

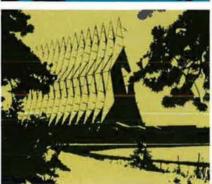
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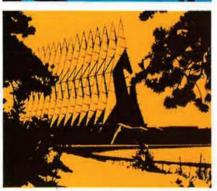






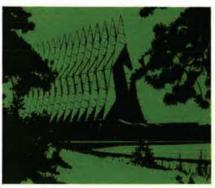






Behind the Scenes at the Air Force Academy

How Those Falcons Are Trained How Academy Liaison Officers Work Prep School for Academy Candidates



In This Issue ----Special Reports on AFA's Silver Anniversary Convention



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e Published by the Air Force Association

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John L. Frisbee, William Leavitt, Edgar Ulsamer, Claude Witze

Contributing Editors: Patricia R. Muncy, Don Steele Douglas Andrews, New York (212) 687-3544 James G. Kane, Chicago (312) 296-5571 Harold L. Keeler, Los Angeles (213) 879-2447 Yoshi Yamamoto, Tokyo 535-6614

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neered at Bell Labs, digital transmission is better not only for data but for many other services as well.

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- By the late '70's, waveguide systems capable of thousands of megabits per second.
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This time by increasing digital services to benefit all our customers.



Airmail

Up-Dated Airpower Control

Gentlemen: Colonel Moore's article, "View From the Blue," in your September '71 issue is truly thoughtprovoking. It seeks to propose a complementary air strategy to that of oceanic strategy—welding together an effective show of military presence calculated to put in-being and on-thescene military forces as a credible deterrent to actions of a potentially hostile nation in a limited-war crisis situation.

In the 1950s, I was privileged to participate in an extensive study, "Project Control," which examined the relationships of the United States versus both Germany and Japan for the period 1930 to 1950. This study examined the role airpower could play in controlling the actions of other nations. Conclusions resulted in various concrete actions, including what we then called the "Forward Air Patrol," implemented as the early warning aircraft flights from Alaska to Hawaii and from Greenland to England. It is most refreshing to see a current military expert author proposing an updated modern application of airpower control in an entirely new approach on an integrated basis with other forces, with realistic assessment of the times, and yet drawing from the lessons of history.

It would seem Colonel Moore's application is confined to limited crises. In this regard I agree with him and assume he has in the back of his mind some specific locales and situations where he might apply this new concept. Perhaps we might just need temporary presence, but it would seem this needs to be fleshed out with appropriate global public information so as to make the purpose perfectly clear.

I would look forward to future articles by Colonel Moore with specifics of implementing his broad conceptual approach.

> COL. NED SCHRAMM, JR., USAF (RET.) Falls Church, Va.

Clip Their Claws

Gentlemen: In reference to your articles on POWs . . . this matter has bothered me for some time. Here is a suggestion which I think might help solve the problem:

Have the American military services, and if possible all of the United Nations forces, issue orders authorizing anyone captured by the Communists to sign and agree to anything their captors suggest. Publish and broadcast these orders so that the whole world knows that they exist and give the reason for issuing the order. This will rob all future statements of their meaning and eliminate the reason for much torture.

> COL. C. R. LAUBENFELS, USAF (RET.) Los Angeles, Calif.

Mach 3.0

Gentlemen: It was a vicarious pleasure for me to get the feel of an SR-71 at Mach 3.0 cruise (September issue's "SR-71 at Mach 3.0 Cruise," by Col. Patrick J. Halloran).

As a staff member at the Air War College last year, I had the pleasure of knowing Colonel Halloran. He is a true professional who greatly impressed me with his dedication to his job and the Air Force.

CAPT. NORMAND G. LEZY Alexandria, Va.

AFA's Chaplain

Gentlemen: For some time I have wanted to congratulate AFA on the selection of Robert D. Coward as National Chaplain. No finer choice could have been made.

Bob Coward personifies the very highest ideals of the Air Force and its spiritual ministry to our young men. In years past he was my senior Chaplain, but more than that, he was my friend. His kind is rare and your choice enhances my respect for the leadership of AFA.

LT. COL. NEWTON V. COLE, CHAPLAIN, USAF Converse, Tex.

B-57 Types

Gentlemen: I am preparing a manuscript on the Martin-built B-57 series and would appreciate hearing from any pilots or technicians familiar with the types. Specifically, I would welcome photographs showing operational use, markings and camouflage, as well as data on deployments and operations. Any material loaned will be treated with great care and returned.

DAVID A. ANDERTON 30 South Murray Ave. Ridgewood, N. J. 07450

Aircraft of MOH Winners

Gentlemen: Research on the specific aircraft flown by Medal of Honor

recipients reveals that P-47D-27-RA, 42-26785, was the Jug flown by 1st⁴⁷ Lt. Raymond Knight on April 25, 1945. Lieutenant Knight, of the 346th Fighter Squadron, 350th Fighter Group, Twelfth Air Force, received the last World War II Air Force Medal of Honor citation, albeit posthumously.

His two wingmen were 1st Lt. William T. Rogers and 2d Lt. Roger E. Clement. Has anyone knowledge of their current whereabouts? Or, for that matter, any former 350th Fighter Group persons, or anyone with a photo showing the markings of Ju₄ 42-26785?

Another posthumous Medal o Honor award went to Capt. Darreli R. Lindsey, 585th Bomb Squadron, 394th Bomb Group, for deeds on August 9, 1944. Has anyone a photo of his plane—B-26B-55, 42-96101?

> TSGT. WILLIAM J. BENNETT 17017 S. Orchard Ave. Gardena, Calif. 90247

Back Issues Available

Gentlemen: Are there any readers interested in acquiring some particular back issues of AIR FORCE Magazine?

I was a Charter Member of AFA and belonged continuously through 1964, preserving each copy. I've now decided to dispose of same and thought possibly someone would like to obtain some back issues.

> LT. COL. C. F. HIMES 3328 Oakbrook Dr. Oklahoma City, Okla. 73115

Gentlemen: I am offering the following magazines for sale:

- AIR FORCE Magazine, September 1955 —Anniversary Issue.
- AIR FORCE Magazine, August 1957-Golden Anniversary of the USAF.
- Flying Magazine, September 1942-Special Royal Air Force Issue.
- Flying Magazine, March 1953-Special Defense Issue.
- Flying Magazine, November 1951-Special Naval Aviation Issue.

These magazines are all complete and in very good condition.

> WILLIAM A. BAKE, JR. P.O. Box 437 Watkinsville, Ga. 30677

Newfoundland Token

Gentlemen: As a specialist in Newfoundland coins and tokens, I'm doing research on a token that was used by our military in Newfoundland and would like to know if AIR FORCE Magazine readers could help me,

The token was made of brass, about the size of a five-cent piece. The obverse side read: Sergeants Club, Base Command, Newfoundland. The reverse side read: Good for $5 \notin$ in trade.

I am trying to find out what type of military base this token was used at. Some say the Air Force, others say the Navy. Was the token used at Fort Pepperell, Newfoundland, or was it used at Argentia? What was the token used for? Who made it? In what year did it start and end?

> GARY PATTERSON R.D. #3, Box 350-B Toms River, N. J. 08753

Wright Insignia

Gentlemen: Some years ago (the late thirties and early forties), personnel stationed at Wright-Patterson AFB, Ohio, wore a distinctive squadron or base insignia on their flight jackets. The insignia was a yellow arrowhead on a black background with the word "WRIGHT" printed in the center of the arrowhead. Also, most of the base-assigned aircraft had this emblem painted on the sides of the fuselage.

I am trying to obtain a picture or

drawing of this insignia, Can anyone help?

LT. COL. H. J. MARKER, USAF (RET.) 104 Via Sego Redondo Beach, Calif. 90266

Prolific Author

Gentlemen: I'm now researching a major effort on the B-24 before, during, and after World War II in its many roles as bomber, transport, trainer, etc. The main interest is in personal experience areas rather than technical development. The book would be as extensive as *Flying Forts* and one to come out in November entitled *Fork-Tailed Devil*: The P-38. Any help would be much appreciated.

> MARTIN CAIDIN Suite 402 North, Twin Towers Cocoa Beach, Fla. 32931

UNIT REUNIONS

35th Tactical Fighter Wing

A reunion of all personnel of the 35th Tactical Fighter Wing is being organized. It will be held at Torrejon Air Base, Spain, on November 20, 1971. This is our first attempt at a reunion and is going to be the "World's Finest" in activities planned and number of personnel in attendance. Help in obtaining historical information, photographs, etc., would be appreciated. Contact

Maj. Norman Rushton 401st TFW, Box 11096 APO New York 09283

37th Air Service Group (WW II)

The third reunion of the 37th Air Service Group, 8th, 12th, and 15th Army Air Forces of World War II, is being planned for August 1972 at Cincinnati, Ohio. For further information please contact

> Edward "Chick" Palmer 126 Laurel Ave. Sea Girt, N. J. 08750

466th Bomb Group (H)

A 466th Bomb Group (H) (Attlebridge, England) reunion is planned to coincide with the 2d Air Division Association reunion next spring. We are looking for ex-466ers, crew lists, aircraft names, photos (people, aircraft, and the airfield) and related data. All photos will be copied and returned promptly. Send your name, address, and other data to

Lt. Col. John H. Woolnough, USAF (Ret.) 6611 Northam Rd. Camp Springs, Md. 20031 Phone: (301) 449-6729

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Adopted at the Washington Convention...

The Air Force Association's

Following is the complete text of the Air Force Association's 1971–72 Statement of Policy, as unanimously adopted on September 20, 1971, by delegates to AFA's twenty-fifth annual National Convention, meeting in Washington, D. C.

America's freedom can only be as secure as the nation's will and ability to protect them.

There can be no doubt that both national will and national strength are progressively deteriorating.

The basic and underlying reason is that the American people, generally, do not accept the seriousness, the nature, or the immediacy of the threat that hangs over this country.

The Soviet Union has forged far ahead of the United States in both numbers of strategic missiles and in missile-deliverable megatonnage. It is developing a supersonic, manned bomber with intercontinental range. It maintains a level of military research and development that exceeds that of the United States by forty to fifty percent. There is no evidence that the Soviet effort is slackening. There is mounting evidence that the effort is directed toward achieving the capability for a first-strike nuclear attack against the United States.

The American people deserve information concerning this threat that is authoritative and articulate, credible and consistent. National political leadership is not supplying it. The United States is behaving as though it can ignore with safety the major shift in the balance of international power that has taken place in the past five years.

Today, national security is not a popular subject. Nevertheless, the Air Force Association would be derelict in its duty if it did not make known its views, however unpopular they may be. For if the issue is permitted to die, the nation may well die with it. The first and overriding requirement is for the national leadership to disclose—fully, frankly, and without reservation—the deteriorating defense posture of the United States relative to the expanding capabilities of the Soviet Union. The red-tape curtain of censorship and inflated classification must be lifted and the facts behind it illuminated. The need for sacrifice by the American people must be clearly demonstrated, or sacrifice will not be forthcoming.

Under present policies, the budget squeeze will continue. Pressures will mount, on the Department of Defense and the military services, to do more with less. But as both people and hardware costs continue to rise, the idea of meeting a rapidly increasing threat with shrinking resources is a mathematical absurdity.

With small prospect of budgetary increases, what is called for, in our judgment, is a cold assessment of priorities in terms of stated national objectives. The definition of what constitutes true national interest must be made sharply and clearly. The requirements for force levels, weapon systems, commitments, and deployments must be equally tough and realistic.

Foremost among American national interests is the deterrence of nuclear attack upon the United States and the insurance that the nation will survive as a viable entity should deterrence fail. At all costs, the Triad of strategic deterrent forces must be retained and its effectiveness improved. The Minuteman missile force must be made survivable through both active and passive defense measures; the manned bomber force must be modernized by acquisition of the B-1; the

971-72 Statement of Policy

seaborne force must be rendered more effective by continuing replacement of Polaris with Poseidon missiles. Likewise, the air defense component of deterrence, currently at its weakest state in more than a decade, urgently needs an advanced manned interceptor to meet the threat of the new Soviet supersonic intercontinental bomber.

The same strategic nuclear umbrella that protects the United States proper also arches over those allies abroad to whom we have firm and unambiguous treaty commitments. Here, the nuclear deterrent must continue to be reinforced and made credible by a visible presence of American ground troops and land-based tactical air forces. These forces should be supplemented by naval carrier-based air where geography permits carriers to operate effectively. As the military capabilities and economic resources of our allies increase, the level of US overseas deployments can safely be reduced. However, overseas deployments some permanent, some temporary—are an essential element of active, positive, unambiguous deterrence.

Beyond such areas of hard-core national interest, the extension of US commitments abroad should be viewed most cautiously. Commitments that are not clearly in the US national interest must be avoided and American resources directed toward those that clearly are.

Above all, national objectives must not be confused with service objectives. The mix of aerospace, land, and sea forces must be compatible with the weapon system requirements imposed by a national strategy of active Realistic Deterrence. The range, accuracy, flexibility, cost-effectiveness, and global mobility of USAF aerospace forces must not be compromised by excessive funding of other systems that only partially meet these requirements.

Over the past quarter century, superior technology has been the hallmark of national security in the broadest sense—in preventing nuclear war and in sustaining national economic growth. The Soviets know this and are pouring resources into military research and development programs at a rate that exceeds current or planned US levels by a wide margin. Meanwhile, a wave of misguided, misinformed, and misled sentiment against technology itself is enveloping this country. As a result, the wellsprings of US technology are running dry at the very time that significant increases in research and development would pay high dividends. A greater effort is needed to keep this nation's military forces competitive with the Soviet Union. It is needed to keep this nation's technologically intensive industries competitive in the international marketplace.

The quality of US technology becomes increasingly critical at a time when a programmed reduction in forces is taking place. As numbers of men and weapons decline, it is imperative that the forces remaining be of the highest operational effectiveness. The policy of selective prototyping, recently set forth, represents a long step in the right direction.

Likewise, the current policy of permitting the individual military services to manage their own resources is to be applauded. At the same time, there is an equal obligation to provide the services with resources commensurate with the obligations laid upon them. Here the hard decisions are still to be made, as weapon systems now in development approach the production phase. A research and development program that stops short of operational hardware does not fulfill its purpose.

With these considerations in mind, we call for a new order of frankness and candor on the part of national leadership. These are issues of life and death. For too long they have been the monopoly of the demagogue, the political opportunist, the neo-isolationist, the technological know-nothing. Falsehood can best be countered by truth, ignorance by knowledge, demagoguery by responsible political leadership. The American people have a need to know. They have a right to know. A truly national dialogue on our defense posture must be initiated, based on the hard facts, in order that a truly national consensus can be obtained on the most important issue of our time.

9

Airpower in the News

By Claude Witze

SENIOR EDITOR, AIR FORCE MAGAZINE

The Senate and Security

WASHINGTON, D. C., OCTOBER 11 Last week the US Senate voted, 82 to 4, to authorize procurement, research, development, test, and evaluation expenditures by the Defense Department of a little more than \$21 billion in Fiscal 1972.

The four Senators who voted against the bill were Democrats J. William Fulbright of Arkansas, Mike Gravel of Alaska, Mike Mansfield of Montana, and Gaylord Nelson of Wisconsin. None of them is a member of the Armed Services Committee. Two (Fulbright and Mansfield) are members of the Committee on Foreign Relations.

The bill has gone to conference to settle differences between the House and Senate versions. The figures tell what has happened so far:

The Defense Department	
requested:	\$22,188,337,000.
The House authorized:	21,069,112,000.
The Senate authorized:	21,018,482,000.

The bill went through the Senate with less fuss and feathers than it did a year ago, a fact that is commonly credited to Sen. John Stennis, chairman of the Armed Services Committee and legislative father of the bill.

For those of us who follow this performance in detail each year, there is a running interest in what the Armed Services Committee, of either and both chambers, says in reaction to the new defense issues of the day. Their annual authorization reports are a study in our national security problems and reflect any and all of our national distress. And distress we have had, ever since World War II faded into the history books, to be replaced by the cold war.

This year the pinch is on, and Mr. Stennis engineered some substantial cuts for this reason, an action for which he has not received full credit, particularly from his critics. It is a fact that the committee chopped about \$900 million from the House version. Suffering the blow were such projects as Safeguard, the C-5A, the Navy's P-3C Orion, EA-6B, Minuteman, the C-130E, a number of Navy ship programs, and USAF's aerospace support program. On the other hand, there were additions. The biggest item was \$801.6 million for the Navy's new F-14A fighter program. Other money was added for the Main Battle Tank, Navy C-9 transport, the Marine Corps Harrier aircraft, and for a future submarine.

The Stennis committee report, anticipating the debate and dulling the attack in advance, acknowledged our "many serious domestic needs in an atmosphere of weariness with the war in Vietnam." With that in the record, it is difficult to accuse the committee, as many critics do, of ignoring the home front. But, the committee insists, a superior defense capability remains America's No. 1 national priority. The facts of the matter regarding these priorities have been printed before in AIR FORCE Magazine, but are worth repeating in Senate language. Says the report: "It is important to realize that there have been significant reductions in the share of our national resources taken by defense over the last five years. Due to both inflation and real growth, the gross national product has increased significantly since Fiscal Year 1968, while defense outlays, have not varied greatly.

"Thus, defense spending since 1968 has fallen from 9.5 percent of the gross national product to 6.8 percent. The federal budget has grown during the same period, so that the proportion of federal outlays taken by defense has shrunk from 42.5 percent of the overall federal budget to 32.1 percent.

"Inflation has been severe during these five years although defense outlays were about the same in Fiscal Year 1968 as they are in Fiscal Year 1972 (\$76-\$78 billion), the Fiscal Year 1972 budget buys about \$20 billion less.

"Thus, there is a relatively simple answer to the question of what happened to the \$18 billion per year savings realized by our phasedown in Vietnam—it has largely been eaten up by inflation. Meanwhile, our ships, our aircraft, and our other expensive military equipment have aged and they increasingly require replacement and modernization."

The committee touched on other aspects of the problem. It says our allies should carry a bigger share of the NATO burden. It looks with distress on the mounting cost of manpower to the Defense Department: In Fiscal 1972 personnel costs will use 52 percent of the defense budget, up from 41 percent in Fiscal 1968.

For industry, there is another section on the cost of modern weapons. Those now in development or procurement will cost at least \$104.6 billion before procurement ends, not including operation and maintenance. Fighter aircraft now in development will cost five to six times more than they did a decade ago. A quote for your file:

"A burst of ,50-caliber machine-gun fire, our primary air-to-air munition until the end of the Korean War, costs about \$20; we are now developing tactical air-to-air munitions costing several hundred thousand dollars per round an increase by a factor of tens of thousands. The avionics package in some types of new military aircraft will alone weigh two or more tons and cost several million dollars. At over \$1,000 per pound this is about twice as costly as gold."

The committee is worried by the trend. It fears that the present system may fail to meet the defense requirement. It blames the dilemma on:

• **Concurrency:** An overlap between development and production, once necessary to speed operational capability, is too costly. This is because late design changes are too complex.

• Lack of operational test and evaluation: Here the committee bowed to the Blue Ribbon Defense Panel and implied that the Defense Department has not done enough to follow its recommendations. It says we have produced, some weapons too complex to be effective.

• Lack of emphasis on weapons development: There are too many platforms for weapons developed, without the weapons themselves. We have fighters without effective munitions, bombers without proper missiles, submarines without effective torpedoes, and surface ships without any surface-to-surface missiles.

On the subject of the Air Force's B-1 bomber, the committee displays caution. It says it is satisfied with the program's management and the efforts to cut costs. It also is "apprehensive" about the cut from five to three test aircraft and from two to one for static testing, alterations that may prove "penny wise but pound foolish." Recommended in the bill: \$370.3 million, with no commitment to production, and, "the ability of the Air Force to develop this important weapon system in an orderly manner and at a reasonable cost must yet be demonstrated."

Continental air defense gets special attention, at least in part because the committee heard testimony from some witnesses—including the American Federation of Scientists—who question the value of any air defense. The Stennis group itself displays caution, along with some alarm. It continues to favor funding for the USAF AWACS program under research and development, at a cost of \$145.1 million. It supports the OTH-B over-thehorizon radar project with \$3.6 million.

But it also recognizes the magnitude of the argument about the Soviet bomber threat. The Russians have Backfire, a new swingwing bomber. If they deploy it, we must provide a defense. The committee says this threat does not justify a full go-ahead on a modernized air defense system, which should placate some of the critics who insist the Air Force always gets whatever it wants. On the other hand, the threat is called uncertain, a situation that justifies our use of the "milestone" approach—a hedge against the threat.

Another subject given major consideration—three and a half pages in the report—is the Navy's F-14 fighter program. Special hearings on this project were held by a subcommittee on tactical air, headed by Sen. Howard W. Cannon. This appears to have been in anticipation of a floor fight, and there was one, led by Sen. William Proxmire.

In the course of this fight, the Wisconsin skeptic handed out what he called a "Fact Sheet" on the F-14. This document said the F-14 cannot perform its mission, costs too much, is no better than the F-4 that preceded it, will leave us at a disadvantage against future enemies, and could be replaced by a cheap, lightweight fighter.

Mr. Cannon demolished these arguments. In one of the most acrimonious arguments in recent memory, the Nevada Senator said Mr. Proxmire was wrong, "illinformed," and dependent on "vague, anonymous, and unidentified people and studies." He listed facts to support this. On the floor, Sen. William Fulbright joined ranks with Mr. Proxmire and also ran into the Cannon fire.

The level of the argument is illustrated best by a Fulbright assertion, at one point, that the earlier General Dynamics F-111B program was a failure, the airplanes having been grounded. Mr. Cannon was able to respond with the pronouncement that the F-111B never was built, which is true.

Compared with last year, the Senate authorization debate was within reason, and the Senate congratulated itself on the performance. Last year, there were forty-eight amendments offered, seven of them from Mr. Proxmire alone. Five were called to a vote and all defeated. This year there were thirty-five proposed amendments, five of them by Mr. Proxmire, of which three were called to a vote and defeated.

Eight amendments were passed by the Senate. One of these, which may provide trouble for the Nixon Administration, calls for a pay increase for lower-grade personnel in the military. Another limits the amount of aid that can be given to Laos—to \$350 million—and says it must be authorized by law. A fund of \$2 million for the Navy's Sanguine underground communications system was deleted by an amendment from Wisconsin's Senator Nelson.

That's The Way It Is . . . A Quote Without Comment

The keynote address at the 25th International Conference of the Radio TV News Directors Association in Boston on September 29 was given by James Bormann, an executive at station WCCO-TV in Minneapolis, Minn., and a former president of RTNDA. Here are some excerpts from his speech:

It's clear enough that the media is under bombardment, not just from the Spiro Agnews, but from thinking members of our audiences . . . even our best friends are telling us to shape up. They tell us about their distrust of the media. . . They no longer can rely on what they have read in the newspaper or heard on the air. . . This is happening with increasing frequency; indeed, it has become an American epidemic. . .

David Brinkley is quoted as saying that complete objectivity is unattainable. And there are those—some of them in journalism school—who use that quote to describe objectivity as a myth. Instead of holding it up to students as a goal to be sought, even though it may be elusive, they scorn it as a hindrance to the new kind of journalism they're teaching.

That kind of journalism has been described variously as the journalism of involvement, advocacy journalism, or activist journalism. Alex Kendrick spoke well of it at a CBS news affiliates session I attended when he said he thought a good reporter in the modern milieu should not be afraid, while covering a riot, to throw a few bricks himself.

Rather than standing on the sidelines as a competent observer and then going to the mike to "tell it like it is," Kendrick urged the contemporary newsman to get involved and then report what he "felt inside."

It seems to me this kind of advice gives a clear clue as to what has gone wrong in our craft. It is simply outrageous to think that we as modern practitioners have any rights or duties or privileges to deal more lightly with the truth than the journalists of another age may have had. That kind of advice should be challenged. . . .

Yet that's the kind of thinking that is emerging from many journalism schools today. I'm sure you all have interviewed young graduates whose chief interest in journalism is to use it and the media as tools for shaping a new social order.

By no means am I accusing all journalism faculty members of betraying their profession—either as journalists or teachers. But the clear fact is that many of them are so intent on destroying the establishment and the universities along with it—that they would blindly destroy the credibility of the media in the bargain.

Airpower in the News

By far the most important change was the adoption, 57 to 38, of Senator Mansfield's proposal that the bill call for withdrawal of US forces from Indochina within six months. Mansfield's argument was, "What have we got to lose?" Minority Leader Hugh Scott said, "You can't stop a war by an act of Congress of this kind." Fate of the amendment in conference with the House is not clear, but there will be strong efforts to have it dropped.

There were two other Senators who suffered defeat in their efforts to change the authorization bill. One was Conservative James L. Buckley, who made three attempts to add money for improvement of our missile capability. He offered what he called a "package" aimed at the modernization of the Minuteman ICBM force and giving both Minuteman and the Navy's Poseidon a counterforce capability. The package never was shipped, at least in part because Chairman Stennis himself did not support it.

Then, there was Sen. George McGovern, an announced Presidential candidate. He tried to reduce funding for the B-1 bomber by \$339 million and lost on a voice vote. Then he attempted to decree a defense spending ceiling of \$60 billion for Fiscal 1973. This idea won more support than anticipated, possibly because the Senators know they can change it if the need arises. It lost, on a 26 to 58 roll-call vote.

For the first time, the debate on the antiballistic missile (ABM) system was short and cool. Sen. Howard E. Hughes of Iowa, a member of the committee, tried to stop ABM deployment. He was supported by Sen. Stuart Symington of Missouri. But Sen. John Sherman Cooper of Kentucky, once a vigorous opponent, did not back the move. He told the Senate he agrees with the Administration that the ABM program is a bargaining chip President Nixon needs in his SALT negotiations with the Soviet Union. Others who switched to Mr. Cooper's view were Sen. Frank Church of Idaho, Edward W. Brooke of Massachusetts, Clifford P. Case of New Jersey, and William B. Saxbe of Ohio.

The Hughes amendment lost, 21 to 64.

The Wayward Press (cont.)

The defense industry, and particularly the aerospace industry, has long been accused of lacking a sense of social responsibility. There is a growing group of technological know-nothings that can hear noise and see dirt at the airport, but is blind to the fabulous capabilities of this industry to contribute to social and economic progress.

In early September, Fairchild Industries of Germantown, Md., inaugurated a program designed to define the potential, with the focus on youth. Called "It's Your Turn," the effort seeks to challenge today's young people to think about their future careers in terms of using technology to solve pollution, communications, medical, safety, and other social problems.

The company has produced a moving picture, radio spot announcements, and a brochure on the subject. All cite the importance of technology in the improvement of the world around us. The brochure discusses such matters as pollution and violent deaths caused by the automobile, and points out that technology can clean up power sources and build safety into the vehicles. It admits we have a major ecological problem, as young people keep reminding us, and says the solution will be found by chemists, metallurgists, physicists, or agronomists. There are many examples cited, each climaxed by the call, *it's your turn*. "And the message is challenge," says the brochure to the young. "You are being dared to take on the problems of the world; to take over the controls of an imperfect society."

There is no evidence, in the material this reporter has seen, that the purpose of the Fairchild Industries effort goes beyond portraying the benefits of technology in a broad sense. Yet, in the Washington *Post* of Sunday, September 12, a staff writer named Robert J. Samuelson declares the company has "formally and unabashedly entered the propaganda business."

By itself, that is an accurate statement, but the Samuelson-Post approach, that of advocacy journalism, is to portray "It's Your Turn" as a sinister campaign—by a "maker of jet fighter planes, communications satellites, and electronic instrumentations"—to feather its own techological nest. The headline in the Post specifies the interpretation:

"The Message: Technology Is Good

Or, the Selling of Fairchild

To the Young"

The crowning insult, and example of bad journalism, is in the accompanying illustration. Operating with the clip-and-paste technique sometimes used by television producers when they want to distort a message, the Post had an artist take the front cover of the brochure and doctor it up to bolster the newspaper's editorial prejudices. The cover was a simple photo of two young people with "It's your turn" over the picture. The only mention of Fairchild in the actual brochure was a company logotype, discreetly printed on the inside of the back cover. The Post wizards clipped it out and pasted it on the front cover picture. That helped support their thesis, but did nothing for the accuracy of their report. It is a type of journalism last commonly practiced, in our experience, by the New York Evening Graphic. That was a paper renowned for a number of things, not including a high standard of professional ethics.



This illustration is a phony. It is a composite picture, pasted together by artists at the Washing ton Post, Their purpose was to misrepresent the original material and cast aspersions on the real motivations of Fairchild Industries,

12

How to find moving in the jungle. One second.

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Aerospace World

By William P. Schlitz

ASSISTANT MANAGING EDITOR, AIR FORCE MAGAZINE



VFW-Fokker's VAK 191 B V/STOL strike aircraft flew for the first time in mid-September. The West's only other STOL aircraft in service is Britain's Harrier.

WASHINGTON, D. C., OCT. 12 In two key votes on September 29, the Senate consented to the continued deployment of the Safeguard antiballistic missile (ABM) system and the Navy's plans to purchase the initial forty-eight of a total of 313 new F-14 fighters.

Defeated easily by a Senate majority were attempts to cut the items out of the military budget (see p. 10).

Two years ago, ABM deployment

got through the Senate by one vote; this time, the sixty-four to twenty tally approving the \$748 million reflected the philosophy that a limited ABM program would give US negotiators at the arms-limitation talks with the Soviet Union a strong bargaining point.

Some observers believe that the already high unemployment rate in the aerospace industry made the Senate reluctant to delete the \$801.6 million



AWACS is beginning to shape up. Here, the fuselage section to support the huge radome is joined to the forward section at Boeing Co.'s Renton, Wash., plant.

allotted in the budget for F-14 procurement.

Although there is no money for the F-14 in the House appropriations bill, House Armed Services Committee Chairman Rep. F. Edward Hébert has assured Senate leaders that the aircraft would have his backing when a



Capt. John T. Correll has just begun a tour with AIR FORCE Magazine (see p. 70) under the Air Force's "Education With Industry" program. Upon completion, he is scheduled for editorial duties at the Air Force's AIRMAN Magazine.

House/Senate conference takes up the matter.

Beginning late in September, the US Air Force and Army teamed up to conduct their own particular cut-rate, round-trip tours to Europe.

No long-haired youth or cameratoting elders were involved, but in one large-scale operation 11,000 US-based troops of the 1st Infantry Division (the famed Big Red One) were airlifted to Germany aboard MAC's alljet force of C-141s and C-5s. The troops also required the transport of 1,112 tons of equipment for use in conjunction with West Germany in an annual field exercise this year dubbed "Reforger III" (USAF par-

A Word of Praise

AFA was graciously applauded for its support recently. In a speech to AFA's Iron Gate Chapter, Maj. Gen. Douglas T. Nelson, B-1 Systems Program Director, praised: ". . the outstanding support this Chapter and the Air Force Association have both given to the United States Air Force in fulfilling its role of defense of this wonderful country of ours. As a particular point, 1 want to ac-knowledge specifically your support of our position reference the need for the new B-1 strategic bomber. I should especially mention the work of AIR FORCE Magazine and its strong editorial policy in support of the B-1, as well as some public statements recently made by your President, Mr. George Hardy, and other key AFA officials. We are most grateful for this support—we will need more of it in the days ahead."

ticipation is known as "Crested Cap III").

The deployment phase alone required 126 C-141 and thirteen C-5 missions. The operation is the third in a series of annual exercises designed to fulfill US commitments to NATO and to demonstrate proficiency in dual-base operating techniques.

The 1st Division's two airlifted brigades linked up with the third brigade stationed permanently in Germany and with the Canadian 4th Mechanized Battle Group. These units were pitted against elements of the US 1st Armored Division and the German 35th Panzer Grenadier Brigade, acting as aggressor forces.

US, Canadian, and German aircraft supported the ground units.

Following the maneuvers, in mid-November, the two US brigades were to return via airlift to the US.

And, in a less-massive operation early in September, MAC's C-5 and C-141 aircraft transported a battalion of the 1st Air Cavalry Division from its home base at Fort Hood, Tex., to Norway.

There, the unit engaged in a NATOrelated Norwegian exercise called Bar Frost. US aircraft and Norwegian air and naval units also participated.

23

NASA has set up a new office to support Defense Department aeronautical programs.

Within NASA's Office of Advanced Research and Technology, the new Military Programs Office will help the USAF with its F-15 and B-1 programs and the Navy with its F-14 development.

The office also will direct the USAF/NASA TACT (Transonic Aircraft Technology) program, in which a NASA supercritical wing will be flight-tested on a modified F-111 aircraft.

Another project of the new office will be responsibility for the US Army/NASA Tilt Rotor Research Aircraft Technology Program, and possibly other joint research, experimental, and prototype aircraft programs.

W.

US Navy, with a boost by USAF, tested its capability to provide over-

Retired Pay Recomputation

As this issue went to press, we learned that the White House plans to submit to Congress—probably early next year—recommendations for retired pay recomputation.

As a result of deliberations by the President's interagency committee on recomp, the Administration is expected to ask for:

 Retention of the present method of adjusting retired pay to reflect cost of living increases;

• A one-time recomputation that would bring annuities for senior retirees up to the level of January 1, 1971, retirement pay scales. This adjustment will occur at age fifty-five for retirees with twenty-five or more years' service, at age sixty for those with fewer. Pay would be further adjusted to reflect consumer price index increases.

 Those retired for disability with fewer than twenty years' service would be eligible for immediate pay adjustment. Retirees with more than twenty, but who have not yet reached the age threshold, would be eligible for immediate adjustment if their disability is rated fifty percent or greater. The measure would fall short of automatic recomputation—a hike for re-

The measure would fall short of automatic recomputation—a hike for retirees each time the active-duty force got a raise—that had been hoped for, and it would involve a waiting period for adjustment for many retirees.

The Air Force Association has been among the leaders in the continuing battle for full retired pay recomputation, and will continue to press this issue. seas fleets with quick-reaction airborne minesweeping.

In early October, a unit of Navy's Mobile Mine Countermeasures Command, consisting of four CH-53 Sea Stallion helicopters and about 100 officers and men, was flown by C-5 aircraft from Norfolk, Va., and Charleston, S. C., to the US Sixth Fleet in the Mediterranean.

The unit was based at NATO's Souda Bay facility at Crete, while the Sea Stallions embarked aboard suitable fleet ships. The aircraft have been specially configured to tow mechanical, acoustic, and magnetic ocean minesweeping equipment. They can operate from ships with flight decks, such as amphibious assault craft.



On September 29, Thomas W. Nelson was promoted from Deputy Administrative Assistant to Administrative Assistant to AF Secretary Robert C. Seamans, Jr.

The C-5 is the only aircraft big enough to carry the Stallions; it gives the Navy minesweeping group worldwide options as a self-sustaining tactical unit.

\$

On September 26, the Smithsonian Institution's Langley Medal was presented to Air Force Lt. Gen. Samuel C. Phillips. The event marked the Smithsonian's 125th anniversary.

Established in 1909, the medal has been awarded only thirteen times for "especially meritorious investigations in connection with the sciences of aeronautics and astronautics."

General Phillips, who heads Air Force Systems Command's Space and Missile Systems Organization (SAMSO) in Los Angeles, was hon-

Aerospace World

ored for his work as director of NASA's Apollo manned spaceflight program from 1964 to 1969.

He joins a select group. Among previous winners: the Wrights, Curtiss, Lindbergh, Byrd, Goddard, Shepard, and von Braun.

Another top aeronautical award, the 1971 Wright Brothers Memorial Trophy, will be presented to Sen. Howard W. Cannon (D-Nev.) in December.

Senator Cannon's service to US aviation dates back to his college days when he learned to fly and delivered newspapers by air from town to town in southern Arizona. As an Army Air Forces pilot in World War II, he was shot down and spent forty-four days behind enemy lines.

He is a major general in the Air Reserve and a Capitol Hill expert on aeronautical matters.

A

Chronic headaches for the nation's airport managers are the severely strained—and sometimes fractured relations with adjacent communities because of aircraft noise.

NASA and American Airlines have completed the first phase of a study to determine the operational problems connected with flying steeper landing approaches at commercial airports, a partial solution to the problem and part of NASA's overall aircraft noiseabatement research.

A series of flight tests, most of which were flown at Stockton, Calif., centered on a two-segment landing approach.

For the tests, the first segment began at an altitude of 3,000 feet and 6.4 miles from the runway. At 400foot altitude, the aircraft reverted to the conventional 2.5-degree instrument landing system, radio-beamguided flight path to touchdown.

A modified 720B Astrojet was utilized in the program. The aircraft was equipped with three-dimensional area-navigation equipment linked to a special flight director display to show pilots the control motions required to accurately follow the steeper glide path. Pilots from NASA, FAA, and various airlines, plus flight observers, participated. They then were questioned as to their reactions.

American Airlines' final report, including pilot judgments, technical considerations, and other data, is to be submitted to NASA by November 19. The aim is to determine what procedural changes will allow pilot, FAA, and airline acceptance of steeper landing approaches as routine operations.

53

The Air Force is winding up a second series of tests at the Air Force Flight Test Center, Edwards AFB, Calif., to determine the feasibility of a Modular Airborne Fire Fighting System (MAFFS).

The system consists of 500-gallon tanks mounted on pallets and equipped with sixteen-inch-diameter pipes for the ejection of fire retardant from nozzles located outside transport aircraft. MAFFS will be capable of being loaded onto and off cargo aircraft without any modification or change in an aircraft's configuration.

Compressed inert gas in the tanks provides pressure to force fire retardant through the nozzles at an incredible 24,000 gallons per minute. The system is designed to include center-of-gravity and slosh control important factors in handling an aircraft with that kind of liquid weight aboard.

This summer, a two-tank setup was successfully tested at Edwards. The second series is with a five-tank assembly aboard an Air National Guard C-130. MAFFS is self-contained and independent of aircraft systems.

Air Force visualizes a number of uses for MAFFS, including fighting forest or grass fires at remote USAF ranges or aircraft fires at inaccessible sites. Civilian applications are a good possibility.

The fire retardant, a nontoxic nitrate composition, not only extinguishes fire but also will retard its spread.

N

In a related matter, work is going forward to improve the protective clothing worn by fire fighters.

Military and civilian firemen alike have long noted deficiencies in their



Jet fuel burns furiously during a test of various aluminized asbestos fire-fighting clothing. Note the instrumentation cables attached to the suits. Data gathered from the tests will help in designing more effective protective gear for both military and civilian use in combating blazes. Aircraft fires, because of inherent fuel stores, are particularly hazardous.

aluminized asbestos apparel; it is bulky and restrictive, and, especially in the case of aircraft fires, simply doesn't guarantee protection from intense heat.

