations School**, Hurlburt Field, Fla., for presenting formal instruction in a variety of highly sophisticated subject areas, including limited-force crisis-response planning factors, attitudes in dealing with people from other cultures, and the broad aspects of international terrorism. (Accepted by **Col. Richard A. Dutton**, Commander.)

The Thomas P. Gerrity Award ("The most outstanding contribution in the field of systems and logistics")—To **Col. Thorne W. Longworth**, USAF (Ret.), for developing and managing many innovative programs which led to significant advancements in strategic logistic support, while serving as Director of Aircraft Maintenance, Deputy Chief of Staff, Logistics, Hq. SAC, Offutt AFB, Neb.

AFA/Veterans Administration Employees of the Year—To **Donald Morton**, Veterans Services Division Training Coordinator, and **Mrs. Lydia Wilson**, Veterans Benefits Counselor, VA Regional Office, Cleveland, Ohio, for initiating and implementing a special program to stimulate and assist Spanish-speaking veterans in qualifying for employment.

AFA CITATIONS OF HONOR

Benito P. Botteri, Wright-Patterson AFB, Ohio, for superior performance as Project Engineer and Chief of the Fire Protection Branch of AFSC's Aero Propulsion Laboratory. He has pioneered in the development of fire-detection systems, is considered the foremost Air Force consultant on aerospace vehicle fire protection, and has contributed a vast body of knowledge to the field of aerospace fire safety.

Maj. James W. Christian, for demonstrating scientific and engineering proficiency of the highest order as manager of the Thrusted Replica Decoys Program at SAMSO, thereby strengthening the US arsenal of penetration systems and contributing significantly to national security.

Capt. Connie J. Engel, 97th Flying Training Squadron, Williams AFB, Ariz., for superlative performance not only in her primary role as a T-38 instructor pilot but also in representing the Air Force in an outstanding manner through numerous speaking engagements and on national television.

MSgt. Wayne L. Fisk, Det. 1, 33d Aerospace Rescue and Recovery Squadron, Clark AB, the Philippines, for improving the Air Force's combat rescue capability by applying his wartime a rescue experience and his personal expertise as a parachutist, emergency medic, scuba diver, and mountain climber to mission planning and survival instruction.

Maj. Robert A. Heyart, ANG, Commander, 191st Combat Support Squadron, Selfridge ANGB, Mich., for stimulating and assisting enlisted people to further their education through enrollment in the Community College of the Air Force, thus accelerating their professional growth and enhancing the recruitment and retention posture of the Air Reserve Forces.

Lt. Thomas E. Kraft, Aircraft Commander, Det. 1, 33d Aerospace Rescue and Recovery Squadron, Clark AB, the Philippines, for superior flying performance as pilot of an air rescue helicopter on a mission in the South China Sea. In an exhausting recovery effort involving three flights, Lieutenant Kraft directed his crew in saving fourteen people from a sinking cruiser.

Col. Demos T. Kyrazis, Chief, Laser Development Division, Air Force Weapons Laboratory, Kirtland AFB, N. M., for exceptional scientific creativity and mastery of difficult technological problems related to critically important high-energy laser programs.

Lt. Gen. John B. McPherson, USAF (Ret.), President, Air Force Historical Foundation, Bolling AFB, D. C., for vigorous, imaginative leadership that revitalized the Foundation through his recognition and understanding of its mission of recording and preserving the heritage, traditions, and knowledge of the United States Air Force.

SMSgt. Gordon E. Roberts, NCOIC Munitions Service Branch, 43d Munitions Maintenance Squadron, Andersen AFB, Guam, for applying innovative managerial techniques to munitions loading and weapons release functions of the B-52D aircraft, thus increasing the combat readiness of SAC's 43d Strategic Wing on Guam.

Capt. Scott Teel and **Capt. Gary H. Williams**, 23d Tactical Air Support Squadron, Bergstrom AFB, Tex., for superior airmanship, courage, and professional competence while piloting an O-2A. During a night operation, Captain Teel crawled outside the aircraft and manually lowered a malfunctioning landing gear while Captain Williams piloted the aircraft at minimum controllable airspeed.

Air Reserve Personnel Center, Denver, Colo., for implementing the new and expanded Survivor Benefit Plan of the Air Reserve Forces with an unprecedented information program conducted on time, within the spirit and intent of the law, and at minimum cost. (Accepted by **Col. Frank Hardee**, Commander.)

Twenty-first Air Force, McGuire AFB, N. J., for successfully completing, during 1978, the quick reaction movement of 6,000 passengers and 10,000 tons of cargo in more than 600 emergency airlift missions to Africa, the Middle East, and South



AFA National President Gerald V. Hasler, right, presents the Association's highest annual honor—the H. H. Arnold Award—to Sen. John C. Stennis (D-Miss.).

rica, and within the US, all in addition to normal flying operations. (Accepted by Maj. Gen. Thomas M. Sadler, Commander.)
Fighter Interceptor Squadron, Griffiss AFB, N. Y., for consistent excellence in operations, including a clean sweep of all seven awards in the F-106 category in William Tell 1978, the Air Force Missile Safety Plaque, and the award for Aircraft and Munitions Maintenance Excellence. (Accepted by Lt. Col. Bruce Worrell, Jr., Commander.)

William Moran, Director of Operations, Hq. Air Force Commissary Service, Kelly AFB, Tex., for significant contributions to the success of the Air Force Commissary Service, from its organization and activation to its far-reaching improvements in management effectiveness, customer service, and appearance, AFA honors him as Air Force Civilian of the Year.

Maj. John D. Blair, Carswell AFB, Tex., for outstanding ability and professional skill which resulted in the resolution of major issues and problems and the implementation of new programs and procedures for more than 5,000 active-duty members and 13,000 retired people, while assigned as Chief, Consolidated Base Personnel Office at Carswell AFB, Tex., AFA honors him as Air Force Personnel Manager of the Year.

AFA MANAGEMENT AWARDS FOR LOGISTICS

AFA Executive Management Award—To **Daniel Flores**, for exceptional performance as Chief of the Aircraft Production Branch, Aircraft Division, San Antonio ALC, Kelly AFB, Tex., leading his organization to unprecedented levels of production, productivity, and mission responsiveness, resulting in exemplary support to Air Force programs of national significance, thus contributing to increased readiness of Air Force combat commands.

AFA Middle Management Award—To **Maj. George Kastanos**, for superior performance as Chief, Utilities Division, Directorate of Operations and Maintenance, DCS/Engineering and Services, Hq. AFLC, Wright-Patterson AFB, Ohio, contributing immeasurably to Command energy conservation and the attainment of Air Force energy goals, which will have a profound effect on future implementation of innovative energy technology.

AFA Junior Management Award—To **Capt. Sidney L. Taylor**, for outstanding logistics management as Deputy Chief, Production Management Branch, Communications-Electronics-Meteorological Management Division, Sacramento ALC, McClellan AFB, Calif., by providing vital logistical support to critical DoD CEM systems involved with command and control of our tactical and strategic forces while at the same time initiating actions that saved hundreds of thousands of dollars.



With AFA President Hasler looking on, seated, right, AFA National Secretary Jack C. Price presents the Theodore von Kármán Award to AFSC Commander Gen. Alton D. Slay.

AFA MANAGEMENT AWARDS FOR SYSTEMS

AFA Distinguished Award for Management—To **Brig. Gen. Richard K. Saxer**, for a series of exceptionally successful and innovative management actions as Deputy for Aeronautical Equipment, ASD, AFSC, Wright-Patterson AFB, Ohio, which were key factors in raising the organization's performance rating to outstanding and resulted in markedly increased productivity, morale, and quality of the unit's output.

AFA Meritorious Award for Program Management—To **Lt. Col. Paul T. McEachern**, for exceptionally meritorious service as System Program Director, PAVE PAWS System Program Office, Deputy for Surveillance and Control Systems, Hq. ESD, AFSC, Hanscom AFB, Mass., which contributed significantly to the development and acquisition of a high-priority Phased Array Warning Radar System and exemplified the highest standards of performance and professionalism.

AFA Meritorious Award for Support Management—To **Charles E. Porter**, for exceptionally meritorious service as Director of Programs and Budget and Director of Cost Analysis, Comptroller, ASD, AFSC, Wright-Patterson AFB, Ohio, which led to outstanding service in support management to the A-10, F-15, F-16, EF-111, and B-1, contributing immeasurably to a cost-effective weapons acquisition program and enhanced defense posture.

AIR NATIONAL GUARD AND AIR FORCE RESERVE AWARDS

The Earl T. Ricks Memorial Award—To **Capt. Harry Brooks** and **Capt. John S. Payne**, 187th Reconnaissance Group, Alabama ANG, Dannelly Field, Ala., for outstanding airmanship on September 10, 1978.

The Air National Guard Outstanding Unit Award for 1979—To the **165th Tactical Airlift Group**, Savannah Municipal Airport, Savannah, Ga. (Accepted by Col. James W. Buckley, Commander, and Lt. Col. William P. Bland, Jr., Director of Operations.)

Air Force Reserve Outstanding Unit Award for 1979—To the **514th Military Airlift Wing**, McGuire AFB, N. J. (Accepted by Col. Alan G. Sharp, Commander.)

The President's Award for the Air Force Reserve—To the **357th Tactical Airlift Squadron**, Maxwell AFB, Ala. (Accepted by Maj. Ronald K. Peacock, Aircraft Commander.)

SPECIAL CITATIONS

Mountain Home AFB, Idaho, the second consecutive year for outstanding support of the Air Force Recruiter Assistance Program. (Accepted by Col. V. R. Christiansen, Commander.)

Air Force Recruiter of the Year—To **SMSGt. Ivy L. Armstrong**, 3546th USAF Recruiting Squadron, Houston, Tex., for demonstrating the highest degree of personal professionalism, integrity, and resourcefulness, and for instilling an unequalled spirit of competition within the recruiters of his unit.



Columnist George F. Will, here flanked by USAF Secretary Hans M. Mark and ATC Commander Gen. Bennie L. Davis, was this year's recipient of AFA's Gill Robb Wilson Award.

In his address to the delegates, Secretary Mark traced three decades of Air Force progress based on the 1945 study "Toward New Horizons" to illustrate the need for Air Force people who can help build the foundation for tomorrow's aerospace power by supplying . . .

The Critical Element— Long-Range Thinking

BY THE HON. HANS M. MARK, SECRETARY OF THE AIR FORCE

I AM very pleased and honored to be here today and to have the opportunity to speak to you about the Air Force and about some of the important things that we should be doing. I think it is particularly appropriate that we have just seen the von Kármán Award presented to Gen. Alton D. Slay. Personally, I know of no one who is more qualified to receive such an award and who has done more to earn it than Al Slay. Let me start by extending my most sincere congratulations to General Slay for this important honor.

In view of the award made here in the name of the late Professor Theodore von Kármán, I thought it might be appropriate to talk a little bit about von Kármán and the crucial role he played in the creation of the institution that we call the Air Force. Von Kármán was born a Hungarian. He was one in the most remarkable constellation of refugees who came to this country from Central and Eastern Europe. These people were, so to speak, the "boat people" of an earlier generation and it can accurately be said that modern American science and technology, as well as much of our military power, is based to a really surprising extent on the work of this group.

Von Kármán was born in 1881 and was twenty-two years old when the Wright brothers first demonstrated powered flight. He was an absolutely remarkable person who had to his credit many important scientific and engineering achievements. It was von Kármán who, together with an altogether different but equally remarkable man, pointed the way for the newly independent Air Force and laid the intellectual framework for modern



"There is no doubt in my mind that our dependence on space-based systems will increase dramatically in the coming years. . . ."

American airpower and for the theory of strategic deterrence.

The other individual in this critical work was, of course, General of the Air Force Henry H. Arnold. Just as von Kármán grew to maturity before man flew, Arnold learned his trade at the feet of the inventors of the airplane—the Wright brothers themselves. Hap Arnold was one of the first flying officers in the US Army and he lived through the entire period of the development of modern military aviation, from the Wright Flyer to the B-47.

The related careers of Dr. von Kármán and General Arnold illustrate just how new our business really is. I met von Kármán several

times when I was just starting out as a young scientist and I know that there are people sitting in this room who knew and worked with General Arnold. That makes us, as it were, the second generation, and being so close to the source of things gives us a perspective that is perhaps not quite the same as that of our colleagues in the older military services. It also puts a greater burden on us, because there is still a lot of thinking concerning the reasons for our existence that has not been properly recorded. We simply do not have the long traditions that exist in the other military services, and we need to pass on—in one way or another—those things that will otherwise be lost.

I am very concerned about the future. I am very concerned about established ways of thinking about it. By an accident of the calendar, I happen to be the last Secretary of the Air Force in the 1970s and, in a few months, I will be the first one of the 1980s. This accident of timing puts a special responsibility on me to try to help formulate some new ideas that we may wish to consider. All of which brings me back to von Kármán and General Arnold.

The Arnold Axioms

At the end of the Second World War, General Arnold was, as you know, Chief of the US Army Air Forces, and Dr. von Kármán was the Director of the Army Air Force's newly created Scientific Advisory Group. This group, of course, was the forerunner of today's Air Force Scientific Advisory Board. At General Arnold's request, the Advisory Group prepared a report that was issued on December 15, 1945, called "Toward

New Horizons." It is a document of fundamental importance and one which in my opinion can be regarded as the "Declaration of Independence" of the Air Force. The volume set out with unusual clarity the basic assumptions that led to the creation of the Air Force as a separate military service two years later. Just as important, the document is also one of the most interesting efforts at long-range thinking that I have seen. Notice that I have deliberately used the word "thinking" rather than "planning" because it is, of course, the thinking that really counts.

The first few pages of "Toward New Horizons" consist of an exchange of letters between General Arnold and Dr. von Kármán in which the study's fundamental ideas were outlined. It might be worthwhile to examine this correspondence and to see which ideas are still applicable today, thirty-five years later, and which will require new thinking on our part.

Arnold's letter to von Kármán, dated November 7, 1944, started with several axioms that he believed were fundamental for the development of an Air Force that would serve the interests of the nation in the long term.

The first of these axioms was that, "We, as a nation, are now one of the predominant powers." The important word to me in his statement is the word "now." It is interesting that, as little as thirty-five years ago, the circumstance that we were one of the predominant powers in the world seemed to be a new thing to one of our senior military leaders contemplating the world situation. Since then, we have gone through the optimism of the Eisenhower and Kennedy years to what today seems almost to be a desire on the part of many people to withdraw from our status as a global power.

There is no doubt in my mind that General Arnold's statement was correct in 1945 and remains correct today. Granted, I would modify it somewhat by saying, "We, as a nation, are *still* one of the predominant powers." But then I would add, "And we will remain one into the foreseeable future."

In my view there are three principal reasons why—whatever else may happen—the world will have to

Secretary of the Air Force Hans M. Mark began his professional career as a research physicist with the University of California at Berkeley and the University's Lawrence Radiation Laboratory. From 1964 to 1969, he was chairman of the Department of Nuclear Engineering. In 1969, Dr. Mark was named head of NASA's Ames Research Center, a position he held until his appointment as Under Secretary of the Air Force in July 1977. On July 26 of this year, Dr. Mark became the thirteenth Secretary of the Air Force.

reckon with us as a major power. These are our nation's strength in agriculture and our people's strength in the creation and the application of new technology. Both of these strengths are permanent in that they are related to geography and national traditions that will not change in the short term. But most important of all is our third strength: We are the only nation, and the first nation in the world, that has succeeded in understanding what human freedom is and how to maintain it. As long as the boat people of the world—and yes, the ballet dancers, too—want to come here rather than elsewhere we shall be a force that simply cannot be ignored.

The second point General Arnold made in his letter is that "Offensive, not defensive weapons win wars." There is no question that this statement is true from a historical perspective since it is only the capability to do damage to a potential enemy that carries with it the ability to win wars. Guns, not armor-plate, are the essence of victory.

In today's context I would probably modify General Arnold's statement somewhat. Since we now have a strategic balance, which uses offensive weapons not to fight wars, but to deter them, I would say "Offensive, not defensive strategic weapons deter nuclear war." I believe that when put this way, Arnold's statement forms the theoretical basis for the strategic deterrent balance that we have maintained for the past thirty years. There is no doubt that the balance rests primarily on offensive weapons—on our ability ultimately to do unacceptable damage to a potential enemy—rather than on our ability to defend ourselves. The maintenance of a strategic balance is, and remains, a first-priority objective of our national defense and of the Air Force.

Arnold's third important axiom was this: "It is a fundamental principle of American democracy that

personnel casualties are distasteful. We will continue to fight mechanical rather than manpower wars." I believe that this statement is still true and it is of course this concept that has led to our intense application of high technology in the equipping of our military forces. Furthermore, it is the application of high technology that continues to put a great premium on having the highest-quality people in the Air Force.

In principle then, General Arnold's axioms are still valid today, with some modifications which derive from changes in the political situation.

Von Kármán's Goals

It might be interesting at this point to look at von Kármán's reply to General Arnold, since von Kármán outlined in it the technical steps that would have to be taken to make it possible for the nation to execute the strategic principles that General Arnold had outlined.

Von Kármán submitted the "Toward New Horizons" study to General Arnold with a cover letter dated December 15, 1945. He started out by making a statement about nuclear explosives, which, by the way, had been demonstrated to work in practice in April 1945, after Arnold had written his letter. Von Kármán wrote, "The discovery of atomic means of destruction makes a powerful Air Force even more imperative than before." He and his colleagues devoted Chapter 1 of Volume I of the study to expanding that thought. In doing so, they laid out the technical foundation for what is now the strategic nuclear deterrent. All of the technical possibilities, the long-range bombers and the long-range rockets, were discussed and most of what was suggested has actually been executed.

There can be no question that the maintenance of strategic deterrent is our first-priority objective. General Allen said the same thing in his

speech yesterday much more eloquently. But there has been a change; we have introduced something new. We still have bombers and the land-based deterrent and we have put much effort into the development of modern versions of both of these. But, in maintaining the strategic balance, we have also engaged in negotiations about strategic arms limitation with our potential adversaries. These negotiations and the treaties that result from them are an important part of the strategic balance itself. Come what may, we will have to continue both processes. We will have to negotiate and develop treaties and build the weapon systems necessary to maintain the balance.

In another part of his cover letter, von Kármán made some predictions. He said that "The next ten years should be a period of systematic, vigorous development devoted to the realization of the potentialities of scientific progress," and he went on to detail some specific goals: supersonic flight, pilotless aircraft, all-weather flying, perfected navigation and communication, remote control and automatic fighter and bomber forces, and aerial transportation of entire armies.

Most of these goals have also been achieved and, furthermore, they were accomplished in a time period that was perhaps a little shorter than the one von Kármán had in mind. Capt. Chuck Yeager flew the X-1 to supersonic speeds only two years later, and, in the 1960s, aircraft with supersonic capability were introduced into the combat inventory. The 4,000,000 people in Berlin were entirely supplied by air when the Russians clamped down their brutal blockade on that city in 1948—only three years after von Kármán pointed out the vital importance of massive air transport. Although this particular airlift operation did not involve the transport of military forces, it was the first really large-scale demonstration of the political importance of airlift and what could be done with this new capability. Airlift remains one of our foremost priorities. We must continue to enhance this capability, especially in the strategic area, and continue to use it imaginatively for positive political effects.

The Frontier of Space

It is really remarkable that General Arnold's strategic insights and Dr. von Kármán's technical responses have had such long-term validity. It is equally important, however, to ask the question, "What did they miss?" In reading through "Toward New Horizons" and the various papers written by von Kármán and his colleagues in that time period, the answer is obvious. They missed the importance of space operations and what they would imply for the future. It is a puzzling omission because von Kármán's report does talk at length about the potential application of intercontinental rockets, but, for some reason or other, he did not take the next step, to look at what could be done with these rockets in terms of creating earth-orbiting operational capabilities. A few years later, a group of people that included some who put together "Toward New Horizons" did, in fact, conduct a study at the Rand Corp. in which space operations and their possible military applications were extensively discussed. However, this document did not seem to have much impact; the country ignored the importance of operations in space until the Russians jogged our minds with their orbiting satellite, Sputnik-1, in October 1957.

Since then, operations in space have become a very important part of—among other things—the strategic nuclear balance. The Strategic Arms Limitation Agreements which we now have and those which are being considered are part and parcel of this balance. These agreements would not be possible without the so-called "National Technical Means" of verification which you all know are, in part, space-based sensors that tell us whether the other side is living up to the agreements that have been made.

There is no doubt in my mind that our dependence on space-based systems will increase dramatically in the coming years for communications, indications and warning, and reconnaissance. The advent of the Space Shuttle will vastly increase our capability to operate with man in space, and it is clear that many of the operations will have very impor-

tant consequences for the national security. We must be alert to exploit these new possibilities and to make sure that they are applied as rapidly as possible to do the things that will enhance our strategic posture and otherwise further our national goals.

These, then, are the three things that I would like to try to do in the time that I have the honor and the privilege of being with you:

First, is to enhance our strategic deterrent forces;

Second, is to improve our military airlift;

Third, is to define the Air Force's new role in space operations and to help develop the appropriate organization to carry out this mission.

The Key to the Future

Although von Kármán did not foresee the importance of space operations in his reply to General Arnold thirty-five years ago, he did make a statement toward the end of his letter which I believe is really much more fundamental and much more important. What he said was this:

"The men in charge of the future Air Force should always remember that problems never have final or universal solutions and only a constant inquisitive attitude toward science and a ceaseless and swift adaptation to the new developments can maintain the security of this nation." This is a tall order for those of us who have the responsibility to lead our Air Force today, and it is an important one. We are told many things about the importance of people—General Allen made the case in a beautiful way yesterday.

In writing this statement, von Kármán put it to us squarely thirty-five years ago. Nothing of real and lasting value can be accomplished without people who have imagination, ingenuity, and the drive to get things done. For my own part and also for my colleagues here today, let me pledge that we will do whatever we can to make certain that such people join and remain in the Air Force. We will then be able to draw on the rich intellectual power of the Air Force and of this nation to make certain that we continue to have an Air Force which is second to none in the world. ■

The Chief of Staff discussed the Soviet military buildup, SALT II, major personnel issues, and the urgency of enhancing US military stature—characterizing MX as "the first US strategic weapon system . . . designed to support both arms control and force modernization"—in assessing . . .

The Central Challenge of the 1980s

BY GEN. LEW ALLEN, JR., CHIEF OF STAFF, US AIR FORCE

I AM most appreciative of the efforts of AFA in explaining to the American people the complex issues surrounding national security and the Air Force role in meeting our defense objectives.

This annual affair provides an important opportunity to reflect on where recent events have taken us and where they are likely to lead. For the next few minutes, I would like to briefly survey some key developments of the past year, as they affect Air Force readiness and modernization. From this perspective, I will discuss the major challenge facing our nation and some of the principal tasks that confront us as we move into the '80s.

I would like to begin by reaffirming my conviction that the United States has the best-trained, best-equipped, and best-manned Air Force in the world. We continue to make improvements in readiness through tough daily training, wide-scale exercises, and imaginative leadership. A prime example is Operation Red Flag, which has become synonymous with realistic combat training and is being complemented by similar activities overseas, such as Cope Thunder in the Pacific.

Modernization of the tactical forces is proceeding well. Deployment of the F-15 to Europe has been highly successful, and we will shortly witness deployment of the first Eagle squadron to the Far East. Four A-10 squadrons have assumed front-line duty in NATO, and the first F-16 unit has begun op-



"Given the momentum of Soviet arms programs, there is a real danger that the entire balance of military power will shift in favor of the Soviets."

erations at Hill AFB, Utah. The F-4G Advanced Wild Weasel has been introduced into both Europe and the Pacific. Finally, the E-3A Airborne Warning and Control System (AWACS) has now assumed a permanent role in patrol operations from Iceland, and has responded to a crisis in the Mideast by deploying rapidly to Saudi Arabia.

Despite this progress, the growth of the Soviet threat, particularly to NATO, has been such that our rate of modernization is only marginally adequate. Nonetheless, these new systems are the best in the world. They are proof of America's technological and industrial genius and underscore the necessity to

maintain this vital edge in our enduring competition with the Soviet Union.

Two other aspects of our improved posture bear mention. First is the continuing success of the Total Force Concept. Air Reserve Forces are an integral and vital part of both our day-to-day operations and our war-fighting potential. From hurricane-tracking to combat deployment, these units are available and ready on a moment's notice to serve the nation's needs.

Secondly, I want to stress that at the core of this success, as in every other Air Force activity, lie the efforts of skilled, experienced, and dedicated people. I will return to this point momentarily, because adverse trends that have arisen in the past year must be reversed if we are to attract and retain sufficient numbers of high-quality military personnel.

SALT and the Military Balance

Several events of the past year have had substantial impact on US defense policy. The most prominent of these was the signing of the SALT II treaty. The provisions of the treaty itself are obviously significant. Of equal importance, however, is the fundamental reappraisal of our defense posture—and of the US-Soviet military balance—that has been sparked by the SALT II ratification debate in the Senate. This debate has highlighted the diversity of opinion in the Congress and the country regarding the proper level and capability of US military forces. And, to the major

point of my remarks today, it has sharply defined the central challenge of the 1980s: maintaining the military balance with the Soviet Union.

The SALT II debate closes the decade with the nation facing a new and sobering situation. For the first time in thirty years, the public is coming to realize that the United States is no longer the world's preeminent military power. Gone is the strategic superiority that we long enjoyed. Today we confront the Soviet Union from a position of rough equivalence in strategic nuclear power. And, given the momentum of Soviet arms programs, there is a real danger that the entire balance of military power will shift in favor of the Soviets.

Our military policies of the 1970s—in the face of significantly greater Soviet defense exertions—have brought us to this critical juncture. Today we confront a Soviet Union whose military investment over the past decade has exceeded our own by some \$100 billion. This massive effort has yielded a host of new, highly capable weapon systems already in the field, and supported a broad, competent weapons development effort—the products of which have yet to be deployed.

