

## THE MOA NEWSLETTER

The Maintenance Officer Association (MOA) is committed to enhancing the USAF mission by improving the maintenance world. Although comprised primarily of USAF maintenance officers, MOA is not associated with the United States Air Force or any other organization.

ISSUE NO. 3

NOVEMBER 1982

### MAINTENANCE, PRODUCTIVITY, AND THE ORGANIZATION

By Dr. William D. Kane, Jr.

[The following article was extracted from the final report of a research study by Dr. Kane in the summer of 1980. The study investigated the impact of environmental (in the organizational sense) distractions and the resulting coping behavior on maintenance performance. Dr. Kane observed and documented the distractions in the work environment that detract from productivity (noise, weather, lack of special tools/parts, management policies, scheduling conflicts, etc.). Although this study was designed as exploratory research to identify where further research could be most beneficial, some of the observations and conclusions are particularly relevant to Project Rivet Ready. Likewise, maintenance managers at all levels should be aware that factors which they can control may have productivity implications far in excess of those controlled by the individual technician. Based on both space and clarity considerations, the following comments were edited and condensed with the approval of the author.]

A key issue (in viewing Air Force maintenance) is the one of an assumed monolithic maintenance environment versus hypothesized multiple maintenance environments. SAC's, MAC's, and TAC's maintenance environments differ from each other because of their different missions. The crew chief's maintenance environment differs from the specialist's maintenance environment because of the range of tasks each is involved with. At the same time, it is likely that the crew chief who works in the phase dock functions in a different environment (in an organizational sense) than the crew

chief on the flight line (same AFSC), and the same thing applies to the specialist who works on the bench and the one who works on the flight line. If we assume, from what data base I do not know, that the environment is monolithic and in reality it is not, manpower and other resource planning developed on that false assumption will dysfunctionally distribute scarce resources. Given the complexity of the modern Air Force maintenance world, the possibility of multiple environments and their impact on all aspects of maintenance should be tested.

#### Observations

The three areas to be discussed here are the frequency and intensity of environmental (situational) distractions (constraints), the coping behaviors of maintenance people, and maintenance people's perception of what impedes productivity.

The frequency and intensity of environmental distractions is some function of the degree of environmental turbulence. The environment in a field shop or phase dock is relatively less turbulent than a flight line environment, and therefore fewer distractions are encountered. However, the entire maintenance environment is more turbulent and less predictable than the clerical support environment and a significant portion of a maintenance person's time is spent dealing with environmental distractions. The non-representative data indicate that 50% or more of a maintenance per- [See MAINTENANCE, Page 5]

## THE MOA MOUTH

I recently read an interesting article in an airline magazine, *Flying Colors*, by Dr. Jay Hall entitled, "Reality Management for More Responsible Organizations." Dr. Hall was applying to organizational and management theory the teachings of the famous psychiatrist William Glasser. Many of you will remember Dr. Glasser as the father of the reality school of psychotherapy. For those of you who have not had the pleasure, Dr. Glasser maintains that an individual's problems stem from an unwillingness or inability to face reality, to behave, and to make choices consistent with reality. (My apologies to Dr. Glasser for that instant condensation of several books and a life's work.)

As I read Dr. Hall's article, I became more interested in the examples of unrealistic organizational behavior he was citing. An organization in trouble, he contends, evidences some or all of the following signs:

- People are encouraged to prosper at the expense of others.
- Information is coveted and used as a tool of power.
- Profit maximization is the top priority irrespective of the consequences.
- People are coerced to lay aside their personal convictions for the sake of expediency.

The author then outlines his three Rs of Reality Management with their accompanying test questions. A manager is Responsible if his actions serve his own needs without depriving others of the same. A manager is Realistic if he insures that the long-term costs of a given action are sufficiently offset by the short-term gains. And finally, the ethical manager exhibits Rectitude if his management actions conform to his own sense of right and wrong.

Well, it was a long flight and, since I ran out of article before the airline ran out of scotch, I had a chance to think about that article in practical rather than esoteric terms. I concluded (Voila!) that one of the reasons our profession is both rewarding and frustrating is that the environment in which we operate is just not very realistic--starting with the 100%-is-the-standard approach and then looking at the basic assumption that the natural state of an aircraft is Fully Mission Capable. Sure, we make that assumption. If the last time we looked at an aircraft (say, 48 hours ago) it was FMC, what is the aircraft status in the system? Enough of that. As you can see it was a lo-o-o-o-ng flight. On to some more practical matters.

How practical is our everybody-uses-tech-data-for-every-job approach? I once had an airman ask me why we didn't put tech data in a more useable form. I also still have a copy of the QC gig on a E-8 with 20 years F-4 experience for doing some routine F-4 task sans tech data.

Do you squadron commanders really believe it when you pass out one of those "Our No. 1 Priority for today is to get all the dental appointments taken care of"? Bet few other people do; thus, the no-shows. But our mission is to fly and fight. In an exercise, is the flow of augmentees to or from the flight line? Would J. C. Penney ever consider implementing a supply system wherein all the customers had to attend a school before they could order anything? How realistic is it for an aircraft having commonly accessed panels to have 100 fasteners, of varying sizes, with different pull lengths, and various torque values? (Speaking of the F-111, I once knew a bright, young man who decided to develop a simplified checklist for panel installation that would include all the need-to-know info. Much to his chagrin, when he finished, it looked like the L. A. phone book). In industry, if the worker is really expected to be diligent in his torquing habits, the torque wrenches aren't locked up on the other side of the factory.

[See MOUTH, Page 3]

MONTH .....

[Continued From Page 2]

I could go on and on, and so could you. I only have two points to make in all this rambling. First of all, I think it helps to step back once in a while and realize that certain things about our business don't make any sense--they are not realistic. If nothing else, you won't get frustrated trying to make sense out of them. Secondly, and more importantly, that is what Rivet Ready is all about. There are a lot of specific initiatives in the RR document, but the bottom line and the common thread is putting maintenance people back in the business of fixing airplanes and doing it smart. Gen Masterson is totally committed to that proposition. Quit doing dumb things. (That's a paraphrase--not a quote. He's more eloquent than that.) So hang in there. A lot of people are working the problem, but there are no easy solutions. It may not all happen on our watch.



Larry Matthews  
Lt Colonel,  
President

#### NOW IT'S MY TURN

I do not agree with Col Hoelzer's recommendations for supplemental courses in civil engineering, personnel, supply, etc., for company grade officers [NMA Newsletter, Aug 82]. True, we should and do encourage maintenance supervisors (officer or NCO) to go beyond their defined area of responsibility to get the job done. However, I believe the pendulum is swinging too far in that there is a growing tendency for too many senior Air Force leaders to expect maintenance officers to be the "jack of all trades."

The result of this pressure is that too many maintenance officers, in an attempt to keep from being branded as slow-leaking half-steppers, are learning all about everyone else's job and not minding their own store. The result, as I see it, is a growing population of slick manipulators of supply, CE, etc., who know less and less about fixing airplanes. Simultaneously, and for different reasons, there is a growing number of minimally qualified airmen and NCOs attempting higher UTE rates with ever more complicated aircraft and less dollars and resources, while the maintenance officers are busily roaming around in supply, CBPO, CE, etc. When it comes time to being able to

really ramrod a flightline, I'm afraid we will find ourselves with a group of cheerleaders who can spout plenty of superficial generalities about broke airplanes and lots of details about how the 2095 and 1348-1 process works, but have no conception of the distinction between a fixed jet and some shade tree mechanical action.