Air Force's Aerospace Medical Research Laboratory and the Aircraft Ground Fire Suppression and Rescue System Program Office have united to tackle the problem.

Their work is important because of the potential lives that may be saved as a result.

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TSgt. Lloyd W. Halbrook of AMRL's Barothermal Branch has been singled out for his considerable contribution to the project. From equipment on hand, he built instrument packages to measure the physiological conditions encountered by suited-up fire fighters in intense heat. Heretofore, such data was nonexistent because of lack of measuring instrumentation.

Volunteers then undertook a series of field tests against the heat—meaning close proximity to a store of burning JP-5 aircraft fuel. Men withstood the flames to the limit of their endurance, with several requiring medical attention afterward.

The tests involved seven different clothing assemblies in fourteen separate trials. The data acquired will help in the design of fire-fighting suits having that essential built-in margin of safety.

 \overleftrightarrow

Terming technology the cornerstone of America's might, Dr. James C. Fletcher, NASA Administrator, recently warned that if the US lost its leadership in this field to the Europeans or the Soviets, it would be by default.

"The most ominous lag of all is in the development of new technology for military and civil aviation," he told the Los Angeles Area Chamber of Commerce's Fourteenth Annual Aerospace luncheon.

He predicted that if the present trend of downgrading our technological programs continues, the US will be forced "—whether by peaceful, economic competition, or by threat to our national security—to regroup our space industry team and outrace another 'Sputnik.'"

In the long run, he said, this will be far more costly to the taxpayer than the price of holding our present scientific and technical team together with a continuing, well-balanced program.

No other program, Dr. Fletcher said, has contributed as much as the space program to every segment of our national structure—science, industry, education, agriculture, aviation, communications, medicine, and national security. NASA's share of the tax dollar is 1.4 cents. This is a small price to pay for national security and peace of mind, Dr. Fletcher said.

Cooperation with the USSR and other foreign powers depends on our strength, Dr. Fletcher declared. "Space cooperation could lead to cooperation in other fields and greatly facilitate the President's efforts to achieve an era of lasting peace for the world." But he warned that we should not



The series of photos above demonstrates the herculean effort involved in joining the massive sections of a Boeing 747. In this particular case, the aircraft being discussed is the first F version—which will be the largest commercial jet freighter in the world. The scene is at Boeing's Everett, Wash., facility.

AFA TO CONDUCT REQUIREMENTS SYMPOSIUM IN CONJUNCTION WITH SAC BOMBING COMPETITION AT ORLANDO, FLA., DECEMBER 15-16, 1971 . . .

In conjunction with the Strategic Air Command's annual Bombing Competition, and in cooperation with SAC, the Air Force Association and its Central Florida Chapter of Orlando will cosponsor a two-day program, featuring a major symposium on "Strategic Requirements."

The program, to be held at the Robert Meyer Motor Inn, Orlando, Fla., on Wednesday and Thursday, December 15–16, will include a luncheon, the symposium, a banquet, and briefings and demonstrations at McCoy AFB.

First symposium session will be on Wednesday afternoon, with the concluding session on Thursday morning. Presentations will cover Manned Aircraft, the Threat, the SLBM Force, the Human Element, the Missiles, and the B-1.

Panelists will include: Lt. Gen. Russell Dougherty, Commander, Second Air Force; Lt. Gen. P. K. Carlton, Commander, Fifteenth Air Force; Vice Adm. Frederick H. Michaelis, Deputy Director, Joint Strategic Target Planning Staff, SAC; Brig. Gen. W. D. Johnson, Deputy Chief of Staff for Personnel, SAC; Brig. Gen. Robert L. Cardenas, Chief, NSTL Division, JSTPS, SAC; and Maj. Gen. Douglas T. Nelson, B-1 Systems Program Director, ASD.

Gen. Bruce K. Holloway, Commander in Chief, SAC, will give a résumé and will conduct a question-and-answer period at the close of the second session.

Following the Thursday morning session, registrants will go to McCoy AFB for a briefing on the bombing competition. There, they will see displays, including the SR-71, and aerial demonstrations.

AFA members, aerospace industry representatives, active-duty Air Force personnel, and members of the Air Reserve Forces are cordially invited to attend the symposia and the social functions. The registration fee of \$45 covers the two symposia, the luncheon, the banquet, and bus transportation to the Thursday afternoon program at McCoy AFB. Checks may be mailed to: Central Florida Chapter, AFA, P.O. Box 2651, Orlando, Fla. 32802.

Accommodations are available at the Robert Meyer Motor Innsingles \$15 and twins **\$18—and** should be booked direct with the Robert Meyer (prior to **December** 1) at 151 E. Washington, Orlando, Fla. 32801, telephone (305) 841-3220. Mention that you will be attending the **AFA** program.

Don't forget the dates: Wednesday and Thursday, December 15-16, 1971, at the Robert Meyer Motor Inn, Orlando, Fla. Everyone is invited. —Don Steele

Aerospace World

expect the Soviets to be eager to deal with a second-rate space power.

V

Boeing Co.'s Wichita Division was the recipient of a \$10.2 million contract for modification kits that will enable late-model B-52s to be armed with Boeing's new supersonic SRAM (short-range attack missile).

The work will involve ninety-six Gand H-model B-52s. Eventually, USAF plans to equip the entire force of 281 late-model bombers with the air-toground missile.

The Boeing contract calls for engineering and production of the conversion hardware, including wiring and structural changes to adapt the B-52s to SRAM.

SRAM was ordered into production last January and will also equip the FB-111 and the B-1, which is currently on the drawing boards. The fourteenfoot missile's two-year flight-test program ended successfully in July.

V

The Civil Aeronautics Board has filed suit against sixteen individuals and organizations, charging violations of charter-flight regulations and the Federal Aviation Act.

The CAB suit seeks an injunction to prohibit the defendants, who the CAB says are illegally acting as "passenger consolidators," from continuing as "indirect air carriers or indirect foreign air carriers in violation of" several US statutes.

The action "represents the first time that the board has taken direct federal court action against those persons involved in illegally soliciting members of the general public for passage on transatlantic charter flights . . ."

This past summer, the scheduled airlines were seriously hurt by the massive diversion of transatlantic passengers making use of cut-rate—and in many cases illegal—flights offered by charter operators. One unfortunate result was that many young people were stranded in Europe when their return flights failed to materialize. The CAB stressed that its investigation of the violators was initiated long before this situation developed.

The board also indicated that other areas of the US where "similar illegal charter operations are growing at a substantial rate" might come in for CAB legal action.

Thus far, the CAB has filed complaints against a total of sixty-five parties, including several US and foreign supplemental and scheduled carriers, for violations of charter regulations. Many of the cases were resolved through consent cease-and-desist orders.

53

The Navy, which is overseeing development of additional safety factors for parachuting pilots (see August issue, p. 21), also is trying to reduce head injuries by designing a new crash helmet.



Newly elected AFA President Martin Ostrow (left) and TV personality Joe Higgins with Cadet Eric Paul Dahl at CAP's recent convention (see text).

The helmet is made possible through development of a mathematical model of forces producing skull fractures in aircraft and other crashes. ("In the last decade," Navy said, "the Department of Defense lost more men to head injuries than to combat action," in emphasizing the importance of the project.)

The mathematical model, created by Dr. Nicholas Perrone of the Office of Naval Research, now makes available analytical data the previous lack of which stymied such a development.

The validity of the data was established by comparison with the record of actual accident effects.

Crash helmets currently in use offer only limited protection; their design lacks consideration of essential factors, such as individual differences in head shape.

Dr. Perrone's work may also contribute to reduced "closed-brain" injuries—when the brain is damaged through shock of collision without fracture.

\$

At the Civil Air Patrol's first national convention September 24–25 in Denver, Colo., CAP Brig. Gen. Samuel H. DuPont, Jr., was unanimously reelected for a second term as CAP's national board chairman. Last year, at thirty-four, he became the youngest chairman in CAP history.

Convention attendance stood at 1,200, representing all fifty states, the District of Columbia, and Puerto Rico.

Among CAP personnel honored with awards were Lt. Col. Roderick V. Riek of Tewksbury, Mass., CAP's top senior member; Col. Donald D. DeFoe of Antrim, N. H., wing commander of the year; Col. William H. Ramsey of Hopkins, Minn., outstanding region commander; and Cadet Eric Paul Dahl of Memphis, Tenn., recipient of top cadet awards from CAP and AFA (see photograph).

In congratulations from President Nixon, Cadet Dahl was cited for integrity and character, and praised as an example for the nation's youth.

Newly elected AFA President Martin M. Ostrow (see AFA Convention coverage, elsewhere in this issue) flew to Denver to present the AFA trophy personally to the sixteen-year-old youth.

CAP, USAF's official auxiliary, in the first nine months of 1971 saved fifteen lives and flew more than 23,000 hours on search and rescue missions.

CAP is hopeful that a supply bill will pass Congress that has as one provision the issuance of uniforms to CAP cadets. Uniforms are now furnished to the Air Force Junior ROTC programs.

CAP is in the process of acquiring more than 200 light aircraft from Army surplus sources to beef up its flying capability. Its cadet membership now totals more than 34,000.

Following the CAP convention, Air Force Brig, Gen. Richard N. Ellis, CAP National Commander, arrived in Paris as head of a delegation of USAF and CAP officials to participate in October's 1972 International Air Cadet Exchange (IACE) planning conference.

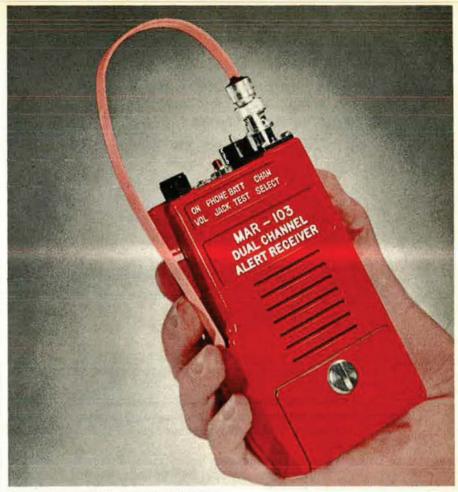
Representatives from eleven European nations, plus others from Canada and Israel, assembled to plan next year's program.

IACE involves an exchange of visits each summer by CAP cadets and aviation-minded youths from friendly nations around the world. The program, designed to promote international goodwill, has been sponsored by CAP in the US each year since 1948.

Senior Staff Changes

Col. (B/G Selectee) John C. Bartholf, from Ass't to CinC, Hq. USAFE, Lindsey AS, Germany, to V/C, WRAMA, AFLC, Robins AFB, Ga., replacing B/G Ralph T. Holland . . . Mr. Robert D. Fletcher, from Dir., Aerospace Sciences, to Chief Scientist, Hq. AWS, Hq. MAC, Scott AFB, Ill. ... B/G Ralph T. Holland, from V/C, WRAMA, AFLC, Robins AFB, Ga., to DCS/M, 7th AF, PACAF, Tan Son Nhut Airfield, Vietnam . . . Dr. John W. Lincoln, from Supervisor, Applied Loads and Mechanics, Vought Aeronautics Div., LTV Aerospace Corp., Dallas, Tex., to Engineering Adviser (Aircraft Structural Loads), Dep. for Engineering, ASD, AFSC, Wright-Patterson AFB, Ohio . . . Mr. Robert T. McLean, from Personnel Office, Hq. ADC, Ent AFB, Colo., to Chief, Classification and Regulations Div., Directorate of Civilian Personnel, DCS/P, Hq. USAF . . . Mr. Karl R. Merrill, from Chief, Industrial Management Office, to Ass't to the DCS, Distribution, Hq. AFLC, Wright-Patterson AFB, Ohio . . . Mr. Thomas D. Moran, from Dep. Comptroller, OASD (Comptroller), to Principal Dep. Ass't Sec'y Office, Ass't Sec'y of the AF (Financial Management), Hq. USAF ..., Dr. Howard L. Parris, from Manager, Human Factors Dept., Lockheed-Georgia Co., Marietta, Ga., to Chief Scientist, AF Human Resources Laboratory, AFSC, Brooks AFB, Tex.

RETIREMENTS: L/G Sam J. Byerley.



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For the first time since the Great Depression, concerned and knowledgeable people are questioning whether greatness lies in our future—or only in our past. The trends that point to a decline of America's influence are still reversible, given strong public support. That support may not be forthcoming unless we begin by . . .

FACING THE FACTS

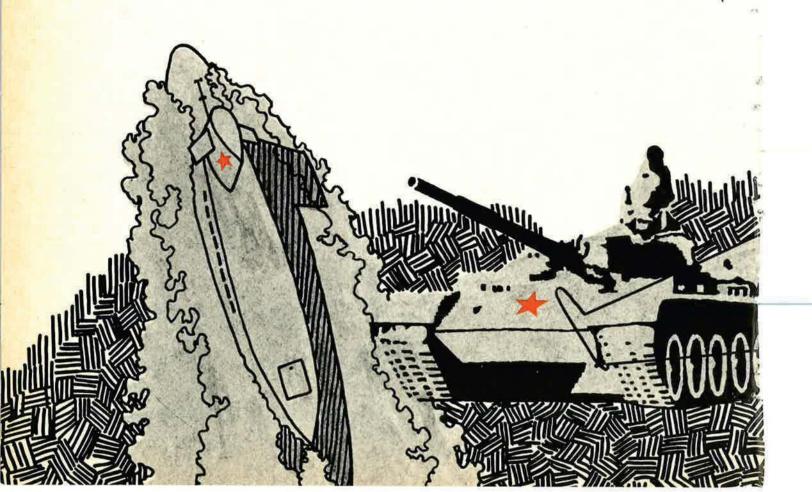
By Gen. George S. Brown, USAF COMMANDER, AIR FORCE SYSTEMS COMMAND

N A short five years, the United States of America will celebrate the 200th anniversary of the noblest experiment—in government, in economics, in social ethics, and in the very system of living—that mankind has ever undertaken.

But at T-minus-five years, there is reason to wonder what the state of this union will be in 1976. Will the experiment in freedom have been validated in the sight of all the world? Or will our 200th birthday more nearly mark the decline and fall of a great dream?

Twenty-six years ago, at the end of World War II, no reasonable man would have posed that choice of questions. Even eighteen years ago, at the time of the Korean armistice and the awakening realization that power is never absolute, it would still have seemed outlandish to question the viability of the United States.

Today, in contrast, the question is being



NOVEMBER 1971

asked, by deeply concerned and highly knowledgeable individuals—and there are apparently many in a weary populace who seem more inclined toward blind hope than to the facing of facts.

And yet the facts are there for all to see. Not guesses, not projections, but facts—hard facts.

Six Salient Facts

Certainly the facts are well known to most of you, but I'd like to go over some of them briefly anyway—and then suggest what I feel we ought to be doing about them.

Fact One: For the first time in our history, the Soviet Union has achieved a numerical superiority over the United States in number of intercontinental ballistic missiles. Against the 1,054 level we have maintained since the mid-1960s, the Soviets now have close to 1,500 ICBMs. Beyond that, they are constructing additional silos. These could be used for more SS-9 and SS-11 missiles, or for a new generation of advanced ICBMs, or both.

These numbers alone do not adequately describe the magnitude of the threat. Some 300 of the Soviet missiles are SS-9s, with a warhead of up to twenty-five megatons. The obvious question then arises: Why would anyone want to put 1,250 Hiroshima equivalents into a *single* nuclear warhead? And the most logical answer would be, to achieve a capability to destroy hard targets. The hardest targets in the United States are the Minuteman ICBMs in their underground silos. Even with multiple reentry vehicles (MRVs), which may already be deployed on some SS-9s, individual warheads could still be in the five-megaton class and could, therefore, with improved accuracy, still neutralize a Minuteman in its silo in a preemptive first strike.

Admittedly, such weapons capabilities do not reveal intentions, but intentions are meaningless except in the context of capabilities. If someone had a loaded and cocked pistol pointing at your head, there are very few valid conclusions you can draw. Either he proposes to blow your head off—or, more likely, he is going to force you to do something you wouldn't otherwise plan to do.

The Soviet ICBM arsenal is, for all practical purposes, a pistol aimed at the United States. In my judgment, it is too large and too powerful to be simply a retaliatory force underwriting a posture of deterrence, as our own ICBMs clearly are. So the purpose must be to nullify—or threaten to nullify—our retalia-



tory capability, and thus leave us helpless in the face of any Soviet demand.

Fact Two: The Soviet Union is also steadily developing and building its other strategic offensive systems. These include the Yankeeclass, missile-firing, nuclear submarine, being turned out at a rate that indicates the USSR could surpass our Polaris/Poseidon fleet within a few years; the Galosh ABM system; the Fractional Orbital Bombardment System; and an unprecedentedly large and modern "blue water" navy.

Fact Three: Along with this growing strategic capability, the USSR continues to build and modernize all of its general-purpose and tactical forces, surpassing the United States in quantity of forces and modernization of weapon systems. This fact is closely tied to my next point.

Fact Four: There is a wide divergence between budget trends in the United States and the Soviet Union. The Soviets have shown no inclination toward reducing their overall defense spending or the funding of their strategic programs. Actually, the trend continues upward. With a gross national output that is barely half of our own, and a larger population to support, the Soviets are spending as much as the United States does for defense, or, if we deduct our Southeast Asia funding, considerably more. With further adjustment for the much lower pay scale in the Soviet Union, you can understand how they are able to turn out so many more different aircraft and other systems, in large enough quantities to equip their client states with modern sophisticated weapons.

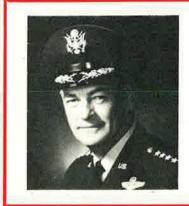
Obviously, there is great sacrifice on the part of the people of the USSR implicit in such a level of defense spending. It is not likely that, without a clear and powerful purpose, the leaders of the Soviet Union would be imposing this additional hardship on a population that has already suffered heavily.

Fact Five: The same unfavorable balance of resources and level of effort is all too apparent in the critical area of research and development. A good part of our legendary success as a nation has been based upon Yankee ingenuity and know-how; we have been known as a nation of inventors and experimenters.

Until recently, the US had enjoyed clear technological superiority over the Soviet Union and the rest of the world. This qualitative advantage, rather than the size of our forces or numbers of weapons, is what has enabled us to deter major war and protect the Free World for over a quarter of a century. And-more · than incidentally-it assured that products marked "made in the USA" set a standard for the world that earned an eager market throughout the globe. The tremendous productivity made possible by advanced technology brought about an almost paradoxical combination: a phenomenally high standard of living for workers in the United States, and products . that could compete favorably in world markets with those of other countries, where some workers were little better off than slave labor.

Both military and commercial R&D--which are really two sides of the same coin-worked (hand in hand to make this nation a great and wealthy power. And yet today, in both skilled ' manpower and R&D funding, we are allowing ourselves to fall behind the Soviets.

To see finely trained and highly experienced scientists and engineers sitting idle, or working outside their fields at much less than their rated



Gen. George S. Brown, a 1937 graduate of the US Military Academy, served as Commander of the Seventh AF in Vietnam prior to assuming his present duties as Commander of the Air Force Systems Command in August 1970. After distinguished combat service in World War II, General Brown was Executive to the Chief of Staff, USAF, and Military Assistant to the Secretary of Defense. From 1966–68, he served as Assistant to the Chairman, Joint Chiefs of Staff. This article is adapted from General Brown's address at the XV Symposium of the Society of Experimental Test Pilots, held at Beverly Hills, Calif., in September. horsepower, is truly distressing. Not because anyone in this country is owed or guaranteed a living, but because so much of our 195 years of progress was built on the brains and labors of such men, and because they could contribute so greatly to our hope for the future.

Even worse, the current specter of unemployment in the area of high technology is already becoming a strong deterrent to the next generation of college students—really "turning them off" as far as the physical and engineering sciences are concerned. That bodes absolutely no good for the economy that is so much on our minds these days—and even less good for our national security.

Of course, there is no way to be 100 percent safe against the possibility of a dramatic technological surprise in weaponry. But we *can* minimize that risk almost to the vanishing point by maintaining a strong technological base and an effective R&D effort.

We surely know how to do that; we always have done it before. The problem is that we don't seem to want to do it any more, or worse yet, too many of us don't believe any more that it *must* be done. We gave up on the SST; we question the need to be in space; and, without seeming to care at all, we watch a nation that has vowed it will dominate the world forging ahead in almost every area of security activity.

Fact Six: Apparently, one of our excuses for being so indifferent to such a dangerous threat is the feeling that the military—or the entire military/industrial structure—has failed us. Some overt hostility toward all of us in that category is a fact.

That attitude, I would say, rests mainly on two foundations: One, a disillusioning war that cannot be won at all in a classic sense, and cannot be successfully concluded in *any* sense without the backing and support of the American people. And two, the matter of cost and performance problems with major weapon system development and acquisition programs.

As to the first problem—the war—our withdrawal is a certainty. But let me say that I saw, in my two years in Vietnam, a rich and beautiful country with a tremendous potential for the future if only its friends will not leave so soon that it doesn't have a fair chance to realize that potential.

Credibility and Confidence

The second problem, on the other hand, has a solution which—if it is not simple—is at least

reasonably clear. That solution comes in two parts. First, to inform the public of the actual facts of the military/industrial relationship, They need to know that the greatest proportion of cost growth comes from external factors over which we have little or no control. But they also have to realize that technological progress-the hallmark of the United Statesis, by its very nature, inherently bound up with risk. If we brush over or ignore the fact that the road to technological success is a rocky one, paved with near misses, we are only asking for more trouble. Or, if we blithely promise that in the future we are going to accomplish everything more simply and at bargain-basement prices in an age of increasing complexity and multiplying dangers, we will never have any credibility.

That is not to say that we cannot do better than we have done—and that is the second part of the solution. First, explain and inform what the risks, shortcomings, and difficulties really are, and then do everything possible to minimize them in practice.

To the latter end, as you know, Deputy Secretary of Defense David Packard, with the full support of Defense Secretary Melvin Laird, began about eighteen months ago a thorough overhaul of the weapons R&D and acquisition process. And the military services have been moving right along in putting the Packard philosophy of management into practice.

That, of course, is a whole story in itself. But the one thing I do want to emphasize is a bold return to the principle of hardware verification, or development prototyping.

We're great at developing elegant theories. We can construct and manipulate mathematical models of enormous complexity. We can make deductive predictions with a high degree of sophistication. We can simulate almost any condition and any environment. We can run mountains of data through fantastically capable computers, forward and backwards and sideways, a hundred times. We can run experiments and tests in shock tubes, wind tunnels, vacuum chambers, and numerous other ingenious devices.

But when we have done all these things over and over again, where are we?

We're at the point where an experimental test pilot has to strap on a piece of hardware, take it into the real world, apply all his hardearned knowledge and skill—and tell us what we *really* have. Theory and study and analysis and simulations and equations on a pile of paper can only take us so far. The real moment of truth comes with a real working model operated by a real working man.

That is what the new approach to prototyping—or "fly-before-you-buy"—is really all about. We want the confidence of demonstrated performance in our acquisition programs before deciding on production. Allied with the prototype concept is the idea of having a number of contractor design teams working in an evolutionary way on promising new designs in a less rigidly structured management atmosphere. Our ideas on managing this work are characterized in what has come to be known as the "skunk works." The end objective of our prototype programs will not necessarily be a commitment to production, but rather a backlog of promising technological approaches from which future requirements can be met as they develop.

While this may cost a little more initially, in the long run we will have more proven technology—proven, not theoretical—on the shelf to draw upon, and consequently better performing weapon systems at more reasonable costs.

That, to some extent, should help restore the confidence of the American public in the military establishment and in our industrial contractors. But the current lack of confidence is compounded of much more than simply the problems associated with buying defense systems. In the final analysis, there is a widespread lack of appreciation for the genuine threat we face, and of the absolute necessity of meeting it head on. The alternative is to become—on the eve of the 200th anniversary of the Republic—one of the many "also rans" of history.

I have outlined six current and pertinent facts out of a great many more you are familiar with:

(1) Soviet ICBM numerical superiority;

(2) Soviet buildup of *all* strategic offensive and defensive forces;

(3) Modernization of all elements of Soviet land, sea, and air forces;

(4) Increased Soviet spending on defense, vs. our own real decline;

(5) The same cross-over in R&D efforts; and

(6) The prevailing hostility not only toward technology itself, but toward the entire military establishment and the defense industry of the United States.

Preaching to the Congregation

What should we be doing about these facts. We should quit talking endlessly to each other, telling each other the things we already believe. In short, we're really just not going to get anywhere by "preaching to the choir."

But what if the choir got out and started preaching to the nonbelievers? *That* could make a profound difference.

As Edward Uhl, President of the Fairchild Hiller Corp., told the Aero Club of Washington in July, referring to the business leaders of the National Association of Manufacturers: "... When I talk to them about the Soviet threat, the Soviet military power, [they] are very anxious to know what the facts are ... and, in my opinion, it's more important for me to convert one of those people to understand what the threat is than it is for me to convert you or tell you what the threat is. So I'd say that we—all of us—have a job to do to explain this dangerous shift of military power."

Willard F. Rockwell, Jr., Chairman of the Board of North American Rockwell Corp., talking to the American Society of Mechanical Engineers in May, put it this way:

"I know quite well that these critics of defense preparations will discount out of hand much that I'm saying here tonight. Their accusations will be that mine is a self-serving interest. If I'm self-serving—I'm not alone. Two hundred million Americans are self-serving also when they repeat with me the words taken from the preamble to the US Constitution the first duty of the national government is to 'provide for the common defense' of our country."

And thus Mr. Rockwell reminds us that we do indeed need to reorder our priorities in this country, putting self-preservation and survival back in the first order of precedence where, by natural law and reason, they have always belonged. The US, after all, has all the resources it could ever need to meet both its domestic and its defense requirements—all the resources, that is, except perhaps the will. If the people understood the facts and realized the consequences, I have no doubt that the national will would quickly manifest itself.

So it is those two hundred million Americans we should be *informing*. I suggest it is high time all of us in the choir get out and preach to *them*. *They* are the ones of whom some members of the President's Blue Ribbon Defense Panel said, in a supplemental statement to the Panel's formal report:

"Neither the facts concerning these trends, nor the ultimate danger, is generally understood by the public, which for the most part remains uninformed and hence apathetic."

They, the public, are the ones who will make the ultimate decisions as to whether a 200year-old United States will look backward upon past glories—or ahead to the greatness of her original promise.

Let's quit proving to each other that we agree on everything. Let's go out and talk to them.

The complexity and fast-changing nature of managing and "buying" sophisticated defense technology tolerate no panaceas. The shortcut of theoretical assumption usually costs more than the longer route of safe and sound hardware evolution. The Department of Defense and the Air Force, borrowing some techniques of the 1950s, have formulated a novel, flexible R&D philosophy, called . . .

The Advanced Prototype Approach

T HE IMPOSSIBLE dream of guaranteeing the feasibility, performance, and costs of technologically advanced military systems without bending metal is giving way throughout the Department of Defense to a new realism predicated on demonstrated—rather than assumed —feasibility. The Air Force is leading the way, enthusiastically and officially committed to the change from reliance on paper analyses to hardware proof.

The name of the new R&D philosophy is advanced prototyping, denoting that its product is not yet a direct candidate for the force structure but, nevertheless, more than a technological experiment or a paper study. Deputy Secretary of Defense David Packard, who catalyzed the prototyping policy earlier this year (see "How Our New R&D Philosophy Relies on the Extensive Use of Prototypes," AIR FORCE, August '71 issue, p. 32), described it recently as reflecting one or more of the following characteristics:

• Support or satisfy an anticipated future military need;

• Reduce the uncertainties of possible future developments in terms of technology, operations, performance, costs, and scheduling;

• Provide novel operational or technological options, if possible at costs significantly lower than attainable through presently available means;

• Have a *reasonable* but not assured chance of success; and

• Have relatively low cost with respect to potential total program costs.

"This major change in policy," Mr. Packard predicted, "should permit us to look at substantially more pieces of hardware and different types of hardware. It will give us a better understanding of the capabilities of technology and provide a better basis for making decisions on our major programs by providing a means for exploring additional technological options. Finally, it will better permit us to retain and improve the competence of [the aerospace and defense industry's] design and engineering teams. This approach should help us decide what we really want before we commit large sums to full-scale development and production."

USAF in the Vanguard

First among the services, the Air Force this summer organized a study group, headed by Brig. Gen. Kenneth R. Chapman, the Air Force Systems Command's Deputy Chief of Staff for Development Plans, to formulate the Air Force's specific prototype policies as well as a comprehensive prototype development program, ready for immediate implementation. This effort has proved fruitful beyond expectation:

• It became the model for the other military services.

• It led to an Air Force prototype program involving, initially, four aeronautical systems projects at a total cost of \$211 million (with an allocation of \$24 million sought for the current year and the remainder to be funded at an annual rate of about \$80 million to \$100 million).

• It includes the mechanism to become a permanent "pipeline" for advanced technology, with completed programs being replaced by new, topical efforts in a manner that keeps aggregate annual funding relatively level.

• It led to the establishment of an aero-

Brig. Gen. K. R. Chapman, AFSC's DCS for Development Plans, headed an Air Force task force that formulated a comprehensive advanced prototype program.

By Edgar Ulsamer SENIOR EDITOR AIR FORCE MAGAZINE



Col. Lyle W. Cameron, newly named Prototype Program Director of the Aeronautical Systems Division, will supervise USAF's four prototype efforts.

nautical Prototype Program Office by AFSC's Aeronautical Systems Division.

• It has the potential for revolutionizing R&D management by reversing the trend toward ever-expanding layers of bureaucracy in both government and industry.

The latter point carries overriding importance because it seeks to break the mold of what AIR FORCE Magazine has criticized as "Middle Management Featherbedding" (see "There's Got To Be a Better Way," AIR FORCE, July '71 editorial).

In a discussion with this reporter, General Chapman stressed that "it is Mr. Packard's and the Air Force's principal objective to shake the development and acquisition structure and to get away from the excess paperwork, bureaucracy, and legalism that have been clogging up" the development and the acquisition process.

Key to this revision of the Air Force's R&D management philosophy is what General Chapman termed "adaptive management." Its principal features are: "The service retains responsibility for establishing technical objectives, and for determining how to measure progress against these objectives; for maintaining a proper balance between these goals and program progress; and for evaluating the final results of the project against the measures that have been established."

By contrast, General Chapman said, "responsibilities for establishing the technical approach, for selecting design and fabrication standards, and for exercising adequate management control of the project will be assigned to the contractor."

The contractor will not have to provide time-consuming, special reports, but instead will submit data in the format and manner that he uses internally. Also, General Chapman said, "the several hundred procedural and policy regulations, manuals, and directives that now govern our development procedures will be, in the main, firmly and officially set aside for advanced prototype programs."

In a further effort to ease the workload and staffing requirements for the government and the contractor, "we believe that, in the case of aircraft programs, the contractor and the services should jointly perform both the airworthiness demonstration and the flight-performance evaluation, with the service entering the program at the earliest possible point in time. This will permit the contractor to incorporate design refinements in the prototype vehicle during the flight-test portion of the program," General Chapman pointed out.

"Because we will replace paper with people," he said, "we envision three- to five-man teams on each project, working closely with the contractor and strongly supported by our laboratories and system divisions. This compares very favorably with the fifty- to 250-man system program offices that are common in our full-scale development and production efforts." A corresponding reduction in the size of the industry teams is anticipated by the Air Force.

The first concrete steps in the direction of lean, no-frills management has already been taken by the Air Force. Lt. Gen. James T. Stewart, Commander of AFSC's Aeronautical Systems Division, in naming Col. Lyle W. Cameron to be head of the new aeronautical Prototype Program Office at Wright-Patterson AFB, Ohio, announced that that entire office would be kept at a permanent staff level of no more than twenty-five people. Individual projects will be staffed by individual managers and engineers drawn from this pool.

Fair Amount of Elbow Room

In dealing with contractors engaged in advanced prototype efforts, the Air Force will give them a fair amount of elbow room, such as general performance goals rather than frozen, detailed design specifications. The theme of streamlining and jettisoning of accumulated procedural ballast will be carried through all phases of the advanced prototype program, from requests for proposals (RFPs) that "are severely limited in size," to "stringent page limitations on data that contractors can submit," and from source selection teams of four to six members each, instead of the several hundred at present, to substantial time savings that might permit contract awards within two months from the time of the basic program goahead decision.

The Air Force plans to retain flexibility on whether a given project is to be pursued on a competitive or single-source basis. Of the Air Force's four advanced prototype programs that are being initiated at this writing, at least one will involve competitive efforts, another is likely to involve only one contractor, and the decision on the remaining two will depend on the amount of funding available and other as yet unknown factors.

Because the Air Force's overall prototype program will be carried out within fixed fiscal limits, individual contracts are likely to include "cost and fixed-price features." In certain cases, specifically tailored "level of effort" contracts will be used. These will recognize that the contractor may not achieve all design goals, but require him to deliver completed hardware and technological findings by a set deadline, according to General Chapman.

The contracting *bête noire* of recent years, the "buy-in" by contractors eager for business, would seem to be exorcized because prototype contracts contain neither a stated nor implied promise for full-scale engineering development or production—the two program phases where buy-in losses could be recouped. (A contractor "buys-in" when he quotes a price so low that he actually sustains a loss, but hopes to make up the deficit through follow-on business.)

One question of considerable concern and not easily answerable involves "data rights," technological advances obtained by contractors at their own cost but subsequently incorporated into their proposals concerning advanced prototype projects. Because the underlying intent of the prototype programs is to channel all the technological advance "that we can get our hands on into a given project-provided that it is sufficiently evolved to become flyable hardware within a two- or three-year period-we may want to synthesize technological contributions by several contractors in one prototype." In such instances, General Chapman said, "we must either find a way to protect the contractor's data rights or pay him for their use."

The First Four Prototype Projects

From a large field of candidates, the Air Force, in September of this year, selected four specific programs that show the greatest potential for advancing the state of the art in areas of prime concern to the Air Force mission. They happen to be aerodynamic systems, but "we recognize that advanced prototype development is not peculiar to aircraft and can be applied equally well to missiles, space systems, components, and other Air Force hardware interests," General Chapman noted.

One prototype project involves an "advanced STOL transport" — a medium-weight, high-performance aircraft that can operate in and out of 2,000-foot, austere landing strips and is capable of high-speed cruise. A fully developed aircraft of this type might eventually replace the C-130 transport.

"We want to find out, among other things, what a 2,000-foot STOL capability really buys us in an operational sense. We want to find the knee in the curve—is it at 2,000 feet that we get the greatest operational and cost payoff, or is it at 1,900 or 2,100 feet, or wherever? We also want to see if there is a contractor who is willing to incorporate fly-by-wire [instantly activated, electronically driven control system] so we can test what this technology might be worth to us," General Chapman said.

The Air Force plans to cooperate closely with NASA in that agency's STOL effort, which involves a smaller vehicle suitable for commercial operation. Progress by one government agency in this effort can be "grafted onto the product of the other," NASA Administrator Dr. James C. Fletcher told this reporter.

In the STOL effort, the preferred Air Force position is to have two contractors, each perhaps with two different designs, compete in a flyoff. Funding constraints might not permit such an approach, however. A total of \$86 million is sought by the Air Force for this project. Another Air Force prototype project involves a small, unmanned, very low-radarcross-section vehicle, utilizing special planform design and new materials. A laboratory mockup of such a vehicle indicates great potential for "invisibility," but the technology must be demonstrated in terms of flying hardware. Because of rapid improvements in defense nets, tactical penetration in the years ahead will rely heavily on "radar-invisible" manned and unmanned vehicles. The low-radar-cross-section project is likely to involve a single-source effort at an estimated cost of \$20 million.

The third, and possibly most attention-getting effort involves a lightweight, high-performance fighter incorporating highly promising technologies which, for reasons of high risk, are not being used in such on-going programs as the F-15 and F-14B. (While assigned to the Air Force, technological advances obtained from this program will benefit all military services.)

This effort will involve competitive prototype developments and flyoffs. The aircraft is to be in the 20,000-pound weight class and will include fly-by-wire. The basic objective is to "achieve extremely high maneuverability and controllability" throughout the flight regime of the vehicle.

"In this effort, we want the contractors to know that we expect them to use all available technologies that can be crammed into a twoor three-year fabrication program," culminating in flyoff, General Chapman said. This might include variable camber wings and some elements of CCV (control-configured vehicle technology, which provides artificial stability, permits sharp reduction in airframe weight, and enhances maneuverability through a missile-like control system). NASA is cooperating closely with the Air Force in this program on a long-range basis by working on "secondgeneration designs," General Chapman said. The anticipated cost of the first-generation fighter prototype is \$90 million.

The fourth candidate project involves a small, subsonic jet or prop aircraft optimized for quiet operations. A potential candidate for the forward air controller (FAC) mission, the aircraft is to be inaudible to ground observers in a wooded environment at distances of more than 2,000 feet.

Recent advances in the sound-deadening of jet engines, General Chapman *said, indicate that the critical factor in a quiet airplane is no longer the powerplant but rather the wing. Emphasis in this program, therefore, will be on acoustically designed wings. The Air Force has budgeted \$15 million for this project. No decision has been made on how many contractors are to be involved.

Congressional reaction to the Air Force's prototype program has been good, and all four programs are to be "well under way" early next year.

Behind The Scenes

The Air Force Academy's falcon mascots have thrilled thousands with their spectacular half-time performances at Falcon Stadium. Where do they come from? What are they like? How do the cadet handlers train

Those Fabulous Feathered Falcons



By James R. Patterson

B_{iawed} young man with a confident grin. He stands five feet nine inches tall and weighs 191 pounds. His specialty is moving rapidly, steadily, and uncompromisingly against numerous other young men while clutching a football. The twenty-one-year-old Cadet Brian Bream is one of the stars of the Air Force Academy's current football season.

Baffin is a stately, white-feathered, young gyrfalcon with piercing eyes. She stands two feet tall and weighs sixty-five ounces. Her specialty is diving rapidly, steadily, and uncompromisingly 330 feet from the top of the Academy stadium to the middle of the gridiron. The six-yearold bird is one of the stars of the Air Force Academy's current football season. There are other points of similarity between Bream and Baffin who, with a combination of names like that, would in another era have made a great billing for a vaudeville act. Both had fine records during the 1970 football season. Both started fall training at the same time. Both began getting into shape by working on fundamentals. Both drew the particular attention of their respective coaches.