Looking ahead, there is little evidence that the pace of Soviet military spending will slacken. It is clear that to maintain a position of rough parity, we cannot allow the Soviets to outspend us in the years to come as they have done in the recent past. The challenge rests squarely upon us. We must convince the Soviets that an unconstrained arms race will not yield them superiority. This will require a difficult, often painful commitment by the American people.

We can and must maintain strategic parity at whatever level the Soviets choose. Yet, it is equally clear that an unconstrained arms race is not in the interest of either the US or the Soviet Union. Both nations can be more secure at signif-

After graduating from the US Military Academy in 1946, Gen. Lew Allen, Jr., served as a SAC bomber pilot. In 1954, he was awarded a doctorate in nuclear physics, followed by seventeen years of duty associated with nuclear weapons and space systems. From 1973 to 1977, he was Director of the National Security Agency. He headed Air Force Systems Command from August 1977 to April 1978, when he was named Vice Chief of Staff of the Air Force. On July 1, 1978, General Allen became USAF's tenth Chief of Staff.

icantly lower levels of armaments if these are reached bilaterally and wisely. Consequently, I strongly support vigorous efforts to negotiate equitable and verifiable arms-control agreements directed toward maintaining comprehensive military parity at reduced force levels.

Such reductions will not be easy to achieve. The Soviets are unlikely to agree to limit, let alone reduce, their forces unless they are convinced that the US can and will maintain parity. Consequently, I believe that we should pursue a course that combines resourceful negotiation to achieve equitable arms limitations where we can, and vigorous strategic force modernization to ensure parity where we must.

The recently concluded SALT II treaty meets the first test of this strategy, and as a member of the Joint Chiefs of Staff, I have expressed this judgment to the Senate. I believe that the SALT II treaty, if placed into effect, can contribute to the maintenance of our security. It will place an upper bound on the potential threat posed by the Soviets, particularly in the key area of ICBM capability, while permitting us to do what we must to match them in nuclear strength.

The JCS deliberated at great length on the treaty, especially with regard to its equitability and verifiability. The agreement contains some provisions clearly favoring one side and some clearly favoring the other. Thus, the question of equity cannot be adequately addressed by a narrow critique of selected portions of the accord. We concluded, after a comprehensive appraisal, that, on balance, the treaty is equitable.

Assessment of the verifiability of the many quantitative and qualitative limits contained in the treaty posed equally difficult judgments. The ability of our varied and highly

capable intelligence systems to monitor Soviet compliance varies substantially. However, we believe that the treaty is adequately verifiable provided we vigorously challenge any questionable Soviet practices and continue to improve our monitoring capabilities.

In summary, while none of the JCS is totally at ease with all the provisions of the SALT II accord, we concluded that it was a modest but important step along the path toward greater limits and controls on strategic nuclear arms.

Strategic Force Modernization Imperatives

However, with or without SALT II ratification, I am gravely concerned about the strategic balance during the early to mid-1980s. The SALT limitations will not sufficiently reduce Soviet forces or constrain their qualitative improvement to allow us to maintain parity without substantial upgrading of our own forces. In fact, due to the momentum of Soviet modernization efforts, most key measures of strategic balance will favor the Soviets during the 1982-86 period. Consequently, we must proceed with vigorous improvement programs for all three elements of our strategic triad—our ICBMs, SLBMs, and heavy bombers. The Air Force is responsible for the modernization of two legs of the triad, and this effort has the highest priority in our funding decisions.

Over the past decade, our ICBMs have become increasingly vulnera-

ble. For this and other reasons, President Carter recently approved deployment of the MX in a mobile configuration.

MX is the first US strategic weapon system that has been explicitly designed to support both arms-control and force-modernization goals. Less costly to deploy than the Minuteman force, it will provide a potent, survivable ICBM capability, fully comply with SALT II constraints on new missile design, and allow the Soviets to verify the number of missiles deployed. As announced by the President earlier this month, special attention will be paid to maintaining environmental quality as MX is developed and deployed.

Our decision to proceed with the MX will make it clear to the Soviets that they will gain no strategic advantage in pursuing a nuclear arms race. MX will contribute to our key long-term SALT objective of maintaining ICBM survivability at significantly reduced force levels. Although MX deployment will not begin until 1986, progress toward this goal will provide an important demonstration of our commitment to keep pace with the Soviets. It will also provide an incentive for them to negotiate seriously toward further constraints and significant reductions in SALT III and beyond. Thus, full support for MX is essential to the pursuit of a combined arms-control and force-modernization strategy for the 1980s.

Modernization of the air-breathing leg of the triad will also be necessary in the coming decade. Important steps are already under way: We plan to deploy more than 3,000 air-launched cruise missiles on B-52Gs with improved avionics. This will greatly improve our ability to penetrate Soviet air defenses. But important issues still need to be resolved. The aging B-52s must eventually be replaced. This alone is a compelling reason to decide soon on how best to meet our long-term requirements for strategic aircraft.

Substantial expenditures will be required to support our national strategic force modernization, but I am confident we can meet this challenge. Strategic forces have historically represented a small part of our annual defense expenditures. How-

ever, strategic improvements must proceed in concert with—and not at the expense of—general-purpose force modernization if we are to maintain a credible deterrent in this crucial area. As the Joint Chiefs unanimously stated in our SALT II testimony, general-purpose forces must not be slighted at the very time when the Soviets are not only dramatically improving their theater and force projection capabilities, but also threaten to attain superiority in central strategic weapons.

The US alone has the clear responsibility to maintain the strategic nuclear balance. Our allies can and will share the defense burdens in other areas. They have also joined us in a combined arms-control/force-modernization approach to moderate the East-West military competition. In concert with our allies, we are simultaneously developing a theater nuclear force modernization program for the 1980s and formulating an agreed position for negotiating equitable limits on these systems with the Soviets. Similarly, we continue to improve our NATO forces via the long-term defense program while seeking agreement on mutual and balanced force reductions through the negotiations in Vienna.

Defending the Interests of Air Force People

Implicit in this agenda of readiness, modernization, and arms-control objectives for the 1980s is recognition of the fact that ultimately our capability rests not on weaponry but on people. Consequently, I am most concerned by recent evidence that our ability to retain and attract quality people is declining. Last year, I told this audience that, due to existing trends in compensation and benefits, if we held to our standards—as indeed we must—retention and recruiting would fall. I am sorry to report that this prediction is proving correct. Over the past year, the Air Force has failed to meet its enlisted recruitment goals for the first time since initiation of the All-Volunteer Force.

The problems of our sister services, particularly the Army, are even more serious. In the view of the Joint Chiefs of Staff, these recruiting shortfalls, which affect both active and Reserve Forces, constitute an alarming deficiency. However the recent vote by the House of Representatives not to reestablish registration clearly indicates that the American people are not persuaded that even this step is needed at this time. My concern now is that the debate over registration not obscure the fact that we face immediate problems whose resolution cannot be postponed.

I want to stress that in the Air Force, our concerns go well beyond shortfalls in enlisted recruitment. In a related and equally worrisome trend, we will not meet this year's recruitment goals for scientific and technical officers. Thus, we are losing ground in our efforts to close an already existing gap in these critical skills.

Finally, we face an extremely serious problem in the retention of rated personnel. The exodus of young pilots and navigators has affected every aspect of our force planning. These departures will be felt well into the future. Significant numbers of skilled aviators are leaving active duty at the very point they should be moving into important mid-level leadership responsibilities.

To meet the challenge of maintaining the military balance in the 1980s, our course is clear. We must first reverse these people concerns, which go to the heart of our capability. This means responding to the doubts about pay and benefits that, left unanswered, erode our ability to attract and retain quality people. This does not mean creating a life of luxury. The military profession entails sacrifice, and Air Force members understand that. They will endure frequent moves, the rigors of alert, long periods of family separation, and the demands of being

"The aging B-52s must eventually be replaced. This alone is a compelling reason to decide soon on how best to meet our long-term requirements for strategic aircraft."

available twenty-four hours a day, if required, to get the job done.

In return, they ask nothing more than a fair standard of living, and support for those benefits, explicit and implied, which they took into account in their decision to pursue an Air Force career. Many of our people now see the conditions under which they volunteered to serve—and sacrifice—being altered, or called into question.

The fact is that we have not maintained pay comparability with the civilian sector. Moreover, benefits are under attack on virtually all fronts, affecting not only service members, but their dependents as well. I am especially concerned about the recent pressure to shift our policy of accompanied overseas tours, where possible, toward shorter, unaccompanied tours. This particular initiative disturbs me on three counts. The first and most obvious is the impact on families, on morale, and—ultimately—on retention. Second, the higher turnover rates would inevitably reduce experience levels, with concomitant impacts in all areas from combat readiness to the quality of staff work.

Third, it is the type of proposal that, regardless of whether or not it

is eventually adopted, feeds the climate of uncertainty and disillusionment that prompts people to leave the service.

This cause-and-effect relationship must be understood by policymakers throughout the government. Military people do not have the option of withholding their services to dramatize their concerns. Rather, they depend on their senior military and civilian leaders to defend their interests. We have had some success in moderating the impact of proposals and policies that adversely affect compensation, benefits, and quality of life. The President's laudable decision to increase military pay by seven percent is a case in point. However, I recognize that these efforts have not dissipated—indeed cannot dissipate entirely—the uncertainty that leads to current retention and recruiting problems. This will require a broader recognition by the American people that a strong national defense must be based on quality men and women as well as quality weapons.

As we step up to the challenge of maintaining a military balance with the Soviet Union in the '80s, we have important work to do in modernizing our forces, improving combat readiness, and refurbishing our installations. Crucial decisions must still be made about the character of our future forces and the national strategy they must support. However, as the debate proceeds, as decisions are reached, and as funds are made available, my priorities are clear. I will continue to fight to ensure that the Air Force

is—first of all—an institution that can attract quality people, live up to its promises for adequate compensation and proper benefits, and provide an atmosphere in which service to country remains a worthy calling.

I am well aware of the enormity of these tasks. The country faces serious problems of inflation and recession. While the national debate over proper response to the Soviet challenge has finally taken a well-focused turn, it is far from resolved. In addition, new international crises will almost certainly emerge to complicate our foreign and defense policies.

The Air Force Association can and, I am confident, will play an important role in bringing these vital issues to the attention of decision-makers, helping to shape the debate, and ensuring that the stakes are fully understood. The challenge is real, but not insurmountable.

One thing is certain—the unfavorable trends of the 1970s must not be carried over into the 1980s. The gradual realignment of US and Soviet military strength already raises serious questions about our willingness to respond to provocation wherever our interests lie. We cannot allow those questions to become real doubts about our capability to respond. Therein lies the true challenge of the emerging decade. ■

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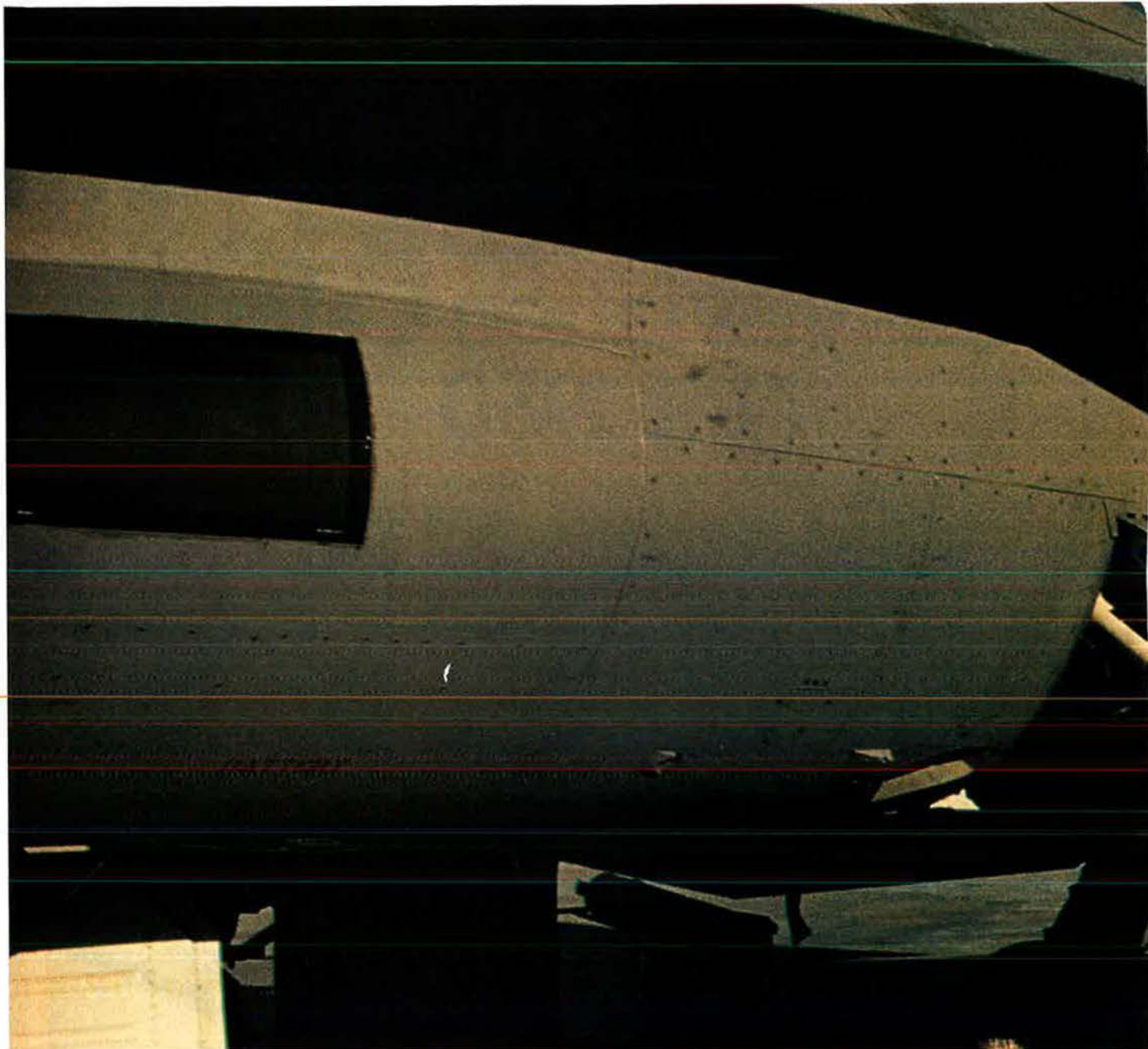
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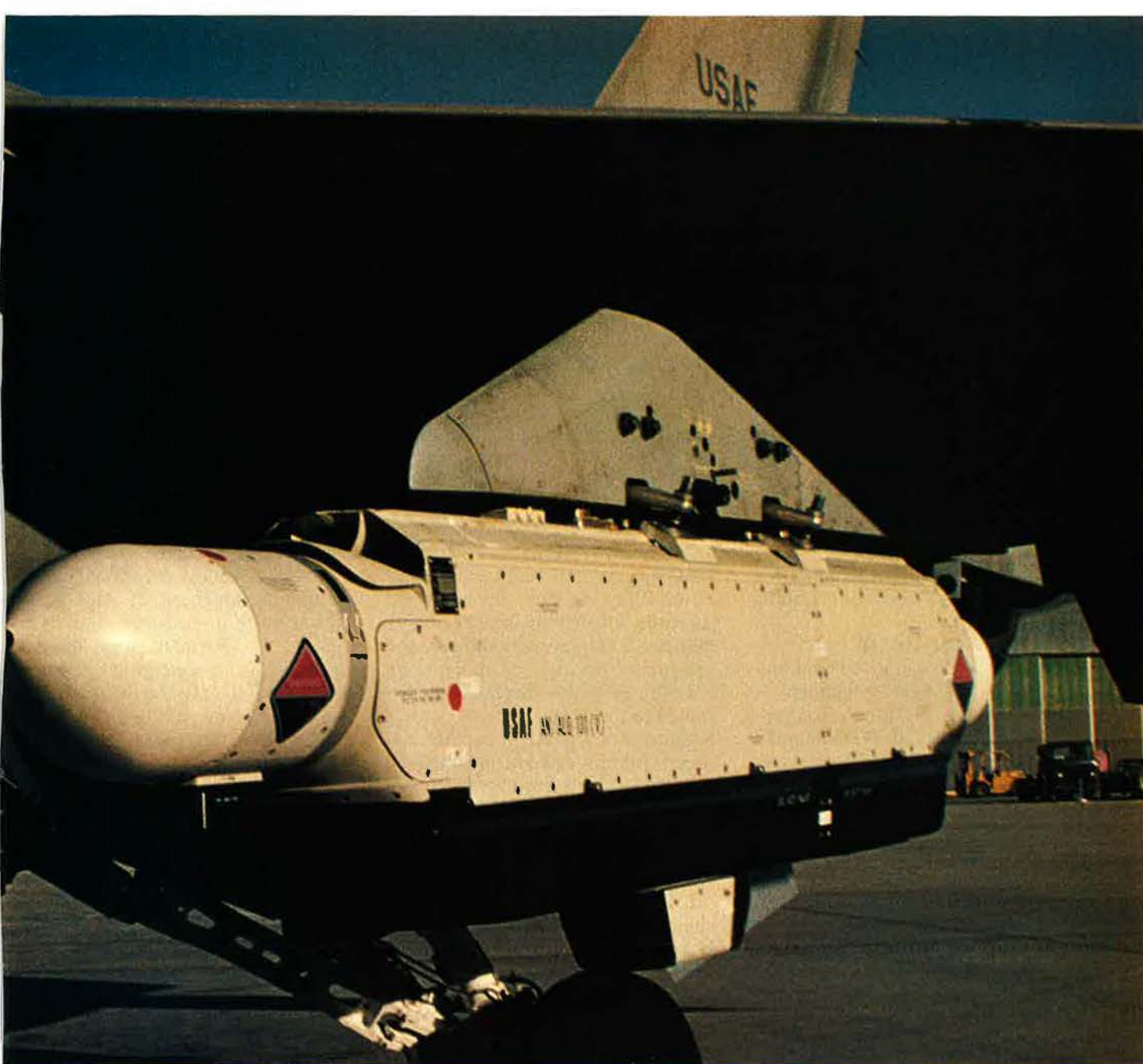
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One of the most popular annual events at AFA's National Convention is the Outstanding Airmen's Dinner, where Air Force civilian and military leaders honor the enlisted force through . . .

A Tribute to the Outstanding Twelve

BY WILLIAM P. SCHLITZ, ASSISTANT MANAGING EDITOR

ON THE evening of September 17, the stars came out—to salute the stripes. Top Air Force leaders, including the Air Force Secretary, the Chief of Staff, and thirty-five other general officers, were among the 500 who gathered to pay tribute to 1979's twelve Outstanding Airmen.

The event was the Air Force Association's twenty-fourth Outstanding Airmen's Dinner, a highlight of AFA's annual National Convention. The dinner, at Washington's Shoreham Americana Hotel, was the capstone of a week crowded with activities for the outstanding twelve, during which the airmen and their families toured the city and visited the White House and Capitol, among other places.

The twelve—ten men and two women—were selected by the Air Force from eighty-two nominations put forth by the major commands, separate operating agencies, the Air National Guard, and Air Force Reserve. They symbolize USAF's entire enlisted force, and join the 378 previous winners in the Outstanding Airmen ranks. (See box for names, ranks, and assigned unit at time of selection.)

The dinner speaker, Vice Chief of Staff Gen. James A. Hill, cited Outstanding Airmen CMSgt. Eugene E. Barnes and MSgt. Thurman V. Chambers as examples of topflight leaders in their respective roles as Deputy Commandant of AFSC's NCO Academy and instructor at TAC's NCO Academy. Both the Air Force and the civilian community have benefited from this leadership, General Hill said: "Chief Barnes has spearheaded fund drives for needy children and other causes. . . . Similarly, Sergeant Chambers is deeply involved in

youth athletic programs and counseling."

General Hill singled out MSgt. Gilbert S. Reddings and TSgt. Spencer T. Hayes as demonstrating uncommon initiative: "Sergeant Reddings, as lead auditor in the Air Force Audit Agency, has identified resource utilization improvements that have enhanced readiness and produced savings of more than \$71,000. Sergeant Hayes, while assigned to the 115th Tactical Control Squadron of the Alabama Air National Guard, designed an improved electronic circuit card for use in the Control and Reporting Operations system. Adopted throughout the Air Force, this innovation has already saved nearly \$14 million."

Courage and humanity were character traits General Hill praised in MSgt. Terry L. Wetzel and SrA.

John F. Korpi. A pararescue Recovery Technician in MAC's Aerospace Rescue and Recovery Service, this past year Sergeant Wetzel "has helped save the lives of twenty-four accident victims, performing rescue operations in the remote wilderness of Alaska, in subzero temperatures and deep snow. . . . Airman Korpi applied his skill as an emergency medical technician to save the lives" of four tornado victims, although hurt himself. "Like Sergeants Barnes and Chambers, both these men are actively involved in their local communities. Sergeant Wetzel has been commended by civic groups and associations in Anchorage, Alaska, for survival training he provides to their members. Airman Korpi has devoted much of his time and talents to instruct security police in

THE OUTSTANDING AIRMEN FOR 1979

CMSgt. Eugene E. Barnes
6597th Student Sqdn. (AFSC)
Kirtland AFB, N. M.

MSgt. Thurman V. Chambers
4500th School Sqdn. (TAC)
Bergstrom AFB, Tex.

Sgt. Ronald J. Fontanez
6990th Security Sqdn. (USAFSS)
Kadena AB, Okinawa

SrA. Gwendolyn Frazier Hall
3902d Air Base Wing (SAC)
Offutt AFB, Neb.

TSgt. LeRoy G. Hart
Air Training Command
Sheppard AFB, Tex.

TSgt. Spencer T. Hayes
115th Tactical Control
Sqdn. (ANG)
Hall ANG Station, Ala.

SSgt. Mary A. Kackley
US Air Forces in Europe
Ramstein AB, Germany

Sgt. Walter P. Koltys
342d Component Repair Sqdn. (AAC)
Elmendorf AFB, Alaska

SrA. John F. Korpi
406th Combat Support Gp. (AFLC)
Zaragoza AB, Spain

TSgt. Michael S. Matthews
21st Air Defense Div. (ADCOM)
Hancock Field, N. Y.

MSgt. Gilbert S. Reddings
Air Force Audit Agency
Langley AFB, Va.

MSgt. Terry L. Wetzel
71st Aerospace Rescue & Recovery
Sqdn. (MAC)
Elmendorf AFB, Alaska



TSgt. LeRoy G. Hart with his wife Malee and daughters Linda and Colleen.



MSgt. Terry L. Wetzel reads to daughter Dana.



SSgt. Mary A. Kackley enjoys the outdoors with husband Rick.

Sgt. Walter P. Koltys, left, applies navigation skill to the chess board.



TSgt. Michael S. Matthews and wife Pam.



Above, Sgt. Ronald J. Fontanez, his wife Olga, and twin sons Ronnie and Joey. Right, SrA. John F. Korpi.



MSgt. Gilbert S. Reddings, "Big Brother" to Dana Avery.



first aid and cardio-pulmonary resuscitation."

People as a resource crucial to readiness was the theme sounded by General Hill in noting the contributions of TSgt. LeRoy G. Hart and Sgt. Ronald J. Fontanez. "Sergeant Hart is an Avionics Instrument System Technician in ATC, responsible for supplying training equipment for F-4 aircraft, the Space Shuttle, and the air-launched cruise missile—all major Air Force programs. His association with training carries over to his off-duty time, when he coaches Little League baseball and does volunteer work in a local children's home.

"Sergeant Fontanez, an Airborne Voice Processing Specialist with the Electronic Security Command, plays a vital role in our intelligence-gathering effort. . . . Off the job, he is involved in church activities and is a squadron representative to the base council of Married Airmen Sharing Together."

General Hill lauded Sgt. Walter P. Koltys as illustrative of a modern dynamic Air Force based on technical expertise and creativity. "An Avionics Inertial and Radar Navigation Systems Specialist with Alaskan Air Command, Sergeant Koltys designed and built new test equipment for checking out the F-4E

navigation system. His imaginative work will save the Air Force both time and valuable operational and maintenance funds. He is also a counselor with the Boy Scouts and a member of the base honor flight."

Concern for teamwork was the attribute General Hill praised in SSgt. Mary Ann Kackley. "As Assistant to the Senior Enlisted Advisor, USAFE, she is responsible for advising commanders on the well-being of their enlisted members. This involves important judgments about morale and the sense of belonging that build teamwork and make good units better. Despite her demanding schedule, Sergeant Kackley finds time to be a Cub Scout den leader and to participate in the Married Airmen Sharing Together program."

Responsibility for the performance of people and management of expensive equipment were underlined as the strong suits of TSgt. Michael S. Matthews and SrA. Gwendolyn Frazier Hall. "A Weapons Controller/Evaluator in ADCOM, in the course of nearly fifteen years Sergeant Matthews has seen duty in Vietnam, Thailand, Canada, Greenland, and several Stateside bases. He is active in the VFW, American Legion, and Air Force Sergeants Association.

"Airman Hall has shouldered large responsibilities early in her career. As a General Accounting Technician for SAC, she manages more than \$1.5 million worth of medical equipment. Her sense of responsibility extends to involvement in such diverse activities as the base Human Relations Council, the Nebraska State Special Olympics, the Esprit de Corps Drill Team, and the First Term Airmen Recruiting Assistance Program."

Following General Hill's career sketches of this year's group of Outstanding Airmen, he underscored the "support, sacrifice, and personal contributions made by their wives, husbands, and families."

Toastmaster at the dinner was Chief Master Sergeant of the Air Force James M. McCoy, himself an Outstanding Airman in 1974.

National AFA President Gerald V. Hasler warmly welcomed the newcomers to the ranks of the Outstanding. The twelve will serve as the nucleus of AFA's Enlisted Council for 1980, working to make the Air Force even more responsive to the needs of national defense and of its people.

Entertainment at the dinner was provided by USAF's Strolling Strings, the United States Air Force Band, and the Tops in Blue. ■



Above, CMSgt. Eugene E. Barnes and, from left, wife Marge, and son and daughter, Jeff and Margo. Right, MSgt. Thurman V. Chambers and family. Clockwise from left, Sheila, Pam, Becky, wife Pat, and Debra.



