



THE EXCEPTIONAL RELEASE



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.

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TECHNOLOGICAL ILLITERACY: A REQUIREMENTS PLAGUE

By Col John C. Reynolds
HQ AFLC/MM-R (R&M), Wright-Patterson

Dave Wright's article [Jan-Feb ER] pointed out three facts about the MO's image that I think is fair to say were internally oriented. I would like to piggyback on Dave's theme but from an external orientation.

These three facts are intuitive to most of us and cause no end of pain and frustration. If I had a nickel for every time I have heard the following moans, I would be a millionaire. "What idiot *!#! engineer designed this widget/component/subsystem? If I ever find him, his voice is going up a couple of octaves! Furthermore, what *!#! Air Force person let it happen?" The three intuitive facts are:

- What the maintenance community tolerates is what it gets!
- Corporate design engineers and Air Force development/acquisition people are not the enemy.
- As that great philosopher Pogo said, "We have met the enemy and they are us."

There is an old wives' tale that we need to attack and bury; that is, weapon system technology drives our maintenance system, concepts, and infrastructure costs. Today that is simply not true, and if we let this tale continue, we all ought to be indicted. No longer can we complain about not being able to change the system. We are in the right places--USAF, MAJCOMs, DPMLs, AFLC, AFSC, AFOTEC, and even SAF/OSD. The only place we do not reside is on Congressional staffs. We do not have

to tolerate maintenance monsters any more.

There are some of us who look at the on/off equipment maintenance philosophy in Chapter 5 of AF 2000 and wonder who is going to make that happen for us. There are some of us who look at R&M 2000 and wonder who is going to do all that good stuff for us. The answer is that no one is going to do it for us. We have to act. We have to get rid of the plague of regression analysis and quit writing requirements that are based on what past systems imply. We have to write our requirements based on the threat and how we want to fight--not how some klutz tells us we have to fight. To do this we need to understand what technology can deliver before we write down our needs. That means a corps of maintenance officers who are technology literates, not illiterates. That's easy to say but tough to do. The ER could be a great forum for moving out of the dark ages.

Design engineers are not the enemy; they are our allies. What we have to understand is that they are also captives of their experience just like we are. They have grown up in an age of functional specialization just like we have. They do not want to do dumb things any more than we do. Just compare the typical design engineer to our troops. The engineers are 24 to 45 years old with masters/Ph.Ds. Our troops are 18 to 35 years old with high school/technical schooling. No wonder we have a fight on our hands. We cannot change that gap; however, we sure can turn it to our advantage. And, by the way, it is AF 2000 and R&M 2000 that [See ILLITERACY, Page 5]


THE MOA MOUTH

The MOA Mouth is going to have to stop TALKING about it and get on with DOING it! In June I will PCS to SAC's 380 BMW at Plattsburgh AFB, NY, to become an assistant DCM. While I'm excited to press on, Colonel-select Joe Fillare, our vice president, departs for Yokota in June also. Both of us are resigning our offices effective June 1986 due to our moves away from MOA's "unofficial" headquarters area. We are both shy of completing our normal terms of office (February 1987). MOA bylaws provide for our policy council to fill such unprogrammed vacancies by a majority vote. Normal association elections will be conducted in the first quarter of calendar year 1987. To my MOA associates I send my gratitude for your support and encouragement. Being the president of an ever-growing professional association is like sitting atop a missile. The ride may be exhilarating, but it certainly is bumpy along the way. If you are ever traveling between Lake Placid and Montreal, stop by Plattsburgh and say hello.

I came to the MOA presidency hoping to accomplish many things. To say the least, I fell short. However, open membership and a 1,000 member association are two goals we are about to achieve. Creating an organizational structure through expanded regional directorships and MAJCOM/SCA advisors offered promise, but to date has produced limited association feedback networks. Establishing outstanding graduate MOA recognition programs for the Aircraft Maintenance and Munitions Officer courses are coming along slowly but surely. Association decals, lapel pins, and T-shirts materialized. The newsletter moved from bimonthly to every six weeks and hopes to become a monthly. MOA's getting there! Not bad for a four-year-old!