Cadet Bream, the unstoppable tailback, last season broke eight Academy gridiron records (he had a great day against Navy when he carried thirty-six times for 207 yards) and is generally considered to be the school's No. 1 candidate for All-American. The Academy's official football handbook identifies him as "easily the best running back in Falcon football history." Baffin's credentials have not yet been so well established. As one of the twelve mascots that give their name to the Academy and its athletic teams, a certain amount of individual anonymity has existed among the falcons, although their performance has been a spectacular half-time feature of Academy football games. Simple justice demands that these hard-working, poorly paid (only two meals a day), skillful performers should receive proper recognition.

Falcon Feats and Foibles

Dr. (Col.) James C. McIntyre, director of falconry on the 18,000acre campus ten miles north of Colorado Springs, Colo., was grooming Baffin for the Army-Air Force game October 16. She is too valu-



able to risk for any lesser occasion, he explained, because there is always the possibility that a bird will go AWOL.

The falconry coach, who retired after thirty years in the military service as a veterinarian, stresses the fact that, despite the most rigorous training, only a tenuous bond ever exists between bird and handler. It is not an affair of the heart, but of the stomach. After a summer of pleasant idleness, the falcons have to be retaught that they must work for their food, and that food is provided only by the cadet falconers.

While only two falcons have ever been permanently lost into "the wild, blue yonder," the threat is a constant concern to Dr. McIntyre and his twelve cadet handlers. Electronics has recently provided a useful fail-safe tracking device in the form of a nine-gram transmitter strapped to the bird's leg. Powered by a hearing-aid battery, it has a line-of-sight radius of about six miles. Cadets with direction-finding receivers ring the stadium whenever the mascots fly. Even so, the chase can be arduous if the falcon decides to go over the hill—or, much worse, in the case of Colorado Springs over the mountain.

The falconers live with another nagging worry which, so far, hasn't been realized. The lure the birds are trained to dive on after they are released from atop the stadium is a soft leather bag with a chicken wing attached. The fear is that some day an easily diverted, feathered dive bomber may spot a feminine spectator's hair adornment—a bit of fluff or folded ribbon—and *that* will become the target for the day, instead of the lure on the gridiron.

One Fell Swoop

And should the assaulted lady be the wife of a VIP, the entire falconry program could be wiped out in, literally, one fell swoop. Such a calamity could be welcomed only by the television producers who cover the Air Force Academy games.

As TV actors the falcons are generally inclined to lay an egg, as they say in show biz. They are too small, too fast, and too unpredictable for the most experienced cameramen. Many authorities estimate the bird's top speed at 200 mph. Dr. McIntyre's more conservative estimate is half that, but no one really knows, he says.

"The difficulty with clocking the falcon accurately," Dr. McIntyre explains, "is that you don't know just where she is going. Some years ago someone had the bright thought that these birds could provide much useful information for aeronautical engineers if they were flown in a wind tunnel. The concept was sound except that it could never be satisfactorily explained to the falcon, and she wouldn't cooperate."

These references to the female sex of the falcon may come as something of a shock to many football fans and Air Force Academy supporters. The bitter truth is that the falcon very nearly was not accepted as the mascot for the new service school when, in 1955, the first Academy class was debating the merits of various contenders. The choice, which now seems so precisely appropriate, was not then apparent. A considerable body of opinion supported the eagle or the tiger as the Academy's symbol.

The eagle lost out in the early returns. As an emblem, it already had been chosen and given rather wide exposure a good many years earlier by the United States government. And the tiger. Well, what was the connection with flying? (Okay, okay, you former Flying Tigers.)

But it still was not field-grade weather for the falcon. Although the Cadet Wing had decided on the bird, the selection had to be approved by higher authority. There were some four-star frowns at the awful thought of adopting anything *female* as the emblem of a service whose masculinity is epitomized by such rugged heroes as Billy Mitchell, Hap Arnold, and Curt LeMay.

Nevertheless, the falcon flew off with the honor. There was just too much going for the bird that made her the obvious choice. Graceful in flight, fast, courageous, a fighter, the falcon for centuries has exemplified qualities to inspire generations of cadets.

The falcon now is an established feature of the between-the-halves entertainment at Air Force football games. This role is vastly different from the ancient falconry mission, when before the time of Christ they were trained—never domesticated to provide food for man. Before the gun—even before the bow and arrow—this aggressive member of the hawk family was diving swiftly out of the sky to kill or retrieve such small animals as rabbits, squirrels, and game birds.

Dr. McIntyre likes to tell how Genghis Khan, when he was plundering much of the civilized world in the twelfth century, rode with an air force of 5,000 falcons to help provide food for his armies. Only

Behind The Scenes



The Apollo-15 crew—Worden, Scott, and Irwin—with friend "Hungry."



Two types of Falcons—both perform at football games.

the development of firearms relegated falconry to the level of a sporting pastime.

Never a Pet: Seldom a Lady

Returning to the subject of sex, it is the unhappy biological fact, gentlemen, that the female of the hawk species known as Falconidae is larger, stronger, more aggressive, and, alas, more handsome than the male, called a tiersel. For that reason, the falcon rates varsity status as a provider of food as well as gridiron stunt pilot. Yet-and this may be some consolation to male members of the Air Force, past and present-she has retained throughout her colorful history the vicious, ill-humored, erratic temperament that can only be described as "bitchy."

Dr. McIntyre makes an emphatic point that the falcon, although usually manageable, never becomes a pet. Nor a lady. At a football game last year, a supposedly welltrained performer committed an unpardonable breach of etiquette. Just before takeoff from above the press box, the cadet falconer held her over the railing to allow her to relieve herself of any preflight tensions. In the esoteric language of falconry the word is to "mute." Disregarding thoroughly indoctrinated standard operating procedures, the falcon failed to mute and instead waited until she glided down over an upper tier of cadets. In keeping with the highest traditions of the Cadet Wing, the dozen or so victimized students suffered the indignity stoically.

Such a mishap, however, must quickly be put in proper perspective. It would be an overstatement to report that the 4,000 young men comprising the Cadet Wing idolize the falcons, but certainly they are very proud and possessive of their mascots. Compared to the Army mule and the Navy goat, the Air Force cadets believe they have every reason to feel superior with their chosen mascot.

When could a mule or a goat ever expect to have a lunar landing module named after it—an honor accorded the Academy mascots on the Apollo-15 mission! Or how could a mule or a goat ever hope to top the fame of Hungry, the sixyear-old prairie falcon whose feather Col. David R. Scott used on that same mission to prove Galileo's st theory of objects falling in a vacuum?

In the rather brief history of falconry at the Air Force Academy, a hero—or more properly a heroine —has emerged: the beautiful, majestic Athol. A gyrfalcon from Greenland, Athol won the hearts of the Cadet Wing with her imperial



Cadet falconers proudly display their charges. Kneeling is Dr. (Col.) James C. McIntyre, in charge of the Air Force Academy falconry program.

James R. "Jimmy" Patterson is both a veteran newspaperman and veteran USAF officer. Once a reporter for the Kansas City Star, he later was both a flight instructor and public information officer, retiring with the rank of colonel. For many years he was employed by United Aircraft Corp. as a public relations executive, working in Europe, then out of the firm's Washington, D. C., offices. He retired earlier this year and now makes his home in Colorado, near the Air Force Academy. He says he plans to do more free-lance writing. bearing and fantastic airmanship. The big, white bird held every eye when she soared above the stadium before starting her terminal dive to the lure on the gridiron grass.

Cadets still speak fondly of Athol. On the cold December day in 1969 when the gyrfalcon died of a kidney disease that resisted every medical procedure, the sad news swept through the campus and later reached many Air Force offices around the world. By common consent it was decided that the widely admired mascot should be preserved by a taxidermist, and today Athol perches proudly among treasured trophies in Arnold Hall, the cadet social center.

Cadet James D. Wessler, a first classman from Sullivan, Mo., in charge of the falcon program, believes they may have another Athol in Baffin. Not only is she a white gyrfalcon, similar in appearance to the dead bird, but she seems to have some of Athol's instinctive showmanship.

Operational Training

Wessler and his cadet colleagues take great pride in their charges when they perform well on the football field. Considering the long hours they spend training and caring for the birds, they are clearly justified. When regular classes begin in the late summer, the falconers start working two and a half to three hours a day at the mews (falcon house). The Academy considers falconry sufficiently important and physically demanding that an athletic letter is awarded after twoyears' participation in the program.

"In mid-year," Cadet Wessler says, "when the announcement is made to the doolies that they can try out for the falconry program, we get forty to fifty of them. Most of them are attracted by the glamour, or the chance to make football trips. In a few days only a handful are left. Too much hard work. You have to have a real interest in falconry itself and not just the fringe benefits."

Birds and cadets learn together under the experienced eyes of Dr. McIntyre. The youngest birds prairie falcons that have been caught in the cliffs west of the Academy while too young to fly—are kept penned until fully feathered. Called "eyases," they are captured during the summer by mountain-climbing Academy teams.

The first step in the training is called "manning," when the falcon is introduced to the close presence of man. Then the bird is taught to eat bits of meat on the gloved hand of the trainer. Next it is taught to fly gradually increasing distances to the bait while tethered, until a free flight of fifty to 100 yards can be risked. Graduation day arrives when the falcon can be released to dart at the swinging lure.

In its early ground school training, the falcon learns to accept the hood. This is a small leather helmet, invented at some distant time in the Dark Ages, which covers the eyes of the bird and serves as an effective tranquilizer. With the hood pulled down, the high-strung falcon remains calm and docile.

Dr. McIntyre, who has become a nationally recognized authority on the hawk family, believes the falcon's eyesight is one of its most fascinating faculties.

"It is at least eight times better than man's," he says. "A falcon can see and fly to a piece of meat the size of a sugar cube from the length of a football field.

"And as for depth perception. A jet pilot should have it! The falcon dives at 100 miles an hour and stops at the lure six inches above the ground."

Man, that's flying!

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KEEPING UP WITH THE FALCON FAMILY

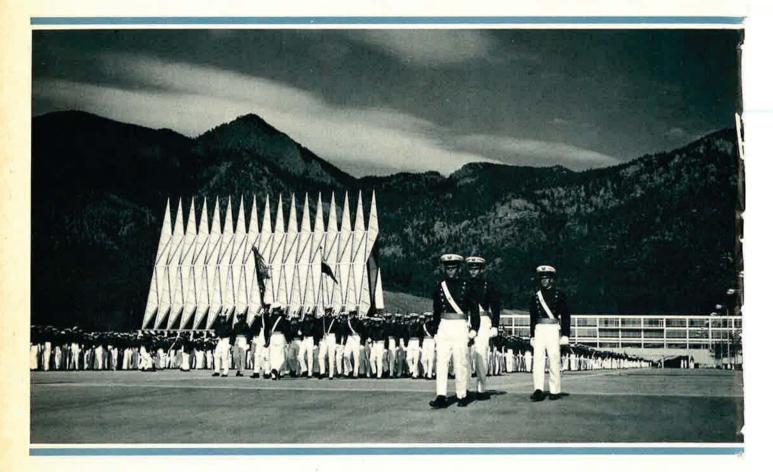
The falcon family has many species throughout the world. They range from the two-foot-tall gyrfalcon to the six-inch falconet. All true falcons are characterized by long, pointed wings, a notch in the upper half of the beak, and dark brown eyes. Other types of hawks have wider and more rounded wings, yellow, orange, or reddish eyes, and do not have the notch in the beak.

Five general types of falcons are native to North America. They are: the gyrfalcon (Arctic only), the peregrine falcon (duck hawk), American merlin (pigeon hawk), the prairie falcon, and the American kestrel falcon (sparrow hawk). The gyrfalcon is the largest and most regal, while the kestrel is the smallest.

All have been trained by falconers. In medieval times, the gyrfalcon was reserved for kings, and the peregrine for nobles of ducal rank.

-From an Air Force Academy fact sheet on the falcon

Behind The Scenes



USAF Academy Liaison Officers call their job the "best Reserve slot in the Air Force." It's a lot of work, and the pay is lousy, but there are other compensations for being one of the 1,200...

By Maj. Eugene G. Barker, USAFR

Talent Scouts for the Air Force Academy

THE BEST Reserve slot in the Air Force is also probably the most expensive. The USAF Academy Liaison Officer (LO) gets no pay, but the satisfaction is great.

There are more than 1,200 Reserve Officers in the LO Program, run by the Air Force Academy. Last year, the average Liaison Officer spent 221 hours of his own time, traveled 1,657 miles in his own automobile, and spent \$255.50 of his own money—all without reimbursement. Why? For some it is the retirement points they earn, but for most it is a good deal more.

Assigned to junior and senior high schools in

his own home area, the Liaison Officer makes his own time schedule, advising guidance counselors in his schools and counseling students who are good Academy prospects. He need attend only a few scheduled meetings and take a short tour of active duty only once every three years. Meanwhile, he must be ready on short notice to speak to such groups as the local Optimist Club, the Boy Scouts, or the PTA. It is his responsibility to see that the eligible young men in his area are kept well informed on the goals and requirements of the Air Force and the Academy. He must encourage those who are qualified and tactfully discourage those who are not. He sees each guidance counselor about twice a year and counsels a dozen young men several times each. His critiques judge each boy as to seriousness of intent and those intangibles of character that cannot be found in statistics or tests.

The need for the LO began with the first class of cadets at the Air Force Academy in 1955. West Point and Annapolis each had a far-flung corps of recruiters in their alumni. The new Academy had none. So in 1957 a group of Air Force Reservists was assigned the task of locating and encouraging candidates for admission. Now most cadets have been counseled prior to admission. Lt. Col. Robert Peary, Director of Candidate Advisory Service at the Academy, would like to see that every entering cadet has been properly counseled by an LO.

Advantages accrue both to the young men and to the Air Force. Too often the motivation of a candidate is actually that of strong parents, sometimes an Air Force father, or an ex-athlete who sees in his son a new lease on old glory. The LO seeks out only the most highly motivated and personally committed high school student, one who can survive the pressures of the cadet system, who can "hack it" and go on to become a dedicated Air Force officer.

The young man must be well above average scholastically, active in competitive sports and social affairs, and have a well-rounded personality that will develop the ability to accept discipline without surrendering initiative. To overcome weakness in any one area of concern, the future cadet must be well above average in others. While a few schools may enroll freshmen with higher scholastic standings, no institution uses any higher standard in judging and selecting the entire man. Intensive counseling by the Liaison Officer helps prepare the candidate for the rigors of cadet life. Maj. Eugene G. Barker, USAF Reserve, is Academy Liaison Coordinator for the Northeast New York State area. A World War II veteran and a practicing architect, he lives in Glens Falls, N. Y.

During the selection cycle for 1970–71, LOs counseled most of the thousands of young men who applied to their congressmen and other sources for nomination under one of fourteen nominating categories. From this group 2,100 were found to be fully qualified for appointment; about 1,700 were offered appointments to fill an entering class of 1,404 cadets. The rejection rate is high, but intensive screening means that a higher percentage of those entering will be able to survive the course.

The LO organization is divided into eightyseven geographical areas, each with a Liaison Officer Coordinator. All report to the Academy's Director of Candidate Advisory Service who, in turn, comes under the Director of Admissions and Registrar, Col. William R. Jarrel, Jr.

With the Air Force Academy offering more



Lt. Col. Harold Jost, Toledo, Ohio, accepts an Outstanding LO award from Brig. Gen. D. J. Campbell, Deputy to the Chief of the Air Force Reserve.

than 430 curriculum courses in twenty-nine academic majors, it is not surprising that the prospective cadet is often unsure of his Air Force career goals. The LO assists the high school guidance counselor in advising the aspirant, drawing on his own military experiences, education, and training in the LO program.

Liaison Officers regularly arrange and escort groups of guidance counselors to the Academy—almost 1,500 each year. This amazing program costs the Academy only the services of a few Office of Information personnel and a bus driver who, together, guide the



New arrivals, in a time-honored stance, draw equipment for Basic Cadet Training.

educators through a whirlwind one-day tour. All other expenses are borne by the participants. Routine Reserve training flights provide transportation. Only thus can the school counselor get the true picture of the Air Force Academy, its facilities, and faculty. While there the LO can visit "his" boys—cadets he himself has counseled.

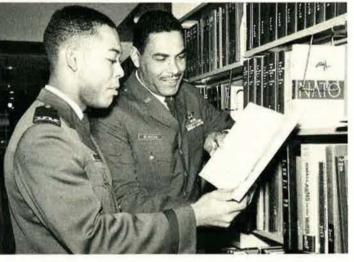
For the Air Force Reservist with at least a few "good years" left, who would like to earn up to forty points per quarter and maxiand a special rapport often develops with the cadet and his family. There are a number of LO Parents' Clubs. It is not at all unusual for cadets and their parents to join the LOs at their Christmas-time counseling sessions for new prospects and their parents. Here, an undecided applicant has a chance to get the word from a real cadet.

The average Liaison Officer last year visited twenty schools, met with guidance counselors and principals forty-four times, and interviewed thirty-three candidates in fifty individual sessions. He spoke to 1,290 citizens at civic clubs and other public meetings. On an annual basis, this effort equals that of a fulltime staff of 125 persons that would cost the taxpayer thousands of dollars.

A college degree and an ability to speak in public are helpful to an LO, but the prime attributes are his desire to help the best male



An LO goes over a fine point with a counselee.



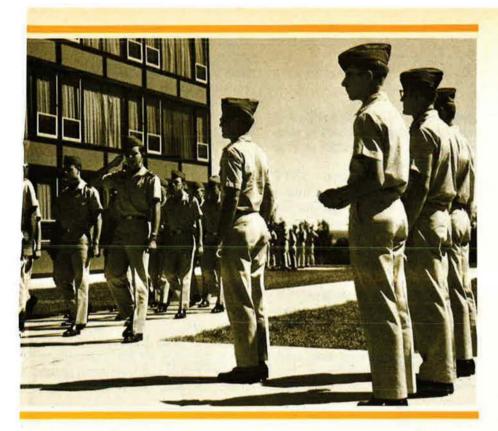
Academy adviser Lt. Col. John Blanton confers with a cadet.

mum points for retirement, for the newly separated young officer with a Reserve obligation, for the man who enjoys working with young people, this is *the* Reserve program. Here is the gratification that comes only from a hard job well done—with all the satisfaction that goes with performing a vital task in a winning organization.

The intangible rewards are many and sometimes unexpected. An LO may find that the Candidate Advisory Service wants him to check to see if everything is okay at a cadet's home, students in our high schools to know about and be encouraged to apply to the United States Air Force Academy. With all the present-day concern about youth, LOs can attest that high quality and determination can still be found.

The need continues and more LOs are needed. Reservists interested may write to the Director of Candidate Advisory Service (RRV), USAF Academy, Colo. 80840.

The pay *is* lousy, but other rewards make up for it.



At the Air Force Academy Prep School, it's a tough regimen of concentrated academics and physical conditioning as prospective cadets go about . . .

Shaping Up for the Academy

By William D. Madsen

C ADET Candidate Jim Rooney of Philadelphia, Pa., looked out the window past the brick dormitories and academic building. Beyond the terraced lawns two squadron teams were playing a fast game of pass football. He reflected on his answer to the question, "Why did you apply for the United States Air Force Academy Preparatory School?"

"For a long time, I've had my sights on a career in aerospace medicine as a regular officer in the Air Force," Rooney explained. "The best route to officer rank is through

Behind The Scenes

the Air Force Academy, and the surest way to get into the Academy —for me—was through the Prep School.

"I enlisted in the Air Force as a regular airman. While I was in basic training at Lackland AFB, an Air Force master sergeant assigned to the Academy's Candidate Advisory Service talked to me about Prep School. MSgt. Zigmas Krasauskas, his name was —'Sergeant Ski' to his friends. Anyway, the Sarge told me about the advantages of the Prep School."

Fifteen months later, A1C Jim Rooney was a student in the Department of Special Instruments at Lowry Technical Training Center, Denver, Colo. He had followed "Sergeant Ski's" advice—took the Prep School exam and got a letter of recommendation from his commanding officer. Result: He entered the USAF Academy Prep School in July 1971, with 160 other "cadet candidates."

The Air Force Academy Preparatory School is located ten miles north of Colorado Springs, Colo., in the middle of the 18,000-acre Academy campus. The school is a self-contained complex with classrooms, dormitories, dining facilities, athletic fields, and a parade ground. In ten years of operation, 1,207 Prep

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Behind The Scenes

School graduates have won Air Force Academy appointments and entered the Cadet Wing.

"Enrollment in the Prep School carries no guarantee that the cadet candidate will receive an appointment to the Academy," said Col. Glenn R. Alexander, Preparatory School commander. "Prepsters are in competition with all other applicants. Our job is to prepare these carefully selected young men to meet Academy entrance requirements and to compete successfully for an appointment. Those who complete Prep School can and do successfully qualify for appointments." appointments. The best qualified of these candidates are invited to compete for the limited number of Prep School spaces available.

Air Force Regulation 53-14, "Air Force Academy Preparatory School," spells out eligibility requirements and admission procedures for regular and Reserve airmen in the Air Force and the Air National Guard.

Army, Navy, and Marine Corps members must first obtain a nomination to the Academy from a member of Congress or other authorized source. After receiving a nomination, these enlisted men may apply for Prep School according to procedures outlined in a joint regulamid-July through May, the Prepster gets intensive instruction in English and mathematics under the expert eyes of regular Air Force officer instructors. The courses begin at high school level and progress rapidly to college-level material.

"I've learned more grammar these past three weeks than in three years of high school," said Cadet Candidate Johnnie Norris of Broadview, Ill. Steve Larsh of Norman, Okla., agreed, and added, "We learn college-level study habits, how to organize material, how to budget time. Invaluable lessons for later studies...."

"Physically, we're conditioned for the rigorous life of a cadet by a year of running, intramural sports, and exercises," Jim Rooney explained. "Academically, we get concentrated work in reading improvement, grammar, rhetoric, vocabulary, logic,



Capt. Frank Machovec, USAF, engages in a lively discussion during a mathematics class at the Air Force Academy Prep School.

The young men eligible to apply for the Prep School include Air Force regular and Reserve members; Army, Navy, and Marine Corps members; and civilian candidates. Admission to Prep School directly from civilian life is authorized only for those individuals who were candidates for the last class to enter the Academy, but who were not offered

Mr. Madsen is an employee of the Office of Information at the US Air Force Academy, Colorado Springs, Colo. tion, known formally as AFR 53-14, BUPERS INST 1530.49C, MCO 1530.5B, and entitled "Air Force Academy Preparatory School."

The Prep School offers an unparalleled opportunity for young men to concentrate on preparing for the mental and physical exams required for appointments to the Academy. Students take Academy entrance examinations including the College Entrance Examination Board (CEEB) tests, Physical Aptitude Examination, and Qualifying Medical Examination as part of the Prep School course.

During the academic year, from



There is time for socializing at many of the Prep School's events.

composition, literature, and speech."

Johnnie Norris applied directly for an Academy appointment, as did Steve Larsh. "We got rejection slips from the Academy," Norris said. "Our high school grades were average, but we had low rank-in-class positions on graduation. Our CEEB and Scholastic Aptitude Test Scores were too low to qualify for appointment. They offered us the opportunity for Prep School training to beef up our SAT scores in English and math. So we accepted, joined the Air Force Reserve, took four weeks of basic training at Lackland, and here we are!"

Now, in addition to English, Norris and his fellow candidates are getting five days a week of concentrated work in algebra, analytical geometry, plane trigonometry, calculus, slide rule, and Euclidean geometry.

Military training is part of the daily life of Prepsters, too. The student body is organized into a Cadet Candidate Group of two squadrons. Students compete for the opportunity to perform in leadership positions. They get practical command and staff experience at group, squadron, and flight level.

During their first two weeks, Prepsters absorb intensive instruction in basic drill, customs and courtesies, and leadership techniques. In May, the year-long military training program is climaxed by a week of allout physical conditioning, field exercises, and obstacle courses to finetune cadet candidates for the strenument as cadets in the Air Force Academy!"

Leaves and passes are not plentiful, but they are adequate.

"We get two weeks of Christmas leave, and another week during spring break in March," said Cadet Candidate Donald Wunz, Jr., of Erie, Pa. "After completing the basic-training phase, weekend passes are granted to all students in good standing. We can't own cars, but we are allowed to rent them."

Nearby Academy Community Center bowling alleys, hobby shops, library, theater, and service club facilities are open to Prepsters. They attend regular Falcon football games, where they have their own enthusiastic rooting section. Special activCadet Wing commanders were former Prep students. The First Classman currently in command of the 19th Squadron, Cadet Lt. Col. Anthony K. Stevens, graduated from the Prep School in May 1968, and entered the Air Force Academy as a "doolie" the following June.

"Maturity, a year of seasoning in a military organization, and great physical conditioning—these are some of the advantages of a year in Prep School before becoming a cadet," said Tony Stevens. "I was a



Athletics is a basic part of life at the Prep School, where the intramural schedule calls for participation in a wide variety of sports.

ous summer ahead as "doolies," or freshmen, in the Air Force Academy itself.

"Our TIs—training instructors are great!" exclaimed Bradley Simpson of El Dorado, Ark. Simpson is the Group Commander this fall, with the rank of cadet candidate lieutenant colonel. "These regular Air Force NCOs show us—through personal example, enthusiastic leadership, and genuine interest in our welfare—what a dedicated military man is like. In fact, everyone—the administrative staff, faculty, and athletic coaches—is always ready to help us reach our goal—appointities include Prep School athletic events, picnics and fishing at Farish Memorial, hiking, riding, and skiing in season. Prepsters put out their own yearbook and newspaper; they run their own student council and special class events, such as dances. They are encouraged to attend Protestant, Catholic, or Jewish services conducted by base chaplains in the Community Center Chapel, or churches in Colorado Springs.

Prep School graduates have done well in the Cadet Wing at the Academy . . . in athletics, academics, and military training. In the last four years, for example, three of the



Cadet candidates learn military bearing at the Prep School.

regular airman when I came to Prep School. The greatest benefit for me was the review of math and English. I scored higher in the College Entrance Examination Board tests than I had ever done before."

Cadet candidates see the Academy as it is. They have no illusions about the physical and mental demands they will face as Air Force Academy cadets. Above all, they understand the obligations of a career as a regular officer in the United States Air Force.

Getting these young men started on the road to that career is what the Prep School is all about.

AC-119 Gunships in Southeast Asia

Low and slow over the sunlit jungle canopies of South Vietnam drones a flying anachronism an AC-119 Shadow gunship. It's a target seemingly easy for enemy gunners to shoot down. But they seldom try it. They've learned that firing at this easy target is like poking a hornets' nest...



By SSgt. Robert J. Lessels, Jr., USAF Photos by Sgt. Gary Modick, USAF

OW AND slow over the sunlit jungle canopies of South Vietnam drones a flying anachronism an ancient transport—seeking combat with the enemy. It's a target seemingly easy for enemy gunners to shoot down. But they seldom try it. They've learned that firing at this easy target is like poking a hornets' nest.

The anachronism is an AC-119 Shadow gunship, operating out of Tan Son Nhut Airfield. Its mission is unique. Armed with four 7.62-mm Miniguns capable of delivering a total of 24,000 rounds a minute, it and the other Shadows of the 17th Special Operations Squadron's C Flight are day birds. Unlike their sister AC-119 units, which operate only at night, the 17th SOS AC-119s are "Shadows with a shadow."

The most lightly armed of the USAF gunships in the combat zone, the day-flying Shadows still are greatly feared by the enemy. Captured enemy soldiers have reported seeing "a hundred" of the aircraft attacking a target, when in truth, only one Shadow had been in the area.

While not as spectacular to watch in action as their night-owl cousins, the daytime gunships can still put on an impressive display of pyrotechnics. When their guns fire, it looks as if a stream of brilliant candy apples is streaking from the aircraft to the ground. And between every pair of tracer bullets are five ordinary rounds. Only the tell-tale spurts of dust on the ground, like splatters on a rain puddle in a downpour, betray the full impact of the gunship's firepower.

The crews of the day-flying AC-119s endure long hours of flying in hot, cramped quarters. The blazing tropical sun heats the cockpit area like a greenhouse. The slipstream entering the low-flying aircraft from its open gunports and doors brings even more humidity into the already damp aircraft. Sometimes a crew flies long, hot hours of patrol without finding a target. When relieved by another gunship, the men return to base, tumbling out of the aircraft to get cold drinks and a shower.

On other days, a forward air controller (FAC) or an allied ground commander may spot the enemy, and the heat of the aircraft is forgotten as the crew prepares for combat.

A rapid exchange follows among the aircraft commander, the navigator, the FAC, the ground commander, and the Seventh Air Force Tactical Air Control Center. The target is verified as hostile and the location of friendly forces is determined. Quickly the navigator feeds target coordinates to the pilot, who swings his cumbersome aircraft onto the correct heading.

The author, Sergeant Lessels, is assigned to the Office of Information at Hq. Seventh Air Force, Tan Son Nhut AB, South Vietnam.



At the target area, the aircraft commander checks in with either the FAC or the ground commander in contact with the enemy.

With the target completely identified, the aircraft commander rolls the AC-119 into a steep bank. He quickly lines up the target in his sights and squeezes the firing button.

A deafening din, like that of hundreds of jackhammers, fills the interior of the aircraft. The sound is so intense that its pressure can be felt pushing in on the body, making breathing difficult. The smell of cordite and powder drifts through the fuselage, stinging the nostrils with its acrid odor.

The inside of the cabin is bright from the muzzle flash of the Miniguns as they spin around, tracking the enemy below. The aircraft jerks and dips as the commander fights to keep the guns on target, forcing the crew to brace themselves lest they be hurled around inside the plane.

Red tracers snake into the jungle canopy below, making the trees —Illustration by Porter Whiteside

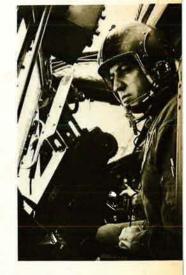
shake as if in a violent gale. A light cloud of dust rises through the foliage, interspersed with streaks of crimson as tracer shells ricochet back above the canopy of green that conceals the enemy.

A sudden quiet settles over the aircraft as the commander pulls off the target and awaits the FAC's analysis of his fire. A mortar has been destroyed, but there are enemy survivors.

As the Shadow curves around for another firing run, a streak of gray smoke passes close by the tail. The enemy has fired a rocket-propelled grenade at the big bird in a desperate effort to silence its guns. Another streak, bright red, races up from the jungle to pass harmlessly by the tail of the now orbiting aircraft. An enemy soldier has fired a B-40 rocket at the "impossible to miss" target. Before the red streak and gray smoke can dissipate, more tracers streak toward the ground. The area is once again saturated with 7.62-mm fire, and the FAC reports that any enemy left below are now hiding deep in their bunkers, out of reach of the Shadow's bullets. The twin-tailed gunship pulls off the target again, allowing the FAC to direct fighter-bombers onto the target with their bunker-blasting bombs.

As the AC-119 leaves the area, white smoke from the FAC's marker

An AC-119 Shadow gunship pilot takes a bead on an enemy position preliminary to triggering a burst from his four 7.62-mm Miniguns. C flight of the 17th Special Operations Squadron is the only gunshipequipped unit flying day missions in Vietnam.





While a gunner on an AC-119 Shadow gunship cranks in a fresh belt of ammunition, another stands by with a full can. Fast reloading techniques assure a pilot of ready firepower when he needs it. It's a form of teamwork that really means business.



A gunship navigator coordinates his aircraft's activities with the requirements of forward air controllers, ground controllers, local unit commanders, and Seventh AF's Tac Air Support Center.



In the air over Vietnam, a gunship on a daylight mission exposes itself to a hail of small-arms fire, an event that is dealt with in kind—to the enemy's discomfort. rockets spews out of the jungle while tan and green F-4 Phantoms can be seen streaking into the target, blowing the smoke apart with direct hits.

The Shadow cruises back toward its base. A call comes in from an Allied ground commander. His men have run into an enemy force in a banana grove and the fighting is hot. Fire support from the gunship would be "most wonderful, thank you!"

This is good news for the gunship. The enemy probably is caught in an exposed position, away from his lifesaving bunkers. Again the target is confirmed and the order to fire received. Again the AC-119 rolls into its orbiting bank and the pilot lines up the target in his sights.

Behind him in the cargo area, gunners begin to wrestle 100-pound cans of ammunition into position beside the fully loaded guns, ready to reload as soon as the guns go dry. The men sweat heavily as the bank of the aircraft increases the tug of gravity. Boxes of ammunition assume three or more times their normal weight as the G forces increase.

The observer standing in the door scans the area for signs of the enemy and finds what he is looking for. Word is passed to the aircraft commander and again the guns roar into life, smashing the enemy location like a swarm of steel locusts.

Soon the position is silenced and, as the gunship returns to its patrol, the welcome voice of the replacement AC-119 comes through the headsets. For this crew, the day is over. They can go home now—until tomorrow.

THREE FOR THE CHIEF

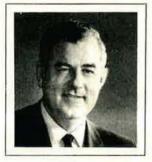
In 1965 I accompanied Secretary of the Air Force Eugene M. Zuckert to the Chief of Staff's Commanders' Conference at Hickam AFB, Hawaii. Needless to say, our C-135 was loaded with brass as we departed Andrews AFB, Md., but it wasn't until we were letting down to refuel at Travis AFB, Calif., that I discovered Gen. J. P. McConnell, the Chief of Staff himself, was at the controls.

The approach was a bit rough and I noticed that the Secretary was firmly cinched up. This precaution proved to be well advised. We hit the runway a good lick and bounced into the air for two more landings. When we finally rolled to a stop, Secretary Zuckert stuck his head into the aisle and shouted: "You planted it well, Chief. I sure hope it will grow!"

-HUGH E. WITT, SPECIAL ASSISTANT TO THE ASSISTANT SECRETARY OF THE NAVY (I&L) AND A FORMER MEMBER OF THE AIR FORCE SECRETARY'S STAFF.

(AIR FORCE Magazine will pay \$10 for each anecdote accepted for publication.)

IN MEMORIAM 1918 - Ralph V. Whitener - 1971



T HE trappings were all too familiar. The long black hearse. The solemn crowd of mourners—somber men and tearful women. The incongruous gaiety of the banked flowers. The fresh-dug grave, camouflaged by artificial sod, gaping under the mortician's canvas shelter. Murmured prayers. Flag folded carefully for posterity. The ritual volleys, and everyone wincing involuntarily at the first one. The mournful notes of "Last Call," soaring upward from the brazen bell of the trumpet into the big oak trees. The amenities of death had been observed.

One is always sobered by the death of a contemporary, saddened if he was a friend, respectful if he was a man to be respected. Ralph Whitener was all of these things. He was a remarkable man, and those who read these words without having known him will not understand all they mean. But those who knew him will.

Ralph came to Washington, D. C., in 1948 as Organization Director of the fledgling Air Force Association. He had been instrumental in getting AFA started on a local level in his home city of Beckley, W. Va. His imaginative programming and hard work had caught the eye of AFA's then president, Tom Lanphier. AFA needed both, and Lanphier thought Whitener could supply them. He did, and more. Unhampered by formal training and unfettered by cynicism, Ralph operated under the simple principle that if there was a job to be done, you did it. It could be staging an airpower tableau in the Hollywood Bowl or putting up shelves in AFA's storeroom. It got done, and done well.

He was godfather and midwife to AFA's exhibit program, which has grown from a modest display at the Omaha Convention in 1954 into the highly effective Annual Aerospace Development Briefings in Washington's Sheraton-Park Hotel.

In 1960 Whitener left AFA's employ and became executive director of the National Aeronautics Association and US representative of the Fédération Aéronautique Internationale. In 1964 he formed his own company, Ralph Whitener & Co., in Washington, specializing in convention and exposition management and the production and staging of special events. In the US aerospace community he was "Mr. Air Show."

There is room to mention only a few of his accomplishments. He served as special consultant to the US Department of Commerce for the 1967, 1969, and 1971 Paris Air Shows. He produced and staged the 1967 and 1969 National Air Expositions at Dulles International Airport. He was managing director for AFA's World Congress of Flight, at Las Vegas, Nev., in 1959. From 1949 through 1964 he managed the annual aerial programs at Kitty Hawk, N. C., in observance of the Wright brothers' first powered flight. For fifteen years he served on the Board of Governors of the National Aviation Club, with two terms as a vice president.

Whitener was born in Hickory, N. C., September 21, 1918. He died suddenly at his home in Annandale, Va., a Washington suburb, early in the morning of September 25, 1971. He had just finished his last job running AFA's 1971 Aerospace Development Briefings. His widow, Alice, survives, as do three children, Robert, Larry, and Kathi. He is buried at the National Military Cemetery in Culpeper, Va.

Ralph was a big man, whichever way you looked at him—big in stature, big in heart, big in talent. Will Rogers once said, "I never met a man I didn't like." Ralph Whitener never met a person who didn't like him.

-JOHN F. LOOSBROCK



Ralph Whitener with Air Force Chief of Staff Gen. John D. Ryan at the annual AFA. Aerospace Development Briefings.

A New Look at Air Force Organization

For almost a half century, airmen have clung to a philosophy of organization that contains inherent contradictions, the author believes. Here is his analysis of the genesis, evolution, and costs of Air Force organizational concepts, and his prescription for

USAF's Organizational

THROUGHOUT its history, whether dated from the Billy Mitchell era or from the Unification Act of 1947, the Air Force seems to have pursued an ambivalent approach to defense organization, and at all levels. The Air Force was born of contradictory parental conceptualizations, describable as autonomous separation and centralized unification. Forced



Billy Mitchell's advocacy of a unified military structure with separate land, sea, and air forces was, the author believes, a compromise with political reality. It set the course of organizational doctrine supported by airmen for the next five decades. on many occasions to take a stand, Air Force leadership has attempted to keep the concepts married to each other. Given the combination of these attempts with doctrines of strategic bombardment, the overall result has been a posture ("autonomous centralization" is as good a title as any) that has made it difficult for the Air Force to interact with other services. The Air Force, moreover, has overlooked the possibility that even Mitchell's concepts were politically expedient accidents.

The theme of this article is that reexamination is in order. What follows is an unconventional analysis of the past several decades, designed to argue that concepts of centralization may have been out of place all along. There are other ways of approaching organizational questions. Indeed, the Air Force has led the way in designing new forms of organization which violate traditional norms, which are becoming predominant in many areas of administrative activity, but which the Air Force itself has misinterpreted because of its overcommitment to "unity of command" and similar notions.

Objectives in the 1920s and 1930s

In the 1920s, Mitchell advocated both separation and unification, but Air Force histories do not set his arguments in broad context. It seems plausible that unification doctrine was only an afterthought, thrown in to compromise with political realities of the era.

There can be little doubt that Mitchell and his cohorts wanted most of all to escape from an Army that seemed determined to strangle aviation in its infancy. Under the circumBy Col. Frederick C. Thayer, USAF (Ret).