I believe the first article of maintenance doctrine is that the officer's primary reason for being is to fix airplanes--safe, quick, and correct. I further believe this applies to virtually all of us irrespective of duty location; be it AMU or Air Staff. Naturally, maintenance officer involvement with people administration and logistics management is necessary. But we hire a cast of thousands to worry the details of those matters. I say we should turn maintenance officer attention toward the flight line and shops and leadership of the people who are there--or should be [See MY TURN, Page 4]

**THIS COLUMN IS INTENDED TO VOICE OUR MEMBERS' COMMENTS AND OPINIONS.**

MY TURN

[Continued From Page 3]

there. Are they trained, skilled, equipped, supervised, and present in sufficient numbers to meet the tasking? To really answer these questions and do something about it, leaders need to be present, not wandering around in CBPO, etc.

I am now at unit level and from a sense of survival, my fellow officers and I spend a ridiculous amount of time and energy in places other than the flight line attempting to sort out problems that in many cases were caused because folks outside of maintenance were not doing their jobs. But what we are doing is patently wrong, and to get more training to do it better is a classic illustration of treating symptoms vice causes.

I'm not proposing a stone wall concept in which we stubbornly sink the boat while proclaiming our rights. What I do believe, however, is that those AF leaders in the MAJCOMs, Air Staff, and IG should begin a campaign to enforce job performance for everyone in the logistics and support world. I believe it is time for a reemphasis on defining the responsibilities of supply, personnel, maintenance, etc; then making each agency, including maintenance, step to the drum. Training one group how to do someone else's job seems very wrong and, if any AFSC outside of maintenance is pursuing a like program, it is a carefully kept secret from me. That should tell us something.

LTC Albert Schmidt  
552 AWACS/AMA

Words of Praise . . .

We've needed a voice for a long time. Trying to do more with less has been our way of life for over 20 years in this business. Now, some more sensible approach to the way we do business is needed--the old path is petering out fast.

LTC Warren Tyler  
18 TFW/AMA

I am honored to accept your kind invitation. I have been assigned to maintenance-related duties for the past 11 years and I fully support the objectives of the Maintenance Officer Association. It is indeed a pleasure being associated with an elite group of professionals such as this.

Maj Mike Bridge  
ATC Tng Advisor to SAC

BERROTH STRIKES AGAIN

In the last newsletter it was noted that MOA member Col Karl Berroth was the DCM of the Daedalian maintenance-award-winning 81 FWW. Well, it turns out that Col Berroth, now the DCM at the 57 TFW, Nellis, was not finished. The Air Force Association recently announced that the winner of the Thomas P. Gerrity Award for Logistics was Col Karl Berroth for his "outstanding leadership and imaginative managerial style." We offer our sincere congratulations, and hope that Col Berroth will reveal his secret formula in a future newsletter.

O-5 PROMOTIONS

The CY 82 Lieutenant Colonel promotion list indicated that Loggies, as a whole, fared very well again. The first-time eligible selection rate for USAF line officers was 65%. For Loggies as a group the selection rate was 67%. 40XXs racked up 70%, with 4024s at 72% and 4054s at 63% (63% was also the AF-wide nonrated average). It should be noted that the 4024 rate (72%) exceeded the pilot selection rate of 71%. There were also four 40XXs promoted BTZ (three 4024s; one 4054).

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The mind is simply wonderful--it works from your birth until the moment you stand up to give a briefing.

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MAINTENANCE

[Continued From Page 1]

son's time is consumed in coping behavior stimulated by environmental events. A substantial portion of the variance in the productivity equation can probably be accounted for by events external to the individual maintenance person and therefore beyond his or her control. The popular mythology is that the majority of the variance in the productivity equation is controlled by the individual maintenance person, and the sketchy evidence from this study indicates that the situation, rather than the individual, contributes to the majority of the variance. If future research confirms the preliminary data in this study, managers could derive greater productivity increases at less cost by proper control of the environment rather than focusing all productivity efforts on the individual maintenance person.

The second observation deserving comment here is what it is that the maintenance person complains about. In most of the cases observed, maintenance persons liked their jobs but disliked environmental events surrounding their jobs. [Editor's Note: This observation is strongly supported by other research and data collected by LMC, LMDC, and AFHRL.] They pointedly attacked segments of the maintenance environment and specifically perceived that, rather than assisting, environmental events hindered maintenance efforts. They are adamant and vocal about this. Not only do environmental events appear to control the majority of productivity variance from the observer's point of view, but the hands-on maintenance people verbalize a similar perception.

The third observation is that the individual maintenance person is doing a good to excellent job (sample not representative) and engages in reasonably positive coping behaviors from a productivity point of view. However, their coping behaviors are often contradictory to organizational policy, to them a perceived distraction. What they are experiencing is the frequently concealed conflict between pressure for maximum sortie generation and compliance with organizational policy.

The official point of view is that these two objectives are one and the same while the maintenance person views them as mutually exclusive. To them, organizational policy and structure are part of the environmental distractions that steal valuable time from what is really important. The maintenance person is productivity oriented and strongly resents environmental events that interfere with task accomplishment. Management might achieve significant productivity gains at low cost by better control of distracting environmental events. This strategy should produce quick returns and is easier to implement than significant attitude change.

Conclusion

Traditionally, management has focused its productivity efforts on the individual at the bottom of the organizational hierarchy who engages in the hands-on core technology. This approach assumes that the hands-on Air Force maintenance person controls a substantial portion of the variance in the production equation. What additional resources that are committed are committed to doing something to the individual to increase productivity. The conceptual argument contained herein challenges the above assumption and suggests instead that environmental distractions (situational constraints) dominate the variance in the productivity equation. A highly motivated, competent maintenance person may not be productive, but it will be the fault of the environment in which the task is contained, not the fault of the individual. If the tentative evidence in this study is borne out, there is a much higher potential for increasing productivity by changing the environment rather than the individual.

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**ABOUT THE AUTHOR**

Dr. William D. Kane, Jr., is an Associate Professor of Management, and has been at Western Carolina University since August 1976. Dr. Kane retired from the Air Force after 20 years' service (primarily in [See MAINTENANCE, Page 6])

## CAREER COUNSELING DON'T FORGET THE COMPANY GRADERS

By Major Mark B. Roddy  
4 CRS/CC, Seymour Johnson

The Air Force goes to great lengths to counsel first-term enlisted personnel on the benefits of making the service a career, time which is well spent. How many of us, however, spend time talking to the first-term maintenance officer--lieutenants and the captains in the four- to six-year range about their career plans. Many of our company grade maintenance officers probably see our career field as an endless succession of swing shift jobs, 12-hour days, and 6- or 7-day weeks. They see little opportunity forthcoming to enhance their personal and professional careers, that is, time to pursue advanced academic degrees, enjoy a hobby, or even be with their families for more than a few hours a week while still filling meaningful, promotable jobs.

A lot of us know that life in the maintenance career field has much more to offer than the gloomy prospects I listed above, but our younger officers need to be shown this and given the assistance and career guidance

to help them achieve these goals.

Recently in reviewing the records of one of my newly-assigned officers prior to a career counseling session, I discovered that her Form 90 was totally blank. It would obviously have been of little benefit to either her career planning or to her career monitor at AFMPC in matching her goals and desires with the needs of the Air Force. This officer had been in three years, but no one had ever talked to her before about career progression or how to fill out a meaningful Form 90!

We owe it to ourselves, our career field, and our junior maintenance officers to take the time to see what their career plans are and to help them achieve these goals through career counseling.

Remember that these officers will be the squadron commanders and division chiefs of tomorrow's Air Force when we are the DCMs or directors of maintenance. Time spent helping them career plan to get the right job now will prepare them for the demands of the future.