The heart and soul of MOA rest with two folks who work extremely hard on your behalf and mine. Marian Matthews has continued into her fourth year of "above and beyond" performance as our executive secretary, newsletter editor/paste-up artist, database maintainer, and "corporate memory." Likewise, Bob Griswell has put our finances in order and created solid audit tracks for our association. These folks are key to MOA's continued success. They were invaluable to me as MOA associates and as good friends. I want to publicly acknowledge their fine support. Thanks!

Like other attempts to communicate with the membership, our symposium advance attendance response was almost nonexistent. Our planning efforts were impacted. MOA can't run on autopilot, folks! Members have to decide: newsletter "readers" or "participants" (articles, meetings, letters, etc.)? Our numbers are growing, but our participation is diminishing! The decision to "let George do it!" isn't working 'cause George isn't participating either! Not a bright note to end on, but the way it is. I've received more "no's" or no responses at all to requests for help and ideas than I ever expected possible. The work of the few is drying up.


Edwin G. Moitz
Lt Colonel, USAF
President

NOW IT'S MY TURN

I appreciate very much the work you're doing on our behalf, and the ER hits much closer to home than the more academic publications like Air University Review or Journal of Logistics. Keep up the good work!

May be time to publish another list of bases not yet represented. Looks like SAC is behind the power curve (Minot, Grand Forks, Plattsburg).

Capt Cody F. Palmer
513 AMS, Mildenhall

Shame on you guys! If you can't be more accurate, folks are going to believe you were trained by the Washington Post [reference LTC Gary Austin's article, Jan-Feb ER].

The suggestion for the aircraft and munitions maintenance badge first surfaced in AF/LEW in 1978. Then-Maj Jack Mathews (AF/LEW) worked up the emblem, and a package for a munition maintenance badge met the Uniform Board in 1979. Although enjoying the strong backing of Gen Billy Minter (AF/LE) and the munitions community, the proposal was not approved.

The idea never died, but it took several years to get it before the board again--as a munitions maintenance badge. The hard work of developing the proposal and soliciting support was accomplished by CMSgt George Landers, AF/LEW. At that time during a CORONA conference, the vice chief of staff agreed to the concept of a badge for all aircraft maintenance-related AFSCs, and that is when LEYY became engaged.

The badge as approved is the same as the original munitions maintenance badge except instead of only holding a generic bomb in its talons the eagle now holds the bomb and the delta shape which represents aircraft maintenance.

I do not believe I overstate the case when I say in PACAF the munitions folks carried the fight for a

badge. And it is our perception that we were not unique among the combatant commands. Quite frankly, there appeared to be little interest among the aircraft maintainers in the field. I believe attitudes will change when the badge becomes available. Hope so. We should all wear the badge proudly.

Col John M. Elle
HQ PACAF/LGW, Hickam

We just finished an "excellent" NEI (4 Mar 86), and the entire wing is recovering from NSET, mobility ORI, combat ORI, Stan-Eval, 9 AF SAV, and the TAC NEI in less than 12 months. We slipped in a 30-day, 24-jet deployment of our F-15s to Germany in our spare time. All reports are very good. We were the 9 AF nominee for the 1985 Daedalian Award and my squadron was TAC's nominee for the 1985 Maintenance Effectiveness Award.

Capt Thomas J. Owen
33 AGS/NAAM, Eglin

LTC Gill's remarks in the February ER about the munitions officer dilemma triggered my urge to write. Unfortunately, I can't offer a practical solution either; however, my perspective on the problem is a little different.

Most of the discussions I've read and heard treat this as a career management problem for 4054As like myself. I'm inclined to look at it more as a train-the-way-we-fight issue. We're clearly not working the munitions business in peacetime the same way we'll have to in wartime, and the munitions officers aren't the only ones who suffer for it. The 461XXs and 462XXs aren't getting the preparation they should, and other maintenance specialties don't get to see the full spectrum of problems that operations with combat loads create.

[See NYTURN, Page 4]

SNAPPY SALUTES

Congratulations to the following MDA captains whose promotion to major was recently announced. Those with an asterisk will be attending a senior service school.