SrA. Gwendolyn Frazier Hall and husband, ATC Elston Hall.



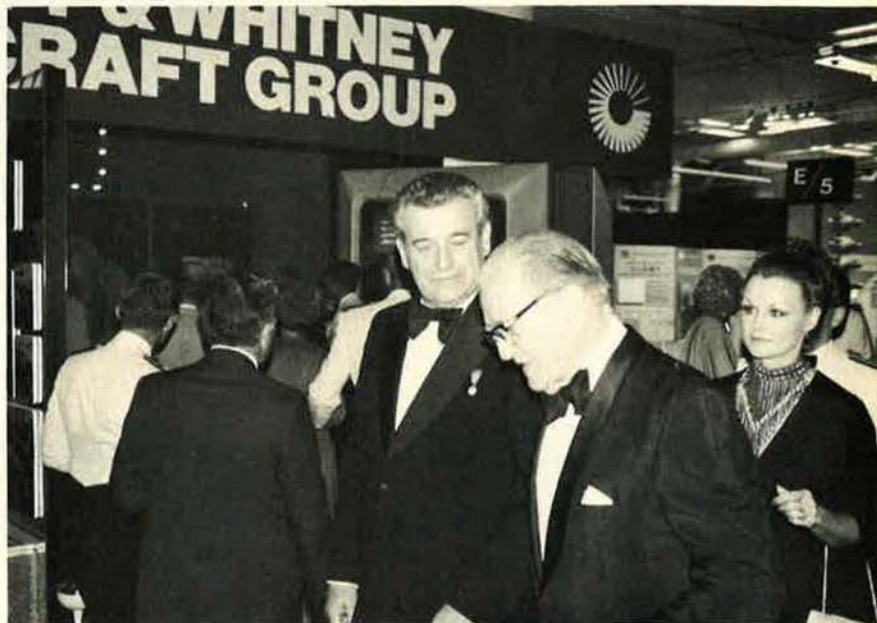
TSgt. Spencer T. Hayes and wife Brenda, with two of their five children.

Aerospace Development Briefings and Displays

THE Aerospace Development Briefings and Displays at the AFA Convention included exhibits and presentations by seventy US and European firms and company divisions that are active in the aerospace field.

More than 5,000 guests visited the exhibits at the Sheraton-Park Hotel. Among them were senior officials of the Air Force and the other military services; ranking members of the Department of Defense and many other federal agencies, including the National Security Council staff; members of Congress and of congressional committee staffs; and attachés and other distinguished foreign guests.

Displays included the latest technologies in use and under development in a wide range of fields: radar, computers and data systems, communications, command and



Sen. John C. Stennis (foreground), Chairman of the Senate Armed Services Committee and of the Defense Subcommittee on Appropriations, visited the displays with AFA President Gerald V. Hasler during a reception in the exhibit hall.



Hundreds of active-duty personnel from Air Force Headquarters and Systems Command attended the briefings. Each visitor selected a group of briefings that most closely paralleled his official responsibilities.



Air Force Chief of Staff Gen. Lew Allen, Jr., was among the VIPs who visited the exhibits and talked with industry engineers and scientists.

control, aircraft and helicopters, strategic and tactical missiles, aviation ordnance, engines, flight simulators, navigation and guidance systems, lasers, fiber optics, satellite programs, cargo-handling systems, and personal equipment.

The displays and briefings—a concept pioneered by the Air Force Association—provide an opportunity for military and civilian officials to review the whole range of aerospace and supporting technology in one place and at one time. Guests also can discuss new technologies and their military applications with industry aerospace engineers and scientists.

Air Force Chief of Staff Gen. Lew Allen, Jr., capsulized the value of the briefings and displays with the comment that he wished he could spend two days at the exhibits. ■



Of the seventy companies and divisions that participated in the exhibits, forty-nine presented detailed briefings on current and future technology applications.



Among the many senior Air Force officials who attended the briefings and displays were Gen. Alton D. Slay (above), Commander of Air Force Systems Command; and Maj. Gen. James E. McInerney (right), Director of Programs at Air Force Headquarters.



Maj. Gen. William E. Brown, Commander of USAF's Air Defense Weapons Center at Tyndall AFB, Fla., discussed aerospace defense issues with industry representatives and guests at the exhibit hall.



AEROSPACE INDUSTRY ROLL OF HONOR

Companies Represented at the 1979 Aerospace Development Briefings and Displays

Arvin/Echo Science Corp.

12 MHz—Transient Free/Wideband Recording System

Bell System

Command and Control and Support Activities of Special Interest and Importance to Air Force Personnel

Bendix Corp., Aerospace-Electronics Group

Advanced Aerospace Technology

Boeing Aerospace Co., Ballistic Missile & Space Div.

Boeing IUS System's Modular Approach

British Aerospace, Inc.

Rapier, V/STOL Harrier, and the Ski Jump and RSI Capabilities

Bunker Ramo Corp., Electronic Systems

DISCO—Distributed Information System for Command Organizations

Cutler-Hammer's AIL Div.

AIL's Capabilities and Our Nation's Defense

Delco Electronics Div., GMC

Update of Avionics Sub-systems—Computers/Navigation

Emerson Electric Co., Electronics & Space Div.

Signal Processing—The Key to Successful Systems

E-Systems, Inc.

Command, Control, Communications, and Intelligence (C³I) in Today's Air Force

Fairchild Industries Inc., Fairchild Republic Co.

Fairchild Republic Company's Night/Adverse Weather A-10 Aircraft

Ford Aerospace & Communications Corp.

Electro-Optical Systems, Tactical Missiles, and Operating Support Systems

General Dynamics Corp.

Major New Weapons for the USAF

General Electric Co.

Aircraft Engine Group

A New Look in Supersonic Fighter Engines

Aircraft Equipment Div.

Doppler Beam Sharpening on APQ-163 Radar and GEPOD 30, Lightweight 30-mm Gun Pod

Grumman Aerospace Corp.

Corporate Overview—"Shapes and Motions"

Honeywell, Inc.

Very High Speed Integrated Circuits and Ring Laser Gyros

Hughes Aircraft Co.

All-Weather Eyes for Tactical Aircraft: Ground Imaging Radar Grows Up

IBM Corp., Federal Systems Div.

IBM Electronic Systems for Strategic Deterrence

ITT Gilfillan

Research and Development Now for the Radars of Tomorrow

Lear Siegler

Performance Data Computer System, Automatic Flight Control Computer, Aerospace Management Services

Lockheed Corp.

Putting Tomorrow's Technology to Work Today

Loral Corp.

Electronic Warfare and Aircraft Survivability

Marconi Avionics Ltd.

Marconi Avionics—Serving World Aviation

Martin Marietta Aerospace

ASALM, Martin Marietta's Role in MX and the Space Shuttle Program

McDonnell Douglas Corp.

Douglas Aircraft Co.

KC-10 Advanced Tanker/Cargo Aircraft Progress Report

McDonnell Aircraft Co.

F-15s for Air Defense

McDonnell Douglas Astronautics Co.

Advanced Strategic and Tactical Systems for the Air Force

McDonnell Douglas Electronics Co.

Vital Radar Warning Training and Cockpit Voice Warning Systems

Northrop Corp.

Aircraft Group

Northrop's Newest Tiger—The RF-5E

Communications & Electronics Group

Advanced Avionics Systems

Raytheon Co.

"Air-to-Air Missiles for the 1980s and Beyond"

Rockwell International

Autonetics Strategic Systems Div.

Next Generation Systems in Aircraft and Missile Navigation and Radiation Hardening

Missile Systems Div.

Antiarmor, Close Air Support, and Interdiction Weapon Systems

North American Aircraft Div.

Highly Maneuverable Aircraft Technology (HIMAT) Program

Space Systems Group

DoD NAVSTAR GPS Satellite Program and the Space Shuttle

Rolls-Royce Inc.

"V/STOL Future"

The Singer Co.

Kearfott Div.

State-of-the-Art Navigation and Guidance

Link Div.

50 Years of Simulation

TRW Defense & Space Systems Group

MX Development

United Technologies Corp.

Chemical Systems

Ramjet Propulsion—Ready to Go

Hamilton Standard Div.

The Air Force and Hamilton Standard Systems

Norden Systems

Airborne Weapon Delivery Systems and Computer Systems

Pratt & Whitney Aircraft Group,

Government Products Div.

Gas Turbine Engines

Pratt & Whitney Aircraft of Canada Ltd.

The Quiet JT15D Turbofan Engines

Sikorsky Aircraft

H-60 Black Hawk Capabilities

Westinghouse Electric Corp.

F-16 Multinational Aircraft

Williams Research Corp.

Small Turbofan-Powered Cruise Missile

The following companies displayed but did not hold briefings

AGA Corp.

Infrared Imaging Equipment

Avco Systems

New Technology in Strategic and Tactical Systems

Beech Aircraft Corp.

USAF's UC-12B Aircraft

Bell & Howell Datatape Div.

Instrumentation Magnetic Tape Recorders

Brooks & Perkins, Inc., Advanced Structures Div.

Aircraft Cargo Handling Systems

Computer Sciences Corp.

C³ and Intelligence Software Capabilities

Davis Agency Inc.

Special Worldwide Travel Arrangements

General Electric Co., Electronic Systems Div.

Solid-State Radar

General Electric Co., Ground Systems Div.

Data Bases Generated by our Computer Image Generation Technology for Simulation and Training

Itek-Optical Systems Div.

Image Information Systems

Lockheed Aircraft Service Co.

Improved Flight Data Recording Systems Proposed for C-130 and C-141 Aircraft

Lockheed-California Co.

Advanced Technology as Applied to Currently Produced L-1011-500

Wide-Bodies and Future Transport Aircraft Designs

Lockheed-Georgia Co.

Wide-Bodied STOL Version of the C-130,

the C-5 Multi-Mission Capabilities, and

the C-141B Stretch Program

Lockheed Missiles & Space Co., Inc.

Advanced Solar Arrays for Space Power, a Cryogenic Cooling System to Protect

Sensors, and Samples of Space Materials

Logicon, Inc.

Digital EW Systems and Software and Structured Flow Charts from

Unstructured Computer Programs

Olympus Corp. of America

Fiberoptic Borescopes, Light Sources, and Accessories

Panavia Aircraft GmbH

"Tornado," All-Weather Multi-Role Aircraft

Rockwell International, Collins Government Avionics Div.

Global Positioning System User Equipment

Sanders Associates

ECM (Electronic Countermeasures) Systems

Sierra Research Corp.

Advanced Electronic Systems

Texas Instruments Inc.

Tactical Information Processing and Interpretation (TIPI) Imagery Interpretation System

At the Longworth House Office Building . . .

AFA's Sixth Annual Salute to Congress



A CROWD of more than 600 people attended AFA's sixth Salute to Congress on September 18. Delegates from the thirty-third annual National Convention packed the Longworth Building of the House of Representatives to meet and talk with congressional members and staffers, providing a rare opportunity for contact with members of Congress in a relaxed social atmosphere. On these two pages are a sample of the hundreds of photographs taken at this event. ■

Frank Gallagher, President of the Paso del Norte Chapter, Tex., left, watches as AFA President-elect Victor R. Kregel, center, receives congratulations from Rep. Richard C. White (D-Tex.).



The Bay State was well represented at the Salute. Meeting with House Speaker Rep. Thomas P. "Tip" O'Neill (D-Mass.) are, from left, Mary Anne Snow, Secretary of Massachusetts AFA; Mary Anne Gavin, Massachusetts AFA State President; and AFA member Maureen Gavin.



Pennsylvania Democratic Congressman Allen E. Ertel, second from left, takes time out to meet with, from left, F. H. Brown, Pennsylvania Delegate and President of the Col. Stuart E. Kane Chapter; Arnold Air Society member Yvonne Pazdalski; and AFA National Treasurer Jack B. Gross.



Rep. Samuel Stratton (D-N. Y.), second from right, meets with fellow New Yorkers. From left are AFA President Gerald V. Hasler, Delegate Ruth M. E. Leibold, and AFA National Director William C. Rapp.



Rep. Joel Pritchard (R-Wash.), left, greets Margaret A. Reed, AFA Vice President for the Northwest Region, and AFA National Director Sherman W. Wilkins.



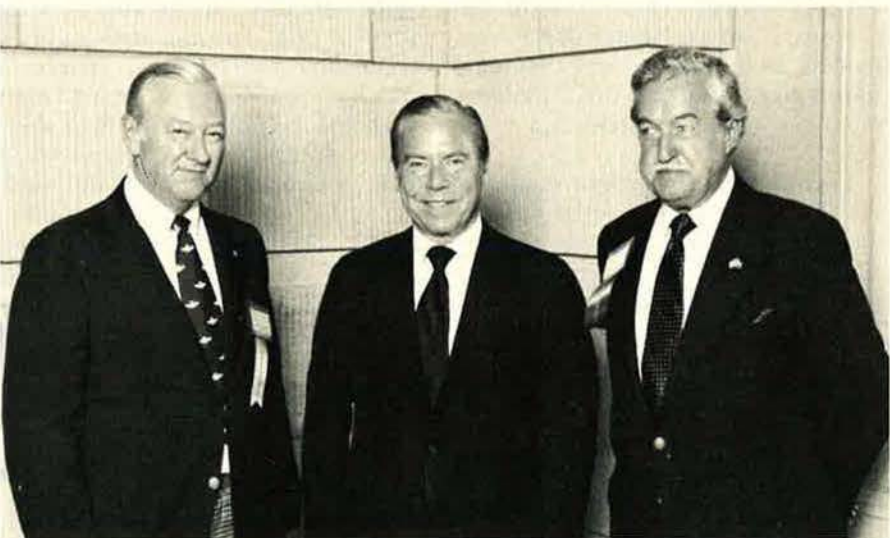
Rep. Tony Coelho (D-Calif.) gives a warm welcome to Mrs. Ewing and Dwight M. Ewing, right, Vice President of AFA's Far West Region.



Virginia Delegate George W. McKay, left, here is with Congressman Dan Daniel (D-Va.).



Newly elected AFA Vice President for the South Central Region, Thomas O. Bigger, left, visits with Rep. Harold E. Ford (D-Tenn.), and AFA's new Board Chairman, Daniel F. Callahan, right.



House Minority Leader John J. Rhodes (R-Ariz.) stops to speak with fellow Arizonans William D. Eikner, President of the Phoenix Sky Harbor Chapter, left, and Tucson Chapter Vice President Thomas W. Henderson, right.

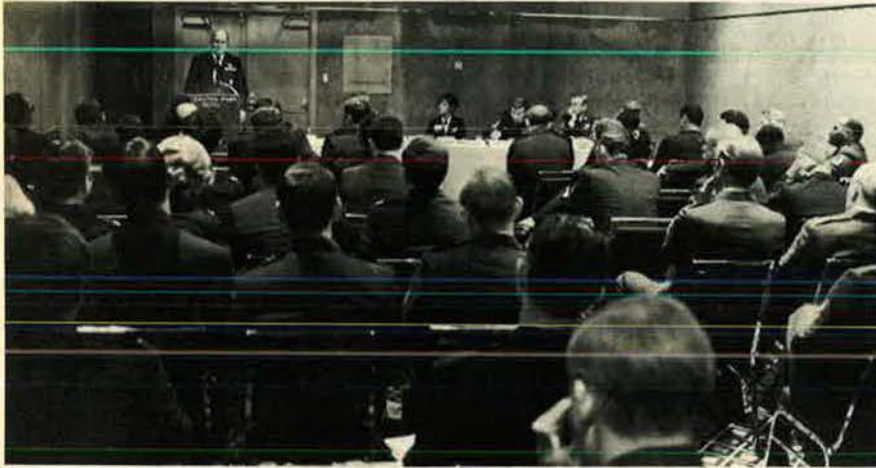


Michigan Delegate Leonard Isabelle, right, a former President of the James H. Straubel Chapter, joins Rep. John Conyers, Jr. (D-Mich.), for a chat.

AFA's Junior Officer, Senior Enlisted, and Enlisted Advisory Councils met at the 1979 AFA Convention to discuss concerns of their constituents, engage in dialogue with senior Air Force officials, and work on special projects. Here is a . . .

Report From Within

BY MAJ. GENE E. TOWNSEND, USAF, CONTRIBUTING EDITOR



Gen. Lew Allen, Jr., Air Force Chief of Staff, addresses a joint session of the Junior Officer, Senior Enlisted, and Enlisted Advisory Councils. He emphasized that there are no proposals to degrade retirement benefits for those on active duty.

HE strode briskly to the podium, probably unaware that the standing ovation was inspired by anything more than respect for his position as Air Force Chief of Staff.

However, to the Air Force men and women attending the joint sessions of the Junior Officer, Senior Enlisted, and Enlisted Advisory Councils during the Air Force Association's annual convention, the applause reflected a deeper feeling.

It was to show Air Force Chief of Staff Gen. Lew Allen, Jr., appreciation for his part in helping to secure the recent seven percent pay raise and for his forceful advocacy of holding the line on other pay and benefits issues.

During a lively question-and-answer session with the councils, General Allen, concerned with still another issue, made a personal request to the audience.

"There is no proposal anywhere to degrade retirement benefits for anyone on active duty. Yet, the perception is still there—even though there is no substance to the threat. Please do what you can to help me get that word to our people. The 'people' question in its totality is

of paramount importance to me."

He also requested that the councils focus on areas that go beyond pay and benefits. "We are in the Air Force for a different purpose and we need to emphasize that. We need to fight down any perception that the primary mission [of the Air Force] is not the defense of our country."

General Allen made those remarks during the second day of the AFA's "Professional Update Seminar," where senior Air Force leaders met with the three councils jointly to answer questions and discuss Air Force projects and concerns.

From bases throughout Europe, the Pacific, and the United States, and representing a true cross-section of the Air Force, council members arrived at the Sheraton-Park Hotel ready to discuss concerns of their constituents and carefully record the latest "word from the top."

Council members worked from morning to night during the week-long convention, attending briefings, discussions, and social events. Some highlights included the keynote address, the Professional Up-

date Seminar, separate council meetings with senior Air Force officers, special projects, the Outstanding Airmen Dinner, and the Air Force Anniversary Dinner Dance.

Getting Started

Gerald V. Hasler, outgoing President of the Air Force Association, welcomed the participants and observed that the Air Force is facing the most serious personnel problems in its history. He challenged the councils to "help turn them around."

The keynote address given by Maj. Gen. Harry A. Morris, Assistant Deputy Chief of Staff for Manpower and Personnel, also contained a challenge: ". . . as a group, you must think bigger than your individual ideas, be wiser than your individual experience, and collectively contribute more than any one of you could contribute."

He noted that Air Force people are interested in the job they do, the conditions under which they do it, and the compensation they receive.

"Yet, we go beyond the point of being just one more set of occupations—we are an institution, with institutional values, with special traditions and customs. There is much more to being in the Air Force than just the physical and mental effort of doing a job. We place special emphasis on certain attitudes such as self-discipline, self-sacrifice, loyalty, integrity, dedication, and duty. These attitudes, these values, are part of our institutional identity, part of what sets us apart and makes us unique," he said.

The Professional Update Seminar

Generals Allen and Morris were not the only senior Air Force officials to address the joint council sessions. A brief review of the agenda indicates the scope of the

Professional Update Seminar and the "newsmakers" it attracted:

"The Air Force Information Program," Brig. Gen. H. J. Dalton, Jr., Director, Office of Information (name changed to Office of Public Affairs on October 1, 1979);

"The Air Force Legislative Program," Maj. Gen. Charles C. Blanton, Director, Office of Legislative Liaison;

"The Air Force Medical Program," Lt. Gen. Paul W. Myers, Surgeon General;

"Air Force Personnel Programs," Lt. Gen. Andrew P. Iosue, Deputy Chief of Staff, Manpower and Personnel;

"Leadership in the Air Force Today," Lt. Gen. Howard M. Lane, The Inspector General;

"The Air Force Commissary Service," Maj. Gen. Charles E. Woods, Commander, Air Force Commissary Service;

"Congressional Activity," Rep. Robin Beard (R-Tenn.), member of the House Armed Services Committee.

Lt. Col. (Colonel selectee) Diane E. Ordes, Hq. USAF, moderated the seminar. The following are some highlights of the presentations:

General Dalton ticked off some major issues posing tough public affairs problems for the Air Force. He noted that a major problem facing the Air Force is "runaway inflation," and the concern it raises for future defense budgets. Other prob-

lems include the energy shortage, "people issues," and questions centering around the All-Volunteer Force, some lingering problems from the "Vietnam experience," difficulties new environmental requirements are causing defense programs, and the "changes in the social structure of our country."

General Dalton pointed out a bright spot in the current public-affairs climate. "The debate on SALT has brought about a new consciousness in the American public regarding defense requirements," he said.

General Blanton discussed the interface between the Air Force and Congress in the budgetary process. He noted that the Defense budget is tight, and still a prime target for cuts. However, General Blanton also voiced optimism over the impact that the SALT debate is having on budget considerations in the Congress.

General Myers noted that the medical mission is "getting done." Even though there is a doctor shortage, Air Force medical service is of high quality. "We will be doing even better out into the '80s as the manpower picture improves."

General Iosue seconded the Chief of Staff's remarks on retirement benefits: "The current retirement plan is in no way endangered for anyone on active duty regardless if you have one year, twenty-eight years, or are signed up in the delayed enlistment program. We



Maj. Gen. Harry A. Morris, Assistant Deputy Chief of Staff, Manpower and Personnel, gave the keynote address to the advisory councils.

aren't a military institution that only looks at itself as a job. We are dedicated to taking care of our people."

General Lane took issue with those Air Force members who claim they don't have enough authority to perform their jobs properly. "I contend that every person in the Air Force has enough authority—if he will only [use it.]" He noted that you should depend on your own people, not the inspection team to fix things, for "the more responsibility you abdicate up the line, the more responsibility you lose up the line."

General Woods gave an overview of the Air Force's \$200 million program for building forty-two new commissaries and making dozens of major and minor renovations. He pointed out that the commissary still offers significant savings. "Twice each year, in several parts of the country, we make up a market basket of 161 items and match the items exactly in the two most popular supermarkets in the area. The savings vary by area of the country, but average twenty-five percent," he reported.

The seminar was by no means a monologue from the top. Council members asked a lot of questions—and many of them were tough.



Gerald V. Hasler, outgoing AFA President, joins a working session of the Senior Enlisted Advisors for a discussion of problems confronting the enlisted force.

Is the All-Volunteer Force really working? How can we sell the Air Force as a calling when more and more members need food stamps? Is it economically feasible to recruit more women in light of their lower reenlistment rate?

Not all of the questions had easy answers. However, two words might sum up the seminar's two days of proceedings: "Cautious optimism."

The President's decision to proceed with development of the MX, the removal of the 5.5 percent pay cap, recent public opinion polls favoring increased attention to the nation's defense needs, and the ability of the Air Force generally to recruit and retain a high-quality force were some of the more optimistic notes sounded.

To sum up the view from the top: "Get the word back to your people that we are working the problems, that we have the resources to solve the problems, and that they will be overcome. However, keep things in the proper perspective. Whether compared to another service in the Department of Defense, or any Air Force of the past—we still have a great Air Force today."

The Councils Start Working

Following the Professional Update Seminar, the three councils—the Junior Officer Advisory Council (JOAC), the Enlisted Council, and the Senior Enlisted Advisors—met separately to work on special projects and discuss problems unique to their constituents.

This was the tenth worldwide



Lt. Gen. Andrew P. Iosue, Deputy Chief of Staff, Manpower and Personnel, fields questions during the "Professional Update Seminar."

AFA conference for the JOAC, the sixth for the Enlisted Council, and the third for the Senior Enlisted Advisors. Both the JOAC and Enlisted Councils drafted separate pamphlets that will be forwarded to AFA, then to the Air Force for possible use in supporting recruiting and retention programs.

The purpose of the JOAC is to advise the AFA president on matters of special interest to Air Force junior officers—lieutenants and captains with less than twelve years' commissioned service. Membership includes representatives from each major command and separate operating agency.

The Enlisted Council serves a purpose similar to that of the JOAC and for the past six years has been effective as a responsible voice in the area of enlisted concerns. Basi-

cally, its membership consists of the Air Force's Outstanding Airmen—the Air Force's "top twelve"—for the previous year.

The Senior Enlisted Advisors serve under authority of Air Force Regulation 39-20, which requires that each member be an E-9 (chief master sergeant) or E-9 selectee. The regulation limits the advisors to wings or larger units and defines their role as apprising commanders of all enlisted matters, including living and working conditions, training curricula, and recreational services. Although meeting under the auspices of the Air Force, and not the AFA, the group has met for the past three years in conjunction with the AFA convention to work on special projects and forward recommendations to the Association and the Air Force.

Conclusion

By any standard, the week-long series of meetings, discussions, social events, and time spent on special projects yielded a large measure of success for the three councils. Although working in a "tell it like it is" atmosphere, there was mutual respect and consideration throughout the dialogue between council members and senior Air Force leaders. Everyone listened and left with a better understanding of the larger problems and what is being done to solve them. ■

Council members put in long hours in discussions, attending briefings, and working on special projects for AFA and the Air Force.



Another Banner Year

BY ROBIN L. WHITTLE, DIRECTOR OF INFORMATION

THEY came from Capitol Hill, the executive suites of the largest aerospace firms, key government agencies, and from Air Force major commands and separate operating agencies. One could measure the accomplishments of AFA's affiliate, the Aerospace Education Foundation, by the stature of those who assembled for the third annual Foundation luncheon held September 17 during the AFA Convention at the Sheraton-Park Hotel.

Although the luncheon was only part of the Foundation's convention activities, it once again typified the nationwide support the Foundation enjoys for its work in adapting Air Force technical courses for civilian school use.