Ambivalence

stances, it would have made little sense to argue for a "single chief of staff," for Mitchell must have deemed most potential "chiefs" unfriendly to his objectives. Thus, he ranged far and wide in his advocacy of a national aviation identity. Few in the Air Force probably are aware even now that he sought an Air Force that would operate nationalized airlines with modern aircraft, then turn over to private business the most efficient models. In the heyday of US private enterprise, Mitchell's airline proposals did not attract support within the legislative and executive branches. But Mitchell had other political problems as well.

The 1920s was a time of "economy and efficiency" in government. The Bureau of the Budget was created in 1921, and its first Director, Charles Dawes, became notorious for economizing. To this day, textbooks repeat the tales, perhaps apocryphal, of his regulations against wasting paper clips. Those who advocated economy and efficiency then, and those who have done so since, have argued, not with compelling logic, against all forms of "fragmentation," "proliferation," and "duplication." And they always have seen centralization as the road to efficiency.

Dawes and his cohorts were only the forerunners of the two Hoover Commissions and Secretary of Defense Robert S. McNamara, who, among others, have failed to note that their forms of "economy" produce unbelievably massive overhead structures. The point is that the 1920s were not years in which one could win an argument that two military services should be divided into three. Mitchell had little choice but to argue for a unified overhead

structure with three distinct subdepartments (one of them to combine civil and military aviation) in an attempt to reconcile the contradictory values of separation (his goal) and centralization (the economizers' goal).

In retrospect, there was not enough aviation to warrant a separate agency without inclusion of the airline function, but that was infeasible. Mitchell's quest for political acceptability may have established an "accidental" doctrine of unification, never questioned because those who succeeded him were committed emotionally to vindicating his memory. The depth of the commitment also may have instilled the notion that proposed doctrines must be "pure," untainted by "politics," even if "politics" had a hand in shaping them in the first place. All of this, finally, was complicated further by the emergence in the 1930s of fully developed concepts of strategic bombardment.

Once afflicted with the principles of Douhet, the airmen found the military reason for combining separation and centralization. A bomber force, and the fighters launched to protect it, seemed to comprise an entity subject only to a President's direct command, a notion that has continued to this day. Whatever bombers did was seen as unrelated to ground and naval forces. The airmen of the 1930s, therefore, did not expend much effort arguing for total unification. What they sought, and achieved, was the precursor of the Strategic Air Command, the GHQ Air Force.

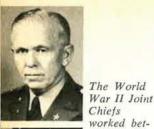
In rereading what was said at the time, it seems significant that the airmen envisioned the separate Air Force as containing only bombers and their protective fighters. All other military aviation, carrier-based aircraft excluded, was seen as properly assignable to the Army. Doctrinally speaking, the airmen were unprepared for what happened in World War II.

World War II: Some Wrong Lessons

It may become clear one day how many erroneous conclusions were drawn from World War II. All of us refused to believe our organizational designs contributed to success; yet, reanalysis suggests just the opposite. Roosevelt had a penchant for disorder, and things were not always managed well at his level, but there are a number of examples which demonstrate that the alternative to disorder need not always be hierarchy. Much of what we did, of course, enabled us to make explicit administrative connections with the British.



Was Robert S. McNamara a managerial innovator-or were his ideas "the product of nineteenth century organizational thinking"?





-were the strategists. Admiral Leahy, the Chairman, was essentially an administrator.

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Eisenhower's 1958 reorganization of the DoD outlined the design for McNamara.

AAF's Brereton opposed Ike's wartime preference for using tac airlift for logistics.



The Secretaries of War and Navy-and as the war progressed, the Undersecretary of War for Air-worked as partners of their military chiefs. No one of them was "in charge" of the Pentagon as a whole. The Joint Chiefs functioned better than at any time since, perhaps because their structure violated cherished theories of "clean" lines of authority. The Chairman of those years, almost forgotten since, was Adm. William Leahy, an old salt who had known Roosevelt for years. His task was to manage the machinery and expedite the flow of information; he was not an authority figure. The strategists were Marshall, King, and Arnold, hardly weak personalities. When the tough questions were at issue, they met with the President. Arnold had full status, despite his formal subordination to Marshall.

What lesson did most theorists of defense organization draw from this experience? One almost can recite it: "There must be a clear line of unambiguous authority so as to provide for resolution of disagreements among the JCS." To this day, few are ready to examine the possibility that the JCS worked best as a "committee" of strong-minded equals, and during a period when allocation of resources and strategic issues were not easy to resolve.

Sometimes we see arguments that if the wartime system worked, it did so "in spite of" its structural deficiencies, or because of the "unique" Roosevelt-Marshall relationship. To put it bluntly, traditional theories themselves have prevented a sensible analysis, for the theories tell us the experience was impossible. Following theory instead of experience, we have been attempting ever since to "strengthen" the hand of the JCS Chairman, then wondering why it doesn't help very much.

Similarly profound lessons emerged from the next lower level. We discovered many things about "joint," "combined," and "task force" organizations. Instead of noting, however, that each such undertaking or command was different from the others—and for good reasons—we concluded that a single coherent set of "principles" should be applicable everywhere. Thus was born the notion of permanent unified commands, each with a "CINC" to "resolve disputes."

By wartime, of course, the Army Air Force was in full bloom. At the tactical level, numbered Air Forces worked in tandem with Army counterparts. There is no need to retrace here the doctrinal battle that grew out of these relationships then and in the Korean War, most of them traceable to the question of who should be "in charge." The question itself has been unimportant all along.

Not all disagreements were Army vs. Air. In the case of tactical airlift, World War II arguments pitted some junior Army generals and the Air Forces against Eisenhower himself. Ridgway, Taylor, and Gavin-airborne division commanders at the time-rated airborne effectiveness much higher than did Ike; he thought it more important to use the airlift for logistics while letting the paratroopers cool their heels in the rear area. The Allied Airborne Army commander, AAF Lt. Gen. Lewis H. Brereton, joined his division commanders in bitter protest, and Arnold agreed with them. It is interesting to speculate on whether this was the forerunner of the revolt of the same Army generals during the Eisenhower Administration.

Pushing doctrines of strategic separateness, the airmen succeeded in establishing a direct chain of command for the B-29s in the Pacific. (Remember Arnold's "additional duty" as an operational commander?) They agreed only with reluctance to include Eisenhower in the decision process for selecting bombing targets in Europe. What should have been clear, but wasn't, was that the separateness of strategic bombardment, and to some extent strategic airlift, could not be "pure" and, in any case, could not be squared with what was happening to other forms of aviation.

Somehow or other, the airmen convinced themselves that a coherent conceptual "whole" could be built from permanent unified commands, a separate military aviation arm, and a strong overhead structure having the equivalent of a "single chief." This was an era, it should be recalled, when many students of organizational behavior actually believed that "disagreements" or "conflicts" within *any* organized activity constituted evidence of "poor"

Col. Frederick C. Thayer, now an Associate Professor at the Graduate School of Public and International Affairs, Univ. of Pittsburgh, is a 1945 graduate of the US Military Academy with a doctorate in Political Science from the Univ. of Denver. He has held staff and command positions in MAC, served as Chief of the Joint Policy Branch at Hq. USAF, and in 1966–67 was a Visiting Military Fellow at the Council on Foreign Relations. He is the author of Air Transport Policy and National Security (Univ. of North Carolina Press, 1965), and of many articles on military and public policy.

organization, and that the appropriate solution was hierarchical leaders to impose "agreements" and get rid of "useless debate." The euphoria attached to the postwar recognition of the Air Force as a third (or fourth) service discouraged dispassionate analysis. None of us could wait to don those distinctive uniforms. The way was paved for the organizational problems that have existed ever since.

Problems of the Modern Era

To keep this reanalysis within reasonable space boundaries, here is a selection of contradictions:

• The Air Force has retained an allegiance to "single chief" concepts. Indeed, just before the McNamara régime began, some members of the Air Staff produced a "Black Book" of centralization proposals that were quite attractive to the newcomers. The loudest public advocate of the "single chief," of course, was Gen. Maxwell D. Taylor; he made it clear in his book, The Uncertain Trumpet, that he was his own nominee for the position (certainly not Admiral Radford). Air Force experience with the Department of Defense of the 1960s, and with Taylor when he was JCS Chairman, should have called those concepts into question by now.

• The Air Force has remained loyal to permanent unified commands. Yet it is not amusing to recall that PACOM moved from Japan to Hawaii in the 1950s almost solely for economic reasons, not strategic ones. History may never record a more tangled set of command arrangements than those that grew up around Southeast Asia. Just as it would have made little sense to "unify" Nimitz and MacArthur during World War II, it has made little sense to have a Navy-oriented overhead standing between Washington and a non-Navy task force; when one thinks of CINCPAC, CINCPACAF, CINCUSARPAC, and FMFPAC, thoughts of Gilbert and Sullivan quickly follow. Washingtion has had no choice but to bypass this entourage on numerous occasions. It should be clear that if it is superficially attractive to establish such permanent structures, it remains unlikely that any specific contingency will match any one of the structures. Here one thinks of Lebanon, Cuba, and the Dominican Republic.

 Books could and should be written about STRIKE Command, now sliding gently into deserved oblivion. Three contradictory objectives led to STRIKE: The Army-especially

its airborne generals-saw it as the vehicle for permanent possession of the airlift sought for two decades (impossible, because nobody can afford to have transports stay idle between tactical airdrops); the Air Force saw a cure-all for doctrinal disagreements (impossible, for no general officer could produce answers satisfactory to all, whatever the color of his uniform); and McNamara wanted to remove all combat-ready units from the services (impossible, if the services are to be retained in any substantial capacity). STRIKE's geographical responsibilities-everything not covered by other unified commands-caused Pentagonites to refer to the commander as "CINCWORLD." and he had little choice but to behave as an alternative JCS.

The anomalies became obvious with the onset of civil disturbances; given the needs of a President, MacDill Air Force Base in Florida hardly could be the operational command post for domestic deployments.

• The Air Force might have learned from Defense Department trends in the 1960s that one man's centralization is another's decentralization. Using the authority of the 1958 Reorganization Act, McNamara transformed his Assistant Secretaries into full-blown operating chiefs and increased the number of semiautonomous agencies, which have tended to acquire many functions assigned by statute to the services. Taken as a whole, the Defense Department Assistant Secretaries and the defense agencies are the best historical example in any field of administration of the burgeoning overhead that accompanies the "economies" of centralization.

Where Does This Leave Us?

The Air Force should have enough experience by now to take a new look at its own doctrines, especially at how they look to others. "Unification" and "centralization" are twoedged swords and, as concepts, they are incomplete. Nobody can figure out the potential of such concepts without first deciding who is to be "in charge." If it is clear by now that Taylor-type or McNamara-type centralization can be a threat to the Air Force, it should be just as clear that others easily could perceive an Air Force-type centralization as a threat to them. The case of SAC best outlines the dimension of the paradox.

The strongest Air Force argument for centralization has accompanied the evolution of strategic bombardment. The Air Force has seen

Army airborne commanders Ridgway (top) and Gavin argued for commitment of tac air to combat operations, as

borne Army

in Europe

during World



War II.

Maxwell Taylor was the foremost public advocate of a "single chief" in the early 1960s.



Admiral Radford chaired JCS during organizational debates leading to 1958 reorganization.







Secretary of Defense Melvin Laird's philosophy of "participatory management" has once more involved the services and the JCS in major decisions.



Deputy Secretary of Defense David Packard has supported a concept of prototyping in weapons development which reduces the rigidities of McNamarastyle management. itself as the quarterback, able to deliver the "long bomb" directed by the President/coach. This approach, of course, rules out any "middle man" between the two. If one follows this logic, one cannot avoid the conclusion that the Air Force never could be satisfied with anything but permanent custodianship of the Number One position. Air Force leaders never have made this argument, but that is how it must have appeared to others all along. This idea obviously has run its course; SAC discovered a mission in Southeast Asia that taught it something about interdependence, and the Air Force gradually has become aware that it might not come out ahead if all strategic offensive weapons were put into a single command. There are both organizational theories and operational experience to support a new outlook.

New organizational prototypes-almost everywhere-tend to emphasize collegial, nonhierarchical, participative decision-making, and to advocate openness and readiness to change. One of the academicians cited most often, Warren Bennis, is known widely for his concepts of "temporary" and "changing" organization, theoretical explanations of projects he observed in the National Aeronautics and Space Administration-themselves copies of Air Force projects. After all, the Air Force led the way in establishing collaborative relationships between government and contractors, neither side certain of the precise shape of final products. The key to these organizations, contrary to Air Force thinking (which emphasizes the "authority" of the project chief), is the problem-solving process which must include the appropriate constituencies and expertise if it is to produce viable decisions.

The concept of "prototyping," advanced by Secretary of Defense Melvin R. Laird and his Deputy, David Packard, probably will survive criticisms of the "military-industrial complex" and continue what already is a new tradition; before long, the McNamara years will be seen as they were-the product of nineteenthcentury organizational thinking. John C. Ries labeled the organizational model of the 1960s as one "which failed to survive the test of the Spanish-American War." (See The Management of Defense, The Johns Hopkins Press, 1964.) To be fair about it, the McNamara regime only fleshed out a design already outlined by Eisenhower himself, the principal architect of the 1958 reorganization.

To label McNamara as behind the times is to confound the conventional wisdom, subscribed to by many in the Air Force, that Pentagon management in the '60s was the most innovative in history. When Laird, the conservative politician, installed "participatory management" to involve the services and the JCS in major decisions, Julius Duscha wrote in the New York *Times* (a perennial McNamara supporter) that it was a "dilution" of the Secretary's formal authority.

The newer approaches, then, see ambiguity, uncertainty, confused chains of command, and intramural conflict/collegiality as positive values. Lest these words seem to contain their own internal contradictions, it is worth emphasizing that the most feasible way to resolve conflicts is to include the parties to the conflict in the resolution process itself. The McNamara who attempts to control everything actually ends up with little effective control over anything at all; it is no surprise that defense budgets were out of control between 1961 and 1963, well before Southeast Asia was a significant budgetary problem. While this was traceable in part to the adoption of "flexible response," with its increased requirement for general-purpose forces, the attempt to manage everything from the top also contributed.

Unfortunately, most praise of the 1960s never includes a look at pre-Vietnam budgets, nor at the details of the individually prepared "Draft Presidential Memoranda," which Mc-Namara used to transmit his decisions to the White House. Paul Nitze, while Secretary of the Navy, once had the audacity to forward a detailed analysis of the manner in which the memoranda contradicted each other, an act that did not endear him to the front office.

One other aspect of extreme centralization should be mentioned. As a theory, centralization provides a focus for settling disagreements among subordinates, but it also paves the way toward exclusion of superiors as well. The greatest tragedy of the 1960s may be the degree to which two Presidents were not involved in major decisions on defense, an exclusion that extended to the State Department, the Budget Bureau, and the Council of Economic Advisers. Overreliance upon the "strong" Secretary had much to do with the wildly erroneous estimates of Vietnam War costs, a major cause of the inflation which followed. The ageless concept of "delegation of authority" provides no answer to this dilemma.

Directions for the '70s and '80s

If one argues for a nonhierarchical, ambiguous organizational approach, how does one go about it? It probably goes too far, in practical terms, to suggest that it may have been a mistake to create a single Department of Defense but, if Mitchell's original proposal was

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accidental, the suggestion seems less preposterous. Perhaps the greater mistake has been that, since 1947, every proposed or actual reorganization has relied upon further centralization as the cure-all. It seems at least time to question the wisdom of having a single Cabinet officer manage one-third to one-half of the federal budget.

Perhaps the most that might reasonably be accomplished is a gradual return to the relatively looser structure of 1947, with the Secretary of Defense and the Department Secretaries functioning as a collegial body. A corollary to this would be the gradual withering away of the Offices of the Assistant Secretaries of Defense, not to mention the semiautonomous defense agencies.

Turning to the JCS, few things would make more sense than reestablishment of the successfully ambiguous World War II model, the function of the Chairman being one of organizing work, managing the secretariat, maintaining linkages and communications-not that of a superstrategist. This would be a sensible role for a military elder statesman, such as Leahy was in his time. Indeed, given this philosophy, a Taylor appointment in the mid-1960s might have been acceptable. The "might" is a significant qualification, for it does not seem overly desirable in this society to have a President appoint to high military position an officer who resigned in protest during an earlier administration.

The corollary suggestion, of course, would be the gradual elimination of the burgeoning overheads variously titled as "Office of the Chairman," the "Joint Staff," and the "Organization of the Joint Chiefs of Staff." The sensible substitute would be temporary, *ad hoc*, issue-oriented joint committees drawn from the services, each individual functioning as both a "service" and "joint" performer. Shocking as this will seem to believers in the conventional wisdom, *this is indeed an argument for abolition of everything but secretariat functions for the permanent Joint Staff.*

The Air Staff, and other service staffs for that matter, should be comprised of officers holding dual assignments as members of major commands. Rather than continuing to pursue the notion that an overhead staff can resolve the conflicting interests of major command "warlords" (a Pentagon phrase of long standing), the conflicts should be openly and proudly recognized. The Air Force should have learned by now that the charade of "USAF Planning Concepts" (formerly "The Air Force Plan") is self-defeating. The initial plan, introduced in the mid-1960s, was kept vague to avoid facing disagreements, and the separate command plans did not mesh with each other.

If these approaches were applied to the unified commands, there would appear to be two choices available. What now is called the position of "CINC" could be recast as a lower-level version of the Leahy-type JCS Chairman and perhaps designated as a "Chief of Staff." Alternatively, one of the service component commanders could double as the administrative "CINC," it being clearly understood that the *operational* command structure would vary by contingency.

To implement this thinking across the board would increase spending for travel and communications, even for exotic equipment such as picturephones. This could be offset, however, by the sharp decreases in personnel assigned to overhead staffs. This would reverse a trend toward larger staffs and tighter travel budgets, a trend that has given us the worst of both worlds. In the broadest of terms, one compelling reason seems to argue for such a philosophical shift.

Without being cynical about it, the Air Force's organizational approach of the postwar years has provided the rationale for huge staffs, which employ all the officers produced during World War II. The personnel "hump" is disappearing, and we need a plausible theory for coping with a more evenly distributed officer corps. If the Air Force continues to pursue centralized management, it will run out of people anyway. In this sense, centralization is a limitless philosophy. Because one never gets to the point of having a large enough overhead to manage *everything*, it always is easy to justify staff increases. This has been the case long enough.

There is no reason to suppose that a more collegial approach to organization would compromise the Air Force's separate identity. Collegiality, after all, tends to guarantee that those individuals and agencies who *should* be involved in decision and policy processes are not excluded. In retrospect, this was the original objective of the World War I airmen, and Air Force enchantment with centralization can be viewed as a departure from it. The organization that sticks with centralization finds itself engaged in all-or-nothing battles. If it loses, centralization works against it.

It may not be too late for the Air Force to choose the other side of its ambivalent arguments.



When he was Secretary of the Navy, Paul Nitze—later Deputy Secretary of Defense —pointed out the contradictions in Mc-Namara's "Draft Presidential Memoranda."

The author believes that Admiral Leahy's wartime role as a nonauthoritative Chairman could serve as a model for reorientation of JCS and unified command organizational structures.



It's night. A blizzard is raging in the Colorado Rockies. A C-47, out of Peterson Field, is in trouble, with both engines acting up. Six men get ready to bail out. Their chances of survival seem slim, but in a few hours it'll be

Thanksgiving Morning

By Maj. Curtis L. Messex, USAF (Ret.)

Illustrated by Cliff Prine

BLACK. Overcast. Cold wind off Pike's Peak gusting to thirty miles an hour, blowing fine snow into drifts. Visibility not too bad, but getting worse.

The young second lieutenant shivers and steps back into Peterson Field Base Operations, glancing at the clock on the wall. Almost 2300. The navigation training missions should be back shortly. Can't be too soon—ready for some sack time.

Lousy night to get stuck with Airdrome Officer duty. Could be worse though. Tomorrow is Thanksgiving, and with any luck the ongoing A.O. will show on time in the morning. Hope those guys get back a little early—don't want to spend tomorrow sleeping.

The hot line from the control tower buzzes, and the bored airman at the desk hunches his shoulder to cradle the phone against his ear with the ease of long practice. He grunts an acknowledgment, listens, straightens abruptly.

"Hey, Lieutenant. One of your birds is in trouble!"

The airman drops the phone on its hook, flips open a card file, and starts dialing the first number on his crash notification list.

"Cable 27. About thirty miles east. Both engines cutting out. Preparing to bail out."

The lieutenant stands frozen for a moment, absorbing the terse message, then reaches for the A.O. duty book and flips through it until he finds the page covering aircraft accidents.

"It figures," he thinks. "First time I pull this duty something like this happens. Looks like I just make sure everyone is notified and then keep out of the way."

Thirty miles to the east one of two widely separated C-47s loses altitude grudgingly as the two engines alternately surge with power and falter. One man remains in the dimly lighted cockpit fighting to hold the airplane steady against the erratic bursts of power while five other crew members hastily strap on parachutes in the brightly lighted cargo compartment.

The engineer cinches up his last strap and kicks the door jettison lever. With a rush of wind the door disappears, revealing a gaping black maw streaked with white slashes of snow. The student navigator gives a final tug on his straps and steps up to the threshold. He stares at the black pit for a moment, then looks back at light, warmth, and security.

"Hey," he shouts over the noise. "You sure he really meant for us to jump?" After all, this is a training mission. Maybe this is just realistic practice.

The next man, the other navigator, hesitates. He's been sacked out and doesn't know what the problem is either, except that the engines sound odd. This isn't his regular crew. It could be just practice even though the drill wasn't supposed to be practiced in the air—you just can't tell about some of these pilots. He turns to the radio operator: "What do you think?"

Meanwhile, the engineer and copilot, aware of the problem and impatient to get out, are blocked by the cluster at the door. Questions are shouted back and forth. A minute of precious time slides by.

Suddenly both engines are silent and the pilot's voice can be heard over the rush of wind. "DAMN-ITALL! I SAID BAIL OUT! WHAT'S HOLDING YOU?"

A frozen moment of startled faces. A stampede out the door. The pilot starts out of his seat, looks back at the instrument panel, hesitates a split second, then drops back to the controls. The radio altimeter, sensing the ground, is flashing its red, altitude low, warning light. No time left to bail out!

He peers through the window at blackness, then flicks on the landing lights. An indefinite something looms through streaming snow. Hard back with the wheel in automatic reaction. The nose rises sluggishly through a numb, frozen eon of time. Sudden awareness that the safety belt is hanging unfastened and it is too late....

Impact. A gentle one! Tail wheel first, then windmilling propellers bite frozen ground. Retracted but still exposed main wheels take the load. The plane jolts through darkness. Pools of light in front of each



wing reveal flashes of sagebrush, snow, and rocks whipping past. The pilot, feet braced against the rudder pedals, left arm against the window frame, holds the wheel back and rides the brakes into the unknown.

Stillness.

Silence broken by the sigh of blowing snow against aluminum and plastic. Metal ticking cool. The pilot moves with what seems to him to be dream-like slowness, jerking the master and battery switches off, unlatching the overhead escape hatch. He starts to pull himself out, then realizes the airplane is moving again—backwards! Instinctively he drops back to the seat, sets the parking brakes, and scrambles out again wondering why he bothered with *that*.

A Miracle Unfolds

Sliding off the front of the nose he falls, struggles up, and runs desperately into the darkness, pursued by the specter of fire and explosion. After fifty yards of rocks, drifts, and sagebrush he slows and looks back. No sign of fire. He sits beside a sage and explores a painful area on his right knee. Nothing serious.

Sudden craving for a cigarette. He fumbles one out of his sleeve pocket, digs out a lighter, then is caught by a fit of trembling that prevents getting the two together for several minutes.

Successful at last, he sucks deeply, staring at the dim hulk of the airplane lying nose up on the slope.

Engines drone overhead and he is suddenly aware of the bitter cold. Mashing the cigarette into the snow, he gets up slowly and limps carefully back toward the wreck, circling to the downwind side, testing the air for a smell of gas. Finding none, he climbs back up over the nose, reaches down through the open escape hatch, and fumbles along a switch panel, feeling for the battery switch.

Suddenly he pauses in thought, then feels along the panel again to turn off landing light and fuel booster pump switches. Back to the battery switch. As it clicks a relay snaps, fluorescent lights flicker on in the cockpit, light shines on the snow from cabin windows, the interphone dynamotor hums briskly. In the tail, unnoticed, the inverter sings quietly as it sucks power from the battery.

The pilot waits, rigid with tension, but all is quiet. Another stretch through the hatch and the radio hums into action. Another tense wait. Again no fire or explosion. He realizes he has been holding his breath. He relaxes and climbs down through the hatch, closing it against the wind and snow.

As the VHF radio makes its distinctive noise of channelizing, the pilot fits his headset and keys his microphone. "This is Cable 27. Does anybody read me?"

The query is answered immediately. "Cable 27, this is Cable 24. You are weak but readable. Say your position."

"I'm on the ground about twentyfive miles east of Colorado Springs. My crew bailed out further east."

"Understand, 27. Give me a tone for homing."

"Roger. This is Cable 27 transmitting." He presses the tone button on the VHF control panel and holds it.

In the air, the copilot of Cable 24 turns on his ARA-8 homing adaptor. The unit promptly starts modulating the incoming tone with a steady dah-dit-dit, dah-dit-dit. The pilot rolls into a left turn and holds it until the code starts to blur into a steady tone. Rolling out quickly he overshoots and gets a dit-dat-dah, dit-dat-dah in his head-

The author, Curtis Messex, retired from the Air Force in September 1970, and now makes his home in Cheney, Wash., as a free-lance writer. His byline appeared in the September '71 issue with the story of the "Airdrop Mission to Katum," and will be seen in coming issues of AIR FORCE Magazine. The story of "Thanksgiving Morning," he tells us, is a true one. The ill-fated C-47 was with the 8th Air Rescue Squadron, based at Peterson. Major Messex was the—as he puts it—"unfortunate second john pulling my first duty after pinning the bars on." The C-47's engines quit because of a leaky fuel selector and an empty long-range tank in the cabin. The Goon was salvaged and, with two new props, flew again. set. A gentle turn back to the right blurs the code again and he holds the heading until small changes in the signal dictate slight corrections.

Suddenly the volume of the signal peaks and the signal changes momentarily to a firm turn code before it starts garbling. The copilot snaps the homer off and the garbling changes to ". . . over me. You're just a little south now. I'm turning on my Aldis light now."

A dim glow appears below, and in Cable 24 the pilot says quietly, "I've got him. Check our position."

The copilot peers at the dim instrument panel, then calls back to the navigator, "We're crossing the 091 radial of the Colorado Springs VOR right now."

"Roger. I'm checking Pueblo radio for a cross bearing. Stay on him until I get it." Another needle swings smoothly around and steadies. "Okay, I've got it."

The pilot picks up his mike. "Cable 27, this is 24. We've got a fix on you. We'll get somebody out there as soon as we can. Are you okay?"

"Yeah, I'm in good shape, but it sure is cold down here."

"Roger. You're getting pretty weak. If you want to shut down to save your battery, go ahead. We'll jazz the engines if we want to talk to you again."

"Okay. I'll be listening. 27 out."

Back at the base, activity intensifies until a crash-rescue convoy thrashes out through drifting snow and turns east on the highway. By an awkward radio link through the control tower, the lead truck requests and receives guidance from Cable 24, who is able to see the glow of headlights through the flying snow.

In Base Operations a steady flow of telephone calls goes out as people are tracked down and notified. Then a pause. What else can they do? A bright idea. Call the telephone operator-have her start calling all the farms and ranches in that area-ask them to turn on their outside lights so survivors can find their way to shelter. Call the sheriff and state highway patrol to converge on the area and search the roads. Then . . . well, then wait and wonder how long it takes a man to freeze to death in a Colorado blizzard.



In Cable 24 the crew watches dim pools of light gradually speckle the darkness below while they guide a set of headlights to a point where two needles cross just right on the instrument panel. Finally the pilot runs the propelter controls up to high rpm and back twice and waits. There is no reaction. He picks up his microphone again.

"Cable 27, this is Cable 24. If you hear me show a light." Moments later a light stabs up from below.

"Okay, 27. I have your light. Apparently your battery is too far gone to bring up your transmitter. The rescue convoy is just southwest of you. Shine your light around the horizon that way."

The light obediently shifts and swings back and forth. Thirty seconds later the control tower at Peterson Field relays word that the crash convoy has the light in sight and is starting across country. Cable 24 passes the word to the pilot of 27 who acknowledges by swinging his light up toward them for a moment before resuming his sweep of the horizon.

An hour and seven minutes after

his scramble over the nose he is climbing into the warm cab of a snow-covered fire truck.

It is 0007, Thanksgiving morning.

Stand and Be Saved

Twelve and a half miles southeast, the radio operator, curled into a tight ball and wrapped in his parachute, shivers in the shelter of some rocks just under the crest of a hill. To keep blowing snow from filtering down his neck he has the fabric wrapped over his head. Rocks beneath him keep digging in with painful persistence.

He shifts uncomfortably and accidentally opens the parachute to a flurry of snow. After a brief, unsuccessful struggle to rearrange things satisfactorily, he rises stiffly to his feet to wrap himself up again. As he does so, a point of light catches his attention. It wasn't there earlier.

He stares, trying to see more, but the snow defeats him, concealing the light for long moments. Uncertainly, he wraps the parachute around himself, hesitates, then he shrugs and starts carefully over the rough ground toward the light. Inside a ranch house a woman mutters querulous questions as her husband comes back to bed. "Who's calling at this time of night?"

"Telephone operator. Some flyers in trouble out here. Wanted me to turn on the outside lights so's they could find the house."

"That's foolishness. They can't land out here."

"Don't need 'ta. They already jumped outta their airplane."

"Shouldn't be flyin' in this weather anyway. Too cold and windy."

"Reckon they fly when they're told to."

"Did you turn the light on?"

"Yep. 'Spect it won't help, though. Thermometer's down to fourteen now. Anybody out there that hasn't found a hole to crawl into probably won't be found 'til it warms up."

The radio operator slips and stumbles down the hill. His feet, in leather boots, already numb. As he works his way down the slope, the light disappears. He hesitates again, then struggles on, keeping the wind just behind his right shoulder. The ground levels off, then climbs again. Suddenly the light is back, a little to the left now, seeming brighter.

At the top of the low rise he stumbles into a barbed wire fence. It turns into a major obstacle, catching loose edges of his parachute and refusing to let go. He jerks at it in frustration, but the tough nylon won't tear free. Unwilling to lose the protective cloth, he finally hacks free from the worst tangle with his pocket knife.

On toward the light. A dark mass looms on his right—a barn. Something bangs his shin and he barely avoids falling face first into the hungry blades of a disk harrow half buried in snow. Now the light can be seen—a single, unshielded bulb swinging in the wind at the top of a high pole. He stands for a while resting amid swirling snow in the lee of the barn, probing the darkness beyond the light.

There it is. The dim shape of another building. He fights his way across the wind to the wall. Windows. It's a house! Along the wall, searching for a door. Steps—a porch—pound on the door, shout. It comes out a startling croak the first time. Pound some more. The door swings away from his fist. Two silhouettes against glaring light.

"My goodness, don't break it down. Come on in. I'll put some coffee on. Plain foolish to be out in this weather!"

It is 0127, Thanksgiving morning.

"... And Good in Everything"

A mile north the copilot is curled in the lee of a small mound. His flying clothes are shredded from a long drag across frozen ground. The impact of landing, coming seconds after the opening shock of the parachute, had knocked his breath out. The wind-whipped parachute dragged him unmercifully while he struggled to shake off paralysis and work the canopy releases on his harness.

After an eternity of tearing rock and stubble he smashed into the mound and stuck there long enough to find and release the catches . . . realizing a split second later that by releasing both catches he'd lost the precious canopy.

For several minutes he lay still until the biting wind forced him to seek shelter and then crawled to the lee of the mound where he burrowed into the snow. Despite the cold, the ground was warm—soft and moist—as he clawed into it. Shock-numbed sense shrank awareness and time drifted unnoticed.

Sudden light blasts at him, forcing its way through closed lids.



Open eyes focus helplessly on a blinding glare. Then, as the light swings in the wind, perspective comes. It's a bare light bulb hanging near the peak of a large building barely thirty feet away. A barn. That means a house near by. He sits up and stares around, discovers a lighted window around the mound to his right.

Lurching to his feet he stumbles over rough ground toward the window, conscious of the painful pull of crusted blood on scraped skin. The guiding light flicks out just before he reaches it and he thumps into the wall in the sudden darkness. A dog barks hysterically. Lights go on again. A head thrusts through curtains for a long moment and is withdrawn. The young man stands uncertainly for a moment, then starts feeling his way along the wall, going with the wind.

A few steps and the dog is there, snarling, snapping in the darkness. He stops, tries to speak soothingly, fails. A light sweeps over him. A gruff voice shouts a question into the wind, "Who's there? Shut up, Bruce!"

"I-."

"Never mind. I can see you now. Come on." A firm hand takes his arm. Around the corner, into the wind. "Mind the steps." A pool of light at his feet. A door. Light. Warmth. A chair. Green oilcloth on a kitchen table.

"Hey, Ma. Roust out. We got one an' he's about froze." A shotgun carefully set down by the door. The dog, wagging its tail now. "Lord, son, you're a mess. Looks like you tangled with a grizzly. An' he throwed you in the manure pile when he got done."

It is 0137, Thanksgiving morning.

Whose Hand on the Spotlight?

Two miles to the southwest the engineer, wrapped in his parachute and huddled in the meager protection of a small cutbank on a wide dry wash, sees lights moving through the snow and lurches stiffly out of his shelter to run, stumbling, slipping, shouting through the blizzard. He staggers to a stop as the red glow of tail lights disappears, stands trembling. After a moment he turns and struggles back toward the wash and the place where the car had



gone by, searching for a road in the darkness.

Kneeling, he studies the faintly visible tracks for a long time, gingerly touching them to confirm the dim outline he can see. Just one set of tracks on a rough dirt road that disappears into unpromising nothing in both directions. Winddriven snow slashes at him, tugging at his jacket and flying suit. He shivers and turns back to the intersection of the wash and the road, thinking of a culvert and possible shelter, regretting the loss of his parachute, left behind during his dash after the car.

A couple of miles down the road a pair of sheriff's deputies peer through the windshield at a wire fence across the road. One swings a spotlight along the fence.

"There's a gate."

"Yeah, but it's just open field out there. This is the end of the road."

"Got enough room to turn around?"

"Lottsa room on my side. Swing the light around real slow first." "Can't see much."

"Yeah, might as well start back." The engineer scoops out a hole in a drift on the lee side of the road embankment. Deep snow has kept him from the culvert. He curls up in the hole, piling up snow for more protection, stopping for rest more and more frequently. Out of the wind the cold doesn't seem so bad. Might even be able to get some rest.

The deputies, turning the car, drop a front wheel in a snow-filled rut. Back wheels spin uselessly. The passenger gets out to look, then pushes as the other guns the car back and forth. Careful jockeying gets it turned around and started back down the road. Idling along, the deputies peer into the flying snow, probing shadows with their spotlight. The heater fan whines in high blower and the deputy on the right holds his chilled hands to the heat vents.

The engineer's eyes are slitted almost shut. He still feels cold and shivers as he lies curled in the snow, but the cold isn't bothering him as much now. The run after the car had been exhausting and demoralizing. It's time to rest—to sleep—just for a while. Headlights glare on his face with increasing intensity for a long time before he realizes what is happening. Realization is followed by a nightmare of slow reaction as he forces stiff muscles to respond. Slowly, slowly, he rises from the snow, spreading his arms in a grotesque wave, croaking a wordless shout as headlights move past, just feet away.

Inside the car the cold deputy finishes reporting in, hangs up the microphone and looks outside again just as the spotlight, left pointing to the right for the moment, falls full on the snowy apparition at the edge of the road.

"Christ!" he gasps.

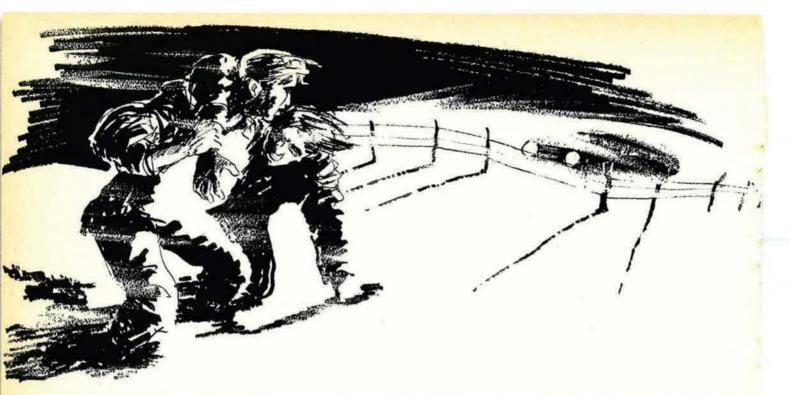
It is 0230, Thanksgiving morning.

Random Convergence?

In base operations the lieutenant is trying uncomfortably to look efficient, useful, and knowledgeable on the fringe of a small group of senior officers who have congregated in response to the phone calls.

Reports of survivors have been received and confirmed. Everyone is acutely conscious of the dragging





clock, the bitter weather outside, and the odds against the two remaining men surviving until dawn. There is sporadic speculation about the reason why both engines failed at the same time. Suspicion centers around fuel starvation, with a minority holding that carburetor ice is the culprit. The lieutenant absorbs with interest the stories of experiences that are retold to back up the differing theories. The telephone rings occasionally at the dispatch counter-instantly stopping all conversation each time. An hour has passed since the last report.

Thirty miles to the east a highway patrol car smashes violently into a snowdrift. Bucking, jolting, tires spinning frantically, it claws its way through to windswept dirt beyond. As traction is regained, the two men inside exchange a look.

"That was close."

"Sort of. We better look for a place to turn around. I don't want to spend the rest of the night in the next one."

They continue along the narrow road, searching the darkness with headlights and spotlights.

A quarter of a mile upwind to their right the two navigators stagger over the top of a low rise and see the lights passing below.

"A car! Run!" shouts the younger man and breaks into a trot over the treacherous footing, pulling the older man along. The car is even with them—moving away. The older man trips and almost falls, grunts in pain as the younger holds him up. One arm is strapped across his chest with parachute cloth and nylon shroud line. His right shoulder hangs low.

Poorly adjusted parachute harness straps had combined with an unfortunate position at the moment of opening shock to slam the quickrelease buckle into his collarbone, snapping it instantly. His cry of pain was answered from the darkness by the voice of the student navigator.