### MAINTENANCE .....

[Continued From Page 5]

avionics maintenance) and earned his Ph.D. in Organizational Behavior from Cornell University. While in the Air Force, he earned a B.A. in History and a M.S. in Systems Management. Dr. Kane has conducted maintenance-associated research as a summer faculty research fellow with the AFHRL/ALM at Wright-Patterson AFB. The combination of his experience as a maintenance technician and his academic credentials gives him a unique perspective in viewing the maintenance environment. Dr. Kane's article in the Air Force Journal of Logistics (Fall 1981) entitled, "A System's View of Maintenance Performance," should be of particular interest to NDA members.

### ONE RED ROSE

New suggestions for the name of the newsletter and votes keep dribbling in. Apparently a lot of people care what we call the newsletter, but unless they are writing us on another matter, most people just don't let us know their opinions. We felt the best way to handle this very pressing issue is simply to include the choices with our election ballot due to go out to the members after the first of the year.

### MEMBERSHIP ROLLS

To save you statisticians from having to count them, the membership figure when this newsletter went to print on 19 November was 152. (See pages 11 and 12.)

PERSONNEL

**A MAINTENANCE OFFICER'S PERSPECTIVE  
ON OFFICER PROMOTION BOARDS**

**By Capt John Labien  
HQ AFMPC/AFMCPD2**

"Did this officer ever review his/her promotion folder?" "Why isn't there a photograph in this record?" "Why doesn't the officer's selection brief show his/her duty title, awards, education level, or PME?" These are a few of the questions I asked myself daily while working as assistant recorder on the CV82B Central Captain's Board. After two weeks with this promotion board, I felt that our young maintenance officers need to take a more aggressive role to understand the important information every officer should monitor in his record.

The officer promotion board process starts by giving briefings to the promotion board members (colonels/generals) covering all board procedures. These detailed briefings cover the contents of the officer selection folder, the whole person concept, and use of the scoring scale. The whole person concept considers such factors as performance, breadth of experience, leadership, job responsibility, professional competence, specific achievements, and education.

The next step in the board procedure involves a trial scoring of 15 to 20 officer records. This allows the board to develop individual and group scoring standards using the whole person concept to evaluate each record. After the board president (a general officer) is satisfied with the standards established during the trial run, the board begins the actual scoring process. The panels are told to take as much time as necessary to properly evaluate each record. Scoring is based on a six to ten point scale at half point increments. If two members give scores that vary two points or more, there is significant disagreement and the record is returned to the panel chief to discuss the split condition with the panel members involved and to bring the variance to within one-and-a-half points. The board president performs an additional audit by reviewing

numerous records after they are scored by the panels. If he has any doubt concerning the score, the president may send the record back to another panel for scoring.

After all records have been reviewed, an order of merit is developed starting with the records receiving the highest score. The allowable promotion quota is applied starting at the top of the list until the promotion quota runs out. The quota for captain was a number equal to 95% of those officers in the promotion zone (IPZ). The score category where the quota ran out is called the "gray." All records in this gray area are rescored to determine which will be selected for promotion. Once the gray has been resolved, the board reexamines the lowest scoring selectees to determine if they are fully qualified for promotion as required by law. (Officers who can be selected if the quota allows must also be fully qualified.)

The accuracy and completeness of your officer selection folder are vital in this promotion process. Most maintenance officers know the importance of their records. They also know that 60 to 90 days before a promotion board convenes each eligible officer receives his/her preselection brief through the CBPO. But do our young officers know that they share the responsibility for identifying any errors or omissions in their record/promotion brief and having them corrected by the CBPO? Some of our first lieutenants may not have realized this responsibility when they reviewed their preselection brief for the CV82B Captain's Board. Examples of the problems you should look for in your records include:

-- Officer photo missing (affects captain's board only) or not in accordance with AFR 35-10. MPC identified all missing photos to the responsible CBPO and officers involved 60 days prior to the board. To insure that your photo presents a professional image, I would recommend the following actions before having your next picture taken: First, get a fresh haircut. Make sure that your hair, sideburns, and mustache are far enough within limits that there will be no question [See PROMOTION BOARDS, Page 8]

PROMOTION BOARDS. . . . .

[Continued From Page 7]

when reviewing the picture that you are an outstanding example of AFR 35-10. Second, insure that your uniform is in accordance with AFR 35-10 (medals, insignia, etc.).

-- Citations or orders for decorations missing. These were also identified 60 days prior to the board by MPC.

-- Training reports or OERs late or missing. These were tracked weekly by MPC so only a few were still missing. An area we could improve is the number of officers who did not have any OERs in their records from their present duty assignment because they changed reporting officials every 60 to 90 days. It is very difficult for a board member to clearly assess potential, especially on a lieutenant, if there are no OERs to show how the individual has performed during the last year or more.

-- Missing or erroneous information on the officer selection brief. These items should have been corrected when the officer received the preselection brief from his/her CBPO 60 to 90 days prior to the promotion board. Items which may be in error include: duty title history; academic degrees and schools attended (make sure your education level and major study area are properly listed on your preselection brief); professional military education and method of completion (SOS/ ACSC, Res/Corres); and decorations.

As professional maintenance officers we should insure that the junior officers who work for us understand the importance of reviewing their promotion folder and officer selection brief. If you have any questions involving the selection process or your officer records, go to your local CBPO.

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THE CHIEFS' GROUP

By **CSgt Jim Binnicker**  
**MC AFMPC**

We are not the local Chiefs' Group that challenges (and usually wins) the eagles in softball, volleyball, or whatever. We are THE Chiefs' Group at the Manpower and Personnel Center (MPC)--officially known as the office of the Assistant for Chief Master Sergeant Matters. We are also known by a few other names that cannot be printed. Prior to April 1978 we were part of the Senior NCO Assignment Branch within the Airman Assignments Division. We were then separated from the E-7/E-8s and became a full-fledged division, managing all chief master sergeant assignments. Our primary objectives are to expand the role, responsibilities, and prestige of chief master sergeants; assign chiefs to requirements based on specific qualifications and experience needed; and maintain balance within the chief resource. The main tool that we utilize in managing CMSgts is the Chief Enlisted Manager (CEM) Code (that's AFSC for SMSgts and below). We also utilize selection folders (APRs, decorations, citations, CMSgt resume, and correspondence) and Palace Mode CEM Codes. The term "crossflow," as opposed to "cross-training," is used because CMSgts are not required to go through the normal retraining process; however, it does require functional manager approval.

The Chiefs' Group is geared toward personalized service, and we encourage chiefs to contact us regarding their careers. Contrary to popular belief, calling the Chiefs' Group does not cause us to look at the chief for a possible assignment.

Shortages in the sortie producing specialities continue to be our biggest concern, and we do everything possible to keep chiefs in these critical areas. One program is the High Year of Tenure (HYT) program used to extend volunteers beyond the 30-year point. Last year we were successful in keeping 64 43200 maintenance chiefs an additional year. We are constantly looking [See CHIEFS, Page 9]

**CHIEFS** .....

[Continued From Page 8]

for ways to refine the way we do business and are open for suggestions. Please write us at AFMPC/MPCRC, Randolph AFB, TX 78150.

One final note that has nothing to do with chief assignments but a lot to do with maintenance. In viewing the ever-popular movies Star Wars, it was reassuring to note that, even into the 21st Century and even with all the advancements in aviation, the crew chief was still needed to guide the spaceship out of the hangar.

**NEWS FROM USAF CLASSIFICATION**

By Major Scott Madole  
HQ AFMPC/MPCRC

"The drive is on for recruiting and retaining quality troops!"

"Terrific!" snorts the crusty line chief after struggling through a typical 11-hour day. "When's the blue bus get here?"

The haggard line boss shows some insight in this off-hand remark. He is right: there are no blue buses parked just outside the main gate, ready to discharge twenty 7- or 9-levels poised to eliminate the diagonals and Xs from his status board.