Dr. William L. Ramsey, President of the Milwaukee Area Technical College in Wisconsin, who was reelected Foundation President at the following day's Board of Trustees meeting, explained one of the Foundation's most successful fund-raising ventures—its Jimmy Doolittle Fellow Program. For a \$1,000 individual or \$15,000 corporate tax-deductible contribution, the donor or the person being honored receives a walnut plaque with a

bronze medallion bearing General Doolittle's likeness. The 177 Fellow awards have enabled the Foundation to adapt fifty Air Force courses for classroom use in civilian schools and colleges. This year, for the first time, the Foundation is offering ten home-study courses and three special publications. Dr. Ramsey said Foundation officials "need more Fellows to meet the demands of the schools for more Air Force courses."

Eight of the Foundation's newest Fellows were then honored with plaques presented by Foundation Board Chairman Sen. Barry M. Goldwater (see next page for list).

The next order of business was the presentation of Foundation Certificates of Appreciation to nine individuals and organizations that have consistently supported the Foundation (see box on next page).

Also during the luncheon, Gerald V. Hasler, who served as AFA National President through September, presented three of AFA's highest awards. Citations of Honor went to Maj. Robert A. Heyart, Commander of the 191st Support Squadron at Selfridge ANGB, Mich., for encouraging enlisted

people to further their education; and to Col. Demos T. Kyrakis, Chief of the Laser Development Division, Air Force Weapons Laboratory at Kirtland AFB, N. M., for outstanding job performance. The Association's Hoyt S. Vandenberg Award for the most outstanding contribution in aerospace education was awarded to the USAF Special Operations School at Hurlburt Field, Fla., represented by its Commander, Col. Richard A. Dutton.

The final luncheon highlight was presentation of the first prize in AFA's annual Air Force Junior ROTC contest. The \$4,000 scholarship went to the Junior ROTC unit at Southern High School, Graham, N. C., winner for the second consecutive year, again with a written entry. The unit received a plaque from Chairman Goldwater.

This year's contest theme, "How Best to Meet the Military Threat," challenged cadets to produce an entry suitable for public presentation. Format is left to the unit, and in six previous contests has ranged from posters, poems, essays, and tapes to sound-slide, film, and video productions.

"This is a very remarkable paper," Senator Goldwater said of the winning essay. "I suggest you read it, for you are going to be hearing more about this subject in the coming year with a Presidential election looming." He called the contest theme "the most important question the American people will have to face."

Senator Goldwater commented on several excerpts from the winning essay that were read to the audience. One passage bears repeating here. The cadets wrote that "a large segment of the population does not believe, and does not want to believe, that a serious threat to our national survival exists." Senator Goldwater seconded their



Dr. William L. Ramsey (left) and Sen. Barry Goldwater congratulate (from left) Aerospace Education Instructor retired Lt. Col. Robert Newman, Kerry Mayton, Janice Frauendorfer, and Bennie Piland on winning the AFJROTC contest again this year.

observation. "Every place I travel in this country," he said, "I find an apathy on the part of the American people. They can't believe that this great nation that just thirty years ago stood supreme in the world, now stands in second place. They won't accept it. And I'm asking you men and women in and out of uniform . . . to convince your people back home that we *are* in second place. We can be in first, but it's going to take everyone's effort."

Two of the three cadets who did the research and writing have since graduated from Southern High School. Last year's cadet commander, Janice Frauendorfer, is a freshman at Warren Wilson College in Swannanoa, N. C.; Bennie Piland is enrolled at the University of South Carolina in Columbia, while Kerry Mayton is a senior at Southern this year.

Accepting the scholarship award in behalf of the three, Ms. Frauendorfer noted that AIR FORCE Magazine "was the biggest help in getting material for the essay."

The unit's Aerospace Education Instructor, retired Air Force Lt. Col. Robert Newman, said the Junior ROTC program is producing young people determined to ensure America's strength economically, morally, and militarily. He noted the vital role of AFA and the Foundation in this process.

Later in the week, Sen. Jesse Helms (R-N. C.), Sen. Robert Morgan (D-N. C.), and Rep. Richardson Preyer (D-N. C.) commended the essay to their colleagues, inserting it in the *Congressional Record*.

Foundation Board of Trustees Meets

Each year, the Aerospace Education Foundation's Board of Trustees meets during the Air Force Association National Convention.

First order of business this year was the presentation of a \$25,000 check to the Foundation by Mrs. Dorothy Welker, AFA Iron Gate Chapter Secretary and coordinator of the Chapter's 1979 Air Force Salute. Mrs. Welker noted that \$5,000 of the total was for five Jimmy Doolittle Fellows yet to be named.

"The Iron Gate Chapter is by far the largest single contributor to our Foundation, apart from AFA's General Fund," Dr. Ramsey told

trustees. Iron Gate contributions total \$410,500, and the Chapter is credited with naming thirty-six Fellows, the most by any organization.

Dr. Ramsey also presented ten Certificates of Appreciation, eight to members of the Air Training Command for their continuing and strong support (*see box*).

Foundation Executive Director James H. Straubel reported that the Foundation's major project—adapting Air Force courses for use in civilian schools—had another successful year.

"In the past seven years, nearly 1,550 course packages representing about 270,000 hours of instruction have been purchased by more than 725 schools in all fifty states, the District of Columbia, and eleven foreign entities," Mr. Straubel said. Fifty courses, ten home study courses, and three special publications are now available with five more courses scheduled for release in February 1980, and another five to be released next fall.

Mr. Straubel told the trustees the Foundation's success was due in large measure to the Doolittle Fel-

low program from which all funds go directly to adapting more courses. Mr. Straubel thanked retired Air Force CMSgt. Walter Scott, who originated the Scott Associate Program whereby individuals and organizations may affiliate for a \$25 donation. Scott Associates receive a plaque, and, to date, donations total \$3,275.

The Foundation Executive Director announced a new project to edit, reproduce, package, and promote the sale of US Navy courses under special agreement with the US Naval Institute.

"By the time we meet next year," Mr. Straubel told the trustees, "we will be offering sixty courses out of the eighty-two we originally set out to adapt for civilian use."

Final order of business was the election of officers and trustees. Reelected were Sen. Barry Goldwater, Foundation Board Chairman; Dr. William L. Ramsey, Foundation President; Dr. Charles H. Boehm, Secretary; and George D. Hardy, Treasurer. Before adjourning, the trustees elected thirty-one to Board membership. ■

THE LATEST JIMMY DOOLITTLE FELLOWS

INDIVIDUAL FELLOWS

*Donald W. Steele, Sr. (in memoriam)
 *Donald W. Steele, Sr. (in memoriam)
 *Donald W. Steele, Sr. (in memoriam)
 *Mary Drummond Steele
 Charles E. Benedict
 Dr. Albert B. Briccetti
 Lt. Gen. Maurice F. Casey, USAF (Ret.)
 Wayne H. Coloney
 Lt. Gen. John P. Flynn, USAF (Ret.)
 Robert L. Kirk
 John S. McCollom
 Eleanor C. Rotter

SPONSORS

Virginia State AFA
 New York State AFA
 Southeast Region, AFA
 AFA Staff
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 Sen. Barry M. Goldwater
 Wayne H. Coloney Co.
 Wayne H. Coloney Co.
 William W. Spruance
 Vought Corp.
 Wright Memorial AFA Chapter
 Sen. Barry M. Goldwater

*Presented at the Opening Ceremonies; others presented at the Foundation luncheon

AEROSPACE EDUCATION FOUNDATION CERTIFICATES OF APPRECIATION

Presented at Luncheon

Sen. Barry M. Goldwater
 Willard F. Rockwell, Jr.
 Orville Sandaker
 William W. Spruance
 Iron Gate AFA Chapter
 Wright Memorial AFA Chapter
 United Technologies Corp.
 Vought Corp.
 Wayne H. Coloney Co.

Presented at Board of Trustees Meeting

Noel A. Bullock
 Thomas E. Carter, Chanute AFB, Ill.
 Frederick W. Chapman, Keesler AFB, Miss.
 Owen K. Dignan, Lowry AFB, Colo.
 Hilton Goldman, Randolph AFB, Tex.
 Jerry F. McCarley, Sheppard AFB, Tex.
 Donald E. Nate, Lowry AFB, Colo.
 William S. Neale, Sheppard AFB, Tex.
 Kenneth A. Rowe
 Ron B. White, Keesler AFB, Miss.

Industrial Associates of the Air Force Association

"Partners in Aerospace Power"

Listed below are the Industrial Associates of the Air Force Association. Through this affiliation, these companies support the objectives of AFA as they relate to the responsible use of aerospace technology for the betterment of society, and the maintenance of adequate aerospace power as a requisite of national security and international amity.

- Aeritalia, S.p.A.
Aerojet ElectroSystems Co.
Aerojet-General Corp.
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Aerospace Corp.
ALL, Div. of Cutler-Hammer
Allegheny Ludlum Industries, Inc.
*American Electronic Laboratories, Inc.
American Telephone & Telegraph Co.
AT&T Long Lines Department
Analytic Services Inc. (ANSER)
Applied Technology, Div. of Itek Corp.
Armed Forces Relief & Benefit Assn.
AVCO Corp.
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BDM Corp., The
Beech Aircraft Corp.
Bell Aerospace Textron
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Bell & Howell Co.
Bendix Corp.
Benham-Blair & Affiliates, Inc.
Boeing Co.
British Aerospace, Inc.
Brunswick Corp., Defense Div.
Brush Wellman, Inc.
Burroughs Corp.
CAI, A Division of Recon/Optical, Inc.
Calspan Corporation, Advanced
Technology Center
*Canadair Inc.
Canadian Marconi Co.
Cessna Aircraft Co.
Chamberlain Manufacturing Corp.
Cincinnati Electronics Corp.
Clearprint Paper Co., Inc.
Collins Divisions, Rockwell Int'l
Colt Industries, Inc.
Computer Sciences Corp.
Conrac Corp.
Control Data Corp.
Cubic Corp.
Decca Navigator System, Inc.
Decisions and Designs, Inc.
Dynalectron Corp.
E-A Industrial Corp.
Eastman Kodak Co.
ECI Div., E-Systems, Inc.
E. I. Du Pont de Nemours & Co.
Emerson Electric Co.
E-Systems, Inc.
Ex-Cell-O Corp.—Aerospace
Fairchild Camera & Instrument Corp.
Fairchild Industries, Inc.
Federal Electric Corp., ITT
Ford Aerospace & Communications
Corp.
GAF Corp.
Garrett Corp.
Gates Learjet Corp.
General Dynamics Corp.
General Dynamics, Electronics Div.
General Dynamics, Fort Worth Div.
General Electric Co.
GE Aircraft Engine Group
General Motors Corp.
GMC, Delco Electronics Div.
GMC, Detroit Diesel Allison Div.
GMC, Harrison Radiator Div.
Goodyear Aerospace Corp.
Gould Inc., Government Systems Group
Grumman Corp.
GTE Sylvania, Inc., Sylvania Systems
Group
Gulfstream American Corp.
Harris Corp.
Hayes International Corp.
Hazeltine Corp.
Hi-Shear Corp.
Honeywell, Inc., Aerospace & Defense
Group
Howell Instruments, Inc.
Hudson Tool & Die Co., Inc.
Hughes Aircraft Co.
Hughes Helicopters
Hydraulic Research Textron
IBM Corp.—Federal Systems Div.
International Harvester Co.
Interstate Electronics Corp.
Israel Aircraft Industries, Ltd.
Itek Corp., Optical Systems Div.
ITT Defense Communications Group
ITT Telecommunications and Electronics
Group—North America
Kelsey-Hayes Co.
Kenton International, Inc.
Lear Siegler, Inc.
Leigh Instruments, Ltd.
Lewis Engineering Co., The
Litton Aero Products Div.
Litton Industries
Litton Industries Guidance & Control
Systems Div.
Lockheed Corp.
Lockheed Aircraft Service Co.
Lockheed California Co.
Lockheed Electronics Co.
Lockheed Georgia Co.
Lockheed Missiles & Space Co.
Logicon, Inc.
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Electronics Co.
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Martin Marietta Aerospace
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O. Miller Associates
Pan American World Airways, Inc.
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PRC Information Sciences Co.
Products Research & Chemical Corp.
Rand Corp.
Raytheon Co.
RCA, Government Systems Div.
Redifon Flight Simulation Ltd.
Rockwell International
Rockwell Int'l, Electronic Operations
Group
Rockwell Int'l, North American
Aerospace Operations
Rohr Industries, Inc.
Rolls-Royce, Inc.
Rosemount Inc.
Sanders Associates, Inc.
Satellite Business Systems
Science Applications, Inc.
Singer Co.
Sperry Rand Corp.
*SRI International
Standard Manufacturing Co., Inc.
Sundstrand Corp.
Sverdrup & Parcel & Associates, Inc.
System Development Corp.
Talley Industries, Inc.
Teledyne, Inc.
Teledyne Brown Engineering
Teledyne CAE
*Teledyne, Inc.
Texas Instruments Inc.
Thiokol Corp.
Tracor, Inc.
TRW Defense & Space Systems Group
United Technologies Corp.
UTC, Chemical Systems Div.
UTC, Hamilton Standard Div.
UTC, Norden Div.
UTC, Pratt & Whitney Aircraft Group
UTC, Research Center
UTC, Sikorsky Aircraft Div.
Vought Corp.
Western Electric Co., Inc.
Western Gear Corp.
Western Union Telegraph Co.,
Government Systems Div.
Westinghouse Electric Corp.
*Williams Research Corp.
World Airways, Inc.
Wyman-Gordon Co.
Xerox Corp.

*New affiliation

Meeting in an atmosphere of growing public concern about the condition of the nation's defenses, delegates at AFA's 1979 National Convention emphasized the urgency of modernizing and adequately manning the Air Force and its sister services as a counter to burgeoning Soviet military might . . .

AFA's Agenda for the Eighties

BY VIC POWELL, AFA AFFAIRS EDITOR

THE message was consistent throughout the Air Force Association's 1979 National Convention: the need to improve the nation's military preparedness in the coming decade. A call to action was issued by the keynote speaker at the opening ceremonies. National defense issues were addressed at delegate meetings and by Junior Officer and Enlisted Councils. The urgency of modernizing the Air Force and its sister services was emphasized by Air Force leaders. The theme was enhanced by reconstruction work going on throughout the Sheraton-Park Hotel, center of Convention activities, and by hardhats, sporting

the AFA insignia, distributed to delegates at the opening ceremonies.

Opening Ceremonies

In a hard-hitting keynote speech, Capt. Kathy LaSauce-Arlington, a member of USAF's first class of women pilots and one of the first women to serve as an aircraft maintenance officer, gave the delegates a new perspective about personnel problems she regards as being detrimental to national defense (*see p. 86*). She urged AFA to "get going on air policy. . . . Let America know what is happening in the Air Force. We in the Air Force

have few who will speak in our behalf. We have you, the Air Force Association."

A memorial tribute to aviation and AFA leaders and supporters who have died during the past year (*see list*) was delivered by the Rev. Msgr. Rosario L. U. Montcalm, AFA National Chaplain from Holyoke, Mass., who also pronounced the invocation. The tribute was followed by a moment of silence and the Air Force Hymn, sung by the Singing Sergeants.

A four-foot-long gavel was presented to AFA by Charles Sattan, President of the New Hampshire State AFA. Amos Chalif, Vice President for the Northeast Region and Sergeant at Arms for the convention, introduced Mr. Sattan and noted that the President's regular gavel might not be up to the job. Mr. Chalif said that little gavels may be fine for little issues and little delegates, but that there was neither at this Convention.

President Gerald V. Hasler, assisted by Board Chairman George M. Douglas, presented awards to sixty-six individuals and units of AFA and the Air Force (*see pp. 88 and 89*). Medal of Merit winners for 1979 and past recipients of the Man of the Year Award were asked to stand and be recognized.

A memorable part of the awards ceremony was the tribute to Don Steele, former Associate Executive Director for Field Operations, who died earlier this year. Don's widow, Mary, who was accompanied at the opening ceremonies by three of her four children and their spouses, accepted three Jimmy Doolittle Fellow plaques of the Aerospace Education Foundation that posthumously designated him a Fellow.



AFA President Gerald V. Hasler, right, presents "AFA Man of the Year" award to Alexander C. Field, Jr., in recognition of his time, energies, talent, and dynamic leadership as Great Lakes Region Vice President in revitalizing AFA activity in key communities.



At the opening ceremonies, AFA President Hasler introduced Board Chairman George M. Douglas and presented AFA awards to the honorees who are seated on the platform.

The plaques, each representing a \$1,000 contribution to the Foundation, were sponsored by the Virginia State AFA, AFA's South Central Region, and the New York State AFA. They were presented by Jon Donnelly, past President of the Virginia State AFA; Cecil Brendle, Vice President for the South Central Region; and Henry Newcomer, President of the New York State AFA. Executive Director James H. Straubel presented a Jimmy Doolittle plaque from the AFA staff to Mary, designating her a Fellow.

To permanently recognize Don Steele's outstanding contributions to AFA unit organization, the Association's leading unit honor, the Unit of the Year Award, was named the Donald W. Steele Memorial Award. It was presented to the General Robert F. Travis Chapter (p. 89).

Business Sessions

In his message to the delegates at the first business session, President Hasler said, "... the important thrust of this Convention involves issues, policy issues concerning our national security, perhaps our survival as a nation. There have been reports that public attitudes are beginning to favor a more powerful defense position for this country. To whatever degree that may be true, we members of AFA can take a measure of credit. But it also means that we must intensify all our efforts if we are to achieve our Association's objectives."

Official delegates from forty states and territories unanimously adopted the annual Statement of Policy (p. 6), and two major policy papers: "Force Modernization and R&D" (p. 46) and "Defense Manpower Issues" (p. 50). These docu-

ments set the direction of AFA support and action for the year ahead.

Delegates amended AFA's National Constitution and Bylaws, changing the beginning date of the operating year from July 1 to October 1; extended invitations to serve on the Board of Directors to the immediate past Air Force Chief of Staff and the immediate past Chief Master Sergeant of the Air Force; gave the Board of Directors more specific authority to review and accept State and Chapter constitutions and bylaws; and provided for participation in budget preparation by the AFA President.

During the second business session, delegates were briefed on the MX missile program by Brig. Gen. Guy L. Hecker, Jr., Special Assistant for MX Missile Matters, Hq. USAF. General Hecker urged delegates to help promote public acceptance of the need for MX, a type of activity that AFA has traditionally performed well, he said. President Hasler urged delegates to express their personal opinions on MX to their congressional delegations.

Election of Officers

Delegates elected AFA's top four national officers. They are: Victor R. Kregel, President; Daniel F. Callahan, Chairman of the Board; Earl D. Clark, Jr., Secretary; and Jack B. Gross, Treasurer.

Mr. Kregel is an industry executive in Dallas, Tex. He entered the Air Force in 1942, received an Air

NAMED IN MEMORIAL TRIBUTE

These are the names of the USAF and AFA leaders and supporters and aviation pioneers who died during the last year.

Retired Lt. Gen. James E. **Briggs**, retired Gen. George S. **Brown**, retired Maj. Gen. I. G. **Brown**, retired Col. Philip G. **Cochran**, Max **Conrad**, J. Blaise **deSibour**, Mrs. E. A. **Doyle**, Lyle S. **Freed**, Joseph **Gajdos**, retired Brig. Gen. Clyde H. **Garner**, Mrs. Margaret **Gerrity**, retired Lt. Gen. Gordon T. **Gould, Jr.**, William M. **Goyer**, retired Maj. Gen. Donald P. **Graul**, Joseph L. **Hodges**, retired Maj. Gen. J. J. **Jumper**, retired Gen. Joe W. **Kelly**, Walter **Kryzimenski**, William **Laird**, retired Lt. Gen. John D. **Lavelle**, Mrs. Pamela **Marotske**, Alan **McCone**, retired Brig. Gen. A. L. **McCullough**, Brig. Gen. Robert C. **McDonald**, Herman **Meinersmann**, retired Maj. Gen. Willard W. **Millikan**, Earl **Mountbatten** of Burma, Janet **O'Connor**, Bernard D. **Osborne**, Clifford G. **Payton**, Felix **Seligman**, Benjamin F. **Snell**, Donald W. **Steele, Sr.**, Brig. Gen. William S. **Sweeny**, retired Maj. Gen. Moody R. **Tidwell**, retired Maj. Gen. Karl **Truesdell, Jr.**, retired Gen. O. P. **Weyland**, retired Maj. Gen. E. H. **White**, Stansell E. **Whiteside**, and Jack **Withers**.

"Does America Really Care?"

Following are excerpts from the keynote address at the Opening Ceremonies of AFA's 33d National Convention by Capt. Kathy LaSauce-Arlington, a member of the first class of USAF women pilots. Nine days before the Convention, she married Capt. Chris Arlington. Both are C-141 pilots assigned to the 63d Military Airlift Wing, Norton AFB, Calif.

Chris and I elected to interrupt a once-in-a-lifetime honeymoon for a once-in-a-lifetime opportunity to appear before you because, as Air Force officers, we care about the future of the Air Force, and as Americans, we are both concerned about the future of this great nation of ours.

You, the leaders of the Air Force Association, are the people of this country who can have more effect on the single most important institution within the Department of Defense—the institution that will have the single greatest effect on the free world—the institution we are concerned about, or we would not be here. That institution is the United States Air Force.

We all know that there are other technologies, and there are other aircraft and other missiles that are desperately needed, and are on the drawing boards awaiting approval. But to fly those aircraft, repair them, and keep them flying—to keep the flyers healthy; to execute the contingency plans; launch the missiles; to have that engineering vision of today that will become the systems of tomorrow; to have all of that—a quality force of motivated, trained, educated men and women is essential.

As I look around me at my peers in the flying business, or at some of the NCOs who worked for me when I was a maintenance officer, I see them leaving at alarming rates, what I consider droves, for jobs in civilian life.

Why is this happening?

It's the easiest to grasp and to understand: Our enlisted people and officers are leaving for civilian life because they simply can't afford to stay in the Air Force. I'm not talking about fortunes—I am talking about putting meals on the table—of being able to clothe, feed, and adequately educate their children. They are leaving because they can't support their families.

Many service families qualify for welfare assistance in the form of rent subsidies or food stamps. In fact, food stamps are seen often in our commissaries, although not nearly as many as would be seen should all those military families who qualify use them. Many are just far too proud to even think of using food stamps and wearing a military uniform—they just don't seem to fit together.

This has been recognized in part by a recent decision to give relief to the 5.5 percent pay cap, adjusting it to seven percent for this fiscal year.

You don't need an MBA to compute that there is still a six percent loss of buying power in a thirteen percent inflated economy.

Second and much more difficult to grasp, yet by far the greatest issue—they are leaving because of the feeling, *real or perceived*, that their stature in American society is *negatively* affected by their wearing the uniform of their country.

I'm ashamed to admit that we are oftentimes treated with more respect out of our country than we are by our fellow Americans at home.

My green military ID card is worth nothing off base—it is not recognized as identification—when produced the person behind the counter says, that's nice but do you have a VISA card or a driver's license. Yet, that card with a picture and an ID number is titled "Armed Forces of the United States." Property of the United States government.



Capt. Kathy LaSauce-Arlington delivered the keynote address setting the tone of AFA's 33d Annual National Convention.

Industry studies show that a person on the average changes jobs three times in his first eleven years before settling on his life's work. We're being asked by our people to make a lifetime commitment in the first five years at the ripe old age of twenty-five or twenty-six. We need *good* cause for such a long-term commitment and faith that such a commitment will be rewarded by at least equal commitment from our country.

Does America really care?

I speak for my peers, and we wonder—we're not sure. Will those who care, and there are many, speak out at least as loud as those who don't care?

America has to be told by someone that our nation must pay the price for the best national defense—the best Air Force manned by the best people. We cannot settle for anything less.

I am fully aware that the Air Force Association supports all that I have said. You have indicated that in your 1979-80 policy paper.

I think your job is to educate the public at large (as your charter puts it) on the people of the military today.

Let America know what is happening in the Air Force. We in the Air Force have few that will speak in our behalf. We have you, the Air Force Association.

We need your help and support because aerospace systems alone without people cannot protect the security of the United States and the free world.

To sum it up, any country can build airplanes, missiles, or smart bombs, but no one can build Americans. No one can build a fighting force—the deterrent forces that we the Air Force can—the key to that is people and someone—some organization—better see to it that we are given the right tools to work with and that those tools are respected and supported for their true significance to America's security and the safety of the free world.

Force commission and pilot's wings in 1943 and completed Navy flight training in 1944. He served in the Southwest Pacific, and later as an exchange officer with Fighter Command, Royal Air Force. He was a member of the Air University faculty, and prior to his retirement in 1965 served as Business Manager of Athletics at the US Air Force Academy. He has been an AFA National Vice President for the Southwest Region, an elected National Director, State and Chapter President, a member of the Organizational Advisory Council, and a member of the Aerospace Education Foundation Board of Trustees. He is a Life Member of AFA.

Dan Callahan, of Nashville, Tenn., is a management engineering consultant. He is a graduate of the US Military Academy and the University of Michigan. He retired from the Air Force as a major general after thirty-six years of service. His Air Force responsibilities included engineering, production, maintenance, supply, planning, and programming activities. He was the Manager of Chrysler's plant at Cape Canaveral in support of defense and space operations and served as Deputy Director of Administration at NASA's Kennedy Space Center. He has served AFA as an elected National Director, State and Chapter President, and a member of the Aerospace Education Foundation Board of Trustees. He is a Charter Member and Life Member of AFA.

AFA's new Secretary, Mr. Clark, of Kansas City, Kan., is President of the Collins Construction Co. and the Earl D. Clark Architecture firm. He is an Air Force colonel in the Retired Reserve. He has served AFA as a National Vice President for the Midwest Region, as an elected National Director, State and Chapter President, and as a member of the Finance and Organizational Advisory Committees. He is a Life Member of AFA.

Mr. Gross, elected to an unprecedented nineteenth term as AFA Treasurer, is a prominent civic leader and businessman in Hershey, Pa. A colonel retired from the Air Force Reserve, he has served AFA as Chairman of the Board of Directors; an elected National Director; State and Chapter President; Chairman of the Finance Commit-



The Air Force Exceptional Service Award posthumously honoring Donald W. Steele, AFA Associate Executive Director for Field Operations until his death in August 1979, was presented to Mr. Steele's widow, Mary, by Air Force Secretary Hans Mark.

tee; a member of the Executive, Resolutions, and Convention Site Committees; and as a member of the Aerospace Education Foundation's Board of Trustees. He is a Life Member of AFA.