Lyndi Balven	Wiley H. Mahan*
Paemela D. Carter*	Craig P. Matt*
C. William L. Catts	Raymond C. Mattox
Nicholas S. Costa	Carmen M. Mezzacappa
John L. Easley	William E. Moseley*
John R. Edinger*	Kent A. Mueller*
Daniel L. Falvey	David T. Nakayama*
Myrna L. Fuller	Karen L. Olson*
John J. Haller, Jr.	Ronald R. Payeur*
James K. Harkins, Jr.	Polly A. Peyer*
Ellis M. Hines	Patrick C. Quigley
Carol D. King*	Randall L. Shanahan*
James W. Laycock*	John G. Stevens, III
Lisa B. Long*	Joseph T. Stine, III

MDA salutes 1Lt Charles H. Leathers, Jr., who was selected as the Junior Officer of the Quarter, 509 BMW, Pease.

Sacramento ALC Directorate of Maintenance won AFLC's fiscal 1985 Maintenance Effectiveness Award in the depot maintenance category. Well done!

The winner of the M/G Clements McMullen Memorial Daedalian Weapon System Maintenance Award is the 416 BMW at Griffiss. The runners-up of this prestigious award are the 51 TFW at Osan and the 552 AWACH at Tinker. These units were selected in recognition of their outstanding performance during FY 1985.

MYTURN (Continued From Page 3).

The right solution to the munitions officer dilemma is to buy lots of live ordnance and use it liberally in realistic training. This will provide as close an approximation as possible to the true wartime role of munitions people, and everybody including ops will benefit. The obvious problem, of course, is that this costs big bucks. We can't get the money for the rounds we'll need in a shooting war let alone some extras for training.

So we're back to the same old problem: What to do with munitions officers in peacetime. As I said, I don't have a practical answer either.

Capt Howard P. Buehler
Student, AFIT, Univ. of Ok.

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

CREW CHIEFS

I am currently gathering information for a book I am writing that will be entitled "The USAF Crew Chief and His Airplane--Forty Years of Proud Tradition." If any readers would care to help me, please send me your name and address, and I will send you a research survey.

I am seeking information from crew chiefs who are active duty, separated, or retired. I would like also to hear from flight crews as well.

I am also seeking photos for the book, and information on the requirements for these photos will be sent with the surveys. All information used will be properly credited to the contributor.

David T. Chamberlin
Mach Six Productions
1490 S. Reed, #205C
Lakewood, CO 80226

[The above ad is reprinted in part from the Air Force Magazine, April 1986.]

ILLITERACY [Continued From Page 1].

has the engineers checking six and looking for our help. They are getting fed up with being clobbered during program reviews by people they have never seen or heard of or who have never talked to them while they were doing preliminary design. I have news for you: they are hyped up and ready to change. If you don't believe me, just ask the Palm Beach P&W troops who have lost half of their fighter engine market share to GE.

And now to Pogo. If we wait for someone else to make AF 2000 and R&M 2000 work, we are the enemy. If we do not step up to cross-educating both corporate design engineers and ourselves, we surely are the enemy. We are all over the place. We have stories to tell both good and bad. We have industry organizations that will help. We have forums all over this country to tell our stories and theirs. We have organizations like AFCOLR and programs like the "Blue Two" visits that are starting to eat away at the gap. What we need is a literary and oral revolt, and we need it now!

Let me give a few examples of some things most of you do not know about. Our folks working the H-60 do not use safety wire pliers on the T-700 because there is not any safety wire. Our ATC folks are using a new kind of fitting and coupling in the T-38 that will never leak! (Do you want to debate 800,000 installed in the F-14 since 1972 with no recorded failures? Do you want to debate an A-10 in Alaska which was down for eight days because the PERNASWAGE heads could not be aligned and it would take a minimum of five days at SH-ALC to drop the wing and fix it? The ATC GIs from Williams went up and fixed it in five minutes!)

Did you know soap samples are now being done under the wing in a rainstorm with instantaneous results by the wear metal analyzer with no PHEL requirements? Did you know we are getting over 2,000 hours on complex black boxes with power-off latch indicators to tell us exactly which card to pull? Did you know that most of these boxes are half the cost and have two to three times the performance in addition to the 2,000+ hour MTFB? Also, the total T.O.s are in a decal above the latch indicators. No shop equipment, no spares, no

nothing! Did you know we can acoustically probe a sealed fuel tank of any dimension and get readings within a gallon upside down in a high "G" turn? Did you know that AFLC can form just about any shape in thermoplastics to house stuff and never worry about fasteners, moisture, corrosion, and stray voltage? (Try that one on, munitions troops!)