Many times we have a great deal of difficulty relating Manpower Personnel and Training programs directly to improvement in mission accomplishment. We are trying, however, to relate individual aptitudes and interests to success on the job. Right now a contractor is attempting to come up with objective performance measures based on tasks performed on the job for 432X1s (crew chiefs). The idea is to develop performance measures, test crew chiefs, try to validate factors such as aptitudes, interests, or life experiences which

predict their success, and finally use these factors to match people to jobs. If the methodology successfully develops useful, productive measures, investigation will begin on other AFSCs. More importantly, if it is successful, we will finally have a way of predicting how an individual performs on the job before he enters the Air Force.

All this is not new to the line chief. He knows a quality crew chief is a guy who can do the job effectively and efficiently. He also knows that no single factor such as aptitude to do a job or adequate training or motivation makes someone a quality troop. It is a combination of factors that contribute to quality. A costly research effort into predicting individual job performance has just begun, and it is going to be difficult to analytically determine the factors which would predict success. However, if it is successful, the effort expended will be worth the cost. We will keep you posted.

**FINANCIAL STATEMENT**

FOR CY 1982

Submitted by Capt Wiley Mahan

**INCOME**

Dues \$2,490.00

**EXPENSES**

Administrative Services	601.75
Postage	199.95
Newsletter Printing	324.72
Stationery	216.12
Administrative Supplies	45.90
Bank Charges	21.07

TOTAL EXPENSES 1,409.51

BALANCE AS OF 15 NOV 82 \$1,080.49

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No person cares one single whit who's pulling the cart until the horse begins to balk.

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### CHALLENGES OF THE FUTURE

By LTC Bill Dillon  
HQ AFRES/LGM

This year brought a subtle maintenance change in the AFRES/REGAF relationship that has high potential to break down some organizational barriers that exist throughout the Air Force. The Air Force Reserve maintenance procedures are included in the basic SAC and MAC Rivet Ready driven 66-XXs to be published in January 1983 and the TAF 66-XX to be published in March 1983. Placing our unique procedures in the basic book of the commands, AFRES will go to war with forces able to communicate and, ultimately, understand each other. The exchange of ideas in peacetime will enable both to choose the best to improve the total force. Also, should we go to war, far less time will be lost adapting AFRES to the gaining MAJCOM's way of doing business. Nowhere was this more evident than in our adopting TAC's combat oriented maintenance organization (COMO) two years ago from our 66-1 orientation.

Adopting COMO was far from painless. We encountered not only the normal resistance to change but we had to establish more direct lines of communication with TAC/LGQ and /XP functions, as well as define the COMO's effect on our air reserve technician (ART) civil service structure. But we bit the bureaucratic bullet and examined the then-current structure's reason for being, its probable dissolution during war and weighed the personnel impacts against the benefits of going to COMO. The overall impacts were slight because the promotions and demotions cancelled each other out. The discomfort of change was worth the effort, for now the tactical fighter portion of AFRES is not only more like its gaining command--TAC--but it paved the way for our participation in the writing of the first Tactical Air Force 66-XX. AAC, AFRES, TAC, PACAF, and USAFE have initiated the steps toward a more unified TAF through joint staffing of 66-XX. We all have a better understanding of the dynamics of a 72 PAA wing versus a 24 PAA squadron. Each has its own organizational requirements, and small unit deployments are a wartime fact for all--not just for AFRES. In scrubbing down some of the wartime realities, we all asked questions about

such things as multi-organizational or multi-national control in, say, the NATO environment as well as other theatres of deployment. Unit tasking codes and man-power elements of the aviation, intermediate, and munitions packages were discussed. While some felt that such matters were on LGX or XP turf, there was a consensus that maintenance should organize during peacetime to fight the war and that each separate command of the TAF would not have its own peculiar war to fight. With few exceptions, we will all be gained by some other entity. The TAF has made quite a stride through Rivet Ready toward understanding and eventually organizing for these entities. Much has been done; there is much more to do.

This Rivet Ready thrust is especially appropriate for the year of the Combat Warrior and the creation of the Space Command. Maintenance in space has its own imperatives whose shape and destiny can either ride on the tails of strategic thinking or create its own Billy Mitchell as equal partners in policy formation to conquer the High Frontier of space. The winning of the High Frontier is our most important political and military challenge. The strategic perception of the High Frontier's impelling forces will shape its course while the future of our nation and economy will be shaped by its outcome; organizational barriers and enclaves of bureaucratic power will stifle its growth. In its own more prosaic way, Rivet Ready's real potential rests in creating a more universal view of maintenance freed from unexamined procedures. One of MDA's tasks, perhaps its most important, will be the encouragement of strategic military maintenance thinking and writing. LTC Ed Moitoza was right [MDA Newsletter, Aug 1982]: maintenance officers talk but do not write much about maintenance. Perhaps these threatening times and the promise of the High Frontier will free our bound ideas to soar to the galaxies.

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**KEEP THE FAITH**  
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**MOA MEMBERSHIP LIST**  
(Effective 16 November 1982)