Seven new Vice Presidents were elected to head activities in AFA regions, joining five others who were reelected. The new Vice Presidents

are: Joseph R. Falcone, New England; Jon Donnelly, Central East; Thomas O. Bigger, South Central; Robert J. Puglisi, Great Lakes; Ernest J. Collette, Jr., North Central; Donald K. Kuhn, Midwest; and James H. Taylor, Rocky Mountain.

The five Vice Presidents who were reelected are: Amos L. Chalif, Northeast Region; John H. de-

1979 MEMBERSHIP ACHIEVEMENT AWARDS

STATE WINNER

**Oklahoma

CHAPTER WINNERS

- **Admiral C. E. Rosendahl Chapter (N. J.)
- *****Central Oklahoma (Gerrity) Chapter (Okla.)
- Chautauqua Chapter (N. Y.)
- ***Col. Stuart E. Kane, Jr. Chapter (Pa.)
- Denton Chapter (Tex.)
- Fairbanks Midnight Sun Chapter (Alaska)
- Flying Yankees Chapter (Conn.)
- Fort Smith Chapter (Ark.)
- Gold Card Chapter (Utah)
- Heart of the Hills Chapter (Tex.)
- High Desert Chapter (Calif.)
- John C. Meyer Chapter (Fla.)
- Lawrence D. Bell Chapter (N. Y.)
- Leigh Wade Chapter (Va.)
- Lincoln Chapter (Neb.)
- Middlesex Chapter (N. J.)
- Mifflin County Chapter (Pa.)
- Tallahassee Chapter (Fla.)
- Tri-County Chapter (N. J.)
- ****Union-Morris Chapter (N. J.)

PRESIDENT

William N. Webb

PRESIDENTS

Elmer Jensen
 Gaylord E. Giles
 John H. Householder
 Francis H. Brown
 Ron Ivy
 Frank X. Chapados
 Russell D. Lose
 Steve Altick
 Keith E. Nichols
 Edward J. Fox
 Howard N. Tanner, Jr.
 Ralph J. Reynolds
 John C. Goodell
 Arlie G. Andrews
 David D. Tews
 Frederick Bell
 David R. Pletcher
 Harry W. Wallick
 David Karrer
 Robert B. Stiastry

**Award winner for 2 consecutive years

***Award winner for 3 consecutive years

****Award winner for 4 consecutive years

*****Award winner for 6 consecutive years



AFA's newly elected national officers, from left, Earl D. Clark, Jr., Secretary; Victor R. Kregel, President; Jack B. Gross, Treasurer; and Daniel F. Callahan, Chairman of the Board of Directors.

Russy, Southeast; Francis L. Jones, Southwest; Margaret A. Reed, Northwest; and Dwight M. Ewing, Far West.

Five new Directors were elected to the Board. They are: Hoadley Dean, South Dakota; R. L. Devoucoux, New Hampshire; E. F. Faust, Texas; Alexander C. Field,

Jr., Illinois; and Jack C. Price, Utah. Thirteen other incumbent Directors were reelected. They include David L. Blankenship, William P. Chandler, Richard C. Emrich, James P. Grazioso, Alexander E. Harris, William V. McBride, J. Gilbert Nettleton, Jr., William C. Rapp, Steve Ritchie,

Edward A. Stearn, L. T. Taylor, Herbert M. West, Jr., and Sherman W. Wilkins.

These eighteen Directors join four other Directors who are under forty years of age, plus all past National Presidents and Board Chairmen, permanent Directors, National Officers, the National Chaplain, the National Commander of the Arnold Air Society, the Chairman of AFA's Junior Officer Advisory and Enlisted Council Executive Committees, and AFA's Executive Director. (The full Board membership appears in "This Is AFA," on p. 90.)

Additional Events

In addition to the Opening Ceremonies and the three business sessions, the Convention program included an exclusive evening champagne bus tour of the nation's capital; the Aerospace Education Foundation's Luncheon (p. 81); the AFA-sponsored meeting of the Arnold Air Society and Angel Flight joint Executive Board; the annual reception and dinner honor-

Air Force Association's 1979 Activity Awards

INDIVIDUAL RECIPIENTS

AFA Man of the Year

Alexander C. Field, Jr., Illinois

Presidential Citations

Noel A. Bullock, Colorado
Amos L. Chalif, New Jersey
R. L. Devoucoux, New Hampshire
Sam E. Keith, Jr., Texas
David C. Noerr, California

Special Citations

Charles H. Church, Jr., Missouri
Lt. Gen. John P. Flynn (Ret.), Florida
Arthur L. Littman, California
Col. Hugh D. McCracken, Jr., Mississippi
Col. Michael W. Moore, Utah
Walter G. Vartan, Illinois
Col. Matham M. Wakin, Colorado
Sherman W. Wilkins, Washington
Col. John F. Wolter, Nebraska

Exceptional Service Awards

Thomas O. Bigger, Tennessee
Tailmadge L. Boyd, New York
Hoadley Dean, South Dakota
Donald W. Disbrow, California
Jon R. Donnelly, Virginia

Dwight M. Ewing, California
Joseph R. Falcone, Connecticut
Gaylord E. Giles, Oklahoma
Roy A. Haug, Colorado
Francis L. Jones, Texas
Richard D. Kising, Maryland
C. D. Knight, Texas
Donald K. Kuhn, Missouri
George C. Lambkin, Texas
Frank Manupeilli, Texas
Tillie Metzger, Pennsylvania
Eugene J. Moneymaker, California
Bryan L. Murphy, Jr., Texas
Marvin Resnick, Oklahoma
William N. Webb, Oklahoma

Medals of Merit

Haynes Baumgardner, Texas
Richard C. Becker, Illinois
S. Sam Boghosian, California
Frederick A. Boorady, New York
CMSgt. Robert D. Carter, Texas
Richard C. Doom, California
James Estep, California
John B. Flaig, Pennsylvania
Dan D. Fuigham, Texas
Nathaniel A. Gallagher, New York
Mary Anne Gavin, Massachusetts
T. A. Glasgow, Texas
Ronald Gray, California
Naomi Henion, California

Col. Steven B. Hinderliter, Virginia
Jack Kruse, New Jersey
Capt. Craig Lindberg, Colorado
James S. Long, Texas
Vincent Lozito, California
Lt. Col. Charles L. Martin, Colorado
C. D. McMahon, Pennsylvania
Leland E. Mohler, Utah
Otis G. Moore, Colorado
Polly Murphy, Tennessee
J. Gilbert Nettleton, Jr., Washington, D. C.
Col. Thomas J. Phillips, New Hampshire
Charles Pinney, California
Stuart E. Popp, Missouri
Clarence Reynolds, Tennessee
Charles J. Sattan, New Hampshire
Martha Schiff, New Jersey
C. W. Scott, Illinois
Charles E. Skidmore, Ohio
Anthony D. Skufca, Ohio
P. D. Straw, Texas
Frank Thompson, Arizona
Frank J. Wallace, Connecticut
George R. Weinbrenner, Texas
Dorothy L. Welker, New York
Roy P. Whitton, Indiana
Evelyn Wilcox, California
Leonard Wilf, New Jersey
Edwin S. Wittbrodt, Colorado
Lavern A. Yarbrough, Oklahoma
Christopher A. Young, California

ing the Air Force's Outstanding Airmen (p. 70); receptions and luncheons honoring the Secretary and Chief of Staff of the Air Force; the Salute to Congress held in the Longworth Building of the House of Representatives (p. 76); the AFA Reception in the Exhibit Halls; and the Convention highlight, the Air Force Anniversary Reception and Dinner Dance, at which the prestigious H. H. Arnold Award was presented to US Sen. John C. Stennis. The Dinner Dance featured the USAF Concert Band and Singing Sergeants, conducted by Col. Arnauld Gabriel, in a musical presentation honoring the twenty-fifth anniversary of the Air Force Academy. Dancing to the music of the Steve Lesieur Orchestra followed the formal program.



At a luncheon for Secretary Mark (far left), Gen. Lew Allen, Jr., presented the Air Force Exceptional Service Award to outgoing AFA President Gerald V. Hasler.

Acknowledgments

Martin H. Harris, Chairman of the Constitution Committee and former AFA National Secretary, served as Parliamentarian. Credentials Committee members were Margaret A. Reed, Chairman, Vice President for the Northwest Region; Frank M. Lugo, President of the Alabama State AFA; and Roy P. Whitton, President of the Indiana State AFA. Inspectors of Elections were Kenneth Banks, Chairman, of Akron, Ohio; Lloyd Nelson, of Park Ridge, N. J.; and William N. Webb, of Midwest City, Okla., President of the Oklahoma State AFA.

With deep gratitude, AFA acknowledges the important contributions to the Convention program made by Cecil Brendle, Barbara Browne, Evie Dunn, Olive Felty, John Gray, Tom Griffith, Jean Isaacs, Helen Jeffery, Rick Knapp, Phil Loebach, Charles Lucas, Mary Lucas, Betty Nelson, Irene Robertson, Dana Spears, and Wann Spence. They donated their time and effort to help ensure the successful outcome of the Convention.

Our appreciation also goes to AFA leaders and delegates who attended the Convention and whose diligent efforts contributed much to making this one of the most enjoyable, productive, and interesting National Conventions. Our thanks also go to all registrants for their cooperation with security arrangements. We are grateful to the many AFA leaders in the field whose per-

sonal contributions of time, effort, and finances have enhanced AFA's continued growth and prestige over the past thirty-three years.

AFA's 1980 National Convention

will be held at the Sheraton-Washington Hotel (as the rebuilt Sheraton-Park Hotel will be known) in Washington, D. C., September 14-17. ■

Air Force Association's 1979 Activity Awards

UNIT RECIPIENTS

Donald W. Steele Memorial Award AFA Unit of the Year

General Robert F. Travis Chapter, California

Outstanding State Organization

Oklahoma State Organization

Outstanding Chapters

Alamo Chapter, Texas (more than 500 members)
Central Oklahoma (Gerrity) Chapter, Oklahoma (more than 500 members)
H. H. Arnold Chapter, New York (101-500 members)
Col. Stuart E. Kane, Jr., Chapter, Pennsylvania (101-500 members)
Air Force Mothers' Chapter, Pennsylvania (20-100 members)
Blue Barons Chapter, Colorado (20-100 members)
Chautauqua Chapter, New York (20-100 members)

Exceptional Service Awards

Chicagoland-O'Hare Chapter, Illinois (Outstanding Single Program)
Iron Gate Chapter, New York (Outstanding Single Program)
Phoenix Sky Harbor Chapter, Arizona (Outstanding Single Program)
Virginia State Organization (Outstanding Single Program)
Colorado State Organization (Aerospace Education)
Pasadena Area Chapter, California (Aerospace Education)
Central Oklahoma (Gerrity) Chapter, Oklahoma (Communications)
San Bernardino Area Chapter, California (Community Relations)
Wichita Falls Chapter, Texas (Unit Programming)
Nation's Capital Chapter, Washington, D. C. (Unit Programming)

Special Citation

Mobile Chapter, Alabama

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The Association provides an organization through which free men may unite to fulfill the responsibilities imposed by the impact of aerospace technology on modern society; to support armed strength

OBJECTIVES

adequate to maintain the security and peace of the United States and the free world; to educate themselves and the public at large in the development of adequate aerospace power for the betterment of

all mankind; and to help develop friendly relations among free nations, based on respect for the principle of freedom and equal rights for all mankind.



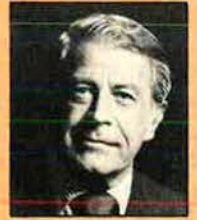
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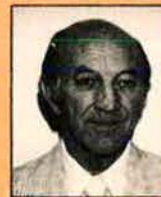
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Ironically, a mere handful of Russian troops in Cuba has awakened some of our more sanguine citizens to the gravity of the expanding Soviet threat.

The Brigade That Backfired

By Gen. T. R. Milton, USAF (Ret.)

IF THE joke were not so clearly on us, there would be something amusing about the Russian troops in Cuba. For, while the Soviets have done far more threatening things in recent years without visible reaction on our part, their deployment to Cuba has stirred up some very unlikely hawks. The Russians, it seems, have a plan, one that is quite in keeping with the teachings of Karl von Clausewitz, that preeminent old German strategist.

Now Clausewitz, a clear thinker if there ever was one, had nothing to say about either détente or deterrence, and it might have taken a good deal of explaining to put across to him the idea of SALT. He began with the basic premise, to oversimplify things a little, that a nation inevitably has some objectives, and military power is an essential instrument in achieving them. Maybe the pursuit of those objectives would result in war, in which case it was necessary to be in shape to win it.

In any case, military power, superior military power, was, in Clausewitz's view, the key factor in furthering national goals in the international arena. We, the great superpower of the West, have lately relied on less orthodox strategic credos, from Mr. McNamara's MAD to our present one, which, aside from focusing on that least likely of war theaters, Central Europe, is too elusive to define.

The Soviet brigade in Cuba came as a severe shock to some of the more earnest disciples of SALT. Perhaps the coming elections had a heavy bearing on attitudes, but the fact remains that a few thousand Soviets ninety miles from Florida have done more to awaken some of our staunchest liberals to the Soviet threat than any number of far more significant events.

Afghanistan should have rung some alarms. So should Aden, an important British outpost in the great days of the Empire and now a Soviet naval base. South Yemen and Ethiopia provide secure ports and air bases for Soviet forces, and the Gulf of Aden itself is becoming a Soviet lake. Soviet naval and air forces there far outnumber our permanent Mideast naval patrol. With the Shah gone and Iran turned inward, the critical Strait of Hormuz, the West's jugular, is essentially unguarded.

Aside from the fact that we find this growing threat unsettling and disagreeable, we should, however grudgingly, admire the Soviet approach to confrontation. They clearly have a cohesive scheme for furthering their ends. Everywhere we look, it seems, they have the initiative, whether in strategic arms buildup, conventional force modernization, civil defense, or just plain adventurism.

It is painfully evident by now that the Soviets intend to dominate the oil-producing area. It is also evident that they intend to have the forces to cope with any contingency that may come up as a result of their outward thrust around the world. Even if it comes to a nuclear exchange, they evidently intend to out-survive us. It is, admittedly, a poor way to win, but it beats our way, which is to dismiss civil defense as administratively and politically impractical, relying, instead, on the mystical theory of deterrence.

At this moment in September, the prospects for SALT II ratification appear to be chancy. The Cuban affair has changed a few minds, at least temporarily. Perhaps the State Department will negotiate the Soviet troops out of Cuba or, more likely, the Soviets will come up with a disarming explanation for the presence of their brigade. One way or another, it seems unlikely that SALT II will founder on this very small

rock. Not, that is, if the Soviets are as anxious to have a treaty as they are represented to be. But however SALT comes out, and however the troops in Cuba are explained away, the important fact remains that the Soviets have a plan for spreading their influence and diminishing ours.

Meanwhile, we muddle on. We are spending, we keep telling ourselves, immense sums on defense. The fact that this vast defense budget is well below, in real or purchasing power, that of the Soviets is evidently beside the point. Nor is it widely advertised that these inflated defense dollars no longer pay for adequate readiness. Twelve hours or so a month, for instance, is not enough flying time for a fighter pilot to keep his hand in. Not if he is to be truly on top of his multimillion dollar weapon system. It is enough flying time for nice conservative operations, like going from one place to another, but it is not enough to maintain the skill to fly and fight in marginal weather, on the deck, and at maximum aircraft performance. Combat readiness, whether in fighters, bombers, the infantry, or at sea, takes money. There is more to it than meeting the payroll and buying the weapons, something that seems not to be appreciated in various high Washington places.

Perhaps the guiding rationale of this seemingly aimless policy, one that stops short of real preparedness or any clear statement of national objectives, is the unadmitted belief that the Soviets are indeed too sensible to start a war, the last tattered remnant of our détente theology and one that also carries with it the hope that Soviet policy will, in the end, fail through its own heavy-handed ineptness.

It is a nice concept, and maybe that is how things will turn out. No war, and the Soviets failing and falling back from Africa, the Middle East, Latin America, and Southeast Asia. If that is our only plan, then we had better hope it works. But on the chance that our opponents are not going to go down quite that easily, it would be comforting to think we had something a little more positive in mind. Something like increased readiness, and a credible military presence in those parts of the world where our interests are truly threatened. ■

US in the Pacific: OVERCOMMITTED AND UNDERMANNED

BY BONNER DAY, SENIOR EDITOR

US response to a crisis in the increasingly turbulent Western Pacific would rest on the ability of the Air Force to support a delaying action until reinforcements arrived.

THE decline of US influence in the Pacific has accelerated destabilizing trends in that region.

While the Soviet Union, China, Vietnam, and Japan all scramble to increase their voice in the economic and military future of Asia and the Pacific, the voice of the US is growing perceptibly weaker.

Travel to US military bases in Japan and Korea and you find that military resources are being stretched to meet an increasing number of contingencies.

Speak with the commanders and you realize the US in the Pacific is overcommitted and underarmed. Count up the potential enemies and measure them against the commitment and reliability of America's allies in the region and you discover some disturbing ratios.

In short, when you visit the Pacific Command, it becomes readily apparent that in any major emergency, the US force in any particular theater would be short of men and weapons. To meet a crisis, reserve forces would have to be rushed from the continental US.

This is partly the result of the major drawdown of military might that took place after the US abandoned the war in Southeast Asia. But the drawdown also was the conscious decision of US policymakers to focus military resources in support of the US commitment to NATO in Europe.

So with US forces standing at a record low, the ability of the US to respond successfully in the Pacific rests increasingly upon the Air

Force using its fighters and bombers to delay a quick enemy victory until Army and Navy reinforcements can be brought to the scene.

America's friends and allies in Thailand, South Korea, Taiwan, and Japan thus may lie more exposed to enemy attack today than at any time since World War II, and at a time when Vietnam, North Korea, the Soviet Union, and China are seeking to expand their influence in the region.

The question increasingly being asked among Asian policymakers is whether the US, with scarce military resources, will respond to a military crisis in the Pacific, or decide instead to stand aside and watch an outgunned nation be taken over.

One assigned duty of US diplomatic and military leaders is to emphasize the US commitment to the Pacific, when meeting with Asian leaders. But this campaign has not stopped non-Communist nations from seeking additional security in the form of stronger military forces and increasingly independent foreign policy initiatives. The new posture of the US also has failed to prevent an increasing number of incidents at the region's different pressure points.

Asian and US officials consider the border between the Soviet Union and China to be one of the most dangerous threats to peace in the region. The size and destructive power of the Soviet and Chinese forces facing each other pose an explosive potential that is almost daily put to the test by border incidents and a constant barrage of propaganda.

An invasion of South Korea by North Korea may be the most likely military adventure, however, in the next two years. The North Korean dictator, Kim Il Sung, has sworn he

will unite the two countries, but is faced with an opponent that is rapidly growing stronger militarily and economically.

Vietnam, after its successful conquest of Laos and Cambodia, could continue its expansive efforts any day, pushing its aggressive arm into Thailand and beyond.

Communist China's stated desire to rule over Taiwan hangs like a cloud over the region. What the US would do in the event of an invasion of that offshore island nation is unclear, in light of Washington's moves in recent years to improve its relations with Mainland China.

In the vast oceans of the area, an expanding Soviet navy has become a growing concern of Japan and of the US. Both nations depend upon the sea lanes in the Indian and Pacific Oceans for oil and other critically important imports.

Meanwhile, guerrilla wars and terrorist activities in the Philippines, Malaysia, and Burma keep the area in a constant state of tension, with no respite in sight.

The US, though its voice is heeded less than before the Vietnam catastrophe, is still regarded as a force for stability in the region. The US Pacific Command, with headquarters in Hawaii, is charged with conducting offensive and defensive operations in the Central and Western Pacific, the Far East, and Southeast Asia. This is a geographic area of more than 100,000,000 square miles.

But with only 140,000 servicemen in the Western Pacific, any US military commitment would quickly dissolve into a race of reinforcements across the world's largest battle arena.

It takes a ship seventeen days to traverse the Pacific Command area which stretches from the West

Coast of the US to East Africa. And the Pacific Fleet has only about 200 ships to cover it.

Spread across these vast reaches are the equivalent of one Marine and two Army divisions.

The Air Force, with its intercontinental bombers and air-refuelable fighters and transports, can cut the time element of the geography significantly. But it still takes a plane eighteen hours to travel from San Francisco to the Philippines, with a fuel stop in Hawaii, and eight more hours to reach Diego Garcia, the island fuel depot in the Indian Ocean.

US interests in Asia, some argue, are as great or greater today than they are in Europe. Economically, US trade ties with the Pacific and Asia have grown to the point where there is a greater volume of business with Asia than with Europe. In 1978, some twenty-six percent of America's foreign trade was with Asian countries, for a total of \$81 billion. Militarily important imports from Asia include rubber, tin, and petroleum.

Strategists also stress the importance of the oil shipping lanes

from the Middle East. Some ninety-five percent of the oil from the Persian Gulf traverses the Indian Ocean, including fifteen percent of the oil required by the US and seventy-five percent of the oil consumed by Japan.

Similarly, the Pacific and Indian Oceans are increasingly important as military routes to support such Middle East friends as Israel and Saudi Arabia. In the wake of the 1973 war between Israel and neighboring Arab states, West European nations are less willing to be used as staging points.

US military interests in the region include security treaties with Japan, Korea, and the Philippines. The mutual security treaty with Taiwan ends December 31, 1979, but the US relationship with that besieged nation, if less clear, is nonetheless a factor in US regional planning.

The US resumption of relations with Communist China, after decades of nonrecognition, increases American interest in Asian affairs.

A growing Soviet military presence, in the form of jet flights into Japanese airspace, larger Soviet

naval task forces in the Indian Ocean, and an increased influence in Vietnam, has sparked concern on the part of US policymakers.

It would seem, with these interests and a pattern of instability, that there would be a comparable reaction in the strength and deployment of US security forces.

But today the US military force of 140,000 in the Western Pacific is the smallest US presence in the region since before World War II.

During the height of the war in Southeast Asia, US military forces in the area rose to more than 800,000. The present force is 20,000 less than were on station before the attack on Pearl Harbor.

The military trends are disturbing. Talk to US military leaders in the Pacific Command and you find a deep concern over the gap between their responsibilities and the resources under their command.

Korean Tension

Asian experts say that neither the Soviet Union nor China trusts North Korea's dictator, the aging and unpredictable Kim Il Sung.

In late September, the Air Force deployed the first element of an F-15 wing to Kadena AB, Okinawa. The entire wing will be in place by mid-1980, replacing F-4s. Plans also call for basing E-3As at Kadena during the coming year.



Chinese and Soviet leaders alike have assured the US that they are acting as a restraining influence on the Korean despot, even though he has made clear he wants a second chance to bring South Korea under his dominion by military force.

Both China and the Soviet Union, however, would find it difficult to maintain leadership roles among revolutionary movements if they did not support a North Korean invasion, once initiated.

The presence of US forces in South Korea is one element maintaining the present military balance on the Korean peninsula. To many military experts, the US muscle in South Korea clearly makes the difference. Without it, North Korea, according to revised intelligence estimates, would have to be rated the stronger military power, with a larger army and a tactical air force that is about twice the size of the South Korean Air Force.

Says one top US military commander: "The South Korean forces could not cope with an invasion without US help."

And to the US military leaders stationed in Korea, there is no question of Kim Il Sung's aggressive intentions. A visitor to South Korea need only tour one of the three tunnels under the demilitarized zone to be convinced the Communist leader has more than peaceful intentions in mind. The tunnels, dug by North Korea in violation of the Armistice Agreement with the UN, are an awesome demonstration of aggressive intent. (See also p. 98.)

When you talk with American and South Korean soldiers stationed along the demilitarized zone, you learn that underground explosions occur with regularity, confirming South Korean fears that additional tunnels, some estimate as many as a dozen, have yet to be discovered.

The third tunnel was discovered last fall. It lies seventy-three meters below the surface and extends 435 meters into South Korea from beneath the demilitarized zone.

From a military standpoint, it is significant that the third tunnel, the furthest east of the three discovered so far, is actually south and behind many of South Korea's forward-based troops, and only forty-four kilometers from Seoul, the South



A major concern of the US and non-Communist Asian nations is the alarming expansion of the Soviet Pacific Fleet, which now numbers some 750 ships, including Kresta-class guided missile cruisers (above), patrol planes such as the Be-12 (below), and an estimated 125 submarines, about half nuclear-powered.

Korean capital. "The distance from the end of the tunnel to Seoul is about the same as the distance from Dulles Airport to the White House," one US officer noted.

Until the tunnel was detected and put under guard, North Korea could have infiltrated troops to attack South Korean and US forces from the rear or to advance upon Seoul in a surprise attack.

Even without the element of surprise, US military commanders say it would be a "tough fight" to beat North Korea with only those forces that are in place.

Defense planning depends upon an early warning of attack, a delaying battle along the demilitarized zone, and the rapid augmentation of forces with reserves from elsewhere in the Pacific Command and from the continental US.

US bases in Korea and Japan are

designed with these reinforcements in mind. Joint exercises with the South Korean armed forces are held annually to refine reinforcement techniques that include units from Okinawa. In the last two major exercises, E-3A Airborne Warning and Control (AWACS) planes were brought in to help control the air traffic.

Meanwhile, the South Korean economy and military forces continue to grow stronger. By 1981, for example, South Korea will have country-wide anti-air protection with Nike-Hercules and Hawk missiles. To some planners, the improvement of South Korea's military posture puts Kim Il Sung into a time-box in which his chances for military success decline with every passing month.

US forces in Korea—totaling 40,000, including 7,900 in the Air

Force—are not large. But they are well trained. Air Force pilots in South Korea, as in the rest of the Pacific Air Forces, fly more hours a month than either the Tactical Air Command in the US or Air Force pilots based in Europe.

Soviet-Chinese Clashes

A major war between China and the Soviet Union would cause serious repercussions upon the rest of Asia and the US.