Landing impact caught him unprepared, and he screamed again as he slammed violently into the ground, mercifully losing consciousness just before the parachute dragged him off the lip of a cutbank. Fortunately, the nylon caught and held on the stub of a dead tree on the far side of the wash, spilling the chute but leaving it flapping and popping in the wind.

The younger navigator made a good landing only a few hundred feet away, released his canopy immediately, and sat up with the second agonized scream ringing in his ears.

Fighting his way blindly into the wind toward the sound, he heard the flapping fabric, tracked it to its source, and located the older navigator. They remained together in the shelter of the cutbank for some time after the older man regained consciousness and until the younger, observing his companion's slowing reactions, concluded that freezing was imminent and forced the older man to his feet to walk and live.

With no clue as to the direction of safety, they simply wandered downwind through the darkness until they topped the low rise and saw the car lights passing ahead. Frantically dragging the injured man along, the younger shouts and waves vainly at the distant car.

Inside the warm car the heater churns briskly, the radio crackles and hisses. Two men stare out into the flying snow.

"There's a turnoff into that field."

"Put the spot on it." The driver swings wide and starts into the opening.

"Don't take it in too far. Looks like a pretty good drift there."

"Yeah. I see what you mean." The driver stops, backs, comes forward, backs again. The rear of the car sags as he crowds the edge of the road.

"Watch it!"

"Look!"

The car is angled across the road just right and slanted upward just enough for the headlights to pick out two men struggling through the snowdrifts. Too far away to be heard, too far to have reached the road before the turnaround was complete.

It is 0335, Thanksgiving morning.



The twenty-fifth anniversary of the founding of any organization is an occasion that calls for stock-taking, for reflection, and for fundamental planning. The recent Silver Anniversary Convention of the Air Force Association, the most successful in AFA's history, did just that. The deliberations, studies, and activities of this event provide the blueprint for . . .

Meeting the Challenge of AFA's Second Quarter Century

By Edgar Ulsamer SENIOR EDITOR, AIR FORCE MAGAZINE

THE SILVER Anniversary Convention of the Air Force Association, held September 19– 23 in Washington, D. C., revolved on the theme that brought the Association into being a quarter of a century ago, and which continues to be its central mandate—informing the American public about the forces, conditions, and trends that determine the national security requirement.

The American people's need and right to know the nature and extent of the military and technological threats facing them was the topical thread that ran through all major Convention events. It formed the theme of the Convention's keynote address, served as the pivot of the Association's new Statement of Policy, was highlighted in all principal speeches, and was the focus of the Convention's closing event —the presentation of the H. H. Arnold Trophy to a government leader for the skill and candor with which he portrayed the deteriorating balance of global military power.

The Convention's keynoter, Gen. Jack J. Catton, Commander of the Military Airlift Command, stressed at the Opening Ceremony that "what this country needs most is more people like you—informed people distinguished by certain important fundamentals." And, he explained, "Those fundamentals are what make you stand out—they are what you must reproduce in others—with the country's security in the ultimate balance. I am not talking about selling stock in AFA—I am talking about selling stock in the USA—getting more people to serve—more to maintain their perspective more to be patriotic—like you."

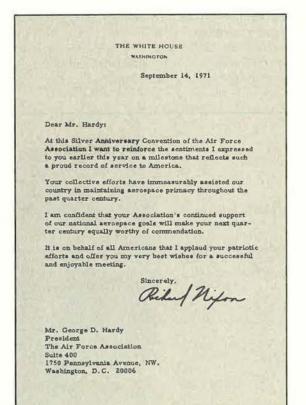
A small combo of the Airmen of Note, led by Lt. Ken Green, makes cool sounds as a group of winners from the Air Force's "Tops in Blue" annual talent contest entertains at the Outstanding Airmen Dinner. The scene was the Sheraton-Park Hotel in Washington, D. C., during AFA's Twenty-fifth Anniversary Convention.



General Catton termed AFA's efforts to provide society with a genuine understanding of the national defense needs as "your greatest contribution to 1971 America," and he importuned his audience to "leave here with the fervor of the missionary [and] help find a way to inform the public so that we can maintain the military stature that will permit us to achieve our objective of a generation without war."

The Convention delegates listened with somber attention when General Catton warned that "many Americans just don't understand the role the military plays in our society, have no confidence in our evaluation of the threat, and could not care less about what we tell them we need. They stay falsely secure in their apparent lack of understanding of the external threat. They stay dangerously comfortable in their apathy to the need for an adequate response to the growing threat. Being uninformed, the American people naturally are unconcerned. This combination, translated into national decisions, could seriously weaken our country's military [and create] an environment which the nation-as we know it-cannot tolerate."

AFA's Statement of Policy, unanimously adopted by the delegates, expanded thoughtfully and provocatively on the problem, postulating that America's freedoms can only be as secure as the nation's will and ability to protect them, that both national will and national strength are progressively deteriorating, and that the basic and underlying reason for this condition is "that the American people, generally, do not accept the seriousness, the na-



The US Air Force's Vice Chief of Staff, Gen. John C. Meyer, addresses the audience during the Outstanding Airmen Dinner, an annual AFA event to salute the best enlisted blue suiters.



ture, or the immediacy of the threat that hangs over this country."

After elaborating on the decline in US military and technological strength, the statement made this telling point: "Today, national security is not a popular subject. Nevertheless, the Air Force Association would be derelict in its duty if it did not make known its views, however unpopular they may be. For if the issue is permitted to die, the nation may well die with it."

The 1971 Statement culminated in a call "for a new order of frankness and candor on the part of the national leadership. These [the facts pertaining to the deteriorating US defense posture] are issues of life and death. For too long they have been the monopoly of the demagogue, the political opportunist, the neo-isolationist, the technological know-nothing. Falsehood can best be countered by truth, ignorance by knowledge, demagoguery by responsible political leadership. The American people have a need to know. They have a right to know. A truly national dialogue on our defense posture must be initiated, based on the hard facts, in order that a truly national consensus can be obtained on the most important issue of our time." (See pages 8 and 9 for full text.)

Deputy Secretary of Defense David Packard, in a similar vein, told some 400 government, Air Force, and industry leaders attending the Convention's Chief Executives Dinner that "there are some people who believe that unilateral disarmament by the US in the face of a mounting Soviet military effort is the way to world peace. This is nonsense." By contrast, he noted that there is growing public awareness that the United States cannot afford to move to isolation and that there is a vital requirement to maintain a position of strength.

Air Force Chief of Staff Gen. John D. Ryan, speaking at a luncheon in his honor, also highlighted the paramountcy of public awareness and AFA's role in it. "Over the past quarter century, the Air Force Association has measured up to the tasks it set out to accomplish. Its support of aerospace power has been effective and unflagging. During these past twentyfive years, in the process of accurately portraying aerospace capabilities and doctrine, the Air Force Association has consistently shown a comprehensive understanding and awareness of the overall defense needs and problems of the United States.

"If ever such an awareness were needed in this country, it is now."

In emphasizing the Air Force's commitment to a mixed force of manned bombers and landand sea-based missiles known as the Triad of strategic deterrence, General Ryan cautioned, however, that "because of the global nature of our economic and political interests, the deterrence requirement is not so narrow that a US homeland defense strategy alone is sufficient.

"As part of our determination to deter conflict at lower levels," he said, "or if such conflict does occur, to ensure it does not escalate into nuclear war, the United States currently stations air, ground, and naval units at bases around the world."

Illuminating the Air Force's future role with regard to tactical deterrence, General Ryan made this significant statement: "Wherever it is in our national interest to deter war whether accomplished by land, sea, or air forces—there will be a requirement for a system of main operating bases outside the CONUS. Any limitations of this requirement affect all our military forces. Naturally, my direct concern is with air bases. I know some people suggest that political constraints during a crisis will not allow the Air Force to use bases in an increasing number of nations."

General Ryan rejected this line of reasoning, saying: "The technical argument is that base rights will not be granted. But it must be obvious that any nation desiring the assistance of the United States will make bases available."

General Ryan said that, in areas of the world involving vital interests of the US, in-place



Rep. F. Edward Hébert (left), Chairman of the House Armed Services Committee, accepts the Hoyt S. Vandenberg Trophy from AFA President George D. Hardy.

forces are required as "tangible evidence of the depth of our commitment [and] I want to point out that this strategy has worked.

"When in the face of serious external aggression to our allies we have made firm commitments and have underwritten these commitments by garrisoning ground and air units in the sovereignty of our ally, there has been no aggression. NATO and post-1953 Korea are cases in point," General Ryan said (see p. 66 for General Ryan's complete address).

(From General Ryan's comment, it can be deduced that US naval forces located outside the sovereignty of a threatened ally do not represent the same kind of unequivocal commitment and, therefore, unassailable deterrence factor, as do ground and air forces garrisoned in-country. See also the AFA Statement of Policy, pages 8 and 9.)

The Secretary of the Air Force Luncheon

In a wide-ranging address at the luncheon in his honor, Air Force Secretary Robert C. Seamans, Jr. (see text, p. 63), assessed the present military balance of power. In remarks that were not part of his prepared text, he said that at the moment "we are not in serious jeopardy but we will be if we don't watch out. It is vital that we push ahead with such weapon systems as AWACS, the B-1, the F-15, and a STOL aircraft."

Turning to domestic problems that affect the Air Force, Secretary Seamans said, "We are all aware of the frequently unjust criticisms of the military and that these present increasing obstacles to recruitment and retention of personnel by the armed forces. Such criticism can be dangerous to our national security, and can contribute to a loss of national self-confidence which would be tragic for us and our friends."

Stressing that "ours is the only nation in the free world that has the potential capability and strength for leadership in the world's continuous quest for peace," he urged that "the time has come, with so many voices running us and our institutions down, for us to speak out for America," an effort that is being pursued with considerable vigor by all strata of AFA.

Secretary Seamans also discussed the challenge of an all-volunteer force concept and its galvanic impact on USAF personnel policies. "The primary concept governing our efforts to solve the problems faced by Air Force people is the idea of a truly all-volunteer force, with no motivation required from the draft." A central tenet of America's philosophy, he said, "is that the individual should have a wide range of choice in ordering his life, in determining his career, and in deciding how to employ his talents. I believe that an all-volunteer concept for military service is a desirable objective. One of the major tasks before us, then, is how best to work toward it."



A group is brought up to date on a company's products while attending the AFA Convention's Aerospace Development Briefings. Some 6,000 persons visited the display area during the Convention.

Many diverse innovations affecting officer and enlisted personnel career motivation are being implemented that "will accelerate our move into the zero-draft era," he said, coupled with efforts to "improve the capability of our Reserve and National Guard units so that they can assume increased responsibility for national security."

Stressing that, in the event of future crisis, the Reserve Forces will be called to active duty before resorting to the draft for needed manpower, Secretary Seamans pointed to the necessity of "a substantial investment to improve equipment which was badly depleted during the Vietnam buildup of active forces and use of these [Reserve and Guard] units in active operational roles whenever possible."

The All-Volunteer Force Question

The uncertainties connected with the effects of an all-volunteer force were a principal issue confronting the Convention and the subject of a special policy resolution as well as of an informative symposium.

The Convention delegates unanimously adopted a resolution which said that the concept of an all-volunteer force represents the "ideal method" for meeting military manpower requirements and, therefore, must be "supported in principle." The resolution cautioned, however, that this approach has not worked in the past, that only about one-third of the men now entering the armed services are genuine volunteers, and that the historical record, together with an assessment of today's public opinion, "makes it clear that this nation cannot realistically expect to meet military manpower requirements without the draft." The delegates concluded, therefore, "that while the concept of an all-volunteer force may represent a worthy long-term objective, it must be rejected as an unrealistic means of meeting current national security requirements, and that continuation of a Selective Service System be supported."

The Chairman of the Committee on Armed Services of the US House of Representatives, Congressman F. Edward Hébert, who was the lead speaker and panelist of the Convention's Military Manpower Symposium (see also p. 70), struck a yet stronger note when he said, "The volunteer force is a dream of utopia that we will never reach."

He suggested that the concept was "a fine weapon for demagoguery . . . but in reality the only way you will have a volunteer army is to draft it."

The Director of the Selective Service System, Dr. Curtis W. Tarr, who followed Mr. Hébert as a speaker and panelist of the symposium, endorsed the all-volunteer concept, predicting that the US Senate will not reenact the draft law when it expires in 1973 and urging, therefore, that "we had better be ready for an allvolunteer force." In the meantime, he stressed "we must learn more about recruiting, more about the motivation of young people. A pay bill may help. Education may help a great deal."

Dr. Tarr said that, on the basis of his personal analysis, the number of true volunteers increased from thirty-four percent of all Air Force enlistments in August 1970 to seventythree percent in August 1971.

Dr. Tarr conceded, however, that this marked increase appeared to be caused by the "economic slump and the unemployment problem in this country" and that for this reason "it is hard to classify them as true volunteers."

Panelist Lt. Gen. Robert J. Dixon, Air Force Deputy Chief of Staff for Personnel, cited a study of high-school seniors, which reveals that while young people have serious questions about military service, they are not as antimilitary as is sometimes believed.

Lt. Gen. George B. Simler, Commander of the Air Training Command, added that the top-quality training Air Force people receive can be a real incentive to serve. He illustrated



Air Force Secretary Dr. Robert C. Seamans, Jr., was one of the many honored guests who toured the display area during AFA's annual Convention.



AFA President George D. Hardy presents the Gill Robb Wilson Trophy to Lt. Col. James Taylor (standing left) and Capt. Robert Everett. The two, acting on behalf of Airman Magazine, are the publication's immediate past and current editor respectively. Applauding the ceremony is USAF Secretary Seamans.



Sharing a table at the Chief Executives Buffet are, from the left, Martin Ostrow, newly elected AFA President; USAF's Vice Chief of Staff, Gen. John C. Meyer; Dan Henkin, Assistant Secretary of Defense (Public Affairs); and Air Force Chief of Staff Gen. John D. Ryan.

his point with the results of a survey of Air Force veterans trained in data-systems design —every one employed in a position capitalizing on that training.

The Outstanding Airmen Dinner

One of the human-interest high points of the 1971 Silver Anniversary Convention was the Outstanding Airmen Dinner, featuring the Vice Chief of Staff of the Air Force, Gen. John C. Meyer, as principal speaker, and outgoing Chief Master Sergeant of the Air Force Donald L. Harlow as toastmaster.

General Meyer stressed that "of all the occasions and affairs I attend, this is the one that gives me the greatest personal satisfaction." In meeting with the airmen, he said, "I get to renew my faith in people. You are the twelve best airmen—the most outstanding—that we have in terms of achievement and judgment. But you are also representative of a much larger group of dedicated and professional airmen who also competed for this award. And it is comforting to know that the Air Force has such a disciplined and ready corps of airmen of really outstanding qualifications."

This year's event scored a first in the fifteenyear history of the Air Force Association's Outstanding Airmen Dinner: One of the outstanding airmen was, as General Meyer put it, "a charming lady . . . the first to be chosen as one of the Air Force's twelve outstanding airmen. Representing the West Virginia Air National Guard, she has earned her place in this very select group in competition with all other airmen—men and women."

General Meyer discussed thoughtfully and frankly such social problems as drug addiction, racial friction, and bias. Because the "membership of the Air Force is, to some extent, a microcosm of American society," he said, "we have problems peculiar to the Air Force and we have problems that reflect an American society in transition."

But General Meyer expressed confidence

that these social issues can and will be solved "by men and women who perceive the problems and dedicate themselves to finding the solutions. They can be solved by men and women who are satisfied with nothing less than excellence and carry this spirit onto the job, into the barracks, into the family unit, and into the community. In short, they can be solved by men and women such as we honor tonight—the Outstanding Airmen of 1971 and their equally outstanding wives."

The 1971 Outstanding Airmen are:

Sgt. Robert H. Burger 785th Radar Squadron Finly AFS, N. D.

TSgt. James J. Griffis Air Force Academy Colorado Springs, Colo.

SSgt. Carlton O. Jacobs 354th Tactical Fighter Wing Myrtle Beach AFB, S. C.

MSgt. John L. King AFCS Detachment 6, 1931st Comm. Group Indian Mountain AFS, Alaska

SSgt. Mary Ellen Loy 130th Special Operations Group West Virginia Air National Guard Charleston, W. Va.

MSgt. Arthur G. Miles 1882d Communications Squadron Phan Rang Air Base, Vietnam

CMSgt. Sam Mims Air Force Cryptologic Depot Kelly AFB, Tex;

SSgt. Dimitry Pavloff 394th Strategic Missile Squadron Vandenberg AFB, Calif.

MSgt. Lesley D. Rhodes Hq. 23d Air Division Duluth, Minn.

MSgt. William Speight 3d Tactical Fighter Wing Kun San AB, Korea

TSgt. Lawrence Wellington 39th Aerospace Rescue & Recovery Wing Eglin AFB, Fla.

MSgt. Elmer F. Williams 1605th Air Base Group Lajes Field, Azores

A Diverse and Stimulating Mix of Programs

Among the many topical and stimulating activities of the Association's 1971 National Convention were a highly informative seminar involving Air National Guard and Air Force Brig. Gen. Jeanne Holm, recently promoted to star rank and the first lady general in USAF, accepts a Citation of Honor from AFA Board Chairman Jess Larson.



AWARDS AT THE 19.

AIRPOWER TROPHIES

- H. H. Arnold Trophy ("Aerospace Man of the Year")—To Dr. John S. Foster, Jr., Director of Defense Research and Engineering, Department of Defense, for his frank and detailed reports to the American people about the urgency of the Soviet arms threat.
- David C. Schilling Trophy (for Flight)—To the Apollo-15 crew (Col. David R. Scott, USAF; Col. James B. Irwin, USAF; and Lt. Col. Alfred M. Worden, USAF) for their unique contribution to manned spaceflight and science.
- Theodore von Kármán Trophy (for Science and Engineering)—To Fred D. Orazio, Sr., Scientific Director, Aeronautical Systems Division, Wright-Patterson AFB, Ohio, for consistent professional excellence in science and engineering.
- Gill Robb Wilson Trophy (for Arts and Letters)—To "Airman Magazine" for its highly effective, thoroughly modern approach to telling the Air Force story (accepted by Lt. Col. James Taylor and Capt. Robert Everett).
- Hoyt S. Vandenberg Trophy (for Aerospace Education)—To the Hon. F. Edward Hébert, United States House of Representatives, for his singular initiative and leadership in catalyzing the Junior ROTC Vitalization Act.
- General Thomas P. Gerrity Memorial Trophy (for Systems and Logistics)—To Col. Shirl M. Nelson, Director of Supply and Services, Hq. Tactical Air Command, for outstanding management capabilities in the field of mobility planning and inventory requirements.

AIR FORCE ASSOCIATION CITATIONS OF HONOR

- Maj. Gen. A. J. Beck, Commander, Warner Robins Air Materiel Area, Robins AFB, Ga., for outstanding leadership in domestic action programs.
- Col Benjamin S. Catlin, III, Commander, Air Reserve Personnel Center, Denver, Colo., for outstanding leadership in managing the military affairs of more than a half million Air Force Reservists.
- Lt. Col. Von R. Christiansen, named "Air Force Personnel Manager of the Year" for outstanding performance as a senior personnel manager at Hq. USAFE.
- SMSgt. Floyd R. Graham, Air Force Weapons Laboratory, Kirtland AFB, N. M., for outstanding management of an advanced program for simulated testing of ballistic missiles in the electromagnetic pulse environment.
- Brig. Gen. Jeanne M. Holm, Hq. USAF, for outstanding leadership as Director, Women in the Air Force (WAF).
- Capt. William Koch, Hq. Strategic Air Command, Offutt AFB, Neb., for making possible the closer coordination of strategic offensive and defensive forces.



In formal attire to attend the annual dinner dance topping off AFA's 1971 Convention are USAF Secretary Seamans and the twelve Outstanding Airmen—one of them a lady.

R FORCE ASSOCIATION SILVER ANNIVERSARY NATIONAL CONVENTION

- **Col. Donald L. Lamberson**, Air Force Weapons Laboratory, Kirtland AFB, N. M., for technological leadership in directing the R&D effort to exploit the military potential of high-energy laser systems.
- Maj. James L. McAfee, 43d Aerospace Rescue and Recovery Sqdn., Laughlin AFB, Tex., for exceptional skill and courage as a helicopter pilot in saving the lives of eight persons in hazardous offshore rescue missions on two successive days in Southeast Asia.
- **Col. Vere Short,** Military Airlift Command, Charleston AFB, S. C., for demonstrating superior airmanship in more than twenty aircraft types while becoming the first Air Force pilot to achieve 25,000 hours of accident-free flying.
- **Col. Floyd Taylor, USAF (Ret.),** Wichita Falls, Tex., for outstanding leadership with the Sheppard AFB Squadron Adoption Program.
- John B. Walsh, National Security Council, Washington, D. C., for contributions to the Strategic Arms Limitation Talks; and named "Outstanding Air Force Civilian Employee for 1971."

AIR NATIONAL GUARD AND AIR FORCE RESERVE TROPHIES

- Earl T. Ricks Memorial Trophy for 1971—To Capt. George C. Neusse and Capt. Roger L. Coakley, 196th Fighter Interceptor Sqdn., California Air National Guard, for exceptional skill and professionalism in successfully recovering a severely damaged TF-102 at great personal risk to themselves.
- Air National Guard Unit Trophy for 1971—To the 130th Special Operations Group, West Virginia Air National Guard (Col. Ralph R. Cowgill, Commander), as the "Outstanding Air National Guard Unit of the Year."
- Air Force Reserve Unit Trophy for 1971—To the 302d Tactical Airlift Wing, Lockbourne AFB, Ohio (Brig. Gen. Ben J. Mangina, Commander), as the "Outstanding Air Force Reserve Unit of the Year."
- President's Trophy for the Air Force Reserve—To the 944th Military Airlift Group (Associate), Norton AFB, Calif. (Col. John F. McCormick, Aircrew Commander), for the "Outstanding Air Reserve Flight Crew of the Year."

AFA-USAF MANAGEMENT AWARDS

AFA-AFSC Distinguished Award for Management—To Col. Harold C. Garner, Hill AFB, Utah, for contributions to the success of the Minuteman program.

- AFA-AFSC Meritorious Award for Program Management—To Col. Lloyd M. N. Wenzel, Hq. Aeronautical Systems Division, Wright-Patterson AFB, Ohio, for outstanding management of the F-14B/F-15 Joint Engine Project.
- AFA-AFSC Meritorious Award for Support Management—To Col. George J. Biggs, Commander, 4905th Maintenance and Supply Group, Kirtland AFB, N. M., for outstanding service in support management.
- AFA-AFLC Management Award—To John Suchy, Jr., Office of DCS/Procurement, Hq. Air Force Logistics Command, Wright-Patterson AFB, Ohio, for outstanding performance in the areas of contract techniques, contractor evaluations, and contract placements.
- AFA-AFLC Middle Management Award—To Raymond E. Cox, Office of Director of Materiel, Hq. San Antonio Air Materiel Area, Kelly AFB, Tex., for work on life-support equipment.
- AFA-AFLC Junior Management Award—To Capt. Paul J. Robertson, Jr., 2954th Combat Logistics Support Sqdn., Kelly AFB, Tex., for significant achievements in the administration of overseas logistics teams.

AFA CERTIFICATE OF HONOR

Brig. Gen. LeRoy J. Manor, Special Assistant for Counterinsurgency and Special Activities, Office of the Joint Chiefs of Staff, Washington, D. C., for positive action in behalf of Americans who are missing in action or held prisoner of war in Southeast Asia.

SPECIAL CITATIONS

- John A. Lang, Jr., for long and dedicated service to USAF and the nation as Administrative Assistant to the Secretary of the Air Force.
- Maj. Gen. Richard M. Hoban, Commander, Ogden Air Materiel Area, Hill AFB, Utah, for support of local and community activities of AFA.
- Maj. Gen. Winston P. Wilson, USAF (Ret.), for long and dedicated service to USAF and the nation as Chief of the National Guard Bureau.
- Brig. Gen. Benjamin B. Cassiday, Jr., Commandant, AFROTC, Maxwell AFB, Ala., for support of local and community activities of AFA.
- CMSgt. Charles E. Lucas, Secretary of the Air Force Office of Information, for enthusiastic and unique contributions to the continuing success of AFA's annual programs honoring the Outstanding Airmen of the Air Force.
- USAF Honor Guard, Headquarters Command, Washington, D. C., for dedicated service to USAF and AFA.



President George D. Hardy with Apollo-15's Scott, Worden, and Irwin, Secretary Seamans, and General Ryan. On right is DoD's Dr. John S. Foster, Jr.

Dr. John Foster, accepts the H. H. Arnold "Man of the Year" Trophy from President Hardy. Dr. Foster is Director of Defense Research and Engineering at the Pentagon.



Reserve issues (see p. 76), various AFA organizational meetings, and the AFA-sponsored second worldwide Junior Officers Conference. The latter was attended by fifty-six lieutenants and captains, representing USAF junior officers on a worldwide basis and themed "Blueprint for Junior Officer Retention in an All-Volunteer Air Force." Hosted by the Air Force Association, this Junior Officer Conference was keynoted by Lt. Gen. Robert J. Dixon, Deputy Chief of Staff/Personnel, Hq. USAF.

Forming the principal backdrop of the Convention were AFA's widely acclaimed Aerospace Development Briefings and Displays, which attracted a record-breaking attendance. Deputy Secretary of Defense David Packard, Air Force Secretary Robert C. Seamans, Jr., and Gen. John D. Ryan were among the many thousand attendants, and acknowledged the briefings' utility in updating Congress, government officials, and military leaders on important, recent advances in aerospace technology (see p. 86).

The Convention's key programs served to showcase a series of important Air Force Association awards, presented on an alternating basis by AFA's outgoing President George D. Hardy and outgoing Chairman of the Board Jess Larson (see the list of awards on pp. 60 and 61).

Capping the Twenty-fifth National Convention of the Air Force Association was the Air Force Anniversary Dinner Dance, attended by a black-tie audience of some 2,500.

This setting served as the backdrop for the presentation of two high AFA awards by President Hardy. The 1971 David C. Schilling Trophy, recognizing the outstanding achievement of the year in the field of flight, was awarded to the all-USAF flight crew of Apollo-15, spacecraft commander Col. David R. Scott, lunar module pilot Col. James B. Irwin, and command module pilot Lt. Col. Alfred M. Worden. In naming the first all-Air Force and all-AFA Apollo crew for the Association's flight trophy, President Hardy cited them "as a new breed of explorers, as skilled masters of flight in the great tradition of Kitty Hawk, for taking a giant step for science, and for demonstrating that in his ceaseless quest for knowledge, man himself must stand among the stars."

The three astronauts, each in Air Force uniform, presented AFA with an Air Force flag that they had carried with them to the moon and back.

The Association's highest award, the H. H. Arnold "Aerospace Man of the Year" Trophy, was presented to the Director of Defense Research and Engineering of the Department of Defense, Dr. John S. Foster, Jr. The Association honored Dr. Foster for his enlightened management of the nation's military technology effort, which "contributed immeasurably to our security and world peace." Further, and in consonance with AFA's deep concern with public awareness of defense requirements, the Association stressed that "all Americans owe Dr. Foster an additional debt of gratitude for his articulate and consistent enunciation of the severity, nature, and scope of the military and technological dangers facing us.

"Dr. Foster has established himself as a candid, superbly effective spokesman for military preparedness and the forward movement of science and technology.

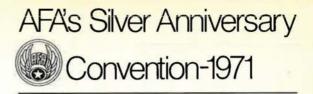
"Dr. Foster has persisted in these efforts courageously in the face of public recrimination, because of his abiding belief that the American people have the right to know the mounting dangers they face."

In accepting the award, Dr. Foster graciously commented that much of the credit for DoD management accomplishments belonged to such outstanding USAF system program offices as Minuteman, B-1, F-15, and AWACS.

The organizational high point of the Silver Anniversary Convention of the Air Force Association was the election of Los Angeles attorney Martin M. Ostrow to the office of AFA National President and of George D. Hardy as Chairman of the Board of Directors. In his acceptance remarks, President Ostrow said, "The challenges which confront us, domestically, internationally, in terms of philosophy as much as in specific needs, are towering indeed.

"But overshadowing the hurdles and the burdens is the fact that at no time has the mission of AFA been more vital, and our job more needed."

These thoughts can serve aptly as the prologue to the coming AFA year.



As the Air Force moves away from reliance on the draft, it must attract people on its merits and keep them because of the challenge it offers. That's why the Air Force's primary management challenge today is...

Improving Things for People

By the Hon. Robert C. Seamans, Jr. THE SECRETARY OF THE AIR FORCE

W E CAN be rightfully proud of our Air Force today. Our airmen have done a magnificent job of carrying out their assigned tasks more often than not doing more than has been asked of them—particularly in a conflict that provides little national acknowledgement of the skill and dedication that our fighting men have shown....

But the performance of our people is even more noteworthy when we consider some of the obstacles inherent in a military career.

Let's face it—the training and vigilance that are essential for successful deterrence can appear to be unnecessarily routine. Maintaining peak morale and efficiency, and thus making it unnecessary to put these qualities to a test, makes the professional military career a unique challenge.

Living conditions are often difficult. Family separations and frequent moves in the military are at times unavoidable. And large organizations sometimes have difficulty treating individuals fairly, and on a personal basis.

Moreover, we are all aware of the frequently unjust criticisms of the military and that these present increasing obstacles to recruitment and retention of personnel by the armed forces. Such criticism can be dangerous to our national security, and can contribute to a loss of national self-confidence which would be tragic for us and for our friends.

In this context we should remember that ours is the only nation in the free world that has the potential capability and strength for leadership in the world's continuous quest for peace. We are privileged to live in a great country—one which recognizes each man's right to pursue his own destiny.

Any failure to unite in supporting the good in our society and in working to correct its imperfections will mean failure to realize our individual and national capabilities. As a nation we have accomplished more than any other in world history. The time has come, with so many voices running us and our institutions down, for us to speak up for America. As President Nixon said in his speech to the Congress on September 9, "We have consulted our fears too much. Now let us be inspired by our faith."

There is much more to be done. And in our determination to move ahead we must face realities. We must deal with problems and injustice where they exist in our nation. But we must not examine ourselves, our motives, our past merely as an exercise in introspection. Our thinking and our decisions today must relate more to the many important needs of the future.

In this light, I want to emphasize today what we are doing and can do in the future to work toward a better Air Force for our people and our country.

The primary concept governing our efforts to solve the problems faced by Air Force people is the idea of a truly all-volunteer force



"Our airmen have done a magnificent job of carrying out their assigned tasks—more often than not doing more than has been asked of them...."

-with no motivation required from the draft. And at this point, let me add a few words about the meaning of an all-volunteer force. Americans are attracted to the principle of voluntary service for organizations of people. And, from a pragmatic point of view, we tend to see involuntary organization, at best, as being an ineffective way to use human talent. A central theme in our American experience is that the individual should have a wide range of choice in ordering his life, in determining his career, and in deciding how to employ his talents. I believe that an all-volunteer concept for military service is a desirable objective. One of the major tasks before us, then, is how best to work toward it.

In our efforts we must be increasingly concerned about attracting people on the merits of our organization and keeping them because of the challenges they can see within the Air Force. In this vein the improvements under way are needed and overdue, even if we were to continue the draft indefinitely.

Now let me mention some of the innovations we have under way to achieve this purpose. First of all, we are improving our personnel management techniques. For example, we are developing computer-assisted personnel planhow many technical specialists, and what prejust what types of officers we need to bring into the active force in any year—how many pilots, ning as a far more precise tool for determining cise training is involved. By better knowing our officer needs we can, as an illustration, better advance the course of permanent officer-grade legislation. And we should be able to plan our force in such a way that all of our officers will have desirable career progressions in the various operational, technical, and management areas. We should be able to avoid humps and valleys that leave good people without rewarding jobs or jobs without experienced people to fill them.

At the same time we are able to more accurately refine our NCO grade authorizations. And we are moving toward an enlisted promotion system that will provide a more equitable promotion opportunity for all airmen.

We also will be able to use these sophisticated personnel techniques as we reduce our enlisted career force requirements. We intend to move in this direction without resorting to the kinds of actions that hurt individuals.

Perhaps the most significant of our improved personnel management capabilities is that we now have a more precise means—both qualitatively and quantitatively—of codifying our objectives so that we know where we are and where we are going. And our personnel managers can use this knowledge to help the individual member of the Air Force accurately plan his career.

The real point we return to, then, is that we are dealing with human beings, and human beings cannot really be computerized. So, in all of our promotion boards, in assignments, in all our personnel relationships, we have to bear in mind that if we want the men and women to stay with us, there has to be a real interest in them as individuals, and they, in turn, must be able to see that what they are doing is really important and really challenging.

In addition to improving our techniques of managing our people, we are seeking to implement a number of incentives which will accelerate our move into the zero-draft era. In part, they address many of the inherent difficulties associated with military life.

One incentive would be to provide a variable housing allowance to compensate for drastic geographic differences in cost of housing within the CONUS. Similarly, a cost of living allowance is needed to supplement income when our people are ordered to serve in expensive areas of the CONUS. For instance, at the present time it is almost impossible to provide a decent standard of living for lower ranking officers and airmen in areas such as Washington, D. C.

Another important area needing improvement, which helps us with respect to achieving an all-volunteer force, is education. Our challenge here is to make education a more posi-

Dr. Robert C. Seamans, Jr., has been Secretary of the Air Force since February 1969. Previously, he was Deputy Administrator, National Aeronautics and Space Administration. He has been active in the fields of missiles and aeronautics since 1941, and his distinguished career has encompassed industry, government, and education. tive incentive within the Air Force. Today's young people should have both challenge and guidance. They must see a close connection between their own self-improvement and benefits to the Air Force, as well as the relevance of each to building a better America.

A swiftly changing technology is likely to further accelerate in the future, and this will require even better educated people. Therefore, we cannot delay further strengthening our educational system. Every Air Force enlisted man should be able to reach at least the high-school completion level by the end of his first enlistment if he was not a high-school graduate when he enlisted. And we hope our people won't stop at the high-school level. On many of our bases today there are educational programs at the bachelor and, in some cases, graduate levels. Our goal is to expand these opportunities to allow every member of the Air Force to complete at least two years of collegiate or vocational education.

Along with these educational and other incentives for the active forces we have to improve the capability of our Reserve and National Guard units so that they can assume increased responsibility for national security. In the event of future crisis, Secretary Laird has advised us the reserve elements will be called to active duty before turning to the draft for military manpower. This in turn necessitates a substantial investment to improve equipment which was badly depleted during the Vietnam buildup of active forces and use of these units in active operational roles whenever possible.

I am convinced that these incentives and improvements for our active and Reserve Forces are important steps and that they deserve the support of our nation.

We also have two national problems that affect our people, which are very current and critical to the future of the Air Force: racial discrimination and drug abuse. I want to briefly outline some measures that we are taking to alleviate them.

With regard to the achievement of greater racial understanding, the Defense Institute of Race Relations was created and will begin classes in November. The six-week course will produce seminar leaders who will then return to their home installations to hold informal discussion sessions. Through these exchanges members of the Air Force will be more involved with the issue of racial equality, particularly as it relates to the individual serviceman.

We are pleased that this institute is located at Patrick Air Force Base in Florida. Its faculty is hand-picked; and the student body will be demographically balanced and racially mixed. Both officers and enlisted will attend.

This program reflects our view that education is the key to changing individual attitudes regarding racial prejudice. For as people learn more about one another, fears are dispelled and we learn to accept individuals as they are and not as members of a race or ethnic group.

Our approach to race relations must be affirmative and apply to all levels of the Air Force. As an initial step, Equal Opportunity Officers were appointed at all installations, and those officers are directly responsible to their commanders. And in this regard I might mention that a worldwide conference of Equal Opportunity Officers, representing all the major commands, will convene here in Washington on September 28. The major purpose of this conference will be the further advancement of our Air Force race-relations program.

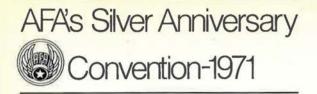
With respect to the national problem of drug abuse—and being a part of our society—the military has been increasingly affected. The armed forces' response has been constructive in its approach, and is a part of this Administration's effort both to call public attention to the seriousness of the problem and to take effective measures to deal with it.

Our program now under way is a five-phase systematic approach to drug-abuse control. These phases include: (1) comprehensive physical examinations, (2) detoxification for those who test positive for heroin (in the future this will include amphetamines and barbiturates), (3) psychiatric evaluation, (4) voluntary behavioral rehabilitation, (5) and, finally, a supportive phase for "graduates" of other phases. This will emphasize individual or group counseling or referral to Air Force community organizations. And this entire approach reflects the fundamental transition from viewing the addict as a disciplinary case to that of a medical problem.

While we planned for the possibility of extensive drug abuse, our experience to date fortunately has been that the use of heroin by Air Force members has been less than one percent in Southeast Asia. Nevertheless, it remains a serious problem.

I think that these actions dealing with discrimination and drug abuse show our willingness to face difficult issues squarely. Through such programs we hope also to contribute to the solution of national problems of which they are a part.

In conclusion, let me emphasize that my discussion has centered upon the need to achieve an improved climate in which our Air Force people can work and live—and continue to do the fine job they have done in the past. I view this as our primary management challenge. In pursuing this objective I have emphasized the all-volunteer approach and certain measures and actions associated with it which will make a service career more attractive and more rewarding. These add up to individual challenge and just treatment. We must succeed in these objectives if we are to have the kind of Air Force that our nation needs in the future.



Fragmented approaches to determining national security needs are dangerous, the USAF Chief of Staff said in a major Convention address. Protecting the homeland, supporting US global interests, and helping allies defend themselves under the strategy of Realistic Deterrence calls for flexible, mobile, and widely deployed USAF aerospace power. That strategy is best served by threat-oriented planning for . . .

USAF's Role in Realistic

ALWAYS enjoy these Air Force Association luncheons because they give me the opportunity to exchange thoughts with many of the people who help the Air Force do its job.

I have especially looked forward to this 1971 Convention. As the Air Force Association Silver Anniversary Year draws to a close, the Air Force itself begins its twenty-fifth year of existence as a coequal with its sister services. I think we have both come a long way.

Over the past quarter century, the Air Force Association has measured up to the tasks it set out to accomplish. Its support of aerospace



"Determination of how much we request, what kind of forces we need, and where those forces are located has got to be based on the threat." power has been effective and unflagging. I know I speak for all in the United States Air Force when I express appreciation for every-thing the Air Force Association has done, and is doing, and probably will continue to do for us.

HS AIR FORC

During these past twenty-five years, in the process of accurately portraying aerospace capabilities and doctrine, the Air Force Association has consistently shown a comprehensive understanding and awareness of the overall defense needs and problems of the United States.