Capt Orlando Albani, HQ USAFE/LGMS  
 Maj Roger Allen, AFDSDC/LGM, GUNTER  
 LTC Bill Ambre, 6515TESTSUPSQ/CC, EDWARDS  
 Col John Anderson, HQ USAF/LEYN  
 LTC Fred Aultman, SM-ALC/MAW  
 Maj Gary Austin, 6594 TESTGP/LG, HICKAM  
 Col Thomas Bainbridge, HQ SAC/LGMT  
 Capt Carolyn Balven, ASD/TAF, W-P  
 LTC Dennis Beck, AFISC/SE, NORTON  
 Col Jay Bennett, STUDENT, ICAF  
 Maj Steve Bentley, HQ AFISC/IGBM  
 Col Karl Berroth, 57 FWW/MA, NELLIS  
 LTC Bob Bishop, SA-ALC/MAQ  
 LTC Jim Blackstock, HQ AFLC/MAJ  
 Col Frank Blazek, HQ AFLC/MAS  
 Maj Alan Blomgren, 934 TAG/MA(ANG), MPLS  
 Capt Terilyn Bodenheim, OD-ALC/MMS  
 LTC Ken Boles, HQ ATC/TTY  
 Maj Mike Bridge, HQ SAC/ATC-LO  
 LTC Art Briggs, HQ USAF/LEYY  
 LTC Whitney Broussard, FACULTY, AFROTC, TROY ST  
 LTC Richard Browning, 388 TFW/MA, HILL  
 LTC David Butler, HQ PACAF/LGM  
 Ms. Wendy Campbell, AFHRL/LRLC  
 LTC John Chambers, 3211 FMS/CC, EGLIN  
 Capt Meighan Chisholm, HQ USAF/LEYM  
 Maj Charles Coleman, HQ TAC/LGQP  
 LTC John Covi, HQ SAC/LGMO  
 Maj Dave Csintyan, HQ AFMPC  
 Col Charles Cunningham, 3205 LOGGP/MA, EGLIN  
 B/G Lewis Curtis, HQ USAFE/LB  
 LTC James Cushman, 8 AGS/CC, KUNSAN  
 Maj John Damon, HQ AFSC/LGMP  
 LTC David Dietsch, STUDENT, AWC  
 LTC Bill Dillon, HQ AFRES/LGMM  
 LTC Pete Doe, 20 TFW/MA, UPPER HEYFORD  
 Maj Robert Drewitt, AFLMC/LGM, GUNTER  
 Col John Duckworth, HQ USAF/LEYY  
 Maj John Edenfield, STUDENT, ACSC  
 Col Donald Edwards, HQ PACAF/IG  
 Col Jack Elle, 57 FWW/MA, NELLIS  
 LTC Gary Eppler, HQ AFISC/SEF  
 LTC James Flasch, HQ TAC/LGFM  
 Maj Paul Fox, 3205 LOG GP, EGLIN  
 Maj William Frankhauser, HQ PACAF/IG  
 Maj Richard Frome, 379 MNS/CC, WURT  
 Maj John Fullerton, 41RWRW/LGX, McCL  
 Maj James Garlitz, 4450TACGP/MAA, NELLIS  
 Capt Allie Gilbert, HQ PACAF/IG  
 LTC Luke Gill, HQ USAF/LEYN  
 Capt Fred Graham, HQ USAF/LEYM  
 Col Lee Greer, SM-ALC/CV  
 Col John Griffin, HQ AAC/LGM  
 Col Larry Grimard, 20 TFW/MA, UPPER HEYFORD  
 Capt John Hammes, HQ MAC/LGMM  
 1Lt Joan Hansen, 3214 OMS/SUPR, EGLIN  
 Maj David Helms, 33 ENS, EGLIN  
 Maj Lykes Henderson, HQ USAF/LEYY  
 Col Ronald Hoelzer, HQ AFLC/LDA  
 LTC Jack Hogan, HQ 5 AF/LGM  
 Capt Fred Hudson, 355 AGS/MAAM, D-M  
 Capt John Hunt, 366 TFW/MAS, MT HOME  
 LTC Bill James, HQ TAC/LGO  
 LTC Ward Johnson, 320 BMW/AMA, MATHER  
 Capt Judith Kautz, DC-ALC/MNB  
 Capt Larry Kays, HQ USAFE/LGM  
 LTC Kevin Kelly, HQ PACAF/LGMM  
 1Lt Allen Kerr, HQ AFSC/LGMP  
 1Lt Robert Kincaid, HQ TAC/LGMF-16  
 LTC Rodney Kontny, AFTEC/LGMA, KIRTLAND  
 Maj Jerry Kucharczyk, HQ USAFE/LG EXEC  
 Maj Peter Larsen, 4235 STS, CARSWELL  
 Capt Lisa Long, 401 AGS, TORREJON  
 Col Steven Long, 3 TFW/MA, CLARK  
 Capt Donald Lowery, 92 FMS, FAIRCHILD  
 LTC Aulay MacRae, HQ USAFE/ATCLO  
 Capt Roy McBrayer, 14 OMS/CC, COLUMBUS  
 Col Robert McCoy, SM-ALC/MA  
 Maj Bill McDonald, HQ USAF/LEYY  
 Capt Wiley Mahan, HQ USAF/LEYM  
 LTC Larry Matthews, HQ USAF/LEYM  
 LTC John Merryman, 64 TFW/MAM, REESE  
 Maj Gene Mertz, 347 TFW/MAINTCON, MOODY  
 Col Philip Metzler, OD-ALC/MAA  
 LTC James Miles, 56TTW/MA, MACDILL  
 Maj David Miller, AFISC/IGBM  
 LTC Jere Miller, HQ USAF/LEY  
 Maj Larry N. Miller, 926 TFG/MA, N.D.  
 LTC Edwin Moitoza, 36 TFW/MAM, BITBURG  
 LTC Guy Morgan, HQ USAF/LEYY

### MOA MEMBERSHIP LIST (Continued)

Maj C. E. Motley, 3350 TCHTG/TTMG, CHANUTE  
Col (Ret) C. O. Murphy, Jr., NORTHROP  
Col Albert Nichols, HQ USAFE/LGM  
LTC Harvey Nixon, HQ USAFE/LGMM  
LTC Max Noble, 92 BW, FAIRCHILD  
Col John Nowak, STUDENT, ICAF  
LTC John Paganoni, HQ USAF/LEYY  
LTC Larry Parent, HQ USAF/LEYY  
LTC Reginald Pasieczny, 7350 ABG/DCRM, TEMPELHOF  
Maj Warren Payne, 17BCAM/CC(ANG), W-P  
Capt Leo Petrin, HQ USAF/DOX  
Maj Doug Polk, HQ USAF/LEYY  
Col Steven Powers, STUDENT, AWC  
Maj Jerry Price, HQ PACAF/LGMM  
Maj Michael Price, RAF EXCH PGM  
Col Carl Rawie, SA-ALC/MA  
LTC Danny Reid, 3 TFW/ADCM, CLARK  
LTC Tommy Richardson, 37 TFW/MA, GEORGE  
1Lt Joseph Rine, STUDENT, AFIT, W-P  
Col Thomas Ringley, STUDENT, AWC  
Maj Mark Roddy, 4 CRS/CC, SEY. JOHNSON  
Capt Al Rodriguez, HQ USAF/MPPT  
LTC Ronald Sams, HQ USAF/LEY EXEC  
Capt Gary Sandiford, WR-ALC/MA  
LTC Albert Schmidt, 552 AWACS/AMA  
Col Barry Schwoyer, STUDENT, AWC  
Capt Timothy Seratt, HQ PACAF/IGIL  
Capt Nancy Shefflette, HQ MAC/LGE  
LTC Don Shelhammer, 92 FMS/CC, FAIRCHILD  
LTC Dwight Shuler, HQ USAF/LEYY  
LTC James Shutt, 36 AGS/CC, BITBURG  
Maj Robert Sloan, HQ USAFE/LGM  
Maj John B. Smith, HQ USAF/LEYY  
LTC Rondal Smith, 509 BW/AMA, PEASE  
Capt Wayne Smith, HQ TAC/IG  
Maj Jim Sonnenberg, 8 TFW/MA, KUNSAN  
Maj Gregory Stanley, HQ AFMPC  
LTC L. D. Stewart, 51 COMPW/AMA, OSAN  
Maj Mahlon Stief, 433 TAW(AFRES), KELLY  
Col Richard Taubinger, 52 TFW/MA, SPANGDAHLEN  
LTC Frank Todd, STU, NATL WAR COL  
LTC Rocco Torre, HQ PACAF/IGIL  
Maj Bill Townsend, 3205 LOG GP, EGLIN  
1LT Kenneth Trojan, HQ PAFAC/LGMM  
LTC Warren Tyler, 18 TFW/AMA, KADENA  
Maj Rod Venables, HQ TAC/LGQ  
LTC Gordon Vining, AFISC/SE, NORTON  
Capt Richard Wagner, HQ AFISC/IGDM  
Col James Wakefield, 92 BW/MA, FAIRCHILD  
Col Ron Walker, HQ USAF/LEYY  
Maj Geary Wallace, HQ ATC/LGMA  
Maj Delyle Wallman, HQ PACAF/LGMM  
Maj Jack Ward, HQ SAC/LGMO  
Maj Jack Warner, HQ TAC/LGM  
Col Dick Watson, 41 RNRW/LG, McCLELLAN  
LTC Donald Wells, 318 FIS/LGM, MCCORD  
Maj Charles Westfall, 52 EMS/CC, SPANGDAHLEN  
LTC Neil White, DIR/AMMO OPS, MCALST  
Maj Dennis Nightman, 89 FMS/CC, ANDRW  
Maj Al Wood, 4 EMS, SEYNOUR JOHNSON  
Maj Walter Worley, HQ USAF/LEX  
LTC Jey Younger, 6515 DNS/CC, EDWARDS

THIS COLUMN HIGHLIGHTS SOME OF THE THINGS ABOUT THE MAINTENANCE BUSINESS THAT YOU JUST CANNOT BELIEVE—IF YOU DIDN'T KNOW BETTER. THE AUTHOR, WHO CHOOSES TO REMAIN ANONYMOUS, STATES: "I HAVE MIXED EMOTIONS ABOUT SUBMITTING THIS ARTICLE FOR THE NEWSLETTER. I DO NOT THINK THAT NEGATIVISM OUGHT TO CREEP INTO NDA, AND THERE IS SOME OF THAT IN THIS ARTICLE. ON THE OTHER HAND, IF I AM CONVINCED, MAYBE OTHER RATED MAINTENANCE OFFICERS WILL SEE THE LIGHT."