Little is known about the tension along their common 4,500-mile border, except that armed clashes occur frequently.

The Soviet Union has about one-third of its total forces stationed in the Far East, including more than 800,000 ground troops, 1,350 fighters, 350 bombers, assorted naval forces, and eighty or more medium-range ballistic missiles armed with nuclear warheads.

On the other side of the border, the Chinese have about twice as many troops, organized in up to eighty divisions. Altogether, the Chinese military forces are 3,600,000 strong, including the Air Force and Navy. China's aircraft present a formidable force, with some 4,000 tactical fighters and eighty medium bombers. In addition, China's leaders have been shopping in the US and Europe to upgrade their military equipment.

The US response to a conflict between the two Communist powers is impossible to predict, but any significant US action would require far more military might than is presently deployed in the Pacific.

And it would require extensive use of America's shrinking base network in Asia. That is why US military men argued the strongest within the Administration when the base agreement with the Philippine government was up for renewal. Says one officer: "Many were advising that we just walk away from our Philippine bases. Our hardest bargaining was in Washington, not in Manila."

In Japan, the mutual importance of US bases is well understood by government leaders. As a result, though there is a base consolidation program under way to free scarce Japanese land, it is on generous terms that make clear that Tokyo wants the US military presence to

continue for the foreseeable future.

Because of the strategic location of Japan, in an emergency the US could quickly fly in reinforcements to such strategically located fields as Misawa AB in northern Japan, Yokota AB near Tokyo, and Kadena AB on Okinawa.

Japan's Role

Present trends point to a growing role for Japan in regional affairs. There is increasing concern in Japan over aggressive moves by the Soviet Union, including the continuing buildup of Soviet naval strength in the Pacific, frequent tests of Japanese air defenses, and what the Japanese see as aggressive actions, including the reinforcement of bases on the Kurile Islands.

The threat is felt all the more keenly because of growing apprehension about the reliability of the American security commitments in the Far East, caused by US policies in Southeast Asia and Taiwan, as well as recent moves to pull US ground troops out of Korea.

The Self-Defense Forces of Japan are being strengthened with F-15 fighters, P-3C antisubmarine warfare aircraft, and other military purchases over the next five years. But Japan is also hedging its bet with the US through a broad-based diplomatic posture. It is one of the few countries in the region to have rela-

Republic of Korea pilots work closely with USAF units based in the ROK. The ROK Air Force has about half as many combat aircraft as does North Korea.



tions with all countries. A Tokyo-Peking treaty of peace and friendship was signed on August 12, 1978, despite violent opposition by Moscow.

Japan's military forces, though well-trained and equipped with modern weapons, are clearly no match for the Soviet Union, and are, in fact, smaller than those of neighboring North Korea.

Japanese uniformed strength totals a little more than 200,000, of which some 155,000 are assigned to the ground forces. Because of its training, the Air Force, with some 800-plus aircraft, including more than 300 fighters, is rated one of the best in the world. Recent force-improvement plans include the purchase of the US F-15 and the Japanese F-1, a cheaper but less capable supersonic fighter.

Because of the instability generated by the projected withdrawal of US ground forces in Korea, some Japanese experts are predicting a significant increase in defense expenditures in the near future, along with an effort by Tokyo to encourage joint military planning with Taiwan and South Korea.

Present US forces in Japan total 47,000, including 20,000 Marines based in Okinawa.

Southeast Asia

Fear of Vietnam's 600,000-man Army casts a long shadow over Southeast Asia. Hanoi's leaders, with a string of successes on the battlefield, command one of the world's largest and most experienced armies.

China got a taste of this battle experience when it invaded Vietnam along the two countries' mutual borders. Though Chinese forces were withdrawn before they could confront the full force of regular Vietnamese troops, a major confrontation between the two Communist powers is still possible.

Respect for Hanoi generalship has caused US military experts to predict that only a major commitment by the US could prevent an immediate takeover of Thailand, should the Vietnamese invade in force. Though Thailand is a member of the Association of Southeast Asian Nations (ASEAN), the other member countries of the economic association would be capable of

sending token military assistance.

Peking has promised the Thais it would come to their aid with troops if the country is invaded. The US commitment to aid is limited to the supply of military arms.

After Thailand, Burma and Malaysia are logical targets for Vietnam's brand of Communist conversion.

The military threat hardest to evaluate is the trend of guerrilla movements in Southeast Asia. Thailand, Malaysia, and the Philippine Republic, all friends of the US, are faced with this festering problem. Apparently, there is little the US can do except to advise, and US military men in the region say that because of the US experience in Vietnam, that advice is not in high demand.

The problem is particularly severe in the Philippines, where the Moro National Liberation Front and the New People's Army have kept the government's 60,000-man army busy.

Soviet Influence

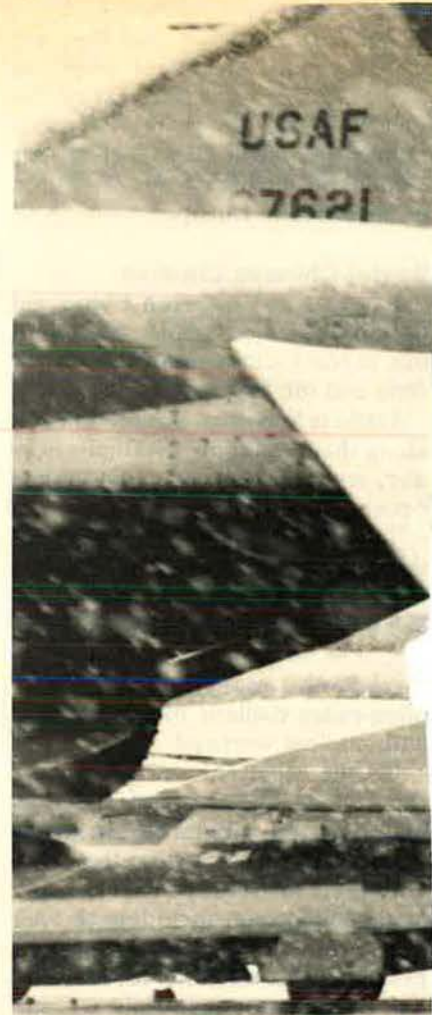
While regional crisis points continue to be a focus of US military planning, the growing military presence of the Soviet Union also is receiving increasing attention.

In the Kurile Islands, taken from Japan at the close of World War II, the Soviet Union is building up its military forces. In Vietnam, Soviet arms shipments are being used to increase Moscow's influence in Hanoi. In Pacific and Indian Ocean waters, a growing Soviet fleet is amplifying Moscow's voice and posing a major threat to vital sea lanes from the Middle East oil fields to West Europe, Japan, and the Western Hemisphere.

To US military planners, questioning whether a forward based strategy is still viable is an increasingly important exercise. For the present, US commanders argue that a forward posture is still best, even though it is increasingly difficult to man.

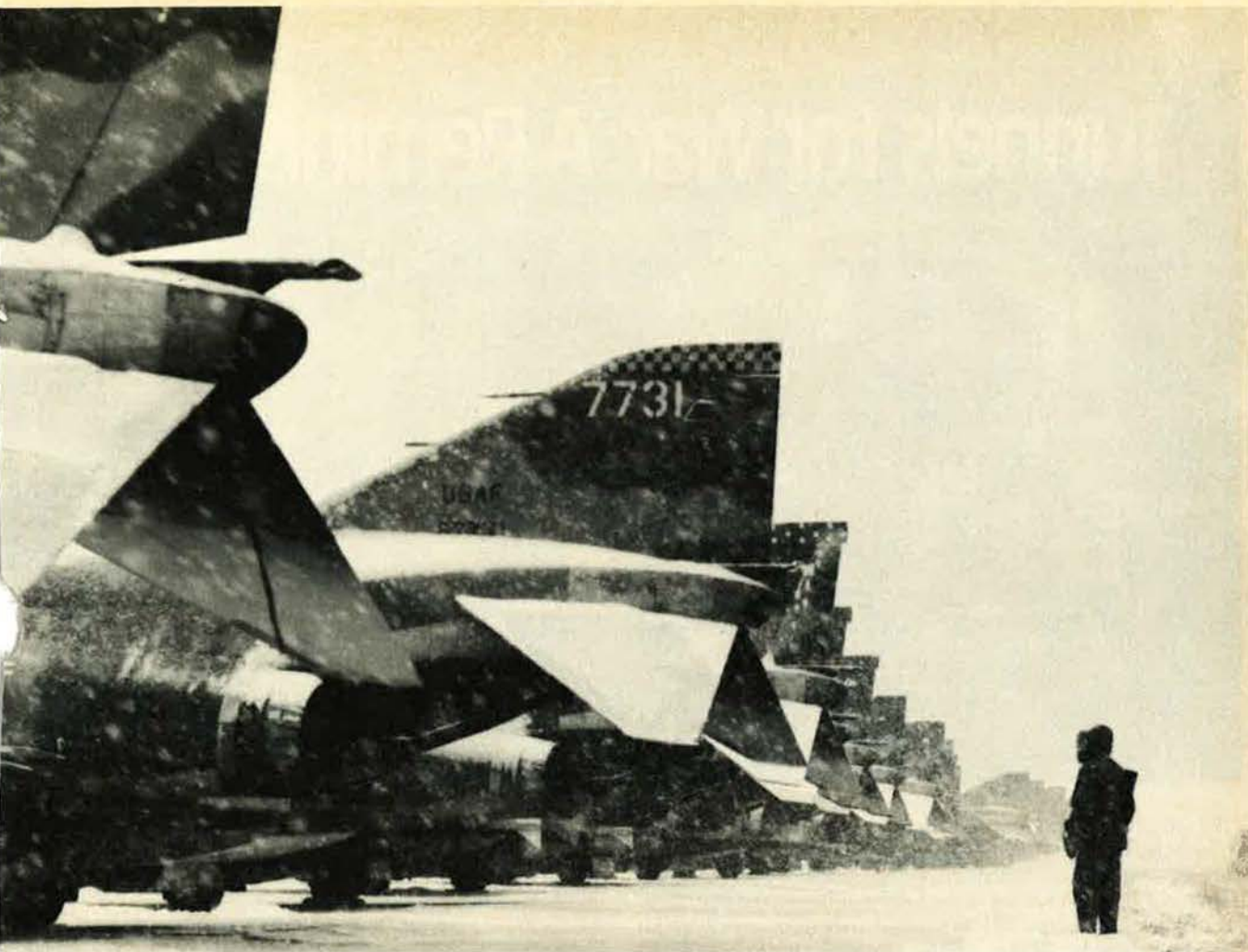
But because of the huge area involved, the US Air Force is playing an increasingly important role as an early warning element and as a vital part of the reinforcement strategy.

In an emergency, Air Force reinforcements would be the first on the



USAF F-4s that can move rapidly to forward bases in Korea (right) are an important part of the US forward-basing strategy. Below, Japanese-made Type 74 tanks of the small but well-equipped Japan Self-Defense Forces in an Armed Forces Day parade.





scene, whether it is fighter units in the Philippines moved to Osan and Kunsan bases in Korea, or Strategic Air Command bombers deployed from the US to Guam.

The job of the Air Force, as Pacific Command planners see it, will be to back up the US and allied forces on the scene until US Army and Navy forces can arrive to turn the military situation around.

How realistic is the US forward-based posture in the face of the threat of the Soviet Union, Vietnam, and North Korea?

Here is what one frank US commander told me:

"In a World War situation, with the Soviet Union invading West Europe, the war could quickly spill into the Indian Ocean and the Pacific. The Pacific Command would get only those reinforcements not needed by NATO. It would mean a tough fight. We would be short of the fighters and bombers we need. The Navy says there would be only an even chance

of keeping the shipping lanes open, particularly at the initial stages of the war. To win, the US would have to fight an offensive, rather than defensive, war."

What about a regional war?

In the words of one top commander: "No US ally could stand up to a Communist assault without US help. For the first thirty days the contest would be a race between the aggressor, whether it is Vietnam or North Korea, attempting to consolidate its territorial acquisition and US efforts to get reinforcements to the scene to counterattack."

When you talk with US commanders in the Pacific, it is clear that continued security of the Pacific region depends more on US

policies and behavior than on any other single factor.

Policies of the US still are felt throughout the area, whether it is on the Korean demilitarized zone, on the streets of Bangkok, or on a fishing boat in Japanese waters. But there is a feeling of growing independence, and less reliance upon the US for security.

To one commander, the different reactions of Pacific governments to the expanding Soviet threat depends largely upon geography. "The closer they stand to the Russian bear, the more concerned they are."

You see a similar phenomenon when you travel through the Pacific Command. The threat seems most real to the Air Force officer who monitors aircraft probes of Korean defenses, the naval commander who keeps track of Soviet ships in the Sea of Japan, and the intelligence officer who follows the Soviet buildup in the Soviet Far East provinces. ■

This report of his recent visit to US installations in the Pacific was written by Bonner Day prior to his joining the Washington staff of the Veterans Administration.

A major reason for continuing tension in the Korean peninsula is illegal North Korean tunneling under the demilitarized zone.

Tunnels for War: A Reminiscence

BY MAJ. GENE E. TOWNSEND, USAF, CONTRIBUTING EDITOR



First came the accounts of President Carter's trip to Korea. Then, a few months later, my colleague Bonner Day visited the Far East and was excited, among other things, over seeing the third North Korean tunnel, discovered in October 1978. Both events triggered personal memories of duty as plans officer for the Public Affairs Office, United Nations Command/United States Forces Korea (UNC/USFK), when the tunnel was found.

Seoul's weather was unusually splendid in October of last year. The cool, crisp days were remindful of autumn back home. We were working hard on two important projects: the upcoming activation of the binational Republic of Korea-United States (ROK-US) Combined Forces Command, and problems centering around the discovery of a tunnel under the Demilitarized Zone (DMZ)—the third since 1974.

Since both activities had high media interest, the Public Affairs Office was really hopping. Major problems in activating the new command were mainly concerned with the protocol related to ceremonial visits and public statements of high-ranking ROK-US government officials. Timing, planning, and a little luck would ultimately solve them.

The tunnel was more worrisome. It was a serious violation of the Armistice Agreement signed in 1953—and one more in a long series of hostile acts committed by the North since ratifying the agreement. People in that part of the world have long memories but didn't have to reach too far back to recall the ax murders of 1976, recent naval incidents off the northwest coast, and now—another tunnel.

A little understanding of geography and a casual glance at a map will reveal why these North Korean tunnels are such a threat to the Republic of Korea. Seoul, the capital, a city of almost 8,000,000, center of learning, banking, and government, lies only about forty-four kilometers (twenty-eight miles) from the DMZ. In any quick strike south, the tunnels would be a definite advantage that could lead to a serious loss for the Republic of Korea.

When the armistice was signed, a four-kilometer-wide (about 2.5 miles) DMZ was established as a buffer along the 151-mile border between the two Koreas. The armistice re-

quired that all military equipment and forces be withdrawn from the DMZ, and the numbers of personnel and types of activities allowed in the zone were severely restricted. Tunneling under the DMZ, across the center dividing line called the Military Demarcation Line into the South's territory, was definitely a violation of the agreement. Needless to say, the situation presented a difficult public affairs problem for the command.

It was decided to give the press a detailed briefing, issue a release, take some reporters down into the tunnel, and escort them to the Military Armistice Commission meeting called to deal with the issue.

Since alleged North Korean Armistice violations are serious, especially in this part of the world, it was not surprising that there was a full house the day of the briefing. News media representatives were mainly South Koreans, along with some Japanese and a few Americans. The Public Affairs Officer, Army Col. Robert C. Reid, took the stage and looked directly into the flood of television lights and flash cubes.

"This afternoon I have been authorized to inform you . . . of a flagrant North Korean act of aggression against the Republic of Korea, an act which is a serious violation of the Armistice Agreement. . . . Speaking on behalf of the United Nations Command and its Commander, Gen. John W. Vessey, Jr., I have been authorized to announce that the United Nations Command Tunnel Neutralization Team has detected a North Korean tunnel under the United Nations Command sector of the Demilitarized Zone."

Colonel Reid pointed out that the tunnel was located about four kilometers south of Panmunjom, very near the site where the armistice was signed, and that it extended more than 400 meters (436 yards) into the Republic of Korea. The tunnel was discovered with the help of a North Korean defector. Colonel Reid also said that:

- The tunnel was estimated to be about two meters (2 yards) high and two meters wide;
- Its existence was positively confirmed on October 17, 1978, following breakthrough of the UNC intercept tunnel;
- Extensive efforts to find the tunnel had been under way



Above, rocks and dirt being hauled out of the United Nations Command intercept tunnel. The photo on the opposite page shows the intersection of the North Korean tunnel under the UNC sector of the Demilitarized Zone (left) and the UNC countertunnel at the right.

Since March 1978 after ROK Army soldiers heard mysterious jangling sounds underground.

The briefing ended with the observation that additional details about the "illegal" tunnel and evidence of North Korea's guilt would be presented to the Military Armistice Commission. Media representatives were then loaded into buses and taken to the site.

An Emotional Moment

South Korea has some of the most beautiful real estate in the world. Its countryside is a continuum of hills, plains, mountains, and valleys. Much of the high ground north of Seoul is strategically significant and not open to the general public. Several of these strategic sites were observed on the road heading northwest to the tunnel. Upon arrival, the press was divided into several groups and led one at a time through the UNC intercept tunnel. It took about twenty minutes to walk the 280 meters (about 305 yards). Then an opening appeared, dimly lit by a makeshift string of electric lights.

Here was the point where the UNC intercept tunnel met the main trunk of the North Korean tunnel. To our group of mostly Korean reporters, it was a deeply emotional moment. Later press accounts couldn't really capture the feelings of those witnessing the event.

Pointing a flashlight east, we saw bore holes drilled by the North Koreans in the tunnel's solid granite wall. More explosives would have been planted, extending the tunnel further into southern territory if it had not been discovered.

Aiming the light west toward North Korea, we started walking through ankle-deep water. It soon reached our knees, then our waists. Finally, we came to the point where the Military Demarcation Line separates the North from the South. Two ROK soldiers were standing guard, at attention, weapons poised, in chest-deep water. We stood there, silently, for about five minutes. One couldn't help but wonder what the Korean reporters were thinking. They were seeing first-hand an event that seemed to make even more remote their dreams of reunification. After a few pictures were taken, we turned back and loaded up the buses.

The Armistice Commission Meeting

Discovery of North Korean tunnels normally results in the UNC requesting a meeting of the Military Armistice Commission (MAC), established to supervise the truce. Each side has a Senior Member and four other members who participate in Commission meetings. The UNC Senior Member's position has been rotated among the US Army, Navy, Air Force, and Marine Corps. Representatives of the United Nations Advisory

Group and the Republic of Korea serve as the other four members of the Commission's UNC component. Four officers of the North Korean People's Army and one from the Chinese People's Volunteers represent the Communists. A North Korean serves as the Senior Member for their side. Either side can request a meeting.

The meetings take place in the Joint Security Area of the DMZ, only a few miles from where the third tunnel was discovered. The Military Demarcation Line bisects the building where the meetings are held. Inside, a green, felt-covered conference table exactly straddles the line. Each group enters the building on its side of the table so neither has to cross into the other's "territory."

Communist representatives are escorted to the meetings by goosestepping, arm-swinging North Korean guards. United Nations representatives simply walk briskly through a double phalanx of guards.

Press representatives from a variety of Communist, pro-Western, and other countries mill around the building, free to take pictures, notes, or set up television cameras around the open windows that ring the building. The proceedings are also broadcast over loudspeakers.

The meetings are formal. The Senior Member of the side requesting the meeting speaks first. If the United Nations Command requests the meeting, the opening statement is given in English, then translated into Korean and Chinese.

The 391st MAC meeting was called to charge North Korea with constructing a third illegal tunnel. The UNC Senior Member, Rear Adm. Warren C. Hamm, Jr., looked the North Korean Senior Member, Maj. Gen. Han Ju Kyong, squarely in the eye, and in a stern voice charged his opposite with a "serious and flagrant violation of the Armistice Agreement." He reminded Han that the UNC had requested the North to stop this illegal tunneling program after the first and second tunnels were discovered in 1974 and 1975.

Admiral Hamm said, "Over the years, we have heard many words from your side denying aggressive intentions, but for the third time in less than four years, your side has been exposed constructing a tunnel of aggression in flagrant violation of . . . the Armistice Agreement. This is not an indication of someone who wants peace.

"The complexity of your tunnel plan, and extensive planning involved and the high cost in money and man-hours to tunnel through solid granite demonstrate not only that your tunnel scheme is an established policy but shows the importance your side places on that policy.

"It is evidence of your intentions and, reviewing the evidence, one cannot conclude that those intentions are peaceful as you have stated at this table. Your words of peace mean nothing, as shown by your actions."

He warned that if North Korea intended to use the tunnels for aggression, it would be a grave miscalculation similar to the one made in 1950, with its attack on the Republic of Korea. He said the UNC would continue to search for additional tunnels and, if any were found, would expose them for the world to see.

General Han ignored Admiral Hamm's invitation to make an immediate visit to the tunnel site. Han claimed the charge was a fabrication and that North Korea had nothing to do with the tunnel.

Watching the proceedings provided a close-up view of an important moment in history. Although the story of the third tunnel now is a part of recent history, it is possible that additional tunnels may exist in the DMZ—so the story lives on.

Natural caverns in the mountains, other geological formations, and the North's clever masking of its tunneling activities make it extremely difficult to find these tunnels.

Few, seeing one of the tunnels at first-hand, question North Korea's intent. They were built for aggression, to move troops and equipment quickly and surreptitiously across the DMZ, not for defense. ■

In his FY '80 Posture Statement, JCS Chairman Gen. David C. Jones reported that "the Soviets have the world's most fully trained and equipped chemical warfare (CW) force. . . ." There has been some revival of US activity in chemical defense preparations, but the question remains . . .

Is USAF Ready for Chemical Warfare?

BY MAJ. NEIL V. RAYMOND, USAF

IN Europe, the war is going better than expected. NATO troops have held the Warsaw Pact advance to only a few kilometers in the first days of fighting. Reinforcements and supplies are arriving at a monumental rate and are moving to the front lines. Fighting goes on around the clock, but the line is holding.

Suddenly, there is a barrage of small missiles, launched from the east. Alarms sound, but before anyone can take cover the missiles arrive over their Allied targets and explode in midair. But there are no mushroom clouds and no devastation—only a fine mist that drifts gently down. People breathe a sigh of relief at being spared a nuclear attack and go back to work. Within minutes, thousands are dying from massive seizures and convulsions. Allied defenses begin to collapse, and Warsaw Pact forces quickly move in to take over undamaged bases and weapons.

Science fiction? No, it is a real possibility. The Soviet Union and its Warsaw Pact allies have the capability, training, and determination to launch a deadly chemical attack on any opposing force if it would be to their advantage. For the US Air Force, this new threat has raised problems that have only begun to be solved. Air Force leadership now must find ways of doing business in a war environment they have never experienced before.

The Soviet CW Threat

The Soviet Union claims that it will use its chemical warfare (CW) capability only in a defensive role. It has taken all of the normal diplomatic actions to make that claim credible. In 1928, it ratified the Geneva Protocol of 1925, which prohibits the use of "asphyxiating, poisonous, and other gases and of bacteriological methods of warfare." In 1969, the Soviet Union and four Warsaw Pact nations

(Czechoslovakia, Hungary, Poland, and Romania), joined by Mongolia, proposed a United Nations agreement wherein each signatory would not "develop, produce, stockpile, or otherwise acquire chemical and bacteriological (biological) weapons." Yet regardless of the USSR's avowed policy, in three vital areas—doctrine, training, and equipment—evidence is overwhelming that the Soviet Union has the capability to operate in a chemical warfare environment, either offensively or defensively.

Soviet military doctrine views chemical weapons as mass destruction weapons to be used to degrade enemy mobility and create casualties. Chemical weapons are recognized as having the potential of isolating opposing tactical units or being used in place of tactical nuclear weapons against targets the Soviets may want to use themselves, such as airfields. As a measure of the authenticity of their doctrine, it is estimated that there are more than 100,000 Soviet chemical corps troops integrated with regular troops down to the company level.

Col. Oleg Penkovskiy, a Soviet Army intelligence officer who was exposed as a spy for the United States in the early 1960s, discussed Soviet chemical warfare doctrine in his journal, *The Penkovskiy Papers*:

And let there be no doubt: If hostilities should erupt, the Soviet Army would use chemical weapons against its opponents. The political decision has been made, and our strategic military planners have developed a doctrine which permits the commander in the field to decide whether to use chemical weapons, and when and where.

Soviet military journals document advances in both chemical doctrine and training. Warsaw Pact and Soviet forces frequently conduct exercises while wearing full protective clothing. In September



1975, *Voenny Vestnik* (Military Herald) carried an article entitled "Eliminating the Effects of Chemical Contamination during a River Crossing Exercise." The article describes an exercise in which a motorized rifle battalion absorbs a chemical attack from enemy aircraft, decontaminates its people and equipment, and continues to force a river crossing in pursuit of enemy ground forces.

Another article appeared in *Voenny Vestnik* in January 1976 entitled "Radiological and Chemical Reconnaissance at Night." Both articles were written by major generals of Technical Troops. The rank of the authors and the level of integration of chemical warfare into other sophisticated tactical exercises further emphasize the importance the Soviets attach to chemical warfare.

Soviet equipment provides hard evidence of Soviet capabilities. Although evidence of doctrine and training existed before 1973, Soviet equipment captured in the Yom Kippur War of that year proved just how serious the Soviets are about chemical warfare. From personal protective gear through large, high-volume decontamination



Left, the exhaust end of the jet engine used in the Soviet TMS-65 Decontamination Apparatus. Above, artist's concept of a TMS-65 in action. Two units can remove CBR agents from forty tanks or sixty trucks in an hour. US Army photographs.

equipment, chemical hardware is thoroughly integrated into Soviet units and provides effective protection against chemical weapons. For example:

- The Soviet Protective Mask, Model ShM-1, is standard issue to all Soviet and Warsaw Pact troops. It provides excellent protection and has a filter that can be changed without removing the mask. Its usefulness is restricted, however, by lack of a voice transmitter, limited side vision, weight (3.5 pounds), and lack of comfort in hot weather.