If ever such an awareness were needed in this country, it is now. As the world has grown more complex, as America in general and the American military in particular have been indelibly marked by the war in Southeast Asia, and as we have begun to put together the forces and plans needed to support the strategy of Realistic Deterrence, there have arisen many different points of view about what *is* happening now and what actions we can and should take.

One point of view sees this as a time when the United States is completely withdrawing from the world; another views the US as solidly encamped around the world like Roman legions.

One view holds that the strategic forces of both the United States and the Soviet Union

Manned bombers like the B-1, shown here in artist's conception, together with land- and sea-based missiles—the strategic Triad—can provide a counter to the threat and can deter war.

Deterrence

By Gen. John D. Ryan, USAF CHIEF OF STAFF, US AIR FORCE

are already capable of so much destruction that there is no point in spending any more money in this area; another suggests that we can maintain a strategic deterrent with fewer than the three elements of our current strategic forces.

Finally, because of pressing internal needs, one view sees current military spending as outrageously high in relation to domestic spending; another, because of inflation, observes that the current military budgets are low in relation to past defense spending.

There is always a hazard when views are presented without relationship to the total problem. These views are especially dangerous, in my judgment, because they are often put forth as guides to national security with such sincerity and good intentions that they gain a credibility they do not deserve.

I have zeroed in on defense spending, strategic forces, and military basing for good reasons. First, there currently seems to be more discussion and more confusion about these areas than about any other.

Second, American security and the security of our allies directly depends on what happens in these areas.

Most of you are well informed about defense and military matters in this country. You have got to be in order to do your job. As a result, you spend a good part of your time reading defense-related articles and reports. And you are subjected to quite a few speeches on the topic. Many of you retaliate by making a few speeches yourselves.

How often in the past few years have you heard someone say that current defense spending is such and such a percentage of the total federal budget; that we are now spending so many more (or less) billion dollars on defense than on domestic programs?

Or: Because of inflation, the dollars in this year's DoD budget are, in terms of buying power, lower than any budget since FY '62 or '54 or whenever?

There is nothing inaccurate about such statements. They are legitimate ways of describing defense spending. But that is the point. They are *descriptions of* this country's defense budget, not *prescriptions for* what we spend on defense.

There is no sacrosanct relation that defense spending must keep from year to year with previous budgets or with domestic spending. The long pole in the defense tent is our potential adversaries' capabilities.

People must understand that the requests for funds first submitted by each of the services and then combined into the overall defense budget are based on the threat, coupled with our defense policies for defending against the threat. Right now that threat is greater than any ever faced by the United States.

Our defense spending should be based on what we need to deter potential aggressor capabilities from being used against us, or to overcome them if they are used.

Granted, as a result of SALT or for some other reasons, the threat could be reduced and there could be a cutback in potential enemy forces. If so, we could make the necessary adjustments.

And, if such a situation does occur, the request for military spending will be determined, as it is now, by what we need to counter the threat to this country. Very likely in the near and long-term future the Number One priority for the American military will continue to be the deterrence of strategic nuclear war.

Under the present circumstances, with increasing costs and other inflationary trends and numerous domestic programs crying for support, many in the nation are in a mood to listen to anyone who has a proposal to reduce defense spending. One proposal often heard is that we don't need land-based missiles, seabased missiles, and manned bombers. Since the issue concerns nothing less than our future national security, let's be somewhat discriminating before we take our savings—if any and run.

The United States fundamental philosophy and strategy is to deter war. Our forces and policies are designed to keep war from happening by making the cost of war to an aggressor greater than his possible gains. The deterring effect of our forces must work regardless of the number of uncertainties which might exist in a crisis. Some examples of the uncertainties we face in structuring our strategic forces are:

• The future capabilities of hostile nations and their intentions;

• The ways a war could begin;

• The performance of our weapons in combat; and

• The tasks we may be asked to perform.

Because of these and other uncertainties, the United States relies on a mixed force of manned bombers and land- and sea-based missiles, known as the strategic Triad.

Each system has unique strongpoints which provide mutual support against either technological or military surprise. Technologically, the survival of the bombers and the alert submarine force is insensitive to missile CEPs; therefore, bombers and alert submarine forces provide assurance against a crippling first-strike against our land-based missiles in case of a breakthrough in missile CEPs.

Bombers and land-based missiles, being insensitive to antisubmarine warfare, provide assurance against a breakthrough in antisubmarine warfare. Bomber survival *is* dependent on adequate time between warning of an incoming missile and safe escape from its airfield. Thus, sea-based missiles and land-based missiles provide assurance against a breakthrough in negating our warning system.

Militarily, the Triad compounds and complicates enemy offensive and defensive problems and provides enough flexibility to respond to nuclear war or provocation below a general nuclear exchange. Offensively, an aggressor's attempt to destroy all elements of the Triad at the same time would fail because even the best possible attack would provide consider-

Gen. John D. Ryan has been Air Force Chief of Staff since 1969, moving to his present position after serving as Vice Chief of Staff. A 1938 graduate of the US Military Academy, he commanded a B-17 group in Europe during World War II. He later held a series of key jobs in SAC, which he commanded for two years. He has also served as commander of the Second and Sixteenth Air Forces; as USAF Inspector General; and as CinC PACAF.



able warning to at least two elements and allow a substantial force to retaliate.

Defensively, a mix of bombers and missiles tasks enemy defenses to defend against both. Thus, a mix of forces on our part makes an enemy spend considerably more to get a certain level of defense. To put it another way, for a given enemy expenditure on defense, the US does not need as many forces to do the job as we would if our forces were either all bombers or all missiles.

Because of the global nature of our economic and political interests, the deterrence requirement is not so narrow that a US homeland defense strategy alone is sufficient. Deterrence of attacks on our allies, as well as on US deployed strategic and general-purpose forces, requires appropriate and credible responses. Within the Triad, any prospective aggressor will see that our forces include both protection against surprise attack and a capability to fight at many levels of war. For the foreseeable future, the Triad will provide the US with a credible strategic deterrent, provided we maintain the viability of each leg.

In a period of near strategic parity and accelerated technological momentum on the part of the Soviets, the virtues of the Triad become even more important. It is the synergistic effect of all three elements of the Triad which adds assurance against the kinds of uncertainties we face in structuring our strategic forces. Assurance, after all, is really the name of the strategic game, now more than ever before.

As part of our determination to deter conflict at lower levels, or if such conflict does occur, to ensure it does not escalate to strategic nuclear war, the United States currently stations air, ground, and naval units at bases around the world.

Wherever it is in our national interest to deter war—whether accomplished by land, sea, or air forces—there will be a requirement for a system of main operating bases outside the CONUS. Any limitations of this requirement affect all our military forces. Naturally, my direct concern is with air bases.

Some people suggest that political constraints during a crisis will not allow the Air Force to use bases in an increasing number of nations. Again this challenge must be considered in light of the total picture.

The technical argument is that base rights will not be granted. But it must be obvious that

TAC civil engineers erect an expandable personnel shelter, part of the Air Force's airtransportable "bare-base" mobility equipment. This concept enhances the Air Force's worldwide deployment capability.



any nation desiring the assistance of the United States will make bases available.

Our overseas bases fall into two categories: Those with forces present twenty-four hours a day, every day of the year, and those which serve as a resupply and staging location to allow the units it supports to operate elsewhere. Our allies who daily face potential aggression from large, neighboring forces, such as in Europe or Korea, are especially sensitive to this difference. Consequently, in some areas of the world, where our interest is vital, in-place forces are required as tangible evidence of the depth of our commitment.

I want to point out that this strategy has worked. When in the face of serious external aggression to our allies we have made firm commitments and have underwritten these commitments by garrisoning ground and air units in the sovereignty of our allies, there has been no aggression. NATO and post-1953 Korea are cases in point.

In other areas, the assurance of our assistance is enough to deter aggression, and we rely on our worldwide mobility capability as proof that we can, in fact, provide assistance quickly when necessary.

The Air Force is enhancing its worldwide deployment capability. For example, we have demonstrated our bare-base capability and can adapt it to a wide range of circumstances.

Ultimately, the location of our forces is determined by the location, type, and magnitude of the threat we must counter to successfully deter war.

I've talked about defense spending, strategic force mix, and military basing, and I keep ending up on the same note: the threat. Typical military thinking, you say. You bet it is.

Determination of how much we request, what kinds of forces we need, and where those forces are located has got to be based on the threat. This will remain as fundamental to our defense planning in the future as it has been in the past.



The

An informative, encompassing—and controversial symposium entitled "The Military Manpower Challenge" engendered issues and answers at AFA's Twenty-fifth Anniversary Convention. A subject that drew its share of attention and conflicting opinions was the Administration's proposal for a military system based entirely on enlistees . . .

All-Volunteer Force— Possible or Probable?

WITH CONGRESSIONAL passage of the military draft extension bill on September 21 only a few hours old, a blue-ribbon panel at AFA's Twenty-fifth Anniversary National Convention discussed "The Military Manpower Challenge." The discussion turned frequently to the dependence of all the services on conscription, or the threat of it, for their manpower. The audience also heard how the Air Force is getting ready for zero draft calls, which the services have been told to achieve by June 30, 1973.

The panel featured experts on four major aspects of the issue:

• The Hon. F. Edward Hébert, Chairman of the House Armed Services Committee, sponsor of the draft-extension bill;

• Dr. Curtis W. Tarr, Director of the Selective Service System and former Assistant Secretary of the Air Force for Manpower and Reserve Affairs;

• Lt. Gen. Robert J. Dixon, Air Force Deputy Chief of Staff for Personnel and head of the Air Force's "Project Volunteer" effort; and

• Lt. Gen. George B. Simler, commander of Air Training Command, which recruits and trains most Air Force people.

Moderator for the symposium was Gen. Jacob E. Smart, USAF (Ret.), chairman of AFA's Military Manpower Council.

By Capt. John T. Correll, USAF

Congressman Hébert's comments opened the discussion.

"In my opinion, you will never have a volunteer army," Mr. Hébert said. "I do not believe it will work. The only way you will have a volunteer army is to draft it.

"We will have—and I look forward to the day and hope for the day we will have—zero draft. Now this is a possibility, and it's a practical approach to the manpower situation. The Army, Air Force, and Marines really have zero draft today. . . . But you would not have zero draft in those branches of the service if you didn't have the draft. . . .

"We have a doctors' draft law. I haven't heard of one doctor being drafted. But if we didn't have that draft, we wouldn't have those doctors, because the heat gets on their necks and they run and volunteer....

"I think we find our hope for the future in developing the young man with the intuition, the desire, the inclination to put the uniform of his country on."

Mr. Hébert, a strong advocate of the Junior ROTC program, stressed that high school students must be imbued with a sense of what their country means.

"... We must make the youngster realize that we who live only live because somebody before us died and was willing to die. It is important that we live for our country, but it



"The volunteer force is a dream of utopia that we will never reach," Chairman Ilébeit said. The hope for the future lies in developing among the very young an affection and devolion to country, he feels.

is far more important that we are ready to die for our country.

"Now, with this philosophy, I proceed as to what we can have for the future in the military. We must look to the youth. Not the generation of the eighteen, nineteen, twenty-year-olds today. They may be bad, they may not be. They may be worse than some but better than others. But we have to go back to get that kid, that youngster.

"The little kids. We have to make them grow up with affection and devotion to a country, and make them understand at a very, very early age that the only reason they are here and enjoy freedom afforded to them under our form of government is because somebody had to sacrifice. . . ."

As for permissiveness and discipline in the armed forces, Mr. Hébert said: "The military is not a democracy. It was never intended to be a democracy. And the day that you have a situation where you have people who won't fight, you have lost the battle."

Asked to comment further on the possibility of zero draft, Mr. Hébert continued: "... The volunteer force is a dream of utopia that we will never reach. The country has never fought a war without a draft and we will need every man we can get...."

Dr. Tarr was the second major participant to speak, and came armed with statistical analyses of recent military manpower procurement.

"... It appears," said Dr. Tarr, "that among the August statistics, our true volunteers are increasing as a percentage of the total number of volunteers...."

If low lottery numbers are used as an index of draft inducement, Dr. Tarr said that about seventy percent of the August 1971 enlistees in all services were true volunteers—compared to forty-five percent true volunteers in August 1970.

Furthermore, seventy-three percent of the 1971 enlistees have been younger than draft age—up from sixty-five percent in 1970.

Factoring out the other services, Dr. Tarr said that in August 1970 the Air Force's true volunteer rate was thirty-four percent. In August 1971, it was seventy-three percent. In August 1970, sixty-four percent were below draft age; in August 1971, seventy percent.

The problem is more complex than just attracting adequate numbers of true volunteers, Dr. Tarr stated.

"If you take the total of category I and II people [the highest mental categories] combined and look at the results in the various armed forces, you can generally see a drop. In July of 1970, for instance, the Army had thirty-five percent in categories I and II. In 1971, that thirty-five percent had dropped to twenty-seven percent. The Navy went from forty-three percent to forty-one percent; the Air Force from forty-three percent to thirty-



Gen. Jacob E. Smart and Lt. Gen. George B. Simler listen as Dr. Curtis W. Tarr analyzes recent military manpower procurement. The problem is one of attracting the right kind of people as well as adequate numbers of them, he said.

six; and the Marine Corps stayed at twenty-six percent.

"Now where you talk about the kinds of sophisticated jobs for which we are trying to prepare young people, a drop in the Air Force from forty-three percent to thirty-six percent is of critical significance. So we know that we are paying a price when we emphasize the number of true volunteers...."

Many factors, he said, have affected recent success in procurement: recruiters working hard with great effectiveness; the promise of better pay; the state of the economy and unemployment.

"... It seems to me there are both encouraging and discouraging signs as we move ahead. We know that the numbers are increasing in recruitment. We know that more come who apparently want to come. We know the promise of incentive may bring more people to us. We know hard work in recruitment pays off...."

On the other hand, he cautioned, a large number of recruits would not be volunteering except for the pressure of the draft.

"We are not sure, frankly, if our people would come if we had a thing like a thriving economy that we all want. My speculation on this is that, despite what Chairman Hébert has said, we are moving in the direction of an allvolunteer force and that it is not likely that Congress, two years from now—if they have the same feeling that they have now—will reenact the draft. I have talked to many a man in the Senate who has said, 'Look, I am going to vote for you this time, but this is the last time.'

"Now, times may change. We may have a completely different sentiment in the country two years hence. But it seems to me there is enough pressure on us so we had better get ready for the all-volunteer force.

"There are several things we must do if we are to get ready. First, we have got to learn more about recruitment. It is not enough to get out and work hard, but one must work intelligently if his work is to pay dividends.

"We certainly need to know more about motivation of other people, and this is where careful inquiry into both statistics and behavioral response of people certainly helps.

"How much effect pay has, we don't know. Actually, the pay bill has been advanced, but no one really knows how much effect pay can

The author, Capt. John T. Correll, has just begun a tour with AIR FORCE Magazine under the Air Force's "Education With Industry" program. Previously, he was deputy special assistant to the USAF Deputy Chief of Staff for Personnel. Other assignments have included duty in Thailand, the Recruiting Service, and ATC.



The armed forces offer an opportunity to work on team-effort jobs, satisfying the need for activity in which people cooperate with others.

have on bringing in the people that can do the job.

"We have a feeling that education helps a great deal. We know that many people go from the Air Force to jobs that they are trained to hold because of their Air Force service. And we have a feeling that people come into the service because it prepares them for the life they will have when they get out.

"But we know little beyond that, and perhaps there is a great deal more we should find out about.

"Also, I think probably the GI bill is some inducement for people to come into the service, but we have no idea of the degree to which they will accept military service in the hope of exchanging their duty in the armed forces for an opportunity to attend college, which otherwise they could not afford.

"Travel, apparently, has a great attractiveness to some young people as indicated by the number who have accepted the Army's promise to go to Europe for sixteen months in a combat specialty.

"Also, I have the feeling that many young people have a secret desire to get into an organization where there is opportunity for cooperation. Many people who have lived like loners, and so many of us do, yearn for the chance to cooperate with others and certainly the armed forces provide this opportunity.

"We need to learn much, much more of how to train people who don't seem to be able to take the jobs we offer them—and yet, who are perhaps the only resource on which we can draw to get those jobs done. One of the greatest challenges of our society, and certainly this focuses on the armed forces in particular, is to take people who don't seem to be qualified to be productive citizens, or soldiers, and train them....

"Finally, we need to learn a great deal about leadership. . . One of the great thrills in life is the opportunity to work for a man, to work with people, whom you can admire, in a setting that is inspiring, in a setting that draws from you the contribution that you never thought you could make on your own. . . ."

Asked about a period of mandatory national service, military or otherwise, for all young people, Dr. Tarr said the idea had merit, but there are pitfalls. Beyond the constitutionality of requiring such service, he questioned whether so large a number of young people could be employed in a worthwhile way.

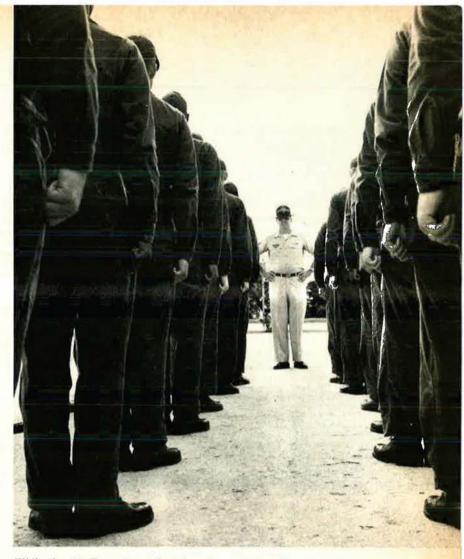
"One thing that I think would destroy an idealistic young American generation is to ask people to serve on jobs, most of which did not need to be done, simply because we thought it would be a good idea to have them working for the country."

Lt. Gen. Robert J. Dixon, the Air Force's Personnel Chief, then focused on manpower requirements about 100,000 new airmen and some 10,000 new officers a year—and the Air Force's approach to the volunteer problem.

The problem, he said, is one of both numbers and quality.



Lt. Gen. Robert J. Dixon hears a presentation by Capt. Bob Frank, chairman of AFA's Junior Officer Advisory Council. Concurrent with the Convention, a conclave of junior officers met to consider ways of improving junior officer retention in an all-volunteer force.



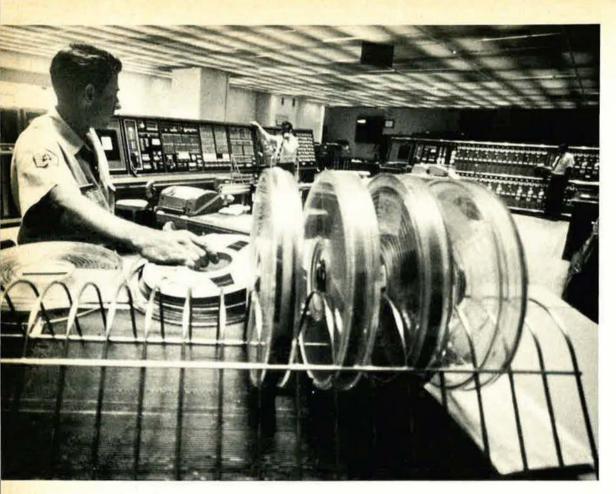
While the Air Force is emphasizing the treatment of people as individuals, it is not relaxing its standards of discipline. Here, basic trainees at Lackland AFB, Tex., get indoctrination in the ways of the military from their training instructor.

"We are a technological force. Eighty-two percent of our people go to tech school—the best tech school system in the whole world, bar none, if not the best school system in the whole world. So we are interested in quality, and quality is dropping. If we judge it by high school graduates, it has gone from ninety-six to eighty-four percent. . . . The point is if a person does not graduate, he has a tough time learning. . . ."

General Dixon cited a University of Michigan study of high school seniors in thirty-six states, which gives an indication of the attitude of youth toward the military.

"High school students did not reflect the newspaper headlines as much as we expected they would," General Dixon related. "They did not say they automatically believe that anybody who goes into the military is insane.

"They raised questions about opportunity to control their future. Very natural and pertinent questions. They discussed benefits of service. They even mentioned the advantage of



Air Force skills, such as working with computers, give veterans an advantage in the civilian labor market. Training can be a major inducement to enlist.

discipline. They worried about pay, they worried about control of their future, they worried about a fast return on their skill, but all normal...."

He pointed out that the new pay raise relieved at least one gross inequity: so far as the lower ranks are concerned, military wages have historically run at about thirty percent of the national manufacturing index of pay.

General Dixon said the Air Force sees the need and the value of treating people as individuals, and providing job satisfaction. Some success is resulting from this approach. Last year's first-term airman retention was the best in six years, and the voluntary loss rate among young officers was the best in five years.

On discipline and morale, General Dixon said: "The Chief of Staff reported to the Secretary of Defense on the state of morale in the Air Force. He told him he considers the Air Force, by every standard in the country or any other country, a motivated, responsive, dedicated, and disciplined force. If I were to show you the statistics on the United States Air Force in terms of productivity, in terms of criminal rate, in terms of drug rate, it is better in every respect than any group of people anywhere near our size anywhere in the world...."

A questioner wanted to know why the Air Force limits the return to service of people who have been out of the military for a couple of years.

"We have, for years, had a problem controlling the year groups in the Air Force," General Dixon replied. "And anybody who has been in the Air Force any length of time knows of the days when there were stagnant promotions in airman and officer grades. Our problem has been that over the years, we have let people stay as long as they wanted to stay and always let them come in whenever they wanted to come in, and we have had recall programs, and, of course, we have had wars and budgets that have fluctuated....

"What we have to do is bring X people in, in a new year group every year, if we are ever to get rid of the humps and valleys and straighten out the promotion problem. So the reason we have a problem such as the one you describe—and others—and no recall program for officers, for example—is because we are trying to make sense out of what was a long and difficult and sort of hand-to-mouth operation over the years..."

Lt. Gen. George B. Simler, the final panelist, described the role of training as an incentive and as a national resource.

"While we can understand the values of advertising and publicity, we are convinced that we should focus mainly on ensuring that we offer something tangible and useful in exchange for service," General Simler said.

"... The nation's university system and Air Force Academy assure the excellence of our officer inputs, but we are now only beginning to develop ways of certifying the quality of our career enlisted force. For the future, we aim for a quality-oriented force. Our aim is for every career airman to become a certified master technician in his trade, holding a master's certificate from a licensing agency or a trade union associated with his skill, or if there is no such association, an associate degree molded around his specialty.

"Toward this end, we are inaugurating a major effort to put together the kinds of cooperative programs with the educational and professional organizations that will result in our ability to certify every airman who meets the standards for an Air Force career, and make available to him new programs, opportunities never before obtainable.

"The tremendous beneficial impact which Air Force technical training programs have upon the manpower and skills of our society is one of the best-kept secrets in town, and it shouldn't be.

"As the war winds down, we will learn once again from departing servicemen how important their skills are to them as individuals and to the national economy.

"Pause for a moment and consider the manpower resources which allowed this nation to become a leading producer of aircraft, computer, and communications equipment. Ask yourself, when you have your television repaired, where the technicians learned their trades.

"The impact on minorities is even greater. Over fifty-three percent of these people obtain supervisory employment in civilian life, more than their contemporaries who never entered service. Our training is so in demand that we have to offer reenlistment bonuses to assure that enough people remain to provide supervision.

"In a survey of thousands of recently separated personnel, every single man trained in data systems design was employed in a position that capitalized upon his Air Force training and experience. Proportionate advantages will be found in other areas. It should be clear by this point that we really have some genuine things to offer young men in considering the Air Force as a way of entering the world of work. We have a lot more to offer than emotional appeals. . . ."

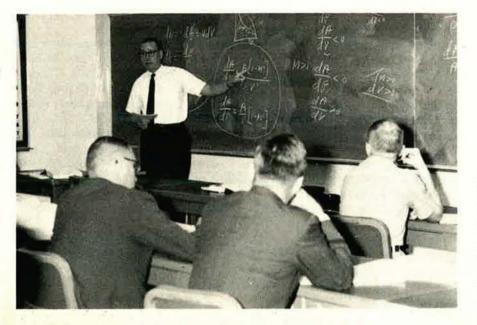
General Simler pointed to growing recognition of the quality of Air Force training, and told how some Air Force courses of instruction have been adopted by civilian school systems.

During the question-and-answer session, a member of the audience asked General Simler to comment on newspaper accounts of morale, discipline, and drug problems in the services, accounts which imply the military is on the verge of becoming inoperative.

"I would say beware of the purveyors of doom," General Simler responded. "We have a drug problem in the Air Force, as do other services. And there is no sense sticking our head in the sand about it. I am very happy to report to you that our experience, based upon the center that we operate at Lackland, shows that participation is less than one percent."

Are recruiters being better received at colleges over the country than in the past?

"Yes," General Simler said, "they are being better received in both high schools and colleges. We still have a long way to go. We are working actively on this problem. We work with the US Association of Counselors. I can see some breaks in the overcast on this one. It isn't clear yet, but it is breaking up."





Funding . . . equipment . . . missions . . . people: These were key topics touched upon within the scope of "The Total Force Concept"—theme of the AFA Convention's annual Air Reserve Forces Seminar. At what observers called the most productive such seminar yet, top commanders and others concerned with the future of our backup team took . . .

A Hard Look at US Air Reserve Forces

By Patricia R. Muncy ASSISTANT FOR MILITARY RELATIONS

THE Cotillion Room of the Sheraton-Park Hotel in Washington, D. C., was the setting on September 22 for the annual Air Reserve Forces Seminar, a major feature of the Air Force Association's Silver Anniversary National Convention. The near-capacity audience was composed largely of Air Reservists and Guardsmen, including the participants of an Air Reserve Personnel and Information Officers Conference and the entire graduating class of the Air National Guard NCO Academy from Knoxville, Tenn.

Moderating the seminar was the Chairman of AFA's Air Reserve Council, Maj. Gen. Robert E. L. Eaton, USAF (Ret.), a former Assistant Chief of Staff for Reserve Forces at Air Force Headquarters.

Setting the stage for the principal speakers to address the seminar's theme, "The Total Force Concept," General Eaton declared, "Short of a full-scale general war, I cannot conceive of a period in our history which has depended more on the effectiveness and operational combat readiness of our Reserve and Guard components than the one we live in today.

"This is especially true when we are told that what lies ahead is more and more cutbacks in the size and structure of our regular force. But, while our regular forces are being reduced, the requirement for a strong defense posture to safeguard the security of our nation has not diminished. In fact, in my opinion, the requirement has increased."

Principal speakers at the seminar were the Honorable Richard J. Borda, Assistant Secretary of the Air Force (Manpower and Reserve Affairs); Maj. Gen. I. G. Brown, Director of Air National Guard; Maj. Gen. Homer I. Lewis, Chief of Air Force Reserve; and Col. Raymond S. Webster, USA, Director of Reserve Readiness and Mobilization, Office of the Secretary of Defense.

A Reaction Panel, to cross-question the speakers, was composed of Brig. Gen. Willard W. Millikan, Commander, 113th Tactical Fighter Wing, D. C. Air National Guard; Brig. Gen. William J. Crandall, Commander, 459th Military Airlift Wing (USAFR); Lt. Col. Edmund C. Morrisey, Jr., Commandant, Air National Guard NCO Academy; and Capt. Douglas P. Bennett, USAFR M-Day Assignee to the Office of Air Force Reserve.

Office, Secretary of Defense

Col. Raymond S. Webster, speaking on behalf of the Deputy Assistant Secretary of Defense (Reserve Affairs), led the presentations, giving an OSD view of the new look in Guard and Reserve Forces—the new look that came into being when Secretary of Defense Melvin R. Laird wrote, "A total-force concept will be applied in all aspects of planning, programming, manning, equipping, and employing of Guard and Reserve Forces." Colonel Webster's remarks follow:

"Part of the meaning [total force] was explained by Secretary Laird's comment that 'Application of the concept will be geared to recognition that in many instances the lower peacetime sustaining costs of Reserve Forces units, compared to similar active units, can result in a larger total force for a given budget or the same size force for a lesser budget."

Referring to the Secretary's widely publicized pronouncement that Guard and Reserves would be "initial and primary" source for augmentation in future emergencies, Colonel Webster stated:

"It is very interesting to note that this aspect is no longer just DoD policy, but will have the force of law. The Selective Service Act provides that the Guard and Reserve are the only means by which the President can exceed the active force ceiling.

"Putting it into other words, 'The objective of the...Reserve Forces is to provide operationally ready units and trained individuals that are immediately available to augment the active establishment in the event of war or national emergency or during periods of increased world tensions.

"'Reserve Forces units will be provided with the numbers and types of primary mission equipment and facilities required to enable them to perform their wartime missions.

"'Reserve Forces units will be authorized the manpower spaces required to ensure effective accomplishment of their assigned wartime missions.

"'The Reserve Forces units and individual training programs will be oriented toward attaining maximum operational readiness in peacetime to ensure that the Reserve Forces are fully trained, operationally ready, and immediately available to perform their wartime missions."



Col. Raymond S. Webster, Director of Reserve Readiness and Mobilization, OSD, was the keynote speaker at the Air Reserve Forces Seminar, telling the audience, "It is not our purpose to rush into a new program, no matter how attractive it may appear, unless we are sure that it has a chance of success."

"This other way of putting it did not come from recent statements by officials of OSD. It is quoted from Air Force Regulation 45-60, dated 13 February 1963, and is probably the first known statement of what we now call the total-force concept.

"The Air Force has indeed led the way in providing full issues of combat serviceable equipment to its Guard and Reserve forces, in putting them to work as part of the peacetime total force in air defense, airlift, and other mission areas, in applying a single set of training and performance standards to all its units, regardless of component or active-duty status. I sometimes detect a feeling of 'So what else is new?' when we talk with Air Force people about our progress in issuing equipment to the Army Guard and Army Reserve, or the increasing Navy emphasis on hardware units rather than individual augmentation training in its reserve.

"Equipment conversions, modernization, mission changes, and the revisions of thinking and troubles which go with them are part of the fabric of the Air National Guard and the Air Force Reserve—although perhaps the speed with which some of the conversions are now taking place and the difficulties in accelerating support to match are opening some eyes to the fact that we mean to make total force a reality.

"Another indication of OSD's sincerity is the



Brig. Gen. Ben J. Mangina, Commander, 302d Tactical Airlift Wing, Lockbourne AFB, Ohio, accepts the Air Force Reserve Outstanding Unit Trophy and congratulations from AFA President George D. Hardy. fact that while the Fiscal Year 1972 budget for the active forces decreased, the Secretary of Defense budget for the Guard and Reserve Forces of all components showed a marked increase, and the increases were in areas where the greatest priority goes to improving combat readiness.

"... Secretary Laird directed the formation of a special OSD reserve components study to delve into all aspects of the Guard and Reserve, and to make recommendations for new approaches which might improve readiness, usefulness, and deployment of the force.

"The study group...asked searching questions which, quite honestly, scared a few people. They sifted the facts and opinions which resulted from these questions and asked more questions which caused noticeable trauma among certain traditionalists—both in the active force and in the Guard and Reserve.

"The outcome of these deliberations was a highly useful document which will have farreaching and favorable impacts on the future of the Guard and Reserve in all of the services.

"The report of the OSD reserve components study group affirms our feeling in OSD—and the long-standing feeling of the Air Force that Guard and Reserve Forces, properly trained and supported, can produce credible readiness in a time frame which makes totalforce reality a feasible objective.

"It is not our purpose to rush into a new program, no matter how attractive it may appear, unless we are sure that it has a good chance of success. We do not want to create turbulence or to chance failure by implementation of concepts that are untested.

"We have identified certain proposals that are going to appear highly attractive to the members of the Guard and Reserve. Others appeal to members of the active forces. But national security, and not parochial viewpoints, is the deciding factor, and we are determined that all but the most obviously practicable and beneficial concepts shall be studied, evaluated, and, if appropriate, field tested before they become part of the approved program."

In answer to a question on whether or not funds will be made available to carry out the total-force concept, Colonel Webster noted that, in August of this year, Secretary Laird had signed a new DoD directive prescribing a better management system and giving management (*i.e.*, the heads of the reserve components) more funds.

With reference to mobilization during the *Pueblo* crisis, when several ANG units were mobilized with only partial utilization made of their resources, the question was asked if such might be the case in future emergencies.

Colonel Webster responded, "As a result of the experience we gained during the *Pueblo* recall, a new directive was developed . . . Peacetime management structure for ANG units was outlined by Maj. Gen. I. G. Brown, Director of Air National Guard, who stated, "The times we face are unusual, and the solutions we seek must also be unusual, innovative, and imaginative."



which spells out that all of the components of the National Guard will have the ability to act both in total, full, partial, or selected mobilization, so if we need just a squadron, we can mobilize just a squadron, or if we need certain parts of the groups in addition to the squadron, we can pick them. All of the services have been working to develop their mobilization plans so we can tailor the force to meet the emergency."

Air National Guard

Following a brief review of conclusions reached at last year's seminar, and subsequent progress, Maj. Gen. I. G. Brown, head of the Air Guard, spoke about current and future requirements:

"The first item is the peacetime management structure of Air National Guard units. In the interest of economy, careful scrutiny of all headquarters or mission, and resources to support that mission, is an absolute must. The headquarters between the units and the Bureau perform a very necessary peacetime function, in addition to having a variety of valid wartime missions.

"Between the flying units, for example, and the Bureau, we have groups, wings, and state headquarters. I will briefly cover each and their value to the gaining commands.

"Group headquarters average approximately thirty personnel spaces with actual manning at a lower level because of the limitation of manning by DoD. The group is responsible for integrating the efforts of six to eight units between 600 and 1,000 personnel with several different functional areas. This is a far cry from the old air base group concept to which, even today, we are frequently compared.

"The wing headquarters integrates the efforts of the groups in training, administration, supervision, and exercise participation. These wing headquarters assisted recently in conducting safety surveys which evolved in conjunction with the increased emphasis on safety.

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"Wing headquarters manning averaged thirty spaces, again with actual manning at some lower level. The state headquarters staffs are approximately one-half the size of the wings, and they average approximately twelve and upward, depending on the number of units in that particular state. They allocate the resources to the units, they perform administrative functions, and they react to state requirements of civil disaster and disturbance.

"The overhead manpower in these headquarters is extremely small in comparison to their responsibilities; and the purpose of this brief outline of the headquarters levels is to assist in dispelling the notion that there is no requirement for a peacetime management structure in the Air National Guard, and also to point out that this structure in no way matches the size of similar Air Force structures.

"My second area of thought revolves around the zero-draft requirement. Everyone has expressed concern over the ability to meet manning levels in the future. We are all—active, Guard, and Reserve—working on incentives that vary from the social flavor to the economic flavor, such as annual pay and bonuses for enlistment and reenlistment. As the trend continues, we find the personnel, pay, and services portion of the military budget encroaching on the operational portion of the budget, making ever-deepening furrows.

"To gain and maintain personnel strength will cost a considerable price, particularly today and in the foreseeable future. A quick look at statistics shows a preponderance of Air Guard personnel in the less-than-six-yearsof-service category. Furthermore, those Guard personnel, identified as careerists, are continuing to age and increase the gap between these two segments of personnel. The conclusion is that we have relative stability in only a small percentage of the total manpower force with a constant large turnover path underneath.

"A large turnover rate creates turbulence, adds significantly to formal training costs, adds to training time within the units, and reduces our combat readiness. Part of the reason for the large turnover rate in the Guard is the stability, of course, in the higher levels of supervisory and management positions.

"The times we face are unusual, and the solutions we seek must also be unusual, innovative, and imaginative. We are forced to look outside traditional personnel boundaries for long-term solutions in the zero-draft situation. These solutions must reduce the stigmas of the up-or-out system, particularly for the reserve forces, again in today's environment and the foreseeable future.

"The last item I will cover, but not in order of priority, is the total-force concept. There are two ideas here that involve actions for. the future. First, the total-force concept means

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the concurrent consideration of the Guard and Reserve Forces along with the active forces in all force structure deliberations. We feel this means consideration of concurrent equipage of the Guard and the Reserve with new weapons systems. Concurrent consideration has often meant only aircraft fallout for the Guard and Reserve to meet new equipage for the active force.

"Since new weapons systems programs are so expensive, the total number of systems is usually reduced before full procurement is achieved. Since reduced activity in the Guard contributes substantial savings, more total systems can be procured and operated for the same total expenditure if some are placed in the Guard and Reserve Forces.

"Therefore, over and above these wonderful, beautiful new weapon systems we are now receiving, we have proposed to the Air Staff and to the Department of Defense that they seriously consider equipping the Guard in such programs as AWACS, STOL, and the F-15. Many benefits are achieved as increased responsibilities are placed on the Guard and the Reserve.

"My second item to the total-force concept is the application toward meeting other service peacetime requirements. Premobilization is an involved process for our brothers on the ground. No longer does their training encompass just map reading and zeroing in. An effective ground force requires large-scale joint training exercises, post-mobilization, and predeployment; training and testing are likewise involved.

"Transportation for this objective has never been fully determined or levied as a requirement. So we say additional transportation capability in the Guard can help solve this problem by providing airlift as a by-product of

The Air National Guard Outstanding Unit Trophy, awarded by AFA President Hardy, left, to the 130th Special Operations Group, West Virginia ANG, was accepted by the unit's Commander, Col. Ralph R. Cowgill.





AFA Citation of Honor winner, Col. Benjamin S. Catlin, III, is congratulated by President Hardy, Colonel Catlin is Commander of the Air Reserve Personnel Center.

training to increase the readiness of our ground forces."

Fielding questions from the Reaction Panel, General Brown reported on manning strengths, the slight decrease in the current waiting list, and increased attention to restoring the authoritative stature of noncommissioned officers.

Air Force Reserve

Maj. Gen. Homer I. Lewis, Chief of Air Force Reserve, made the third presentation:

"Any consideration concerning the future of the Air Force Reserve is dependent, to some degree, upon imponderables, plus those guidelines which stem from higher levels.

"It has now been said often enough to have some meaning, particularly when the statement is made by a person like the Secretary of Defense, that in the future our military establishment is going to have to depend more and more upon an organized, manned, equipped, and well-trained Reserve Force.

"What are we doing? Where are we going? I am convinced the Air Force Reserve is on firmer grounds today than it was last year at this time, and I deserve no credit for this, nor does any one person. It is just a matter of fact brought about by the changing Air Force and an Air Staff realization that we must have a strong reserve.

"Are we at the level we should be? No. But ... we can only go so far so fast, and I really believe we have been keeping pace with our desired goals.