YGBSM

### A FLYING MAINTENANCE OFFICER?

At a recent briefing to the new vice commander, the DCM provided an overall picture of his organization, its responsibilities, resources, and goals. In addition to the DCM's key staff, all of his squadron commanders were present.

Everything was going well until he got to the last part about maintenance goals: there were only four for an approximate 2,000-man outfit with a variety of assigned aircraft. The last goal, to hear the plea, was the most important: We really needed to obtain flying status for his rated assistant. After all, with the variety of possessed aircraft and only three rated officers assigned to the maintenance complex (the DCM, his assistant, and the chief of QC), it was impossible to maintain weapon system expertise and sample the quality of aircraft by flying them.

Naturally, you could have heard a pin drop among the professional maintenance officers. The ADCM's flying status is one of the maintenance complex's four major goals? I talked with a few of the MOs after the meeting and found their thinking to be in line with my own. And since I am also rated—I checked my left pocket to see if I had forgotten my wings when he said that part about "only three rated officers in the maintenance complex"—I decided it was up to me to tell the DCM that part of his briefing had gone over like a pregnant high jumper. So, I examined the arguments.

#### His Story

1. The DCM samples the quality of maintenance by flying.

2. The DCM maintains technical expertise by flying assigned aircraft; therefore, the guys can't pull the wool over his eyes.

3. The troops like to see the DCM fly their aircraft; it gives them a sense of pride.

#### My Arguments

1. I am not sure how often a DCM (or assistant) could expect to fly, but I submit that the frequency could not be often enough for a sufficient sample to develop a confidence level on the quality of maintenance. Secondly, that is what all these analysts and quality control/assurance people have been hired to do. Other means are also available, e.g., aircrew questionnaires, deviations, and personal involvement. In the time it would take him to fly a 1 1/2-hour sortie, the DCM could personally review several maintenance actions, examine forms, and see/be seen by many of his people—instead of a few. Besides, he is usually given a pet aircraft, line chief, and crew chief. I certainly would not let Old Article 15 Charlie launch him.

2. That second part does not seem to hold water, either. Technical expertise? Ever compare a -1 TO to a -6? What level of technical expertise could a DCM maintain? Besides, that, too, is not his job. He is supposed to be managing resources—not turning wrenches. If he needs to check some technical advice he has been given, there is always a second opinion available from the tech rep, the depot, or the manufacturer.

[See FLYING, Page 20]

## VIEWS FROM A FRIEND OF MOA

By Mr. David Shipton

[Mr. David Shipton is a retired USMC NCO who served both as a maintenance technician and a first sergeant while on active duty. He is presently involved with an NRL study of the maintenance environment as a staff scientist employed by Applied Science Associates, Inc., of Valencia, Pennsylvania.]

The purpose of any fraternal organization is to foster brotherhood and to take care of what we call "our own." In the case of your group, you have the obligation to try to take care of a bunch of people too often referred to as maintenance weenies--those folks, officers and enlisted alike who bust their butts day in and day out without fail and really don't ask for much in return. A pat on the back, a simple thank you goes a long, long way toward making up for some of those long, hard days and nights. Sure, sometimes they bitch about how they are treated and how much work has to be done. They have the right to bitch. They are the people who have to give up their weekends and nights with their families. They are the ones who get called out of a warm bed to take care of a sick airplane or fellow worker. They are the folks who work in the rain, sleet, snow, hail, and every other kind of adverse condition known to man. They feel put upon when they have to make and meet appointments, scheduled on their off-time, just because the "other Air Force" works normal civilian business hours. They have the right to voice their opinions from time to time. Even though they complain about flying that extra few sorties on the week-end, they still do it. You maintenance officers know that when you ask them to do that little bit extra, there will be a lot of moaning and groaning, but they still do it. No matter what is asked of them, they get the job done somehow. And no matter what any person says, they do a super job. It's your job as a group to keep each other informed and to try to inform the rest of the world about what is being done to improve the maintainers' way of life. It's also your job to keep the bullshit to a minimum and to make sure that every person who works in maintenance knows what's going on. (Big order.) People who are

informed at least have an idea of what is taking place and just why they are being asked to do "just one more thing." It won't stop their complaining, but it will make them feel better.

Good job. Keep the Faith and don't let the bastards grind you down. Good luck to the MOA which, by the way, is an extinct flightless bird that looked good but was finally eaten by the big guys in town. Let's hope that doesn't happen to you folks. If there is anything I can do, don't hesitate to ask.

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### MOA UPDATE

The membership committee has provided its comments to the first draft of the MOA bylaws. A revised draft should be in the hands of the charter committee by the time you read this. The MOA legal advisor, Bob Dundervill, is evaluating the draft of our articles of incorporation which are required for incorporation as a non-profit organization by the State of Virginia. Our target is to have both finalized before the holidays.

I continue to run into members who, when they see me, suddenly remember a whole bunch of folks they have been intending to nominate for MOA membership. Maybe we should set up an office in an O Club bar somewhere. But seriously, you would be surprised at the large percentage of members who have never nominated a fellow MO for membership. Since the only source of new members is through the nomination process, we may be short-changing some of our comrades. What say you?

Many thanks to the people who contributed to this newsletter. The variety of topics and insights provides an excellent balance. A special thanks to Maj Dave Csintyan and the folks at MPC. We sincerely appreciate the effort put forth by our friends at Puzzle Palace South to spread the word and keep the troops informed. I urge you all to submit your ideas, either as articles or Letters to MOA. Don't worry about form or format--on the back of an envelope is fine. We care much more about your ideas than your typing abilities.

## REFLECTIONS ON A TOUR AT HQ TAC

By Major Jim Sonnenberg  
8 TFM/MA

### Chapter 1: The Big Picture

If there is a single comment that would apply to the completion of any headquarters job, it would surely be to this effect: It was a good opportunity to see The Big Picture.

Before I went to TAC, I had heard people say such things, but I had no real concept of what The Big Picture really was. Now, after almost three years of looking at, around, and through that picture, I am still not sure what it is. But there are a few things to say that will enable folks to discern it from a little picture (maybe three out of five times).

-- It is complex. If you understand everything about what you see, you are looking at the microfilm, not the cinematographic edition.

-- It is in low contrast black and white, always shades of grey, never technicolor. Color, contrast, and resolution are sure indicators of little flicks.

-- It is a positive, absolute image that will enable people who know the least about your job to comprehend, in detail, the pettiness of your most overriding problems.

-- It also enables those people to do their own job more quickly and efficiently.

-- It allows prompt, sweeping decisions that solve a plethora of problems and will never cause problems of its own that "good managers and leaders" (at lower levels, of course) cannot overcome. Decision-makers who have access to The Big Picture can always be recognized by a sly, knowing smile when they answer questions from "little thinkers" who are having problems working in the confines of The Big Picture.

-- It can never be recognized adequately by anyone

with: a.) less than four years on a headquarters staff; b.) frequent access to counterparts in the field; or c.) people with no thirst for a specific interest group to assume the lead in a continuing struggle to see more of The Big Picture.

After fighting The B.P. for a couple of years, the good staff weenie will begin to catch sight of the glimmer radiating from that grail. At that point, there is hope. The tone of voice changes to become more confident and imperious, the tone of correspondence becomes more informal, yet more polite, and telephone calls to the field begin to slacken as understanding of short-term problems are overcome by "the best interest of       (Fill in the blank)      ." It is also about this time that the person begins to wonder about the next assignment and what headquarters staff job would best suit his (this is an editorial "his," to include the feminine) career needs. The conversation he has with Palace Log will probably sound like, "Kunsan!!! WTFD! Best interest of whose Air Force? What do you mean I can't see The Big Picture?"