- The Czechoslovakian Multipurpose Protective Cape is an outgrowth of the Soviet standard issue cape and is used by the Warsaw Pact countries. Made of nylon fabric approximately the texture of oilcloth, it is lightweight, airtight, doubles as a raincoat, and covers the wearer from head to ankle, including the hands. Also, with the waistband inflated, a wearer can cross water barriers while firing his weapon. Finally, two capes attached together make a small two-man tent.

- The Truck-Mounted Decontamination Apparatus, Model TMS-65, is basically a jet engine mounted on a turntable on the back of a truck. The jet's exhaust decontaminates vehicles with heat and a decontamination solution. Water can be injected into the exhaust to wash off radioactive fallout, or a disinfectant used to destroy biological agents. A pair of TMS-65 trucks, working opposite sides of a line of vehicles, can decontaminate forty tanks or sixty trucks in an hour.

- The BMP-A Armored Infantry Combat Vehicle's Nuclear-Biological-Chemical Collective Protective System is designed to provide a sealed "shirtsleeve" environment for combat troops while crossing contaminated battlefield areas. Without needing protective gear, troops in the vehicle can observe, fire their weapons through portholes, and otherwise function normally inside the vehicle. No United States combat vehicle has this capability.

Offensively (for "retaliation"), the Soviets have a modern system of agents and delivery vehicles. They have deployed a nerve agent called thickened GD or thickened Soman, a relatively persistent liquid that can kill through the lungs or by skin contact. They are believed to have tactical missiles and modern-

ized artillery shells for chemical use. These shells can deliver an accurate air burst over a point target with liquid agents. The agent rains down on the target and thus is more accurate than a gas burst upwind of the target.

US Chemical Warfare Policy

Since World War I, the United States has maintained the capability to use toxic chemicals, but has not used them in combat. Our present policy, established by President Roosevelt in 1943, affirms that the United States will not be the first to use lethal chemical weapons or incapacitating gases. President Nixon reiterated President Roosevelt's policy in 1969 as a result of the public outcry over the 1966 sheep-killing incident in Utah and over Army plans to carry obsolete nerve gas across the country to be dumped in the Atlantic. President Nixon went further by renouncing all use of biological weapons and ordering the disposal of biological warfare stockpiles. Hearings in Congress ensued and eventually led to US ratification of the 1925 Geneva Protocol in 1975.

Following the 1969 policy statement, chemical warfare was sharply deemphasized in US planning. The Army Chemical Corps continued to be the prime DoD agency for chemical warfare, but, except for some research into so-called "binary" weapons, no new weapons were produced. Then, in early 1974, came the revelations of the Yom Kippur War. The last couple of years have witnessed revived DoD activity in chemical defense preparedness.

Current Air Force Programs

The DoD program is aimed at developing better defensive equipment and at training people to carry out their duties in a chemical environment. The Air Force is actively engaged in both efforts.

Equipment. The US Army has been designated as the primary DoD agency to develop modernized common-user equipment for all services. The Air Force, Navy, and Marines are identifying needs peculiar to their individual operations and developing equipment to meet those needs. Tactical Air Command and Air Force Systems Command

have been assigned the responsibility for the Air Force.

To meet immediate needs, an aircrew and a ground crew ensemble have been selected from existing state-of-the-art equipment. These two ensembles will be used until better equipment can be developed.

The aircrew ensemble adds several new items of personal gear for the crew member. Body protection is provided by two additional layers of clothing worn under the standard Nomex coveralls. The first layer,



This makeshift protective gear is being distributed to aircrews in high-threat areas. TAC and Systems Command are developing better equipment for crews.

immediately under the Nomex, is an activated-charcoal impregnated undergarment to protect against agents. The second layer is cotton underwear, worn under the charcoal garment to prevent skin irritation. Eye and respiratory protection is provided by a modified full-face firefighter's mask and a filter in the oxygen hose. Head and neck protection is provided by a modified helicopter helmet (to accommodate the large mask) and a butyl rubber hood that covers the head and shoulders. Neoprene gloves worn under Nomex gloves protect the hands. Finally, foot protection is provided by plastic tube socks worn over regular socks and by disposable plastic overboots. The overboots are removed before entering the aircraft to prevent cockpit contamination.

The ground crew ensemble was derived from US Army equipment. It consists of the standard M-17A1 mask, a mask hood, rubber overshoes, rubber gloves, and a two-piece, charcoal-lined overgarment. The two-piece suit is about the thickness and weight of a ski suit. The rubber overshoes are a "mukluk" single-size style that wraps and laces over the normal boot.

Both ensembles were operationally tested in 1977 by the Tactical Air Warfare Center (TAWC). Various functional agencies including aircrews participated in the tests. With some limitations, both ensembles were found satisfactory and are being distributed to the field. Priority on distribution is going to high-threat areas and mobility forces. United States Air Forces in Europe (USAFE) has obligated more than \$11.5 million since 1977 for protective equipment and expects to have two complete ensembles on hand for everyone in the theater in the next several years.

TAC and Systems Command are using data from the TAWC tests and field experience to develop better equipment for the aircrew ensemble. The goal is to produce an ensemble that gives better protection while reducing fatigue, particularly thermal fatigue.

Training. Chemical warfare defense imposes many restrictions on the way people normally do their jobs. To overcome them and to maintain a high state of readiness

requires a thorough program of individual and unit training. Programs of the sort that USAFE, TAC, MAC, PACAF, and SAC are now conducting will become a way of life for all mobility forces.

Ground personnel are now receiving initial chemical defense indoctrination and task qualification training, including a gas chamber drill, soon after assignment to a high threat area or a mobility position. Reindoctrination training is given every six months, along with an annual gas chamber drill. The subjects covered in this training include a briefing on the Soviet threat, care and use of the equipment, and first aid.

Aircrew members are getting similar basic indoctrination plus specific flying-oriented training. In USAFE, the aircrews are briefed on the aeromedical impact of chemical agents and go through specialized egress and flight-simulator training. Finally, actual flying is conducted wearing key components of the protective gear.

Simply having personal equipment and knowing how to wear it is not, however, going to ensure the continued effectiveness of units near a combat area. The minor distractions noticed during individual training become problems when people try to do their normal duties while wearing the protective ensembles. Sense of smell disappears and hearing and touch are restricted. Peripheral vision is limited. Heat fatigue sets in quickly, especially with hot weather or exertion. As a result, commands and communications can be garbled, reactions are slowed, accidents can happen, and physical endurance and fitness become constraining factors. Only by practice are these problems compensated for or overcome.

To prepare their people to deal with these kinds of problems, USAFE has established unit-wide training exercises with chemical gear. Operational Readiness Inspections now include a chemical defense exercise. Each unit in USAFE must conduct quarterly chemical training exercises and they have the option of more frequent exercises. Most units use that option.

It is not unusual to see mainte-

Maj. Neil V. Raymond is a logistics planner on the J-4 staff of US European Command. He has served previously as Commander of the 321st Field Training Detachment, Maintenance Supervisor of the 483d and 436th Field Maintenance Squadrons, and C-141 Program Director at Hq., Twenty-first Air Force. Major Raymond has a master's degree in Logistics Management from AFIT and is a graduate of the Armed Forces Staff College.

nance technicians wearing gas masks while fixing aircraft. Civil engineering Rapid Runway Repair teams frequently train under simulated chemical attack. Reserve units are expected to bring their gas masks during two-week annual training.

Training in full protective gear is done for only certain selected exercises since there is not enough extra equipment on hand to set aside large quantities exclusively for training. According to officials at USAFE headquarters, units in the field can expect to begin training in full gear when enough is available.

Implications for the Future

The Soviet threat has been recognized. But the money and effort that have been expended in countering it is only a beginning. Many problems remain unsolved, and when they are solved, their solutions will become part of our normal way of doing business. Some of the questions that need to be answered are:

- How much will chemical defense measures degrade aircraft sortie generation?
- What facilities will be usable during and after a chemical attack?
- What effect will all of the personal protective gear have on deployment plans?
- How do you treat a conventional wound on someone who is chemically contaminated without creating chemical casualties among medical personnel?
- How does a CONUS base handle a contaminated aircraft returning from a combat area? Is the flight crew equipped and trained to handle the contamination?
- How drastically will a chemical attack lower the "nuclear threshold"?
- Will physical fitness standards have to be raised to deal with the thermal fatigue problem?

In the final analysis, the success of a chemical defense program depends on the attitude of the people who carry out the mission—fly and maintain the planes, guard the

perimeters, support the bases, and so on. All the training and equipment we can provide won't do any good if the people disregard it or, worse, treat it as a bad joke. In years past we could afford that kind of laxness, though it was never officially condoned. Even today, in the words of some of the airmen who have participated in USAFE exercises, wearing chemical gear "is a real pain!" That's right. It is a pain. But the alternative is worse.

Without firing a shot, the Soviet Union has thrust us into a new era of warfare. In spite of all international agreements, the massive Soviet chemical warfare capability has made a chemical battlefield a strong future possibility. American defense leaders now have the burden of ensuring that their people are prepared to deal with that eventuality. With proper equipment, people can survive a chemical attack. The problem will come when they also have to keep on fighting. Only good training and positive attitudes will ensure success.

The Soviets are ready. Are we? ■

Selected Sources on Chemical Warfare

The following books and articles provide more detailed information about the nature of chemical warfare:

AFR 355-5, *Armed Forces Doctrine for Chemical Warfare and Biological Defense.*

AFR 355-7, *Military Chemistry and Chemical Compounds.* A good unclassified text about specific agents and their effects.

"Defense Against Chemical Attack," by 1st Lt. Austin Bay, USA, in the May-June 1978 edition of *Armor* magazine. Documents training experiences and develops a graduated readiness system.

"Chemical Warfare and the Military Balance," by Lt. Col. Charles H. Bay, USA, in Vol. VII, 1977 edition of *Parameters, Journal of the U.S. Army War College.* A thoughtful look at what chemical weapons may do to the "nuclear threshold."

Tomorrow's Weapons (McGraw-Hill, 1964), by Brig. Gen. J. H. Rothschild, USA (Ret.). A look at the history and potential of chemical warfare by a former commander of the Army Chemical Corps.

STAFF GIFT FOR 1980

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November AIR FORCE Magazine

Convention, Briefings and Displays Report Issue—Widely read for its comprehensive reports on the AFA Convention, addressed by key USAF leaders and industry briefings on latest technical developments.

December AIR FORCE Magazine

"The Military Balance"—Exclusive US presentation of the annual report from The International Institute for Strategic Studies, London, England, which documents, country-by-country, the world's military forces and equipment. A desk-top reference used throughout the year by military decision-makers in the US Air Force, DoD, NASA, the Congress, and the other military services.

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The Bulletin Board

By James A. McDonnell, Jr., MILITARY RELATIONS EDITOR

Focus on Bread and Butter Issues at Convention

"Our enlisted people and officers are leaving for civilian life because they simply can't afford to stay in the Air Force. I'm not talking about fortunes—I am talking about putting meals on the table—of being able to clothe, feed, and adequately educate their children. They are leaving because they can't support their families."

So declared USAF Capt. Kathy LaSauce-Arlington in an emotional speech that kicked off the 1979 Air Force Association Convention and which Air Force members and convention delegates lauded as "dynamic" and "outstanding." (See p. 86 for excerpts.)

Captain LaSauce-Arlington, a C-141 pilot from Norton AFB, Calif., who interrupted her honeymoon to keynote the festivities, delivered a ringing appeal for adequate military pay and benefits. In effect, it set the tone of the entire four-day assembly. No other issue, other than the Soviet threat to US security, commanded as much attention as the recruiting and retention question.

The keynoter challenged AFA to help secure adequate compensation for uniformed people. The recent seven percent pay raise, she said, "leaves us a deficit of at least six percent loss in pay every year." She also deplored the low regard many Americans have for military members.

Members of AFA's Enlisted Council, Junior Officer Advisory Council, and the Senior Enlisted Advisor Conference applauded Chief of Staff Gen. Lew Allen, Jr., for his constant plugging for better pay and benefits (see p. 63). At a special session, the Chief promised the councils to continue these efforts, but he acknowledged it "will be difficult" to attain his goal of securing raises that come close to offsetting inflation.

The JOAC and the Enlisted Council finished up their special projects for the year—the preparation of innovative recruiter pamphlets they will offer the Air Force leadership. Assisting both groups are their respective advisors, Maj. Gen. William Usher, the Hq. USAF Director of Personnel Plans, for the JOAC, and Chief Master Sergeant of the Air Force James McCoy for the Enlisted Council.

General Allen, at the AFA Convention luncheon in his honor, also said he was greatly concerned about Senate efforts to impose shorter, unaccompanied overseas tours on the services. He said what AIR FORCE

Magazine has been saying: that morale would plunge, separations would increase, and readiness would suffer.

Summing up, the Air Force Chief said, "I will continue to fight to ensure that the Air Force is . . . an institution that can attract quality people, live up to its promises for adequate compensation and proper benefits, and provide an atmosphere in which service to country remains a worthy calling."

In related presentations to the three councils:

- Maj. Gen. H. A. Morris, the Hq. USAF Assistant DCS/Manpower & Personnel, said that while Air Force people are concerned about pay caps and benefits, "we don't quit, we don't go on strike. We recognize that a few more dollars aren't going to do us much good if we have no country to spend them in." General Morris added, however, that "we can ask our people to do more for less, but only up to a point."

- Lt. Gen. Paul Myers, the USAF Surgeon General, predicted that with medical scholarship programs beginning to produce, the immediate years ahead will see substantial improvement in medical officer staffing—"they'll be good years. . .



The Defense Combined Federal Campaign's annual fund-raising drive was kicked off September 18 in an effort to raise money for charity. This year's goal is \$3,335,000. The capital area Defense community contributed more than \$3.2 million to the campaign last year, which was distributed to 183 charities. Here Campaign Chairman Fred P. Wacker, Assistant Secretary of Defense, Comptroller, right, presents campaign material to Defense Administrator Ken Blackshaw, a veteran Air Force and civilian public affairs officer at the Pentagon. Looking on is Lt. Gen. Richard L. West, USA, left, who is serving as this year's Campaign Vice Chairman.

The Bulletin Board

and the quality of our physicians will be very high."

- Maj. Gen. Charles Blanton, USAF's Director of Legislative Liaison, forecast that Congress will overturn an earlier Senate vote and approve junior enlisted travel (JET) allowances for lower graders overseas. About the same time he spoke, the House approved the JET and it is expected to prevail in conference.

More People Programs in Trouble

The military services began the autumn season facing a string of new cuts in, and adverse management changes to, several important personnel programs. Most of the unpleasantness came from the House Appropriations Committee, which wants in the worst way to shave personnel outlays. The full House, in acting on the FY '80 military budget, approved all the Committee's adverse proposals. It:

- Rejected a Pentagon proposal for a cost-of-living allowance for unaccompanied service members over-

seas. Accompanied personnel have drawn the allowance for years, but the lawmakers couldn't see shelling out the estimated \$72 million in the first-year costs, thus probably assuring that the inequity will continue.

- Directed the services to launch a test of a "two-tier pilot system" in which at least five percent of the FY '80 flying training graduates would be given warrant officer, rather than commissioned, status. USAF is dead set against this plan.

- Clamped a ceiling of 375,000 dependents allowed overseas at one time. Since the current dependent overseas population is estimated at 378,000, including 44,000 nonsponsored kin, some families may have an extended wait before joining their sponsors, if the Senate backs up the House action.

- Directed that starting December 1, 1979, "all support" for noncommand-sponsored dependents overseas, except for emergency medicare, "will be terminated." No use of exchanges, commissaries, schools, etc., unless the sponsor extends for the longer with-kin tour. This policy has been in effect in the Far East.

- Ordered the end of commissions for physician's assistants. The 300-plus commissioned PAs in the Air Force would retain their rank, but those now in training would become warrant officers. Some sources fear that if this provision becomes law

USAF's PA program may become a shambles.

The House also voted to (1) keep CHAMPUS payments at the eightieth percentile level; (2) outlaw abortions in military hospitals except where the life of the mother would be endangered; (3) reject USAF's bid for funding 6,500 AFROTC scholarships, some 740 more than are currently funded; (4) not pay severance pay to officers released for unsatisfactory performance; (5) shelve the up-or-out system for active-duty Reserve officers following two temporary promotion passovers; (6) charge service members up to thirty cents per check for processing their allotment checks; and (7) eliminate USAF's Veterinary Corps and make the Army responsible for all DoD veterinary services.

All told, the House pruned \$77.1 million from the Air Force military personnel budget. Changes are possible further on in the legislative process.

In a separate action, the House approved a year's extension of Air Force's officer grade tables. This measure is for use in case the DOPMA bill, with permanent grade tables, fails again. The Senate Armed Services Committee held several closed-door hearings on DOPMA, and informed sources said there is still a chance it will be enacted this year.

Ed Gates . . . Speaking of People

The Airlines: Not All Roses

The Air Force has been leveling with its pilots who are steamed up about taking flying jobs with the airlines. "Few other jobs offer so much pay for so little work," the service acknowledges. In an official publication being distributed service-wide, the Air Force details the airlines' lofty pay-benefits structure.

USAF also is advising the same audience that there are "many things the airlines don't tell you," like the shaky financial condition of some, boredom on the job, and "furloughs," the lines' euphemism for layoffs.

This tell-it-like-it-is project is part of USAF's latest effort to curb the still-heavy rated officer separations. The effort got an assist recently when the airlines, following months of heavy poaching of pilots from the military services, sharply cut the number of their new hires.

"We're not hiring, period," a TWA spokesman told AIR FORCE Magazine. "American is not putting new pilots on the payroll at the moment," an executive there stated. United, which will soon have hired 996 new pilots over a two-year period, is starting to cut back. "We're evaluating the future situation very closely," a United spokesman said. Most of the other major airlines reportedly either have cut back new pilot hires or have halted them entirely. The recession and huge increases in fuel costs are cited as among the main reasons.

The slowdown in airline hiring lends credibility to USAF's overall

pilot retention pitch, which is contained in what it calls the "Commander's Information Brochure." This is a ninety-page pamphlet, first put out a year ago but recently revised and expanded, that squadron commanders and operations officers should use in talking retention to rated officers who are "on the fence" about shedding their uniforms.

The brochure reviews Air Force assignments, benefits, promotions, future prospects, etc., with considerable candor. The sales effort is reasonably restrained. Thus, when discussing the Air Force-sponsored proposal to increase flight pay, the publication makes no claim that it is trying to come close to airline pay. As for the flight pay boost plan's chances, the Air Force gives it a realistic fifty percent.

The new brochure also examines objectively such "career concerns" as the rated supplement, up-or-out, navigator utilization, and family separations. On another "hot issue," unfortunately, it fails to address a growing complaint—that controlled "3" ratings rendered during the disastrous period of the controlled OER program have not been removed from individuals' files.

The highlight of the new Commander's Information Brochure, however, is the chapter called the "Airline Issue." Painful as it may be for service leaders to publicize it, the brochure starts off by comparing military and airline compensation.

Airline 727 pilot pay (based on 1978 American Airlines rates)

Meanwhile, the House Armed Services Committee approved a bill providing bonuses of up to \$22,000 a year for military physicians. It was scheduled for House floor action in mid-October. A companion measure, likely to become law by November, raises from \$400 to \$453 the monthly stipend paid military medical scholarship recipients, and indexes this pay to the CPI.

Aid Society Expanding Educational Loan Plan

The Air Force Aid Society is broadening its educational loan program once again, this time to include virtually the entire USAF family—active-duty members, their spouses, retirees, selected Reserve Forces members, as well as their children.

For years AFAS educational loans were limited to Air Force sons and daughters for undergraduate work only. The loan ceiling was \$2,000. Last summer, the organization launched a new, more liberal loan project for student dependents that carries a \$15,000 loan ceiling and covers both undergraduate and graduate work. This expansion has been highly successful, according to AFAS Director Gen. Louis T. Seith, USAF (Ret.). AFAS headquarters has been processing 300 to 400 applications for these loans each week.

The upcoming expansion program, General Seith told AIR FORCE

Magazine, will extend the liberalized loan eligibility to:

1. Children of members of the Selected Reserve Forces—the Air Guard, Air Force Reserve units, and mobilization assignees.

2. Air Force members, their spouses, retirees, and Selected Reserve participants.

Details will be announced soon. AFA, long a champion of a more responsive AFAS, salutes these initiatives.

Vets Who Owe Government Money, Hear This

The House Veterans Affairs Committee has approved legislation giving the Veterans Administration clout to recover half a billion dollars in outstanding debts from GI Bill education overpayments and loan defaults. In other developments affecting veterans:

- House and Senate leaders have agreed on a 9.9 percent increase in disability compensation for the 2,300,000 ex-service members receiving it and an identical raise for the 324,000 survivors receiving dependency indemnity compensation (DIC). The measure was expected to become effective October 1. Earlier, the House had approved an 8.3 percent boost and the Senate an 11.1 percent increase.

- An attempt by the Senate to eliminate GI Bill benefits for veterans

and service members taking flying or correspondence training has been beaten back by the House Veterans Affairs Committee. Veterans organizations strongly opposed the elimination attempt by the Senate. The government will continue to pay veterans ninety percent of the established charges paid by nonvets for the same courses.

- Attempts to raise GI Bill educational and vocational training rates this year appear to have fizzled. The last increase was in 1977. Most legislators feel "that raise was a healthy one" and that a boost now is unnecessary, a Capitol Hill source said.

GI Bill overpayments, while less commonplace than earlier, remain serious and the Committee Chairman, Rep. Ray Roberts (D-Tex.), wants the huge sums returned to help "support worthy veterans assistance programs." Most who owe can afford to repay, Roberts said.

The Roberts get-tough bill gives the VA authority to obtain the delinquent veteran's current address and request payment. If that fails, VA would disclose the indebtedness and assure its entry on the individual's credit rating. The delinquents would then be more likely to face up to their obligation.

Meanwhile, an investigative subcommittee of the full House Veterans Affairs Committee scheduled hearings on the question of denying VA

begins at \$13,200 a year, meaning a sharp cut for a beginning flyer fresh out of the military. But in the third year he'll be drawing a tidy \$34,396. By the eighth through the thirteenth year, as a 707 first officer, his annual rate will hit \$47,861. DC-10 captains with twenty-eight to thirty years of service are paid \$88,866 annually. And all of this, the Air Force reports, translates into a nifty \$33,000 annual pension (after thirty years of service at age sixty).

Furthermore, USAF acknowledges, airline pay and benefits may improve in the years ahead. But in a unique section called "What the Airlines Don't Tell You," the brochure goes on the offensive. The airlines, it advises, "are not in the best economic shape." Their profit margins are well below US business as a whole, operating costs are rising rapidly, and their profits are expected to fall thirty percent this year. This prediction remains valid, although these are average figures and vary widely from airline to airline.

Fuel shortages, the brochure continues, will have a "serious impact" on airline expansion and the present level of operation. Carriers with fuel-inefficient fleets, such as American and TWA 707s, will be "hurt worse than those who modernized." This forecast has proved to be right on the money.

Recession is the greatest threat to the airlines, and layoffs and furloughs are seen if the economy turns for the worse. Furloughs—no pay and no accrual of seniority—were commonplace up to two years ago. USAF estimates the average scheduled airline furloughed as many as eight percent of its pilots, some of them for many months.

Pan Am at one point had twenty-three percent of its pilots on furlough. Some nonskeds experienced similar rates. With seniority meaning everything, airline pilots probably need to be twenty-five percent up the seniority ladder to be "furlough-safe," the Air Force estimates. The service also advances the likelihood that the air-

lines have recently overhired on purpose, "as they have done in the past, to provide their own resource of available pilots."

With the recent slowdown in new pilot hiring, the specter of renewed furloughing moves to center stage. It's a constant worry to less-senior pilots throughout the airline industry.

If you join an airline there "is no chance to do anything but fly . . . no chance to work in the management of the airlines as your goals and interests change," the Air Force retention message continues. It adds that airline pilots "are often treated as bus drivers," there being no advancement to higher positions "in accordance with your flying ability."

The Commander's Information Brochure also notes that (1) the government is considering placing "free" airline employee travel and other benefits under taxable income, and (2) unlike in the military, a person's career opportunities are totally dependent on his ability to continue flying.

The airlines, the Air Force adds, offer more tangibles than the military, but "they avoid talk" about such equally important issues as job security, fuel crunches, profit margins, competition, and unions.

The USAF retention effort also gets deeply involved with job satisfaction and job security in the service. As the brochure notes, flying in the Air Force is far more diverse, exciting, and rewarding than "anything you will ever see in the airlines." At another point, Air Force says the pilots whose only interest is pay might best depart and try the airline route. But their chances of connecting appear reduced now over what they may have been six months ago.

"If, however, you desire job satisfaction, challenge, responsibility, comfortable living and membership in a community dedicated to the United States, look again at the Air Force as a career," the retention pitch concludes. ■

The Bulletin Board

benefits to service members who don't complete their enlistments. It takes only 180 days of service to attain GI Bill eligibility, far less than many quarters feel should be the case. Large savings are eyed by officials seeking tougher eligibility rules. These hearings won't lead to early legislation but they may be "a first step" toward limiting benefits to those who served a reasonable length of time, an informed source said.

Since 1944, when the first GI Bill became law, Americans have invested \$49 billion to train 7,800,000 World War II vets, 2,300,000 Korean War veterans, and 7,500,000 Vietnam-era and post-Korea veterans and active-duty personnel.

More than 5,000,000 Vietnam-era participants have not used some or all of their GI entitlements, according to the VA. It estimates that nearly 900,000 of them will lose their eligibility over the next year. The agency's message to all such veterans, whether they served only six months or several years, is this:

"We urge veterans with entitlement to start a program early enough to complete it before time runs out." Rights to VA payments end ten years after separation dates, while all activities under the GI Bill cease December 31, 1989.