Did you know we can push a weapon off its pylon with calibrated hydraulic pressure and kiss the cartridges good-bye? Did you know that you are seeing torque values of 7-8 ft. pounds because the design engineer still thinks we have dial torque wrenches in the shops? He would gladly change to five-pound increments if he knew. What about hydraulic reservoirs and accumulators that will not leak for 10 years like maintenance-free batteries? What about a new form of lead/acid battery that will work with a bullet hole in it, has no outgassing or liquid in it, and is good for 3000 hours without touching it? (Like to see that, F-16 troops?)

What I am trying to say is that we can take control now. We do not have to wait for the ATF. Who is asking AFLC and managers to come live in their shoes for a couple of days before they really get started in the mod? Some are, but not enough. Who is raising hell about a 120-ton jack (which industry does not even know how to build) to change a tire on a C-17 that has not even been built yet? MAC is, but it sure would help if all the maintenance officers in the right places started yelling, "Yeah, what about that?"

One of the points in Dave's article is that the relationship between operations and maintenance has improved. But there is another community who needs our attention now and who is really ready to listen: the corporate design engineer.

It's the old saying all over again---"What you tolerate is what you get." Pick up the R&M 2000 heater and turn up the wick! I hope this article stirs a lot of us to use the ER and other forums to get the good news stories out and the rotten stories uncovered so all can say, "Yeah, what about that, industry and Air Force?"

THE C4024 AFSC

By Col Jay A. Kappaeier
HQ SAC/LGMM, Offutt

I recently attended a core automated maintenance system (CAMS) configuration control board. In addition to becoming involved in issues dealing with this replacement for MMICS, the attendees were briefed on a few other automation issues such as the PMEL automated management system (PAMS), distributive processing, cache disks, etc. Most interesting to me was the number of aircraft maintenance officers who understood automation, including hardware and software issues and the maintenance uses for automation. There were very darn few of these officers.

After-hours discussions with some of our experts revealed that most MAJCOMs could count the number of maintenance officers with automation expertise on one hand. Many of these valuable people have prior service and are close to the 20-year point in their careers. Jobs for these folks are lucrative on the outside.

The need for maintenance officers with computer expertise is growing every day. We are going to more automated systems. "Put it on a computer" is the perceived panacea for our management problems. New aircraft are increasingly run by onboard computer systems, and our troubleshooting is increasingly dependent on computer systems. New systems such as the automated technical order system (ATOS), reliability maintainability information system (RENIS), automated flying and maintenance scheduling system (AFMS), and applications of artificial intelligence (AI) are in various stages of development and use. Why do the maintenance folks need to be involved?

Many people who are computer experts do not know the environment in which their products will work once they hit the flightline. Maintenance officers know what they want but do not know how to express it well to computer experts. Computers are not magic, and poorly designed and fielded computer systems can wreck havoc with an operation (witness the IRS in 1985). If we are to avoid costly errors in the future, computer systems

for aircraft maintenance need the involvement and management of officers who understand both worlds. We desperately need people who have experienced the hard knocks of the flightline, yet can converse with the information systems community and their contractors.

I think we need to work hard Air Force-wide on the nourishment of the C4024/C4016 officer. The "C" designation tells us that the maintenance officer understands automation. This is a field which offers much promise to young officers, both in job satisfaction and in promotion. We have to encourage our people in this area or be at the mercy of automated systems designed and fielded by those who have never spent a day on the flightline.

If you are a maintenance officer with a background or degree in computers, your MAJCOM and MPC should have you identified as a C4024. If you want to start education or training in automation, the time is now. The combination of flightline experience and computer expertise is rare and valuable. Opportunity is knocking!

HELP WANTED

I am the field maintenance officer for the 172 CAMS, Mississippi ANG, and I look forward to membership and participation in MOA. Our unit is presently converting from the C-130H to the C-141B, so we are in a mess right now with considerable construction on the base in addition to conversion training. Perhaps I will gain some helpful insight from MOA relative to the conversion and/or maintaining the C-141.