"For too many years now the Air Force Reserve has been relegated primarily to an airlift mission. While aircraft are and will continue to be essential to the total-force structure, it is not in keeping with what we must consider the Air Force Reserve of the future to retain all our eggs in that one basket.

"One basic reason for this is the broad spectrum of talent which will be leaving the active establishment and seeking a part-time military home in the Air Force Reserve. These will be trained people who should be absorbed into our system in order to take advantage of their varied and valuable talents. "Another reason is that the singular purpose of a strong and trained reserve calls for a force capable of augmenting any and all elements of the active fraternity, so it becomes essential for programmers to look beyond the airlift, mission in considering the Air Force Reserve of the 1970s. We have already made some strides in this direction.

"Our entry into the fighter attack mission with A-37 units, and electronic warfare mission with EC-121s, indicates the pattern is changing.

"It is time for a more realistic approach to equipping the Reserve and Guard with products like aircraft from current resources, and not just those castoffs from the active force which have dropped out of the inventory and been placed in the Reserve Forces in lieu of a restful boneyard burial.

"I can see no reason, including financial, why the Reserve and Guard cannot engage in missions with current line aircraft which will permit them to respond to the total-force concept in the fullest sense. I find it somewhat unrealistic to place Reserve resources in aircraft that cannot be used on active duty, except with extreme and costly modification, and even then utilization might be questionable.

"We keep hearing more and more about enticing younger men and women into the reserve forces. Obviously, the biggest problem is dollars. But problem or not, if we intend to face a future with a smaller active establishment, manned in the no-draft environment, we are going to have to have some more to offer to make the Reserves something our young people want to consider, and I believe we can do it with less than the total package we have been seeking.

"I truly feel that with the right missions and training, our recruiting efforts will produce results, even if we fail to succeed in getting all of the extras.

"Let me make something clear about missions. The problems entailed here are quite

Maj. Gen. Homer I. Lewis, Chief of Air Force Reserve, called on the Air Staff for "a more realistic approach to equipping the Reserve and Guard with products like aircraft from current resources, and not just those castoffs from the active force which have dropped out of the inventory...."



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obvious. The Air Force is going to experience a continual reduction in airframes as we move into more sophisticated equipments and missions. As those airframes reduce for the active establishment, we must expect the same to happen with the Air Force Reserve, probably not at the same pace, because, realistically, for a time some of the airframes leaving the active force can be placed into our Reserve component, but eventually we will have to accept such obvious reductions.

"This could mean that we will have to place more reliance on programs such as the associate program in which we share the use of active-force, first-line aircraft. I don't offer this as something we must get into right now, but I do believe we will have to address this problem before long, and the sooner we begin to think about it, the better off we are going to be.

"Regardless of how the active force is structured in the future, management of reserve resources can best be accomplished by Reservists. This is academic. But realistically, we want to maintain a management system which complements the active force and which can be absorbed into the active establishment if the time comes that mobilization is necessary.

"We do not for one moment believe that our future would be strengthened if we were separated from the active force. We fully subscribe to the total-force concept and devote most of our efforts toward assurance of the success of this concept.

"The Reserve Forces are programmed to meet the threat—they are in effect contingency forces programmed against the force structure needed to satisfy contingency actions, a wartime augmentation. We have always developed our Reserve structure based upon those wartime requirements which our analysts determined were feasible.

"I am in full agreement with this and recognize that we must continue to fund for the Air Force Reserve following this concept, but if we stop there, we leave our national defense with just enough in our reserve bank to meet those contingencies, but not enough left over to satisfy any additional requirements which could come up.

"In other words, should we continue to program and fund our Reserve as we have been, and should the Reserves be called upon to satisfy a wartime need, and should a greater need occur beyond that which has been assumed—one and one-half wars—we will be strapped, and the real purpose for a reserve will have been defeated.

"What I am proposing is to plan for a program and fund a Reserve over and above that which satisfies the contingency plans. This would be a Reserve composed primarily of individuals and some support elements. The talent would represent that Reserve value which we could call upon following the basic emergency; Reserve talent which would be sorely needed to fill in should the contingency become greater than that which could be satisfied from the initial resources.

"Our greatest resource is people. The Air Force Reserve is people. Without them we have no Reserve. Consequently, our greatest efforts must be in retaining and recruiting people, the right people for the right jobs.

"It is also important that the people we have be utilized in a manner which will give the Air Force the full benefit of their talents. This applies to the unit programs as well as the individual areas.

"I know the Air Force has yet to take advantage of the vast wealth of talent we can offer in individuals who are leaders in civilian life, working in areas which correspond to Air Force requirements. If I can accomplish nothing else during my tenure, I hope to bring about a greater utilization of individual Reservist's abilities by our counterparts in the active force. It is a virtually untapped resource just waiting for a chance to be used."

The Secretariat

Anchorman for the four major presentations was the Honorable Richard J. Borda, Assistant Secretary of the Air Force (Manpower and Reserve Affairs). Portions of his speech follow:

"The first area of concern to me is in the area of the equipping of the Guard and Reserve. I think we have made a great deal of progress in this last year with the conversions that we have had, and I think we will make a great deal more progress in the future when one looks at the plans as they apply to downstream conversions. There is no question but the Guard and Reserve have increased their capability through these conversions.

"My next area of concern—and I consider this to be the most critical issue facing the Reserve Forces—is the accession and retention of people.

"First of all, we are approaching a zerodraft environment. Although we have had an extension of the draft bill, I view this as simply giving us the needed time to take a lot of corrective actions so we can ensure that we will have an all-voluntary force.

The Honorable Richard J. Borda, Assistant AF Secretary (Manpower & Reserve Affairs), directed his remarks to equipage and the accession and retention of people in the Reserve Forces.



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Pulling a switch, Maj. Gen. Homer I. Lewis, Chief of the Air Force Reserve, presents President Hardy a special plaque commending the Air Force Association for its continued support of Reserve programs.

"We also have an aging force. If you look at our force structure in the Guard and Reserve, we do have a building up of older people.

"I agree we need incentives to bring people in. And I think these incentives do center around increases in pay—you have to be realistic—enlistment and reenlistment bonuses, and some training benefits, such as educational benefits for people. These are things that we have been working on very hard, so I think we are going along the right track in this area.

"I think one of the other important things that we have to consider in the people problem area is we have to pay attention to our people. We have to be responsive to people; we have to understand their problems; we have to give them good training; we have to give them challenging jobs.

"But, I would like to state loud and clear that I, for one, do not feel that we need to relax discipline or to promote any giveaway programs.

"If we have good leadership, we don't need that sort of thing. And if we have a reduction in discipline, and a lessening in the way in which we lead people, then we really have some big problems on our hands.

"The equipment problem, to a certain extent, can be solved if we can get the money. And the people problems, to a certain extent, can be solved if we can get the money. But particularly in the people area, we all need to take a good, hard look at the type of job we are doing within our respective units. And we are going to have to work a little harder. I think all of us have to recognize that we have to get out and tell our story. I know a lot of you out there do this, but I think you have to do it more. There is an image problem today, military image in the eyes of the civilian community. We have got to make people realize that there is a threat. We have got to make them realize that we have a need for Reserve Forces and that those forces play a vital role

in this nation's defense and its ability to really have a realistic deterrent.

"We need to tell the public. We need to get out and spend some time telling it to the employers in the United States, make them understand that they, too, have a role in working with the Reserves, in making it viable, helping their people join it, giving them the time necessary to go to summer camp, to attend weekend drills, and then not sock it to them when it comes time for a promotion.

"My own experience in Reserve units [Mr. Borda is a lieutenant colonel in the Marine Corps Reserve] and my experience in traveling and seeing some of the Air Reserve/Guard units, and certainly the active force, is that the young people in this country really do respond to leadership. If we give them a good program, if we support them, they will produce for us ten times what one would normally think they would do. But it is our responsibility to do this.

"We have to be innovative. We can't rely on the old systems we relied on over the years. We really do have to put our shoulders to the wheel in this area. Personally, I welcome the challenge and I am very pleased that I have the opportunity to work with a great team represented by the Air Force Reserve and the Air National Guard."

During the question-and-answer period which followed the major presentations, the audience was given the opportunity to explore such diverse subjects as increased technical training school slots, more specific and definitive incentive programs, educational requirements for the pilot training program, improvement in call-up procedures, positions of Chief Master Sergeants of the Air Force Reserve and Air National Guard, Civil Service retirement credit for National Guard technicians, and the proposal to lower retirement from age sixty to fifty-five.



Solid and Solid Sterling Silver



Lt. Gen. James H. Doollttle (Ret.) examines AFA's 25th Anniversary medallion presented to him during ceremonies commemorating the Silver Anniversary event on Exbrurary 0, 1921 event on February 9, 1971.

A limited edition commemorative medal has been commissioned to honor the Silver Anniversary of the Air Force Association and its dedication to American achievement in the aerospace field.

These serially numbered, deep relief medals and medallions will be struck in solid palladium * and in sterling silver by The International Mint whose master engravers created the personal presentation medals for each Apollo flight crew.

The obverse design of the heavy gauge, jeweler's antique finish medal depicts the Air Force Association wings as interpreted by the well-known medallic designer, Donald Struhar, whose work includes the International Mint "History of

America's Men in Space" and commemorative art for the United States Air Force Academy.

The finely detailed reverse design bearing the legend "Power for Free-dom", recreates the World Congress of Flight symbol over an arc of 25 stars.

To insure the limited edition status of this medallic tribute to the Air Force Association, The International Mint will restrict the serially numbered commemorative issues to the following mintages:

SOLID PALLADIUM *		
2½" Medallion	25	
39mm Medal	250	
SOLID STERLING SILVE	R	
2½" Medallion	2,500	
39mm Medal	10,000	

Those wishing to subscribe to all four issues or to both sizes in either palladium or sterling will receive matched serially numbered sets. These sets and the 2½" medallion will be housed in handsome desk-top collector displays. Subscribers to the 39mm medals will receive a specially designed Clear-Vue holder which allows display of both sides of the medal without requiring its removal.

Subscription details are included in the limited edition subscription form below. Since applications will be handled in strict rotation, may we suggest you act now, so as to ensure acquisition of this unique medallic tribute to the Air Force Association.

* A rare, lustrous, silver-white metal approximately equivalent in value to 24K Gold. © Air Force Association, 1971

Air Force Association Silver Anniversary Mer	lal		11/71		
Limited Edition Subscription Application					
Please make check payable to: Air Force Association and mail to: 1750 Pennsylvania Avenue, N.W. Washington, D.C. 20006		e, N.W.	I understand that all orders will be handled in strict rotation and that my check will be refunded promptly should this edition be over-subscribed.		
Please enter my order for the following medallic issue(s):	AFA Silver	Anniversary	NOTE: As a convenience to subscribers, The International Mint will embed your medals in clear lucite vertical wedges for use as desk ornaments. Add \$5.00 for each 39mm medal and \$8.00 for each 2½" medallion.		
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AFA's Silver Anniversary Convention-1971

AFA's Policy Resolutions for 1971-72

The following resolutions were unanimously adopted by delegates to AFA's twenty-fifth annual National Convention in Washington, D. C., on September 20, 1971.

B-1 Advanced Bomber

WHEREAS, the national strategy of Realistic Deterrence rests upon the maintenance of a blend of land-based missiles, sea-based missiles, and manned bombers known as the Triad; and

WHEREAS, each element of the Triad is essential to a strong deterrent posture through its ability to compensate for temporary vulnerabilities in any one system; and

WHEREAS, the manned bomber component of the Triad requires, for its continued effectiveness, a new aircraft to meet the requirements for higher penetration speeds, reduced radar cross-section, larger payload, improved lowlevel penetration, dispersal, and quick reaction; and

WHEREAS, the B-1 advanced bomber possesses all these attributes together with a growth potential which ensures its value as a strategic weapon system over many years; and

WHEREAS, the Department of Defense has requested \$370 million for FY '72 for the B-1 development program with a view to a first flight of the aircraft in 1974 and a production decision in 1975;

NOW, THEREFORE, BE IT RESOLVED that the Air Force Association strongly urges the President, the Secretary of Defense, and the Congress to support the development and deployment of the B-1 advanced bomber as a critical and urgent requirement in maintaining the effectiveness and credibility of the strategic deterrent Triad.

All-Volunteer Force

WHEREAS, the concept of an all-volunteer armed force, as the ideal method for meeting military requirements while safeguarding individual rights, must be supported in principle, but must likewise be evaluated in terms of practical experience; and

WHEREAS, in 1948, when peacetime conditions prevailed far more than at present, the all-volunteer concept had to be abandoned and a new Selective Service law enacted, in order to maintain minimum armed forces and restore their combat effectiveness; and

WHEREAS, each year since 1948 the Selective Service System has been the principal factor in meeting the nation's military manpower requirements; and

WHEREAS, today only about one-third of the men entering the armed services, and only about fifty percent of those entering the US Air Force, are volunteers in the true sense of the word; and

WHEREAS, the historical record, together with an assessment of today's public opinion, makes it clear that this nation cannot realistically expect to meet military manpower requirements without the draft; and WHEREAS, any inequities in the Selective Service System, which must be under constant review and subject always to modification, are far outweighed by the risks to national security engendered under a zero-draft situation.

NOW, THEREFORE, BE IT RESOLVED that, while the concept of an all-volunteer armed force may represent a worthy long-term objective, it must be rejected as an unrealistic means of meeting current national security requirements, and that continuation of a Selective Service System be supported; and

BE IT FURTHER RESOLVED that incentives now being advanced as a means of achieving an all-volunteer force equitable pay standards, better housing, more effective manpower management, etc.—be supported as fundamental to the effectiveness of any armed force no matter how it is structured; but even more important, that the dignity and prestige of a military career be reestablished in the eyes of the American people; and

BE IT FURTHER RESOLVED that all factors relating to the recruitment and retention of military personnel be under constant review to determine when, if ever, volunteer enlistments alone can support military manpower requirements without undue risk to national security.

F-15 Advanced Fighter

WHEREAS, to ensure that our ground forces and our close-air-support aircraft can survive and operate effectively in tactical combat areas, it is imperative that we control the airspace in such areas; and

WHEREAS, the Soviet armed forces have developed several new tactical aircraft in recent years including supersonic air-to-air fighters and interceptors, while the most effective air-to-air fighter in our armed forces today was developed more than ten years ago; and

WHEREAS, the highest priority program for our tactical forces is the continued development of the F-15 aircraft as a high-performance, highly maneuverable fighter equipped with a balanced mix of air-to-air weapons to provide an outstanding close-in visual and medium-range all-weather kill capability;

NOW, THEREFORE, BE IT RESOLVED that the Air Force Association urges the Congress and the Administration to support the development and production of the F-15 advanced air-superiority fighter aircraft as expeditiously as possible with the goal of having such an aircraft operational in the Air Force inventory early in the 1970s.

A-X Aircraft

where the Air Force, after a comprehensive analysis of the close-air-support mission requirements and characteristics, has defined a highly survivable weapon system for maximum target destruction and minimum aircraft attrition, truly specialized for close air support of ground troops, denoted as the A-X; and

WHEREAS, this aircraft will have excellent maneuverability, long loiter time, a large payload, high survivability, and ease of maintenance; and

WHEREAS, prototype contract awards have been let looking to a fly-off evaluation and a selection of contractor for full-scale development and acquisition by early 1973; and

WHEREAS, the Air Force has requested \$47 million in FY '72 for this low-risk, competitive prototype development program;

NOW, THEREFORE, BE IT RESOLVED that the Air Force Association urges the Administration and the Congress to support the Air Force in its efforts to develop and produce this weapon system at the earliest possible date so as to enable the Air Force to fulfill in the most effective manner possible its assigned role of providing close air support for ground forces.

Advanced Aeronautical Technology

WHEREAS, the formation of multinational, governmentsupported, manufacturing efforts abroad has led to the development of commercial aircraft types which US industry is not financially able to develop; and

WHEREAS, the world's major air carriers, for reasons of logistics and economy, traditionally buy commercial aircraft from manufacturers who can cover their entire inventory needs; and

WHEREAS, US industry, with neither a supersonic transport nor an advanced technology twinjet transport to supply to world markets, will not be able to offer a full family of commercial transports for years to come; and

WHEREAS, a reduced business base in the US aerospace industry adversely affects USAF costs and procurement through higher overhead; and

WHEREAS, the benefits to national defense of technology programs driven by civilian requirements is underscored by evidence that the Soviet Union's new strategic bomber, the Backfire, is powered by engines that were developed for the Soviet TU-144 commercial supersonic transport;

NOW, THEREFORE, BE IT RESOLVED that the Air Force Association urges the Administration to institute, through the National Aeronautics and Space Administration, and the Congress to fund, intensive research efforts in the field of supersonic flight that can lead to a superior, more economical and ecologically acceptable second-generation supersonic transport; and

BE IT FURTHER RESOLVED that the Air Force Association urges the Administration to formulate, and the Congress to approve, policies and mechanisms which will permit the US aerospace industry, through more attractive financing terms and publicly stimulated research and development, to compete on a more equitable basis with governmentsupported foreign aerospace manufacturing combines.

Modernization of Air Defense Forces

WHEREAS, the Soviets have developed and tested a new supersonic bomber; and

WHEREAS, qualitative improvements in our air defenses are needed if we are to deny the Soviet bomber force a virtually free hand in attacking targets in this country; and

WHEREAS, our air defense concept calls for a modestly sized force, primarily oriented to area defense and consisting of an Airborne Warning and Control System (AWACS), Over-The-Horizon (OTH) backscatter radar, and an improved interceptor; and WHEREAS, the keystone to our air defense system is the AWACS, for which \$145 million has been requested by the Air Force in FY '72 to allow for the fabrication and installation of demonstration radars in two test aircraft and competitive flight tests in early 1972; and

WHEREAS, the AWACS will be equally effective for airborne battle management in tactical combat operations and will significantly improve the effectiveness of our fighter/attack aircraft;

NOW, THEREFORE, BE IT RESOLVED that the Air Force Association urges the Administration and the Congress to support the Air Force in its effort to provide a modernized Airborne Warning and Control System with an initial operating capability in the latter part of this decade.

Prisoners of War and Missing in Action

WHEREAS, the government of North Vietnam persists in exploiting for political purposes the American servicemen who are prisoners of war or missing in action, and continues to exacerbate the suffering of these men and their families by refusing to comply with the requirements of the Geneva Convention to which they are a signator; and

WHEREAS, the efforts of the US government and appeals of families, millions of concerned individual Americans, and many organizations including the Air Force Association appear to have had some ameliorating effect—albeit minimal—on the treatment of American prisoners of war held by the North Vietnamese;

NOW, THEREFORE, BE IT RESOLVED that the Air Force Association continue and expand its efforts in behalf of these unfortunate men and their families.

Defense of Minuteman

WHEREAS, our strategic posture consists of a Triad of land-based missiles, land-based bombers, and submarinelaunched missiles; and

WHEREAS, a survivable and secure Minuteman force, which constitutes the major part of the US land-based missile element of the Triad, is fundamental to maintaining the deterrent effectiveness of the Triad; and

WHEREAS, protection of the Minuteman force requires reinforcement of the Administration's ABM program to cope with recent changes in the threat; and

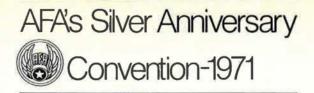
WHEREAS, a collocated and integrated Hard-Site defense system has been recognized as the most effective means of assuring Minuteman survival;

NOW, THEREFORE, BE IT RESOLVED that the Air Force Association urges the Administration and the Congress to authorize development and testing of a Minuteman Hard-Site defense system as a key element of the national antiballistic missile program.

US Disengagement in Vietnam

WHEREAS, US military support of the Republic of South Vietnam, undertaken with high purpose and unselfish aim, has attained the primary purpose of halting a Communist takeover of the Republic of South Vietnam and thus has gained time for training and equipping the armed forces of that country, and for the people of South Vietnam to establish the machinery for democratic processes of selfdetermination;

NOW, THEREFORE, BE IT RESOLVED that the Air Force Association supports the Administration's policy of withdrawing US forces from Southeast Asia as rapidly as is consistent with the safety of US personnel in Vietnam and with the return of all American prisoners of war.



Another record attendance—about 6,000 gave the aerospace industry its best opportunity to lecture USAF and government agency executives on details of the latest technological advances at . . .

AFA's 1971 Aerospace Development Briefings

By Claude Witze SENIOR EDITOR, AIR FORCE MAGAZINE



USAF Honor Guard provided escorts to conduct visitors on scheduled tours of the exhibit area. The spacious hall in the basement of Washington's Sheraton-Park Hotel was busy, but not overcrowded.



Dr. J. E. Coppage, TRW requirements analysis expert, lectured guests on the Triad concept to ensure continued deterrent power, curb future wars.

Big names in the aerospace industry abounded as visitors tramped through the aisles. Many displays featured working mockups of equipment now being used by USAF and other branches of government.





AFA's Silver Anniversary Reception was held in the Exhibit Hall. Top military, government, and industry executives were on hand.



A boy from Brooklyn, member of the 344th Youth Aviation Squadron, CAP, greets Dr. Robert C. Seamans, Jr., USAF Secretary. In background, model of F-4 built by the young cadets.



USAF's Chief of Staff, Gen. John D. Ryan, catches up with Joe Higgins, television personality, at the exhibit.

A FA's twenty-fifth National Convention brought with it a new record in attendance and enthusiasm for the annual Aerospace Development Briefings.

Both attendance and industry participation were higher than in 1970. Forty-seven companies took part (see list, p. 88), and about 6,000 persons listened to their presentations.

Possibly reflecting the current issues and concerns of 1971, there were signs of a changing emphasis in the exhibits, with a number of exhibits and lectures that centered on tomorrow's potential. One veteran company, TRW Systems Group, did not show or talk about a single item it has for sale. Dr. J. E. Coppage, the company's requirements analysis expert, delivered a short speech to all visitors that discussed the shifting balance of power. The answer: The diverse Triad of deterrent force, composed of land-based missiles, sea-based missiles, and manned bombers. It is essential "to make an attack [by Russia] clearly incredible."

A number of companies—at least a halfdozen—took part in the 1971 display after being absent for a few years. They returned with enthusiasm. One new exhibitor—Leigh Instruments Limited, of Canada—and one veteran—Motorola—were sufficiently impressed to start talking about 1972 and why they may need more space and more display material in another year.

As in the recent past, the USAF Honor Guard provided escorts for briefing tours. The guests came from more that fifty USAF and federal government agencies, ranging from the Atomic Energy Commission to the U. S. Office of Education, the Academy of Sciences, and the relatively new Environmental Science Services Administration.



Stresskin Products Co. discussed varied applications of its honeycomb-sandwich material, made of super alloys. Engineers asked many technical questions. Forty-six other companies also exhibited.



USAF Secretary Seamans, who has spent much of his career working in aeronautics, studies model at site of UNIVAC display.

AEROSPACE INDUSTRY ROLL OF HONOR

Companies Conducting Briefings at the 1971 AFA Convention

Los Angeles Div.

B-1—The Flexible Deterrent

Application and Design of Advanced Aerospace Digital

The Singer Co., Kearfott Div.

American Telephone & Telegraph & Associated Companies Communications Countdown for the 1970s AVCO Corp. Bancroft I-Small Tactical Voice Security Equipment Lycoming's New Family of Fan Engines Bell Helicopter Co. V/STOL Technology Today and Tomorrow The Boeing Co. Airborne Command and Control Control Data Corp. A-7 Projected Map Display System Plasma Display Microminiature General Purpose Digital Computer Delco Electronics Div., General Motors Corp. Inertial Guidance and Navigation Systems The Garrett Corp. Garrett AiResearch ATF3 and Missile Engines General Dynamics Corp. Manned Aircraft General Electric Co., Aircraft Equipment Div. Gatling-type Weapons for Air Base Defense CP-32A General Purpose Aerospace Computer Goodyear Aerospace Corp. Computer Systems Advanced Reconnaissance Radar Systems Hoffman Electronics Corp. AN/APN-201 Pulse Doppler Radar Altimeter AN/ARN-100 "Plus" Low Cost Microelectronic TACAN **IBM Federal Systems Div.** Advanced Avionics Systems Lear Siegler, Inc., Instrument Div. LORAN Navigation and Weapon Delivery Systems Lockheed Aircraft Corp. Lockheed-Georgia Co. Military Airlift-The C-130 and C-5A Lockheed Missiles & Space Co. Investigations of Technologies Pertinent to SCM Lockheed Missiles & Space Co., Space Systems Div. Three-Axis Stabilized Communication Satellite Agena and the Space Shuttle LTV Aerospace Corp. **Vought Aeronautics** A-7D New Dimension in Tactical Bombing Accuracy **Vought Aeronautics** Use of Simulators as Engineering Design Tools Martin Marietta Corp. Titan III-Current Mission Assignments and Capabilities Integrated Fire Control and Close-Support Weapons McDonnell Douglas Corp. Douglas Aircraft Co. DC-10 Applications Advances in Operational and Escape Systems McDonnell Aircraft Co. McDonnell Aircraft Fighter Builders McDonnell Douglas Astronautics Co. Integrated Space Transportation System McDonnell Douglas Electronics Co. Time/Frequency Collision Avoidance System Motorola Government Electronics Div. Integrated Command and Control for Targets, Drones, and RPV North American Rockwell Corp. Autonetics Div. Multipurpose Module Test Station Columbus Div. Modular HOBOS Guided Weapon System

Computers Sperry Rand Corp., Univac Div. Avionics Multiprocessing Systems Standard Mfg. Co. New Aerial Stores Lift Trucks Stresskin Products Co. STRESSKIN: All-welded Honeycomb Sandwich **Teledyne CAE** Turbine Engines for Unmanned Aircraft **TRW Systems Group** The Triad: Key to Strategic Sufficiency Westinghouse Electric Corp. Aerospace & Electronic Systems Div. **Techniques in Avionics** The following companies displayed products, but did not hold briefiings: Astronautics Corp. of America Avionics displays; moving map display with CRT radar Beech Aircraft Corp. Missiles, targets, and aircraft supporting USAF Braceland Brothers, Inc. Technical publication production techniques Cessna Aircraft Co. Twin turbofan Citation, small jet transport Coca-Cola USA Beverage service **Conference Book Service, Inc.** Professional books and journals Davis Agency, Inc. Military-DoD-dependent charter flight program Gary Aircraft Corp. Aircraft overhaul services; component manufacturing, testing Jet Electronics and Technology, Inc. Case-contained gyro horizons, flight directors, etc. Leigh Instruments Limited Data recorders for accident and maintenance applications Litton, Amecom Div. Electronic warfare, antennas, and altimetry Litton, Guidance & Control Systems Div. DME/inertial navigation for aircraft Pepsi-Cola Co. Beverage service Photo-Sonics, Inc. Gunsight and strike cameras **PPG Industries, Inc.** Aircraft and specialty products; transparencies, windshields Raytheon Co. Tactical missile systems; avionics, mobile GCA systems Sierra Research Corp. The AN/APN-169A stationkeeping system for TAC United Aircraft Corp. United Aircraft of West Virginia's new Bridgeport facility United Services Club Dependent travel service **XYZYX** Information Corp. PIMO (Presentation of Information for Maintenance and Operation) 334th Youth Aviation Squadron of Brooklyn, N. Y.

Model of F-4 Phantom



Lt. Gen. Otto J. Glasser, DCS/R&D, examines gas turbine model shown by Teledyne CAE.



Gen. Jack G. Merrell, Commander of USAF Logistics Command at Wright-Patterson AFB, Ohio, pays a call at Control Data Corp.



Martin Marietta's emphasis on Titan III and its integrated fire-control systems for USAF made the exhibit popular with uniformed attendees.



USAF's Comptroller has to stay abreast of today's technology, too. He is Lt. Gen. D. L. "Pete" Crow, shown here at the Teledyne CAE exhibit.



An exhibitor greets Gen. W. W. Momyer, TAC Commander.



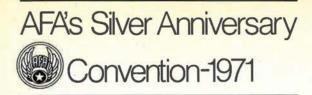
Model of the cockpit for the new B-I bomber was exhibited by North American Rockwell. Here, Lt. Gen. E. B. "Ben" LeBailly looks it over.

Maj. Gen. Lee V. Gossick, from USAF's Systems Command, talks about electronics.





Three new loaders, designed to speed tactical operations at remote sites, were demonstrated to guests by Standard Mfg. Co. Bombs on display were not lethal.



AFA delegates adopted a strong Statement of Policy calling for a new order of frankness and candor on the part of national leadership, honored outstanding leaders of AFA and the Air Force, prepared for another year of significant contribution to national security and world peace, and framed a wide range of important resolutions . . .

Productive Milestone – AFA's Silver Anniversary National Convention

By Don Steele

AIR FORCE MAGAZINE EDITOR FOR AFA AFFAIRS

THIS Convention is an historic milestone in the life of our Association. It marks a quarter century of dedicated service by patriotic men and women banded together in the cause of national security and world peace."

With these words, AFA National President George D. Hardy opened AFA's Silver Anniversary National Convention, one of the most significant in recent years.

At the Convention's Opening Ceremonies and Awards Presentation, Gen. Jack J. Catton, Commander of the Military Airlift Command, delivered the keynote address: "For the past twenty-five years," he said, "everywhere I go I seem to run into you AFA people-doing important things. Years ago, more than some of us young folks care to recall, the important thing was a separate Air Force. I remember Gen. Jimmy Doolittle's evaluation-that the AFA did more than any organization to achieve a coequal and autonomous Air Force. More recently, I detect an ever quicker pace in your progress toward power for peace and an *informed* American public—*nothing* is more important today.

"I see as your greatest contribution," he said, "'providing a wellinformed public'—a society with a genuine understanding of the facts most important to the survival of our nation. If there is one problem—in my mind—that transcends all others, because it affects all the others, it is the apparent lack of public understanding of what this nation will require to achieve that generation of peace the President speaks of and that we all so desire."

In closing, General Catton said, "Here at this Convention you must devote all your abilities and energies to the jobs and specific tasks at hand. You will assuredly be a mutual inspiration to each other—and the results will be of great value to the nation. But leave here with the fervor of the missionary. Preach the gospel of national security. Confirm the need for this nation's support of its military. Baptize Americans in the same oldtime religion you have—one based on fundamentals. And, above all, help⁺ find a way to inform the public so that we can maintain the military stature that will permit us to achieve ' our objective of a generation without war."

Following General Catton's speech, Steve Raijaiz, President of the Polish' Air Force Association, presented President Hardy with a plaque of friendship on the occasion of AFA's // Twenty-fifth Anniversary.

During the program, more than sixty individuals and units were recognized for their efforts on behalf of the Association's mission and membership objectives (see complete list on pp. 95 and 96).

For an outstanding record of accomplishment during late 1970 and early 1971, the President's Trophy to "AFA's Unit of the Year" went to the Middle Georgia Chapter and was accepted by its immediate Past President, Dr. Dan Callahan. The Chapter's achievements included: leading the nation in membership growth; conducting a broad-gauged program on behalf of the MIA/POWs, a program that attracted statewide attention and netted many thousands of petitions; arranging for AFJROTC units to be established at high schools in its area; making major contributions to a summer camp for underprivileged and disadvantaged youngsters; and helping to establish an on-base Resident Education Center at Robins AFB, Ga.

In recognition of his unique drive and leadership as President of the Ak-Sar-Ben Chapter of Omaha, Neb., Paul W. Gaillard received the President's Trophy designating him "AFA's Man of the Year." Mr. Gaillard conceived and implemented a highly successful scholarship program for AFROTC cadets at the University of Nebraska; he led Chapter efforts to upgrade Offutt AFB day-room furnishings in support of "Project Volunteer"; he initiated a program whereby the 2,000,000 customers of the Northwestern Bell Telephone Co. received, with their billing notices, a postcard addressed to the President of North Vietnam requesting that American POWs be treated humanely. This effort was recognized on national television and in other news media and, subsequently, other Bell System companies adopted similar programs; and, as the Chairman of AFA's National Membership Committee, Mr. Gaillard is working vigorously and tirelessly to establish new AFA chapters and to initiate AFA membership campaigns

on Air Force bases and in adjacent communities.

Head-table guests at the opening ceremonies included Maj. Gen. Nils O. Ohman, Commander, Headquarters Command, and the Convention's Military Host; AFA Board Chairman Jess Larson; Nathan H. Mazer and Jack B. Gross, AFA National Secretary and Treasurer, respectively; and Rev. Robert D. Coward, AFA National Chaplain.

The USAF Honor Guard from Headquarters Command, Bolling AFB, D. C., posted the colors, and the USAF Ceremonial Band, Bolling AFB, provided music.

A USAF Memorial Service honoring US Air Force dead was held prior to the first business session on Monday morning. Participants included Chaplain (Maj. Gen.) Roy M. Terry, Chief of USAF Chaplains; Chaplain (Col.) Henry J. Meade, Office of the Chief of Chaplains, USAF; Chaplain (Col.) Simon H. Scott, Jr., Wing Chaplain, Bolling AFB; and AFA Chaplain Coward. The "Skylarks," a choral group from the Bolling Officers' Wives Club, directed by Mrs. J. R. McCullough, provided musical selections.

At the three business sessions, official delegates from thirty-two states and the District of Columbia adopted the annual Statement of Policy (see p. 8); nine policy resolutions (p. 84); one resolution that included seventeen continuing resolutions; three resolutions supporting MIA/POW children,



AFA President George D. Hardy, at podium, speaks to national award recipients and delegates during the Convention's Opening Ceremonies and Awards Ceremony.

AFJROTC, and Civil Air Patrol; and twenty-six resolutions dealing with military and civilian personnel matters.

AFA Resolutions

The resolution dealing with support of MIA/POW children directs AFA to establish a "Big Brother Program" to encourage, through both individual and unit action, a policy of seeking out families of MIAs and POWs and inviting their children to participate in recreational activities.

The resoluton dealing with support of AFJROTC recommends that the Air Force make every effort to give higher priority to the training aids and equipment needs of AFJROTC units to standardize these needs; to authorize on-base encampments; to provide additional support by appointing one officer-active-duty, ANG, or AFRes-at a base nearest each unit, on an additional-duty basis; and to establish a standardized optimum requirement for introducing flight experience to AFJROTC cadets and then to allocate sufficient flying time to complete the program.

The resolution supporting CAP encourages AFA's State and Chapter organizations to establish activities in support of USAF's official auxiliary.

Resolutions dealing with military and civilian personnel matters urged:

• That Congress enact legislation to eliminate the gross inequity that exists in the treatment of retired regular officers employed in the federal Civil Service.

• That the Secretary of Defense approve and submit legislation to provide new permanent field-grade authorizations for the Air Force, and that Congress enact this legislation before June 30, 1972.

• That the Secretary of Defense support and Congress enact H.R. 4729 and H.R. 6724 (increase in ROTC scholarships and subsistence) to enhance the attraction of college youth to the ROTC program.

• That Congress enact legislation to amend the Retired Serviceman's Family Protection Plan to bring the program into closer alignment with the provisions of the Civil Service retirement plan.

• That USAF initiate legislation to amend the Joint Travel Regulations to authorize military personnel to be reimbursed for the entire cost of moving a trailer, and to authorize payment of dislocation allowances to military personnel who move trailers, providing they are otherwise authorized shipment of household goods.

• That USAF provide, when available, education funds to support an on-duty, college program of instruc-



Gen. Jack J. Catton, Commander, Military Airlift Command, in his keynote speech at the Convention's Opening Ceremonies and Awards Ceremony, said, ". . . everywhere I go I seem to run into you AFA people doing important things."

tion for first-line supervisors (military and civilian).

• That USAF establish, where feasible, a Financial Advisory Office for airmen at Air Force installations.

• That USAF change the Outstanding Airman of the Year Ribbon to the Air Force Outstanding Airman of the Year Medal; and that the Air Force Outstanding Airman of the Year Medal be changed in precedence to enlisted members of the Reserve components) and H.R. 6051 (special pay for certain enlisted members of the Reserve components who enlist, reenlist, or extend their period of enlistment) to enhance the attraction of volunteers and retention of skilled and experienced enlisted men in the units of the Reserve Forces.

• That the Department of Defense submit, and Congress enact, legislation that would permit the family of a retired Reservist who has elected to enroll in the Retired Serviceman's Family Protection Plan to receive benefits under the Retired Serviceman's Family Protection Plan.

• That Title 5, United States Code, be amended to eliminate the fifty-five percent restriction and give full credit for service performed prior to the 1968 National Guard Technicians Act (P.L. 90-486).

• That a separate operation and maintenance appropriation be established for the Air Force Reserve to assure that component the capability of full management of its resources and responsibilities as mandated in P.L. 90-168.

• That the Air Reserve Forces strategic airlift capability be maintained either through employment of fourengine jet aircraft obtained from available sources or through maintaining the C-124 strategic airlift capability of the Air Reserve Forces at the Fiscal Year 1971 level.

• That the Air Force favorably consider a program whereby an individual separating from active military service honorably, and for other than retirement or medical reasons, cient number of aircraft hours to the Military Airlift Command for use by this Associate Reserve to provide at least the minimum proficiency flying required by MAC standards.

• That the Secretary of the Air Force include as an additional inspection criteria of major and specified active Air Force commands and agencies the manner in which their bases and units support the National Guard and Reserve programs.

• That the United States Air Force structure manning documents used by the Air National Guard and Air Reserve forces during peacetime reflect a minimum grade of major for officers, and that all airmen spaces below E-7 be proportioned between grades E-5 and E-6.

• That all employers of Guardsmen and Reservists adopt personnel policies that encourage and make possible the affiliation and participation of their employees in the programs of the National Guard and Reserve.

• That the Department of Defense endorse, and that the Congress enact, + legislation that will improve CHAMPUS benefits for retirees and their dependents so as to equalize the benefits received by all military personnel who are provided coverage under the CHAMPUS program.

• That Congress substantially augment the financial ability of the armed forces to grant medical scholarships to qualified students in return for obligated active-duty service.

• That Congress authorize general officer rank for the Chief Surgeons of the Air Force Reserve and the Air National Guard.

AFA's newly elected National President Martin M. Ostrow, left, and newly elected Board Chairman George D. Hardy, right, visit with Gen. John D. Ryan, Air Force Chief of Staff.



rank immediately ahead of the Air Force Good Conduct Medal.

• That appropriate authorities include the Chief Master Sergeant of the Air Force, by virtue of his office, as a member of the Board of Trustees of the Air Force Aid Society.

• That the Secretary of Defense support, and Congress enact, H.R. 6040 (payment of proficiency pay to may accept a special Reserve status for a period not to exceed two years following separation from active duty, which time shall be credited as "good years" if the individual elects to continue as an active participant in a component of the Air Reserve Forces.