### Chapter 2: Making Policy

Probably the most rewarding aspect of a staff job is the opportunity to make policy that others will obviously recognize as a tremendous boon to their working environment. Should anyone be so crass as to take issue with your sound policy, they are quite easy to silence (see Chapter 1). Of course, like anything else, there is a complex system of checks and balances. To ensure improvements are supported at all echelons and throughout the staff, it must be coordinated with the maximum number of other agencies. The most efficient means of doing this is to have the secretary type a suspense slip to each coordinating agency with today's date. It takes practice, but the DPR must learn to arrive at the coordinatee's office looking breathless, disheveled, and harried. Questions must be answered vaguely, and additions/deletions/changes will be "added later if coordination can be done now to save time." It also helps to stack several manufacturer's [See REFLECTIONS, Page 16]

REFLECTIONS

[Continued From Page 15]

reports on your coordination sheet to make the package several inches thick. The final reward to all this effort is your own policy being implemented, and sometimes the IG will even write up those who do not follow it.

Another rewarding aspect of policy-making at a headquarters is the opportunity to watch major decisions being made. I cannot expound on this aspect in too great a detail because the MOA charter does not include academic freedom or a comprehensive non-attribution policy. No career protection either. Suffice it to say that people who should know often answer questions incorrectly, and the situation must be rectified. The best way to rectify the situation is to make the incorrect answer the correct one. This is the real test of the mettle of a staff officer. Since I cannot say much more here, those who would like to know more can send me a SASE for the rest of the story. (From the return address, I will decide whether to reply or not. Should be a good way to add to my unused stamp collection.) If the response is overwhelming, watch for a cryptic note to the editor from an anonymous contributor.

Chapter 3: TDY

TDY is how the staff officer gains the professional insight into how others "in the know" got to know. Inspection trips, staff assistance visits, and conferences provide invaluable experience and keep the officer "in touch with reality." I had a very difficult time understanding this until I discovered what "reality" was. Like The Big Picture (see Chapter 1), it can best be described by its characteristics rather than a strict definition.

-- It is most commonly found where beverages are served.

-- It varies in substance, depending on the rank, position, tone of voice, and volume of the person who knows what it is.

-- It is easier to understand after 2000 hours, especially if one is looking for it as described in the first characteristic.

-- Those who do not understand it probably do not go TDY very often.

-- Those who do understand it are less prone to say things about it, such as, "You're out of touch with reality," "be realistic," or "in the real world. . ."

-- It is a pervasive, all-encompassing knowledge that reflects an attitude and mentality.

-- It can be typified by such statements as "play the game" and "fill the square." Most MOs seem to understand it best (other than as described above) during surge exercises when QA writes up a DSV for pintle hook pins not being installed.

-- Our fearless editor and Association president epitomizes it.

Once reality is understood and internalized, TDY becomes one of the greatest joys of the staff officer. The long hours spend haggling over a conference table, the sweat poured on the parking ramp, and the innocuous advice given to field-level counterparts during a SAV suddenly become worthwhile.

Probably the most satisfaction derived from frequent TDYs comes from the creativity required to justify the trip and from telling coworkers humorous anecdotes about what someone else did.

P.S. If any readers get the impression that I am unhappy or disillusioned, they are wrong. I enjoyed my tour at Hq TAC, even with all the frustration, more than any other assignment I have had. The rewards of being able to (rather, trying to) change some of the foolish things we have done to ourselves goes beyond description. Although tongue-in-cheek, I sincerely think that the professional MO needs the opportunity to [See REFLECTIONS, Page 20]

## WHERE HAVE ALL THE HEROES GONE?

By LTC Larry Matthews  
HQ USAF/LEYN

An interesting phenomenon in Air Force aircraft maintenance is undergoing changes that warrant some study. This phenomenon has been termed "Hero Maintenance." The heroes in a maintenance organization were those technicians so clearly superior, usually in troubleshooting abilities, that they could fix anything. When real trouble arose, the appropriate Sergeant Hero would soon appear as if by magic. Although there were differences in the capabilities of the various heroes, each strong shop or work center had a hero. Especially to higher level management, the heroes appeared to be on duty 24 hours a day, seven days a week.

Sergeant Electric Hero was the court of last resort for a troublesome electric system that refused to accept the fixes of lesser technicians. The wing commander invariably directed the hero contingent, by name, to be on-site in the red-ball truck for important mission launches. The squadron commander would never consider deploying aircraft sans heroes. The leave schedule of key heroes was an item of discussion at wing staff meetings.

### Hero Characteristics

A common characteristic of heroes was technical expertise on the applicable aircraft system. Most heroes also possessed an uncanny troubleshooting aptitude. Heroes appeared incapable of fatigue and in fact did work long hours and were usually available at home in case of emergency. Another common hero trait was an intense interest in training--propagation of the hero pool, if you will. Sergeant Hero seldom worked the tough problems without an assistant hero under his wing learning from the master.

A unit's heroes operated differently from the rest of the organization. The hero's utilization and control did not follow the job-control-to-shop lines. The shop chief/dispatcher did not dispatch Sergeant Hero;

the wing commander, chief of maintenance, squadron commander, et al, dispatched Sergeant Hero. Sergeant Hero was held in reserve to insure that he would be available for the higher calling. When a hero was brought in, he called the shots--all of them. If it happened to be a lengthy repair, the aircraft sat during the hero's off-duty hours. Elaborate control procedures were used to insure that no one messed with the aircraft in the hero's absence.

In addition to different utilization patterns, heroes differed from the rest of the technician pool in several other ways. Aircraft maintenance is largely a negative feedback system. Management systems and attention are not directed, for instance, toward the 99 sorties that were launched as scheduled but to the one sortie that did not launch. This has been characterized as the "100% is the minimum acceptable" syndrome. But Sergeant Hero's work environment was almost totally a positive feedback system. His work was highly visible and highly praised. Wing managers came by regularly to see how a job was coming along. Heroes were seldom on hold for a power unit or a technician from another specialist shop. Sergeant Hero was often called upon to explain in great detail how he fixed an aircraft--often to an audience that could only nod, not understanding the technicalities.

Sergeant Hero also NEVER failed. On those rare occasions that the aircraft refused to heal, there obviously was not a maintenance fix possible. The next step was to call in an expert from the depot or manufacturer to provide an engineering fix. No one would consider calling for a second maintenance opinion when the hero had already taken his best shot.

### The Effects of Poor Force Retention

Why have I discussed the hero concept largely in the past tense? To a large degree, I think it is a concept of the past. There has been considerable speculation that the poor retention rates of the last couple of years caused the loss of our maintenance heroes. The [See HEROES, Page 18]

HEROES.....

[Continued From Page 17]

increased workloads associated with higher sortie rates and more inexperienced technicians burned the heroes out--and they got out. As they exited in increasing numbers, a declining spiral effect was created. Fewer experienced technicians contending with increasing numbers of inexperienced replacements caused more experienced people to get out, ad infinitum.

However, I am convinced it was not the heroes who got out of the Air Force, at least not initially. Those heroes who did leave did so only after fundamental changes occurred in the hero concept, changes with much greater unit capability and sustainability implications than mere retention figures.

The poor retention rates in experienced technician ranks made fundamental changes in hero utilization patterns. With fewer experienced technicians in the work center, the hero could not be held in reserve as before. The hero was used increasingly on routine work (component change, common failures, etc.) requiring little, if any, troubleshooting expertise. The hero found this work neither intellectually challenging nor ego enhancing. The spotlight seldom shines on a hero in a routine job. The only person who came by to check status was the expediter and all he wanted to know was "How much longer?"