1Lt Ted S. Orkin

[Ed. Note: The above special request replaces "ZAPS" this month. There must be dozens of you out there who can offer good advice to this lieutenant. Please share your knowledge and experience with him in an article for the next ER. Maintainers helping other maintainers is what MOA is all about. Our submission deadline is 30 May.]

BACK TO SQUARE ONE?

By Capt Earl G. Shafer
HQ TAC/LGMA, Langley

I have found that things are often much more complex than they first appear to be, and I'd like to comment on TAC's policy of having the ops squadron commander prepare LOEs on AMU OICs. My comments will first address the current unit-level impact of this policy and then expand into my concept of higher-level management.

Concerning the unit-level impact: after reading Capt Quick's comments [Aug 85 ER], I pulled out AFR 36-10 and TAC's INC 85-1. I was relieved to find that the subject LOEs will be categorized as "optional LOEs." The INC states, "This optional LOE is for evaluator use only in preparation of the OER and will remain with the OER only until the indorser has completed the report." By the way, I also found an identical INC in AFR 39-62 for the AMU NCOICs.

I also asked the senior TAC logistician M/6 Holmes during his Commander's Call why TAC had adopted this policy. The General said that the operations community had approached him on this with good intentions and wanted it as a positive means to recognize outstanding AMU OICs and to express their appreciation of the good support provided by an AMU. The General said he thought it was a good idea that would enhance the ops/maintenance communication. He stressed that it was only an optional LOE and wouldn't cause any change in the present lines of authority. However, the General also mentioned that there had been a high-level interest in returning to the old concept of having maintenance assigned to each ops squadron.

Since that time I have thought a lot about that old management structure and worried about having dual chains of command with conflicting objectives both running an AMU. I also wondered why we would be coming full circle back to when NOs received their OERs from the ops squadron commander as described by Col Babbitt [Dec 85 ER]. It sounds like he had to do a lot of fence riding and arbitration between his ops squadron

commander and chief of maintenance. Today under COMG our young AMU OICs must juggle an even greater variety of critical resources to meet an even more demanding sortie rate while contending with more TDYs and exercises. Luckily their OERs are written by someone who fully understands why an AMU fails or succeeds and they can concentrate on their jobs not their OERs.

As Col Babbitt surmised, TAC is trying to motivate AMU/TFS communication but this OER policy change has nothing to do with it. The full adoption of COMG enabled the entire AMU to communicate with and better understand the ops squadron as well as the reverse. Both operations and maintenance are motivated to perform the most sorties, TCTOs, aircraft washes, phase inspections, time changes, etc., on a limited number of aircraft. This obviously requires a lot of understanding and compromise because the operators (without a full understanding of maintenance needs) want to fly more and the maintainers (without a full understanding for operational needs) want to maintain more.

Basically, while our present arrangement of separate chains of command causes friction and conflict, it also causes a close review and justification of requirements, keeps everyone honest, and produces that ideal balance. It allows our separate chains of command to meet on an equal footing and work out a balanced compromise schedule that best satisfies both operations and maintenance requirements. Therefore, I say, "If it ain't broke, don't fix it!"

While I have commented on the relative value of an optional LOE written by the ops squadron commander, I would like to go on to address the full concept of having maintenance attached to the operations squadron in lieu of our present management system (AFR 66-5).

We once managed under a single chain of command concept where maintenance was attached to the ops squadron, and it failed the test of time--probably because it allowed one objective or priority to outweigh all other concerns. It has been said that "those [See SQUARE ONE Page 8]

SQUARE ONE (Continued From Page 7).

A SPECIAL BON VOYAGE

who don't understand history are doomed to repeat it." I hope that we can continue to avoid such a fate.

The present DCO, DCM, DCR command structure was created to facilitate an ideal balance between the individual operations, maintenance, and supply. This system allows our interacting demands to check and balance each other. It allowed my AMU OICs to work closely with their ops squadron as an equal team member rather than a subordinate under fear or retribution. It also allowed me (as AGS maintenance supervisor) to deal with the ops squadron operations officers and wing scheduling officers to equally distribute additional mission taskings and TDYs between the AMU/TFS teams based upon their relative needs and current capabilities.