SAC, MAC Pilots Can Swap

Another move that may possibly help pilot retention is the recent agreement between Strategic Air Command and Military Airlift Command to let some of their pilots swap commands. Initially, the program is limited to exchanging pilots between the KC/EC/RC-135 and the C-141. Future changes may include sending B-52 pilots to -141s, and a navigator cross-flow project.

Aim of the project is to help pilots get multiple-aircraft experience and enhance their career development. Selections for the voluntary program are on a one-for-one exchange. Training takes place at a combat crew training school, after which the pilots serve three years, normally at a base they have selected.

After the three years, participants can elect to stay in their new command, return to their old one, or work

out a new assignment with the Manpower Personnel Center.

Participants in the new program must be majors or below, aircraft commanders, and have at least 1,250 hours flying time. Base personnel offices have transfer information.

Impact of Draft Concerns USAF

The Air Force has never taken draftees, though it benefited from the draft as many high-caliber youths joined up in lieu of a compulsory two-year hitch in the Army. Still, USAF officials are concerned that when and if a draft resurfaces, they will be required to accept many draftees, perhaps one of every three, and also be forced to enroll a share of lower mental category types.

Congressional groups have suggested similar "share-the-manpower" schemes before but USAF, with the cream of the youth procurement crop, wants no part of it.

The matter is somewhat academic this year, for Congress recently shelved the draft registration proposal. The measure lost convincingly in the House. The senators, seeing the handwriting on the wall, did not take up the bill, though they debated the issue at length, much of it in closed-door sessions. But supporters promise to be back.

Some lawmakers are proposing new incentives to lure youths to volunteer for service. One by Rep. Robert Dornan (R-Calif.) would provide a lifetime tax credit of five or ten percent on the taxable income of any person who enlists for two or four years, completes the enlistment, and receives an honorable discharge.

But the House rejected Dornan's plan after Rep. Sam Stratton (R-N.Y.) declared "that we have come just about as far as we can to attract men and women . . . by means of money." He said fifty-six percent of the US defense budget goes for personnel, compared to twenty-five percent by the Soviet Union. This enables the Soviets to put "significantly more money into weapons," Stratton stated.

Short Bursts

The Air Force Academy is **urging USAF people to help recruit academically and otherwise qualified** football talent for the Falcon team, which has suffered through five seasons in the gridiron doldrums. Head Coach Ken Hatfield says his ten assistants can't cover all fifty states in the talent search. But if Falcon supporters tip him off about possible prospects in

small towns, the staff will take it from there. The Academy will join the Western Athletic Conference next July. In the WAC, its teams will meet Colorado State, Texas at El Paso, New Mexico, Wyoming, Utah, Brigham Young, and Hawaii. Since the Conference was founded in 1964, the Falcons have won twenty-six of forty-eight football games against WAC teams, but the basketball squad has only a twenty-eight won, seventy-nine loss record against the same schools.

One of the military retirement system's severest critics, **Rep. Les Aspin** (D-Wis.), is at it again—**blasting away at his favorite target.** The government is shelling out more than \$6 billion annually to retired service members in their thirties, forties, and fifties. Only eighteen percent of the retirees "are over sixty-five and of real retirement age," he declared recently.

Interestingly, Aspin is the same lawmaker who has quarterbacked **an offensive on Capitol Hill to retain junior enlisted travel (JET)** allowances for low-ranking enlistees going overseas. "It is patently unfair" to single out this group for nonpayment, he declared.

That USAF probe of the health of its 1,200 "Ranch Hand" personnel, who sprayed Agent Orange in Vietnam between 1962-71, has slipped. The delay in starting—from last month to January 1980—won't please the many critics who claim the government is moving far too slowly on this controversial issue (see October "Bulletin Board").

Here's a footnote to the report on p. 81 about the winners of the **Aerospace Education Foundation's 1978-79 AFJROTC Contest:** Of the twenty-five high school units winning or receiving honorable mention for their entries, **eighteen are located in the South.** None from New England. The same pattern of heavy interest among units from the southern states has prevailed since the contest began seven years ago. Serves as still another indication of where the country's strongest military support comes from.

Last January the **Air Force diluted its physical fitness program** for members thirty-five and over, requiring only that they take periodic three-mile walks. The reasoning: it would reduce heart attacks. The change, not surprisingly, has been ridiculed and widely interpreted as an official deemphasis on fitness. This "was never the intention," Hq. USAF said recently. **Still, it has ditched the**

mandatory short walk. Under the new rules, the "oldsters" have three choices: take the walk, run one and one-half miles, or run in place. To the growing numbers over thirty-five who jog for miles and indulge in tough fitness programs, the new rules may also seem like child's play.

"Many airmen," the Air Force says, **are eligible to receive the Humanitarian Service Medal**, an award recently established by the Defense Department. Eligible are those who participated in any of the sixteen humanitarian-type operations taking place between 1975 and 1978. Examples include evacuation of refugees from Vietnam, Laos, and Cambodia during certain periods, and various relief efforts following floods, earthquakes, etc. Base personnel offices should have details.

Senior Staff Changes

PROMOTIONS: To **Lieutenant General:** Richard E. Merklng. To **Brigadier General:** Harold J. M. Williams.

RETIREMENTS: L/G George Rhodes; L/G Thomas P. Stafford.

CHANGES: L/G Richard E. Merklng, from Cmdr., Sacramento ALC,

McClellan AFB, Calif., to Vice Cmdr., AFLC, Wright-Patterson AFB, Ohio, replacing retiring L/G George Rhodes . . . **L/G Charles C. Pattillo**, from Dep. CINC, US Readiness Command, MacDill AFB, Fla., to Vice Dir., Joint Deployment Agency, MacDill AFB, Fla. . . . **B/G William L. Shields, Jr.**, from IG, AFSC, Andrews AFB, Md., to Dep. Chief of Staff, Space Surveillance and Missile Warnings System, Hq. SAC, Offutt AFB, Neb. . . . **B/G John H. Storrle**, from Asst. DCS/Systems for Armament & Def. Sup., Hq. AFSC, Andrews AFB, Md., to IG, AFSC, Andrews AFB, Md., replacing B/G William L. Shields, Jr.

SENIOR ENLISTED ADVISOR CHANGES: **CMSgt. Reate Davis**, from 3205th Maintenance and Supply Gp., Eglin AFB, Fla., to Senior Enlisted Advisor, ADTC, Eglin AFB, Fla. . . . **CMSgt. Robert J. McLaurine**, to Senior Enlisted Advisor, Office of Security Police, Kirtland AFB, N. M. . . . **CMSgt. Richard A. Pinto**, from Contingency Planner, Galena AFS, Alaska, to Senior Enlisted Advisor, Engrg. & Svcs. Center, Tyndall AFB, Fla. . . . **CMSgt. Charles L. Reynolds**, from 7th Organizational Maintenance Sqdn., Carswell AFB, Tex., to Senior Enlisted Advisor, Hq. SAC, Offutt AFB, Neb. ■

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CURRENT BENEFIT TABLES

Insured's Attained Age	STANDARD PREMIUM: \$10 per month	HIGH OPTION PREMIUM: \$15 per month	HIGH OPTION PLUS PREMIUM: \$20 per month
	Basic Benefit*	Basic Benefit*	Basic Benefit*
20-29	\$85,000	\$127,500	\$170,000
30-34	65,000	97,500	130,000
35-39	50,000	75,000	100,000
40-44	35,000	52,500	70,000
45-49	20,000	30,000	40,000
50-54	12,500	18,750	25,000
55-59	10,000	15,000	20,000
60-64	7,500	11,250	15,000
65-69	4,000	6,000	8,000
70-74	2,500	3,750	5,000
Aviation Death Benefit*			
Non-war related	\$25,000	\$37,500	\$50,000
War related	\$15,000	\$22,500	\$30,000
Extra Accidental Death Benefit*			
	\$12,500*	\$15,000*	\$17,500*

*The Extra Accidental Death Benefit is payable in addition to the basic benefit in the event an accidental death occurs within 13 weeks of the accident, except as noted under AVIATION DEATH BENEFIT (below).

*AVIATION DEATH BENEFIT: The coverage provided under the Aviation Death Benefit is paid for death which is caused by an aviation accident in which the insured is serving as pilot or crew member of the aircraft involved. Under this condition, the Aviation Death Benefit is paid in lieu of all other benefits of this coverage. Furthermore the non-war related benefit will be paid in all cases where the death does not result from war or an act of war, whether declared or undeclared.

OTHER IMPORTANT BENEFITS

COVERAGE YOU CAN KEEP. Provided you apply for coverage under age 60 (see "ELIGIBILITY") your insurance may be retained at the same low group rates to age 75.

FULL TIME, WORLD WIDE PROTECTION. The policy contains no war clause, hazardous duty restriction, combat zone waiting period or geographical limitation.

DISABILITY WAIVER OF PREMIUM. If you become totally disabled at any time prior to age 60 for at least a 9-month period, your coverage will be continued in force without further payment of premiums as long as you remain disabled.

FULL CHOICE OF SETTLEMENT OPTIONS. All standard forms of settlement options, as well as special options agreed to by the insured and United of Omaha, are available to insured members.

CONVENIENT PAYMENT PLANS. Premium payments may be made by monthly government allotment (payable to Air Force Association), or direct to AFA in quarterly, annual or semi-annual installments.

DIVIDEND POLICY. AFA's primary policy is to provide maximum coverage at the lowest possible cost. Consistent with this policy, AFA has provided year-end dividends in all but three years (during the Vietnam War) since the program was initiated in 1961, and basic coverage has been increased on six separate occasions.

ADDITIONAL INFORMATION

Effective Date of Your Coverage. All certificates are dated and take effect on the last day of the month in which your application for coverage is approved, and coverage runs concurrently with AFA membership. AFA Military Group Life Insurance is written in conformity with the insurance regulations of the State of Minnesota. The insurance will be provided under the group insurance policy issued by United of Omaha to the First National Bank of Minnesota as trustees of the Air Force Association Group Insurance Trust.

EXCEPTIONS: There are a few logical exceptions to this coverage. They are:

Group Life Insurance: Benefits for suicide or death from injuries intentionally self-inflicted while sane or insane will not be effective until your coverage has been in force for 12 months.

The Accidental Death Benefit and Aviation Death Benefit shall not be effective if death results: (1) From injuries intentionally self-inflicted while sane or insane, or (2) From injuries sustained while committing a felony, or (3) Either directly or indirectly from bodily or mental infirmity, poisoning or asphyxiation from carbon monoxide, or (4) During any period a member's coverage is being continued under the waiver of premium provision, or (5) From an aviation accident, either military or civilian, in which the insured was acting as pilot or crew member of the aircraft involved, except as provided under AVIATION DEATH BENEFIT.

ELIGIBILITY

All active duty and retired* personnel of the Armed Forces of the United States, members of the Ready Reserve* and National Guard*, Armed Forces Academy cadets*, and college or university ROTC cadets* are eligible to apply for this coverage provided they are under age 60 and are now, or become, members of the Air Force Association.

*Because of certain restrictions on the issuance of group insurance coverage, applications for coverage under the group program cannot be accepted from non-active duty personnel residing in either New York or Ohio. Non-active duty members residing in these states, however, may request special application forms from AFA for individual policies which provide coverage quite similar to the group program.

OPTIONAL FAMILY COVERAGE

(may be added to any of the above Plans)
PREMIUM: \$2.50 per month

Insured's Attained Age	Life Insurance Coverage for Spouse	Life Insurance Coverage for each Child*
20-39	\$10,000	\$2,000
40-44	7,500	2,000
45-49	5,000	2,000
50-54	4,000	2,000
55-59	3,000	2,000
60-64	2,500	2,000
65-69	1,500	2,000
70-74	750	2,000

*Between the ages of six months and 21 years, each child is provided \$2,000 coverage. Children under 6 months are provided with \$250 coverage once they are 15 days old and discharged from hospital.

Please Retain This Medical Bureau Prenotification For Your Records

Information regarding your insurability will be treated as confidential. United Benefit Life Insurance Company may, however, make a brief report thereon to the Medical Information Bureau, a nonprofit membership organization of life insurance companies, which operates an information exchange on behalf of its members. If you apply to another bureau member company for life or health insurance coverage, or a claim for benefits is submitted to such a company, the Bureau, upon request, will supply such company with the information in its file.

Upon receipt of a request from you, the Bureau will arrange disclosure of any information it may have in your file. (Medical information will be disclosed only to your attending physician.) If you question the accuracy of information in the Bureau's file, you may contact the Bureau and seek a correction in accordance with the procedures set forth in the federal Fair Credit Reporting Act. The address of the Bureau's information office is P.O. Box 105, Essex Station, Boston, Mass. 02112. Phone (617)426-3660.

United Benefit Life Insurance Company may also release information in its file to other life insurance companies to whom you may apply for life or health insurance, or to whom a claim for benefits may be submitted.

Coverage Up to \$170,000



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Group Policy GLG-2625
United Benefit Life Insurance Company
Home Office Omaha Nebraska

Full name of member _____
Rank _____ Last _____ First _____ Middle _____

Address _____
Number and Street _____ City _____ State _____ ZIP Code _____

Date of birth Mo. Day Yr.	Height	Weight	Social Security Number	Name and relationship of primary beneficiary
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Please indicate category of eligibility and branch of service.

Extended Active Duty

Ready Reserve Air Force

National Guard Other _____
(Branch of service)

Retired

Armed Forces Academy

ROTC Cadet

Name and relationship of contingent beneficiary _____

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I enclose \$13 for annual AFA membership dues (includes subscription (\$9) to AIR FORCE Magazine).

I am an AFA member.

Please indicate below the Mode of Payment and the Plan you elect:

Mode of Payment	Standard Plan		High Option Plan		High Option PLUS Plan	
	Member Only	Member And Dependents	Member Only	Member And Dependents	Member Only	Member And Dependents
Monthly government allotment. I enclose 2 month's premium to cover the necessary period for my allotment (payable to Air Force Association) to be established.	<input type="checkbox"/> \$ 10.00	<input type="checkbox"/> \$ 12.50	<input type="checkbox"/> \$ 15.00	<input type="checkbox"/> \$ 17.50	<input type="checkbox"/> \$ 20.00	<input type="checkbox"/> \$ 22.50
Quarterly. I enclose amount checked.	<input type="checkbox"/> \$ 30.00	<input type="checkbox"/> \$ 37.50	<input type="checkbox"/> \$ 45.00	<input type="checkbox"/> \$ 52.50	<input type="checkbox"/> \$ 60.00	<input type="checkbox"/> \$ 67.50
Semi-Annually. I enclose amount checked.	<input type="checkbox"/> \$ 60.00	<input type="checkbox"/> \$ 75.00	<input type="checkbox"/> \$ 90.00	<input type="checkbox"/> \$105.00	<input type="checkbox"/> \$120.00	<input type="checkbox"/> \$135.00
Annually. I enclose amount checked.	<input type="checkbox"/> \$120.00	<input type="checkbox"/> \$150.00	<input type="checkbox"/> \$180.00	<input type="checkbox"/> \$210.00	<input type="checkbox"/> \$240.00	<input type="checkbox"/> \$270.00

Names of Dependents To Be Insured	Relationship to Member	Dates of Birth			Height	Weight
		Mo.	Day	Yr.		

Have you or any dependents for whom you are requesting insurance ever had or received advice or treatment for: kidney disease, cancer, diabetes, respiratory disease, epilepsy, arteriosclerosis, high blood pressure, heart disease or disorder, stroke, venereal disease or tuberculosis? Yes No

Have you or any dependents for whom you are requesting insurance been confined to any hospital, sanatorium, asylum or similar institution in the past 5 years? Yes No

Have you or any dependents for whom you are requesting insurance received medical attention or surgical advice or treatment in the past 5 years or are now under treatment or using medications for any disease or disorder? Yes No

If YOU ANSWERED "YES" TO ANY OF THE ABOVE QUESTIONS, EXPLAIN FULLY including date, name, degree of recovery and name and address of doctor. (Use additional sheet of paper if necessary.)

I apply to United Benefit Life Insurance Company for insurance under the group plan issued to the First National Bank of Minneapolis as Trustee of the Air Force Association Group Insurance Trust. Information in this application, a copy of which shall be attached to and made a part of my certificate when issued, is given to obtain the plan requested and is true and complete to the best of my knowledge and belief. I agree that no insurance will be effective until a certificate has been issued and the initial premium paid.

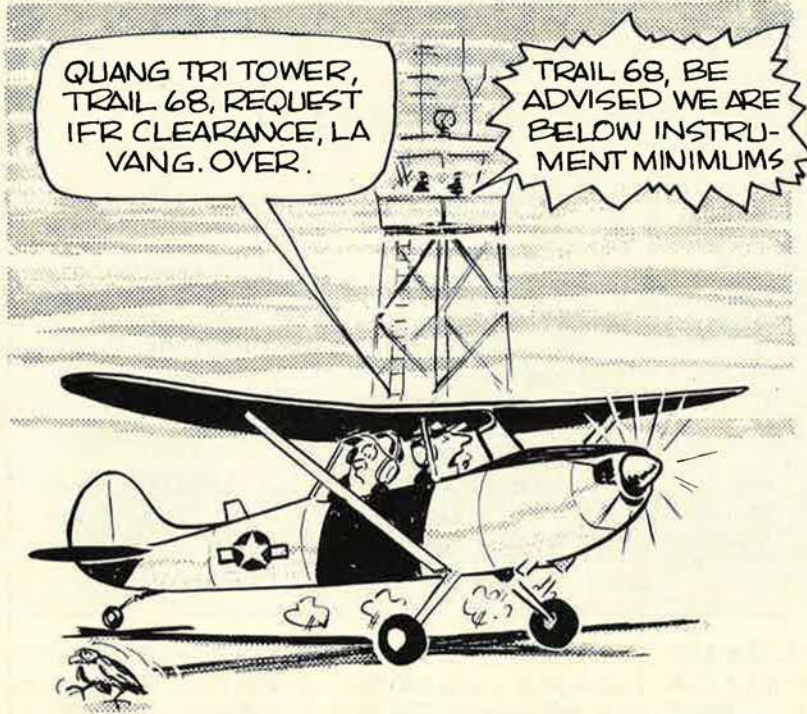
I hereby authorize any licensed physician, medical practitioner, hospital, clinic or other medical or medically related facility, insurance company, the Medical Information Bureau or other organization, institution or person, that has any records or knowledge of me or my health, to give to the United Benefit Life Insurance Company any such information. A photographic copy of this authorization shall be as valid as the original. I hereby acknowledge that I have a copy of the Medical Information Bureau's prenotification information.

Date _____, 19____ Member's Signature _____

Bob Stevens'

"There I was..."

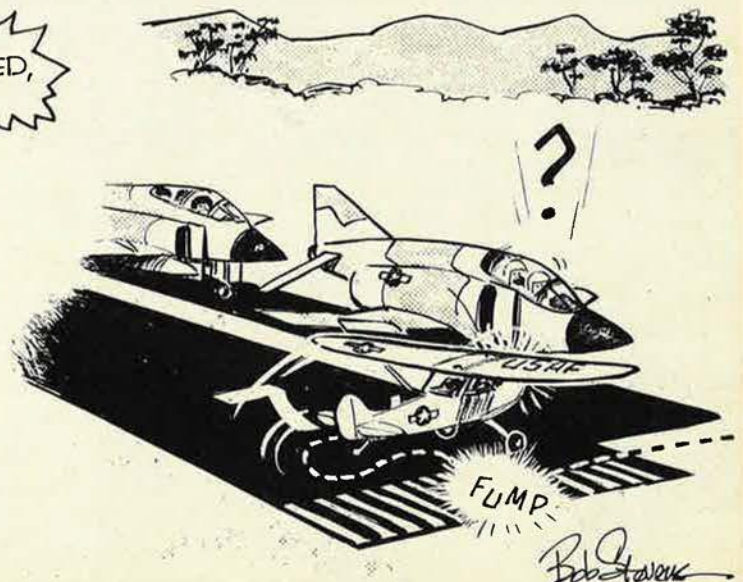
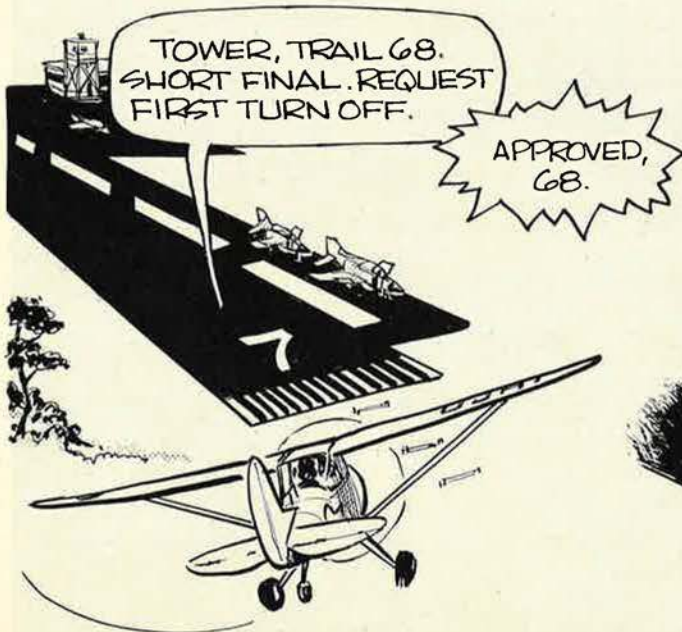
TOOLING AROUND OVER HOSTILE VIETNAM AS A FORWARD AIR CONTROLLER (FAC) IN A TAIL-DRAGGER CESSNA O-1 AT LOW ALTITUDE and LOW AIRSPEED (ABOUT 120 KTS WITH EVERYTHING OPEN BUT THE TOOL BOX) COULD BE FRAUGHT WITH ANXIETY. THERE WERE *SOME* LIGHTER MOMENTS, THOUGH...



THANKS TO W/C C.R. NESEJT
POB 5 BOX 9904 APO S.F.

AIR BASE RUNWAYS WERE BUILT FOR "THE BIG IRON" and ALL LOOKED LIKE THE HOLLYWOOD FREEWAY TO O-1 JOCKS ...

WHEREUPON, THE DIMINUTIVE O-1 ALIGHTS ON THE OVER-RUN and TURNS OFF AT THE APPROACH END OF THE RUNWAY!



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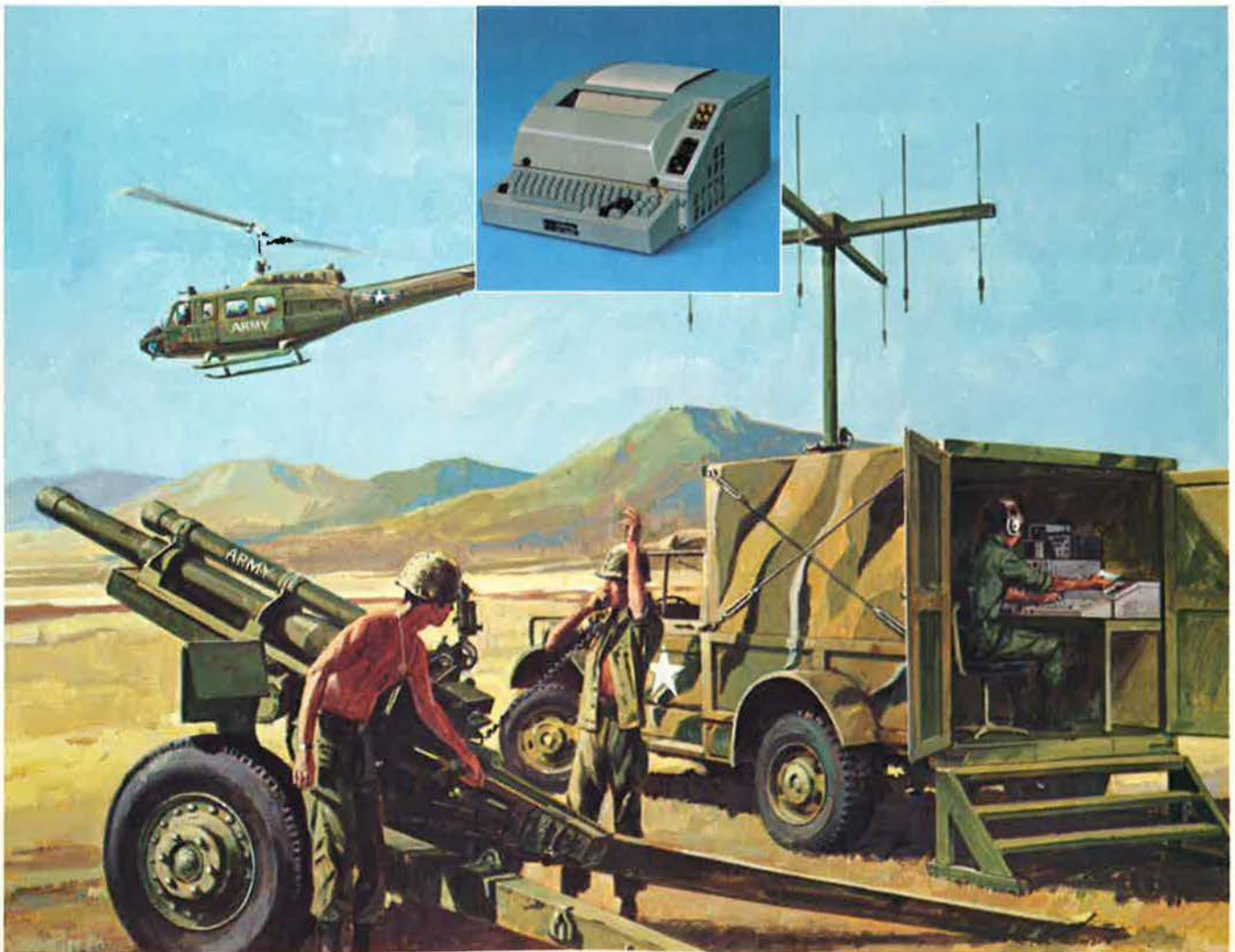
It operates off a universal power supply. And it contains both ITA-2 and ITA-5 codes in a single unit. With those sophisticated features, the small, lightweight unit still has a MTBF of 3,500 hr. Built-in test equipment helps keep MTTR to under 15 minutes.

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