• That USAF assure the continued effectiveness of Reserve Associate units by continuing to allocate a suffi-



George D. Hardy, left, presents the AFA President's Citation for the USAF Honor Guard to MSgt. Malcolm O. Haynes.

• That Congress authorize an increase in the number of pre-med students at the Air Force Academy from three percent to five percent of its student body.

• That the United States Civil Service Commission and the Department of Defense make continuing and increased efforts to obtain authority for the reassignment of an employee who is eligible for retirement, with his consent, to a less demanding, lowergrade position, with any resultant salary differential being paid from the retirement annuity fund.

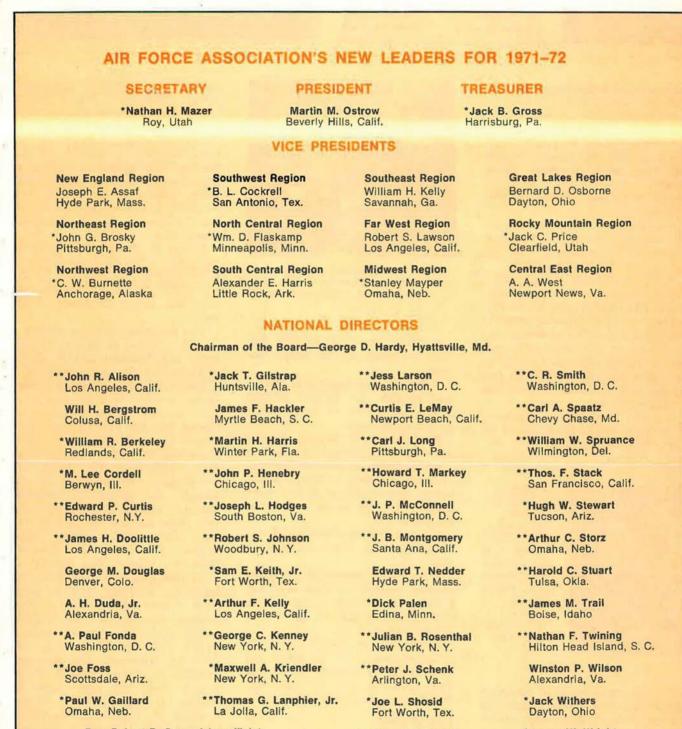
• That Congress and the US Civil Service Commission enact clarifying laws and regulations for the Hatch Act, to clearly enumerate the political activities in which Civil Service personnel may engage.

• That increased emphasis be placed on providing full counseling services for all employees as to their

rights under the federal laws and regulations pertaining to civilian employee retirement.

Continuing Resolutions

The delegates renewed the follow-



*James W. Wright Williamsville, N.Y.

*Incumbent

**Permanent National Director

Rev. Robert D. Coward (ex-officio) National Chaplain, AFA Orlando, Fla.

Norman R. Flemens (ex-officio) National Commander, Arnold Air Society Austin, Tex.

**Robert W. Smart Washington, D. C.

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AFA Board Chairman Jess Larson, left, received a plaque designating him as "AFA's Man of the Years," while George D. Hardy, right, received a plaque as "AFA's Most Traveled President," From left, Norman R. Flemens, National Commander of the Arnold Air Society; Brig. Gen. Benjamin B. Cassiday, Jr., Commandant, AFROTC; Collen Wei, of AAS Angel Flight; and AFA's newly elected National President Martin M. Ostrow.



ing continuing resolutions of the Association pertaining to:

• Comparability of military and Civil Service pay.

 Support of the Air Force Village.
Legislation to equalize military and Civil Service movement allowances.

• A dental-care program for military dependents.

• Enactment of legislation to provide incentives for pilots to remain in the armed forces beyond their initial periods of obligated service.

• Providing funds to (a) permit the advancement of many deserving and qualified airmen who are occupying jobs calling for higher grades, (b) permit the payment of proficiency pay to airmen in all critical-skill areas, and (c) permit payment of greater reenlistment bonuses to personnel possessing technical skills vital to the Air Force mission.

 Lifting restrictions on recruiting of nonprior-service physicians to fill Ready Reserve unit vacancies.



AFA President George D. Hardy, left, presents the President's Trophy to Dr. Dan Callahan, Past President of the Midle Georgia Chapter, "AFA's Unit of the Year."

• Providing equality of treatment to both male and female members in the application of dependency criteria for spouse and children.

• Permiting early Reserve retirement on a reduced annuity basis.

• Providing that all federal pay received by members of the armed forces in a missing or captured status be exempted from the payment of federal income taxes.



Paul W. Gaillard, left, President of the Ak-Sar-Ben Chapter of Omaha, Neb., receives the AFA President's Trophy.

• Establishing a Uniformed Services University of the Health Sciences,

• Providing an accelerated promotion program for Reserve medical officers comparable to that in effect for the active forces.

• Continuing to support the Air Force Museum national fund drive.

• Considering appropriate financial incentives designed to make military service more attractive to and more equitable for men in the lower three enlisted grades.

• Supporting legislation to eliminate nonresidency status for military personnel.

• Supporting legislation to provide medical benefits for Reservists performing inactive-duty training, fulltime training or duty, or active duty for thirty days or less.

• Utilizing Air Force ROTC graduates not needed by the active Air Force in the Air National Guard, Air Force Reserve, and the Individual Mobilization Augmentee Program.

New Officers

Delegates unanimously elected Martin M. Ostrow of Beverly Hills, Calif., to lead the Association as its President during the coming year. Mr. Ostrow is a partner in the Los Angeles law firm of Ostrow, Drucker, Nasatir, and Kuret, and also serves as President of Wilshire Associate Investments and as President of World Leasing Corp. A dedicated member of AFA for more than thirteen years, Mr. Ostrow has served as an elected National Director, a member of the National Constitution Committee, as Chairman of the Organizational Advisory Council, as a Regional Vice President, and as a Wing and Squadron Commander (State and Chapter President).

George D. Hardy, of Hyattsville, Md., AFA's President for the past thirty months and President of the Harry B. Cook Co., a food brokerage firm, was elected Chairman of the Board.

Two incumbent National Officers— Secretary Nathan H. Mazer, of Roy, Utah, and Treasurer Jack B. Gross, of Harrisburg, Pa.—were reelected.

Six new Vice Presidents were elected to head AFA activities in as many Regions, joining six others reelected. The new Vice Presidents are: Joseph E. Assaf, Hyde Park, Mass. (New England Region); Alexander E. Harris, Little Rock, Ark. (South Central Region); William H. Kelly, Savannah, Ga. (Southeast Region); Robert S. Lawson, Los Angeles, Calif. (Far West Region); Bernard D. Osborne, Dayton, Ohio (Great Lakes Region); and A. A. West, Newport News, Va. (Central East Region).

Six new Directors were elected to the Board. They are: Will H. Bergstrom, Colusa, Calif., former Vice President for the Far West Region; George M. Douglas, Denver, Colo., a former National Director; A. H. Duda, Jr., Alexandria, Va., a former member of AFA's National Headquarters staff; Maj. Gen. James F. Hackler, Jr., USAF (Ret.), Myrtle Beach, S. C., President of the South Carolina AFA; Edward T. Nedder, Hyde Park, Mass., former Vice President for the New England Region; and Maj. Gen. Winston P. Wilson, USAF (Ret.), Alexandria, Va., former Chief of the Guard Bureau. The six newly elected Directors join twelve incumbent Directors who

were reelected for another year, as well as all the Past National Presidents and Board Chairmen, other permanent Directors, National Officers, the National Chaplain, and the National Commander of the Arnold Air Society, to form a Board of sixty-four. (The full Board membership appears in the box on p. 93 as well as in "This Is AFA," p. 97.)

Reports

During the second and third business sessions, reports were given on the USAF, on AFA's Membership efforts, on the AFJROTC, and on the status of the MIA/POW program.

Each member of AFA's Membership Committee participated in the report on AFA Membership efforts, and the discussion was moderated by James H. Straubel, AFA's Executive Director. Members of the Committee are Paul W. Gaillard (Chairman), William R. Berkeley, Dr. Dan Callahan, Arthur O. de la Garza, George Douglas, and Edward A. Stearn.

In his USAF report, Maj. Gen. H. Lee Hogan, III, Director of Information, Office of the Secretary of the Air Force, informed delegates about USAF information programs in general. He stressed that Air Force information programs currently are emphasizing the positive contributions that the Air Force has made and continues to make to our society. Also, there is increased attention to the Air Force's internal audience, he said.

Mrs. Kathy Plowman, then Assistant National Coordinator of the National League of Families of Missing and Prisoners in Southeast Asia (see "MIA/POW Action Report," p. 101) and the wife of a Navy Officer, reported on the status of MIA/POW efforts. Mrs. Plowman said, "Now we feel our only hope to continue bringing the issue to the attention of the American people is advertising." She then described the League's plan for an ad campaign (see October issue, p. 86. While some \$25 million in ads will be free, the League must pay for costs and administration, now estimated at about \$111,000, to be raised by donations.

Col. John Lamb, Director of AFJROTC units, gave an interesting and extensive briefing on the AFJ-ROTC program. Speaking of the young men involved, Colonel Lamb said, "I am confident that these young people will do great things for the future development of this country. They are the future, and I like very much what I have seen."

A Monday evening President's Reception for State and Chapter Officers, Official Delegates, and USAF Infor-

AFA UNITS AND INDIVIDUALS HONORED AT THE CONVENTION

AFA PRESIDENT'S TROPHY

- To Paul W. Gaillard, President, Ak-Sar-Ben Chapter of Omaha, Neb., designated "AFA Man of the Year."
- To the Middle Georgia Chapter of Warner Robins, Ga., Dr. Dan Callahan, President, designated "AFA Unit of the Year."

AFA PRESIDENTIAL CITATIONS

J. Raymond Bell, New York Will H. Bergstrom, California Cecil Brendle, Alabama Brig. Gen. Benjamin B. Cassiday, Jr., Alabama Ray Ellison, Texas K. G. Freyschlag, Colorado Maj. Gen. Richard M. Hoban, Utah Maj. Gen. John A. Lang, Jr., USAF Res, North Carolina Maj. Gen. Winston P. Wilson, USAF (Ret.), Virginia The United States Air Force Honor Guard

AFA UNIT EXCEPTIONAL SERVICE PLAQUES

Aerospace Education Award: Tennessee Valley Chapter, Ala. Best Single Program Award: Nation's Capital Chapter, Washington, D. C. Community Relations Award: Sal Capriglione Chapter, N. J. Membership Award: Wasatch Chapter, Utah Unit Programming Award: Utah State Organization

AFA INDIVIDUAL EXCEPTIONAL SERVICE PLAQUES

Noel A. Bullock, Colo. C. W. Burnette, Alaska Dr. Dan Callahan, Ga. Arthur O. de la Garza, Tex. John H. Haire, Ala. Martin H. Harris, Fla. Gerald V. Hasler, N. Y. A. D. McCall, Jr., Tex. J. Gilbert Nettleton, Jr., N. Y. Robert J. Schissell, Washington, D. C. Edward A. Stearn, Calif. Jack Withers, Ohio

AFA MEDALS OF MERIT

William R. Berkeley, Calif. Toulmin H. Brown, La. Joseph M. Capriglione, N. J. James W. Carter, Tenn. William P. Chandler, Ariz. Moses H. K. Choo, Ala. Victor R. Davis, Alaska L. Eugene DeVisscher, Calif. Ray Dunn, Utah Melvin H. Gerhold, Ohio James F. Hackler, S. C. James C. Hall, Colo. Alexander E. Harris, Ark. Irene B. Keith, N.Y. William H. Kelly, Ga. William H. Kelly, Ga. John B. Long, Tex. George W. McKay, Va. Ernest E. Pierce, Ohio Ray E. Ricketts, Va. Frank J. Sego, Ala. Kenneth C. Thayer, N. Y. Cecil K. Vogt, Mich. Orland Wages Va Orland Wages, Va. C. C. Widaman, Fla.

mation Officers featured brief remarks from AFA President Hardy; Joe Higgins, the Dodge "Safety Sheriff," as Master of Ceremonies; and entertainment by the "Goodtimers," a unit of the USAF Band.

Howard T. Markey, a permanent member of AFA's Board and a past National President, served as a most capable parliamentarian. The Credentials Committee included W. M. Whitney, Jr., Chairman, Vice President of the Great Lakes Region; Jack C. Price, Vice President of the Rocky Mountain Region; and David M. Spangler, Vice President of the Central East Region.

Inspectors of Election were Kenneth Banks, Chairman, Akron, Ohio; Cecil Brendle, Montgomery, Ala.; and Lloyd Nelson, Park Ridge, N. J.

Acknowledgments

With deep gratitude, AFA acknowledges the support of the following: General Motors Corp., for courtesy cars; the Federal Systems Division of International Business Machines Corp., for sponsoring the Outstanding Airman Program; Ling-Temco-Vought, Inc., for sponsoring the Press Lounge and for publishing the daily *AFA Profile* newspaper; and Avco Corp., Martin Marietta Corp., Teledyne Ryan Aeronautical, and Williams Research Corp., for cosponsoring the Ladies Hospitality Lounge and Activities.

We also gratefully acknowledge the contributions made to our program by personnel of the United States Air Force-too many to list here-but represented by our Military Host, Maj. Gen. Nils O. Ohman, Jr., Commander, Headquarters Command, Bolling AFB; and by the following Project Officers: Col. William D. Hatcher, Maj. Melvin A. Bailey, and Mai, Harry M. Childress, Hg. USAF; Brig. Gen. Carlton L. Lee, Commander, 1st Composite Wing, Andrews AFB, Md.; Col. William W. Carpenter, Jr., Director of Information, Headquarters Command; Lt. Col. John P. Diener, Andrews AFB Project Officer; Maj. Maynor R. Seals, Bolling AFB Project Officer; MSgt. Malcolm O. Haynes, Honor Guard Project Officer, Bolling AFB; and Lt. Col. C. B. Kelly, III, SAF/OIPC.

To each of these—and to the many officers and airmen they represent we express our enduring gratitude.

Our appreciation also goes to the AFA leaders and delegates who attended the Convention and to the many AFA leaders in the field, those individuals whose personal contributions of time, effort, and finances have made AFA the great organization it is today.

STATE A	WARDS
STATE	PRESIDENT
*Georgia Nebraska	William H. Kelly Lloyd Grimm
CHAPTER	AWARDS
CHAPTER	PRESIDENT
*Middle Georgia (Ga.) Rocky Mountain (Utah) Grand Strand (S. C.) Cheyenne (Wyo.) ** Wasatch (Utah) *Concho (Tex.) Saturn (Ala.) *Sal Capriglione (N. J.) Air Force Mothers (Pa.) Ak-Sar-Ben (Neb.) Alamo (Tex.)	Dr. Dan Callahan Doris J. Edvalson Gilbert L. Meyers Conley B. Stroud, Jr. Thomas D. Miller P. A. Reary W. S. Fellows Joseph M. Capriglion Mary Coyne Paul W. Gaillard Dorr E. Newton, Jr.

Letters received since the Convention ended have been highly complimentary.

Many who attended the Convention feel that this was one of AFA's finest efforts. Excerpts from a few of the many congratulatory letters follow:

"I thought this year's Convention was one of the best. It would be difficult to attempt to single out any one portion for special acclaim."—Col. Milton E. Mitler, Chief, Liaison and Information Div., Office of Air Force Reserve.

"It was an outstanding success, providing industry, active and retired Air Force personnel, and concerned citizens the opportunity to get together, exchange ideas, and formulate ways in which the AFA could continue in its endeavors to strengthen the Air Force and national security." —Lt. Gen. Thomas K. McGehee, Commander, Aerospace Defense Command.

"This year's Air Force Association Convention was a tremendous success in every respect. All of the special events I attended were outstanding. AFA's careful planning and organization, down to the last detail, were very much in evidence. I will long remember this Convention as one of the most enjoyable I have ever attended."— Brig. Gen. Larry M. Killpack, Commander, Air Force Accounting and Finance Center.

"I go to a number of conferences every year, and this past AFA was the best conference I have ever attended." —Col. Benjamin S. Catlin, III, Commander, Air Reserve Personnel Center.

"The Air Force Association, throughout the years, has provided recognition and direct support of Air Force women which has contributed favorably to our program and to the morale of these women who serve their country. The dedication of your members, the worthwhile projects of the total organization, and the goodwill you generate for the Air Force as a whole are inspiring and heartwarming."—Brig. Gen. Jeanne M. Holm, Director, Women in the Air Force.

And, a most fitting closing for this story on AFA's Silver Anniversary Convention:

"Over the past quarter century, the Air Force Association has measured up to the tasks it set out to accomplish. Its support of aerospace power has been effective and unflagging. I know I speak for all in the United States Air Force when I express appreciation for everything the Air Force Association has done, and is doing, for us." Those were the words of Gen. John D. Ryan, Chief of Staff, USAF, at the Chief of Staff's Luncheon, on Wednesday, September 22, 1971.

This is AFA

The Air Force Association is an independent, nonprofit airpower organization with no personal, political, or commercial axes to grind; established January 26, 1946; incorporated February 4, 1946.

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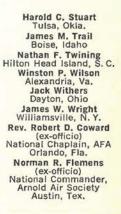


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Airman's Bookshelf

Personalities Near the Pinnacle

The Inner Circle: A View of War at the Top, by Joan Bright Astley. Little, Brown and Co., Boston, Mass., 1971. 228 pages with index. \$6.95.

During World War II, Joan Bright Astley was in an unusually good position to observe high-level decisionmaking in the British War Office and at the major summit conferences. In the War Office, she was the director of the Special Information Center, which maintained classified reading files designed to bring visiting field commanders up to date on the overall war situation. At the summit conferences, administrative arrangements for the British delegations were her responsibility.

Despite these opportunities for inside knowledge and Mrs. Astley's considerable ability as a writer, her book is disappointing. Her interesting background and the enticing title of the book lead one to expect new and exciting information regarding "the planning and maneuvering of Churchill, Roosevelt and Stalin," and the "disagreement as well as cooperation among the Allies." Instead, Mrs. Astley offers a rehash of familiar history, somewhat embellished by her own amusing experiences, such as her attempts to ensure that Marine privates did not get better accommodations at the conferences than the generals and admirals. Her actual contact with the Big Three was minimal. She was not a member of their inner circle, and therefore not privy to their planning and maneuvering.

But she did have an impressive array of friends and acquaintances in the second and third echelons, including such well-known figures as Gen. George C. Marshall, Gen. Sir Alan Brooke, Averell Harriman, and Ian Fleming. Although her impressions of these people were often based on social contacts, her cameo descriptions of their personalities are delightfully perceptive; in fact, these descriptions are perhaps the strongest aspect of the book.

Though it contributes little of substance to our understanding of the decision-making processes in the British high command or at the summit conferences, this smoothly written memoir does add color to the events and, in doing so, helps recreate the mood of the times.

-Reviewed by Capt. James P. Tate, Department of History, USAF Academy.

Of Form and Substance

Remaking China Policy: U.S.-China Relations and Governmental Decision Making, by Richard Moorsteen and Morton Abramowitz. Harvard University Press, Cambridge, Mass., 1971. 135 pages with appendix and index. \$5.95.

Moorsteen and Abramowitz have combined their scholars' knowledge of the Far East with their experience in government to write a balanced, substantive book, which deals penetratingly with the development of longterm United States policy toward China. Moorsteen is a RAND consultant. Abramowitz is a Foreign Service Officer now on leave at the Institute for Strategic Studies in London.

The book is divided into two parts. The first treats the main policy issues and problems affecting the United States and China, with respect to Taiwan, Japan, Korea, Southeast Asia, and the Sino-Soviet dispute. Under each topic, the authors make specific proposals for improving US/ China relations through an evolving process of exploratory steps that would enable policy-makers to discover more about Chinese responses and incorporate this knowledge into future policy.

Part two analyzes special bureaucratic difficulties in pulling together the diverse considerations of China policy and suggests organizational and procedural changes necessary to implement the author's proposals.

The style of the book is somewhat awkward. Its organization as a working paper for high-level policy-makers and the community of China specialists within government makes reading ponderous. In its analysis of the complexities, the uncertainties, and risks inherent in policy-making, however, the reader is given invaluable insight into the process whereby important decisions of foreign policy are made.

Our understanding about China is swamped by uncertainties, the most important being Chinese perceptions and intentions. Unknown factors add immeasurably to the problem of policy-making. The authors make the valid point that abundant information about China is available, but that much of it is unusable because it lacks policy relevance. Accordingly, in their study they evaluate substantive policy issues and present a critical analysis of current policy-making procedures.

While one may not agree fully with the varied assessments of the authors, their argumentation is sound and their analysis will undoubtedly stimulate thoughtful discussion. Possibly the greatest significance of the book is that it raises a multitude of questions that call for studied answers.

Moorsteen and Abramowitz deserve great credit for offering us a way of thinking about China that is both imaginative and realistic at a time when the United States is embarking on bold new initiatives. Their underlying premise, which we cannot ignore, is that "better relations with China are desirable, but not our most important objective in Asia. We have other interests of greater priority there. But our ability to deal with China, for better or worse, will affect all of them."

Forewords are provided by John K. Fairbank (Director, East Asian Research Center, Harvard University) and Nicholas de B. Katzenbach (former Undersecretary of State). The appendix includes documentary material.

> -Reviewed by Maj. Robert R. Fuller, Associate Professor, Department of Political Science, USAF Academy,

The Recce Satellites

Secret Sentries in Space, by Philip J. Klass. Random House, New York, N. Y., 1971. 221 pages. \$7.95.

Phil Klass is known in the Washington press corps as an indefatigable reporter, blessed with that special ability to make highly technical material **underst**andable. Having **already** distinguished himself with a previous book that made sense of the controversial and confusing subject of unidentified flying objects, Mr. Klass has now turned his attention to a comprehensive and highly readable history, analysis, and explanation—in laymen's terms—of those now-indispensable intelligence tools of the nuclear age, reconnaissance satellites. He skillfully traces the technical *and* political history of the US observation satellite program, going back to the 1950s in terms of hardware and to the 1940s in terms of concepts.

Few people realize that not long after the end of World War II there were seminal studies of the potential uses of artificial satellites, notably by the RAND Corp., and that reconnaissance was viewed even then as a purpose to which satellites could be put to use fruitfully.

Thanks to reconnaissance satellite data, Mr. Klass points out, the US was able to sort out fact from fear with respect to the true Soviet missile posture in the early 1960s. Satellites revealed that the "missile gap" that President Kennedy made so much of in the 1960 presidential campaign turned out to be more of a *Soviet* than American problem, Satellite data also gave Kennedy the confidence to face down the Russians in the frightening Cuban missile crisis of 1962.

Mr. Klass does not limit himself to the US observation satellite program. He describes in considerable detail what the Russians have been doing to watch us from space. And he documents the change in Soviet political attitude toward "spying from space" as the realization grew among Soviet planners that satellite data could do much for them in the business of checking on the accuracy of published data on the US missile posture.

In fascinating detail, Mr. Klass describes the various observation—and alarm—satellites operated by the US. He describes, too, the prime methods of recovering data from space—midair snatching of capsules by aircraft and direct relay of data from space to ground stations. He also reports on the contributions to reconnaissance that certain "civilian" satellites have made, none of which either Soviet or US sources would ever confirm.

While pointing out that observation and reconnaissance satellites on both sides are no panacea in terms of war prevention, Mr. Klass demonstrates graphically the amazing contributions this technology has made to mutual knowledge of the high stakes in the nuclear era. He reveals that US satellite data confirmed violations of the Mideast cease-fire by Egypt, even though the US chose to "cool it" publicly on the matter.

Without the information now readily available from space to planners in the US and Russia, there would doubtless have been in the 1960s, and now in the 1970s, an arms race that would have made today's competition look like a Fourth of July picnic. Mr. Klass's report on the secret sentries in space belongs in the library of anyone who wants to understand the impact of space technology on a world that lives at the brink of awful war.

-Reviewed by William Leavitt, a Senior Editor of this magazine.

Collector's Item

The Great Guns, by Harold L. Peterson and Robert Elman. Grosset & Dunlap, New York, N. Y., 1971. 252 pages with bibliography and index. \$14.95.

If there's a gun buff on your Christmas shopping list, take a good look at this book. A gun-collector friend says it's one of the finest and perhaps the most beautiful book on firearms ever published.

The book is in large $(8\frac{1}{2}'')$ by $11\frac{1}{2}'')$ format, printed on heavy stock, with hundreds of illustrations, most of them in color. It is a highly selective chronicle of the 700-year history of shooting. One of its virtues lies in the fact that the authors have limited their selection to only the most magnificent or most technically significant of history's rifles, handguns, and smoothbores.

Harold Peterson is chief curator of the US National Park Service and the author of the article on firearms in the *Encyclopedia Britannica*. Robert Elman is a historical consultant to firearms manufacturers and author of two books and many articles on famous antique and modern firearms. Both authors know whereof they speak.

Two for the Technicians

Communication Satellites for the 70's: Technology, and Communication Satellites for the 70's: Systems, both edited by Nathaniel E. Feldman and Charles M. Kelly. Massachusetts Institute of Technology Press, Cambridge, Mass., 1971. Both books 600-plus pages. \$18.50 each.

These volumes contain revised versions of papers presented at meetings sponsored by the American Institute of Aeronautics and Astronautics in 1970. All the papers are the work of leading US and foreign industrial and university scientists and engineers.

The first-named volume (*Tech-nology*) includes several papers on each of the following general subjects: satellite transponders, space-craft subsystems, spacecraft antennas,

high-power transmission, integration and testing, launch vehicles, digital techniques, and earth stations.

The second volume (Systems) covers: Canadian domestic satellite communications system, European projects, systems for emerging nations, US domestic systems, aeronautical service systems, earth resources satellite communications, defense systems, system engineering, and the relative merits of three-axis and dual-spin stabilization systems for future synchronous communication satellites.

Prelude to Peace

Eagles East: The Army Air Forces and the Soviet Union— 1941-45, by Richard C. Lukas. Florida State Univ. Press, Tallahassee, Fla., 1971. 256 pages with appendix and index. \$10.

Using primarily archival material, much of it for the first time, the author describes the air aspects of Russo-American wartime relations and the problems which made that collaboration frustrating and disappointing.

Lucas discusses the issues involved in allocating and delivering US aircraft to the Russians, the frustrations of basing American aircraft in the USSR, the failures in securing active military collaboration of the Soviets in the Pacific, and the difficulties of establishing close liaison with suspicious Soviet officials.

This book—the most complete account of a particular phase of wartime collaboration (or the lack of it)—is a significant contribution to the literature of World War II. It will attract both the scholar and the general reader who is interested in diplomatic and military history.

The Yoxford Boys, by Merle C. Olmstead. A history of the 357th Fighter Group from activation to deactivation. Copiously illustrated, it includes a list of the Group's aces, commanders, and missions. Aero Publishers, Fallbrook, Calif. 92028, 1971. 103 pages with index. \$3.95 softcover.

Three recent additions to the Arco-Aircam Aviation Series books are: Luftwaffe: Color Schemes and Markings 1935-45; Aerobatic Teams 1950-1970, which covers the teams of several air forces; and Czechoslovakian Air Force 1918-1970. Each book includes a brief history of its subject, technical specifications on aircraft and armament, about 175 black-and-white photographs, and eight pages of color plates. Arco Publishing Co., New York, N. Y. Fifty pages in large format. \$3.25 each in stiff binding.

This Book Could Save Your Life...

The Safe Driving Handbook is published for AFA's Aerospace Education Foundation. Based primarily on the Air Force's highly successful safe driving program, more than 600,000 copies are in print. Many people have said good things about it. Here is a sampling:



- "More than just another book on safe driving. It covers topics well known to many who work in traffic safety but it does so in a clear, easy-to-read, and practical manner that makes it impressive—regardless of how many other books you have read on the same subject."—From the newsletter of the American Association of Motor Vehicle Administrators.
- "One of the great advantages of this useful reference is that it can be studied with profit by every kind of driver—beginner and veteran alike—and for every kind of driving, from the short trip to the supermarket to the long cross-country journey on the superhighway. It makes a particularly invaluable introduction to the subject for the young person about to get his first driver's license."—Book-of-the-Month Club, which picked The Safe Driving Handbook as a "Pro Bono Publico" special selection.
- "It is the finest book that I have ever read on the subject. I hope that it becomes part of every driving course. I learned more from your book than from all the courses I have taken in safe driving."—Mrs. Agnes Beaton, Women's Safety Director, Allstate Foundation.
- "As good a text for average men and women as any I have seen."—Bill Gold, columnist, The Washington Post.
- "If a man cares about his car, about passengers who ride in it, and about his own safety, the book is probably the best accident insurance ever bound between two covers."—The Retired Officer.

The Safe Driving Handbook is the best dollar's worth you can find. And all royalties go to AFA's Aerospace Education Foundation. For your copy, direct and postpaid from the Air Force Association, fill in the coupon and mail with one dollar today. Please allow three to four weeks for delivery.

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League of Families Convention

The second annual convention of the National League of Families of American Prisoners and Missing in Southeast Asia ended September 29 on a united note.

In remarks at the convention's conclusion, Mrs. Wilmer N. Grubb, newly elected National Coordinator of the League, whose Air Force husband has been in captivity since January 1966, said that the League came into the convention "slightly fragmented, but we are now united in our goal of bringing our men home."

Thus, the League emerged intact from a four-day meeting at which a major issue was the divisionary question of what direction—political or otherwise—the organization should take.

One response to this dilemma was a resolution drawn up by the League's more militant faction. Overwhelmingly defeated, it would have amended the League's bylaws to permit political activism, a sharp swerve from the organization's basic policy of nonpolitical humanitarianism.

The dissension within the League was otherwise made more apparent by the group calling itself "Families for Immediate Release," which picketed the White House during the convention, demanding that the Administration set a date for withdrawal of American troops from Vietnam.

(Carole Hanson, elected at the convention as new Chairman of the League's Board of Directors and whose Marine Corps husband is missing in action in Laos, later referred to those picketing the White House as a "splinter group." She said that individuals in the League held varying beliefs as to the course the League should take in its mission. However, she affirmed, they all agreed on one key point: that the men shall not be forgotten.)

The League at a later business session passed a resolution requiring League members engaged in political activities counter to League policy to "make it explicitly known that they are acting as individuals and not on behalf of the League."

Another resolution requested local League units to seek publicity on the POW issue but "with the proviso that such are within reasonable limits and that to use the name of the national League such groups receive the approval of the national coordinator."

Many League members attending the convention visited Capitol Hill with the intention of personally delivering to their Congressmen letters demanding that a full accounting of missing men be part of any negotiated settlement of the war. The letters also urged that an international commission be set up to look into the MIA/ POW problem.

(In line with that, the League adopted a resolution to send a delegation to the UN to generate international concern for the POWs.)

Their reception on the Hill varied; some complained of getting "short shrift," while others were denied audiences with their Congressmen.

On the other hand, a League coffee reception on Tuesday morning, September 28, was attended by some seventy-five members of Congress.

While a number of League conventioneers expressed pessimism at the convention's seeming lack of concrete results, it did draw top brass other than the Congressmen. President Nixon, in a surprise appearance at a dinner meeting, said that "every negotiable channel . . . including many that have not been disclosed" is being explored to bring about the release of the POWs.

He said that the MIA/POW situation had a special "presidential priority" in his mind, but also warned that "we are dealing with a savage enemy, one with no concern for humanitarian ideals." The President asserted, however, that the US would "eventually succeed" in freeing all POWs.

The scheduled speaker at the affair, Secretary of Defense Melvin R. Laird, made a point that was touched upon by others during the course of the convention: that American politicians visiting the North Vietnamese in Paris are told and promised things about the MIA/POW situation that the official US negotiators never hear from their North Vietnamese counterparts.

Whenever the US delegates pressed for a clear-cut stand on the issue by the North Vietnamese, he said, "they have received no response or a response veiled in ambiguity."

The President's words of reassurance and Secretary Laird's comments were inspired to a degree by sharp criticism of the Administration's handling of the MIA/POW situation.

Sen. George McGovern (D-S. D.), for example, has said that the top North Vietnamese delegate in Paris, Xuan Thuy, told him that all prisoners would be released if the US promises withdrawal by a specific date and that the other points of contention could go unresolved for the time being.

In remarks to the news media at the convention's conclusion, Mrs. Hanson called on the media to publicize the plight of the MIA/POWs and to help unite the country on their behalf. She said that, while the President was "pursuing every avenue" to gain the prisoners' release, the League certainly would too. Mrs. Hanson expressed gratification at the President's surprise visit to the convention; it proved, she said, that the group had influence with the Administration.

During business sessions at the convention, the League passed the following résolutions:

BE IT RESOLVED that the National League of Families of American Prisoners and Missing in Southeast Asia conveys to you, the President of the United States, its extreme distress at the continuing failure to resolve the prisoner of war/missing in action tragedy.

We sincerely appreciate all of the efforts made by the Administration and your own efforts relating to this grave concern.

However, time is running out for these men, and we feel we must ask for strong new initiatives to obtain the release of all prisoners and an accounting of the men missing in all areas in Southeast Asia.

The bylaws of the National League of Families have as a stated purpose the identification, accounting for, and return of all detained Americans in Southeast Asia.

Irrespective of any political solution to the war, no solution can be complete without the above assurance.

The assurances are humanitarian and transcend all political differences. Therefore, BE IT RESOLVED that the National League of Families petition all members of Congress to sponsor as an amendment to all bills concerning the termination of the Southeast Asia conflict, the following provisions:

MIA/POW

All aspects of this bill shall be null and void unless the government of North Vietnam and its allies agree to:

1. Allow and insure a complete identification of all captured military and civilians in Southeast Asia prior to the implementation of the provisions of this bill. The identification is to be conducted by an impartial humanitarian body, which will be allowed free access and discussions with all detained Americans. The inspection team will resolve the fate of all Americans missing in Southeast Asia to the best of its capabilities.

2. The release of or internment in a neutral country of all detained Americans prior to the completion of the terms of this bill.

BE IT RESOLVED that the efforts of League of Families of American Prisoners and Missing in Southeast Asia do now beseech our government with the deepest urgency to undertake immediate and vigorous action to resolve the conflict in Southeast Asia and to assure the prompt return of all prisoners and an accounting of the missing in all areas in Southeast Asia.

It is our strong fear that the ability of our men to survive their confinement may now be measured in hours and days, not weeks or months.

To North Vietnam and the National Liberation Front:

BE IT RESOLVED that the National League of Families, in the interests of humane treatment of all POWs, MIAs, and their families, urge you to direct your negotiators to separate the prisoner-missing issue from the other points proposed by your representatives at the Paris Peace Conference.

BE IT RESOLVED that the efforts of the National League of Families be directed toward the transfer of all captured Americans in Southeast Asia to neutral countries as provided in Part IV, Articles 109 and 110 of the Geneva Convention, during which time a full accounting may be reached pending the release of these men.

BE IT RESOLVED that the National League of Families urges the Nixon Administration to obtain the early release of our prisoners of war with the fullest possible accounting of the missing.

If the POW/MIA problem has not been resolved, the next meeting of the League of Families shall be held in May 1972 for the following purposes: 1. To reassess the international political situation.

2. To evaluate the **progress** made by the Nixon Administration to resolve the POW/MIA problem.

3. To determine what course of action the League should take in 1972.

Copies of this resolution shall be distributed to officials of the Nixon Administration, to the leaders of both political parties, and to members of the press.

BE IT RESOLVED that the National League of Families of American Prisoners and Missing in Southeast Asia will organize a delegation of interested League members to go to the United Nations, on a date to be determined, to personally impress upon each signer of the Geneva Convention their obligation to us in enforcing the rules of the Convention.

BE IT RESOLVED that the families of prisoners and missing in Southeast Asia find the withdrawal of the United States from the Vietnam conflict without prior agreement upon release of known prisoners of war, or of identification of missing, alarming. The National League of Families therefore urges the United States government and the Congress of the United States to take steps to insure that these men who served their country are not abandoned. The National League wishes to remind the government and the Congress that Article I of the 1949 Geneva Convention relative to the treatment of prisoners of war requires the signatory nation to enforce the convention against all violators, which North Vietnam most patently is.

BE IT RESOLVED that the National League acquire funds for the Board of Directors to hire a National Press Director whose function it is to most effectively utilize the media to publicize the POW/MIA issue and to promote generation of news interest.

BE IT RESOLVED that any member or members of the National League of Families who engages in any actions or activities that are not in compliance with the purposes of the League as approved by the majority of the members, make it explicitly known that they are acting as *individuals* and *not* in behalf of the League.

On Behalf of the MIA/POWs

A guest speaker at a business session at the AFA Convention in mid-September was Kathy Plowman, representing the League of Families. Mrs. Plowman's Navy husband has been missing in action in North Vietnam since March 24, 1967.

As then Assistant National Coordinator of the League, Mrs. Plowman thanked AFA for its support of League goals. She discussed how the MIA/POW campaign had reached the point of saturation in local communities and how it had added to the considerable drain-emotional and otherwise-on the League families. She said, however, that the League would continue to pursue ways to publicize 1 the plight of the MIA/POWs, and asked for further support from AFA. In particular, Mrs. Plowman mentioned the Advertising Council campaign the League has initiated (see October issue, p. 86), for which an estimated \$111,000 must be raised to * defray costs.

Rescue Line Incorporated, Box 2392, Santa Fe, N. M., has been operating since 1969 to create action on behalf of the MIA/POWs. "Our long-range, on-going projects include ' continuous advertising in foreign countries to stimulate humanitarian responses while urging simultaneous low-key pressuring of government officials and citizens in this country for an early solution," says Mrs. James Lindberg Hughes, director of the group. Her husband has been a POW since May 5, 1967. She hasn't * heard from him since July 1968.

Available for distribution through Rescue Line is a 1972 calendar which dramatizes the plight of the captured and missing Americans. Write the above address for information on the group's projects.

Outstanding athletes from across the spectrum of American sports have organized to help US MIA/POWs. Calling themselves the American Sports Stars for POWs-MIAs, the group has in its ranks the elite of US, sports figures, past and present.

The list is too long to recount here, but the sponsors alone are impressive: Joe DiMaggio, Althea Gibson, Joe Louis, Jesse Owens, Arnold Palmer, and Ted Williams.

The group, the brainchild of Carmella La Spada, a concerned citizen of Washington, D. C., has written a collective letter to North Vietnamese Prime Minister Pham Van Dong asking that a representation from the group be allowed to visit Hanoi "to discuss the welfare and repatriation of the American men detained in Indochina." The group also has stated a request "to effect a regular exchange of letters and to improve communication between these men and their families."

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THE BRIEFING -

We don't have room for Panel Five. It shows the colonel, still alive, Safely clad in a new flak vest-Base commander at Bluie West . . .



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