It is the very nature of the aircraft maintenance business that hard-broke or hard to fix aircraft are (or become) a lower maintenance priority--Priority 3. Aircraft that can be fixed quickly or easily retain their Priority 2 status. Sergeant Hero was now confronted with the Priority 2 realities common to the ordinary technician: completing jobs started by the previous shift (or leaving them for the next shift to complete), waiting for support equipment, and leaving jobs unfinished due to changing priorities.

Additionally, the assistant heroes were no longer in attendance. The assistants were already qualified and proficient on these tasks, working other routine jobs,

or both. The hero could have conducted training for the raw recruit on these routine tasks but soon found that Priority 2 jobs are not conducive to training sessions. Success in Priority 2 work is measured largely in terms of speed, especially if other Priority 2 projects are waiting. This was especially frustrating to the hero if there were one of those juicy plum, hard-broke aircraft sitting waiting--unattended.

These factors had a killing effect. The question is not "How many heroes are left?" Whether there are two, 200, or 2,000, the real problem is that the gene pool has been destroyed. Hero working conditions no longer exist. There are no rewards for hero status. The changes in the work place have made hero status meaningless, to the hero and, more importantly, to the heroes-in-waiting. I would speculate further that adverse retention trends have hit hardest in the assistant hero ranks. The real hero's dedication which caused him to hang on (convinced that these funny goings-on were unique to the base, this weapon system, this shop) equally convinced him that this too could be solved with a new DCM, a transfer, or whatever. But the perspective of the heroes-in-waiting, being less immersed in the process, presented a more realistic picture. As more and more experienced technicians voted with their feet, the work environment for those who stayed became more demanding and less rewarding.

Heroes and Readiness

There is valid concern that the disappearance or reduced numbers of the hero corps has significant readiness implications. However, due to changes in the work environment (especially in the hero's work environment), regeneration of the hero pool may not be possible. Even more important, I would contend that the hero concept and an increased reliance on this concept in recent years was a bankrupt philosophy.

The fallacy of the hero approach is especially noticeable in terms of sustainability. Getting the hard-broke aircraft fixed and back in the sortie [See HEROES, Page 19]

HEROES

[Continued From Page 18]

scheduling pool was the hero's forte. That is a sustainability factor (measure) and a pivotal one. Evidence the Air Force emphasis in the Aircraft Battle Damage Repair (ABDR) program and previous priority in CLSS, RAM, etc.

When overlaid with combat scenarios, the validity of the hero concept becomes particularly questionable. Higher sortie rates and extended flying envelopes (possibly 24-hour envelopes) dictate increased reliance on the entire work force as compared to the normal peacetime scenario. From the practical standpoint, what would be the duty hours required of the hero in the 24-hour-a-day flying environment? Most work 12- to 14-hour days in an 8- to 12-hour flying envelope in a peacetime operation. Readiness, as measured by combat sortie capability, must come from the work force as a whole.

In terms of sustainability where the hero is a major factor, wartime scenarios make the hero concept questionable. Can we afford for hard-broke aircraft to wait their turn until the hero finishes the present job? Can aircraft sit in mid-repair waiting for the hero's return from a couple of hours sleep? The possibility of personnel attrition (loss to combat) of heroes is the icing on the cake. Instead of mourning the passing of the hero concept, we should be evaluating the ways that the peacetime utility masked the wartime implications. Instead, I suggest alternate approaches are required.

Alternatives

The most obvious alternative is also the one with the greatest combat sortie capability payback potential. We need to upgrade the capabilities and expertise of the work force as a whole. Though simply stated, the specific actions required are not simple but are interrelated.

Improvement of training programs in both depth and

breadth is an important first step. The more capable the force as a whole, the less reliant the organization on specific individuals. A move away from the robotics approach to training is absolutely essential.

The robotics school preaches cutting training time and costs by orienting training toward task qualification with a deemphasis on system knowledge. In simplest form, if the technician is only going to change hydraulic actuators, there is no requirement for a knowledge of how the hydraulic system works or when the actuator needs to be changed. I recently heard a robotics proponent proclaim, "Leave knowledge at the gate. If individuals are properly trained on the proper tasks, then the only knowledge required is for the specific task at hand." Well, that approach may, repeat may, have some merit on an assembly line in Detroit. However, the utility of the robotics approach when applied to aircraft maintenance in a peacetime environment falls in the pound-foolish category. Where do the systems experts and supervisors of five to ten years from now come from? However, in a combat environment the robotics approach has frightening implications--both pound- and penny- foolish.

The robot responds to and is dependent upon cues. The technician changes the actuator after being told. The expeditor tells the crew chief which aircraft to preflight and when. The crew chief knows to refuel the aircraft only when the forms come back from debriefing. Will the cues be apparent to the robot trained only on specific tasks, with little or no systems knowledge? Will the cues be different in wartime? Will they be there at all? Who will provide the cues?

It is also imperative that we develop and institutionalize programs to cultivate the troubleshooting capability previously provided by the heroes and informally passed on by OJT methods. Test devices need to be designed to identify those technicians with superior troubleshooting aptitude. Troubleshooting training courses should be developed and tailored to the technicians with exceptional troubleshooting aptitude. [See HEROES, Page 20]

THE MUNITIONS CORNER

By LTC Luke Gill  
HQ USAF/LEYM

Almost a year ago the issue of a separate career field for munitions officers met its demise, hopefully for the last time. The corporate munitions gurus agreed with the Air Staff position that it is not smart to undo all the gains that were made in 1976 by merging munitions and aircraft folks at the field grade level.

What our boss, B/G Gordon Masterson (AF/LEY), wanted us to emphasize, though, is that not all munitions folks should have to fill an aircraft maintenance role to be successful. There are many staff functions, particularly in that strange nuclear world, that demand a lot of pure nuclear expertise. So be advised that the aircraft business is not for all munitions folks, just as the munitions world is not the right cup of tea

for all the wrench-benders.

The recent majors list showed a surprise for munitions folks who were selected at a 78% rate--line of the Air Force was 76%, and aircraft maintenance was 61.5%. I might add that there were two munitions folks selected below the zone (one three years below and one two years early). These were the first two below the zone majors in the munitions business since 1971. There were four 4024 selectees below the zone, two of whom are NOA members: Bob Sloan and Wayne Smith. Congratulations to all.

In the coming weeks, Colonel Joe Verna, the Munitions Division Chief, and I hope to hit the bricks to talk with young munitions officers about the future of munitions as commodity and a career.

FLYING

(Continued From Page 13)

3. The last part of his story is a real humdinger. Ever heard of "while the cat's away the mice will play"? Again, he usually flies a pet aircraft and gets exposure to only a select few. Although a bit more shaky, I am not really sure that the troops like to see their leader in a goat bag anyway. Does it raise the question of whose side he is on?

4. I think there is a last issue, too. There are not many rated DCMs who can stack their maintenance savvy against their nonrated counterparts. 66-whatever comes in many volumes and chapters. And getting the maximum out of his commanders and his staff (training, analysis, quality, etc.) appears to be a full-time job.

By the way, when I presented the above arguments to the DCM (and his assistant), about the only point I won was that his nonrated subordinates were sensitive to the issue. He still believes his story.

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HEROES

(Continued From Page 19)

Until these programs are initiated, our common plaint is likely to be, "Where have all the heroes gone?" The answer: "With knowledge--outside the gate."

REFLECTIONS

(Continued From Page 16)

see how his leadership thinks and reacts to the problems of life on the ramp. If you have not done it, do it. If you have, do it again--after a tour in the trenches to live with your own contributions. Keep the faith.

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