I hope that we, the USAF, will keep looking above and beyond the symptoms of our current difficulties in producing sorties with limited resources and will not undercut the entire managerial structure merely because it is tough to work out compromises under peacetime constraints.

Personally, I see any suggested change back toward the ops squadron controlled maintenance (during peacetime) as a fundamental shift back toward a single chain of command. That would effectively eliminate the current system's checks and balances, reduce the authority of those directly responsible for aircraft maintenance and only result in a less than optimum war-fighting capability.

LTC Ed Moitoza will be leaving AF/PRPR in June to scale greater heights: 380 BNW/AMA at Plattsburgh. During his all-too-short tenure as MOA president, Ed has greatly expanded MOA's objectives and direction. His reorganization of the regional director positions and the institution of the MAJCOM/SCA advisors has enabled association members in all parts of the world to participate directly and forcefully in the development of MOA. He has worked tirelessly and unceasingly to forge MOA into a strong, respected, and influential organization.

The MOA executive board is losing one of MOA's staunchest supporters, VP LTC Joe Fillare. He will be going to Yokota in June. Joe has worked exceedingly hard on MOA's behalf both before and after his tenure as VP. At the MOA convention in 1985 he was presented with the Finley-Kays Award for being the MOA member who had done the most for the organization in furthering its objectives and attaining its goals. As membership chairman in 1984 he vowed to double the MOA membership that year and to place special emphasis on extending membership to MAC and SAC personnel. Through his hard work and unflagging efforts we were able to achieve those goals.

Going with both of these officers are our best wishes for success in their new assignments and our deep appreciation for their devotion and dedication to MOA. Although they indeed will be missed, we know that we will be able to rely heavily on their guidance and their continuing contribution to MOA.

* * * * *

It's not the critic that counts, not the man who points out how the strong man stumbled or where the doer of deeds could have done them better. The credit belongs to the man in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs and comes short again and again; who knows the great enthusiasms, the great devotions and spends himself in a worthy cause; who, at the best, knows at the end the triumph of high achievement, and who at the worst, if he fails at least he fails while daring greatly, so that his place shall never be with those cold timid souls who know neither victory nor defeat.

Theodore Roosevelt

* * * * *

MORE R&M

By Col W. C. "Chip" Morrison
52 TFW, Spangdahlem

It is refreshing to see articles like "Getting R&M into Hardware Design" and "R&M Initiatives as Viewed from the Field." These articles are really a step in the right direction for a professional association such as ours. There needs to be far more discussion and round table topics on these subjects by our group if we are to become a force in our business. Here we may as a group outside the bounds of military restraint get something worthwhile accomplished.

But be wary! My recent experiences in a systems program office (SPO) as a logistician showed me that the engineers with their calculators (not slide rules anymore) and formulae have attacked the "R" portion of the combination. Limited samples and regression analysis (or other statistical methods) have demonstrated (at least mathematically to their bosses) the necessary improved reliability. I cannot fault the effort, for it has produced some improvement, but it so often sounds of self-justification that I feel like a snake oil salesman has just sold me a case of his goodies.

I did see, though, at one SPO a very good test of maintainability. Here the "M" portion of R&M had to be physically demonstrated by a journeyman mechanic in the Air Force at an Air Force base with Air Force-issued tools. Amazingly some very embarrassing things were learned: the subassembly designed by an engineer for easy retrofit did not in fact fit in the allotted space. What was even worse, we found that the engine had to be removed every time we needed to replace the gizmo. The point was simply made. The "R"-type engineer skedaddled back to the drawing board muttering numbers and citing statistics but, with him went a greasy-fingernailed supervisor saying, "If it ain't 100% reliable, it's got to be maintainable," and that means easy to remove, repair, and replace." In this case the test accomplished was directed by a far-sighted Department of Defense civilian who happened to be a double-dipper (a retired chief). He was not accepting the "R" baloney without some "M" mixed in.

In the early 1970s a vice president from a General Electric division tasked to develop the terrain-following radar came up with the "Dwayne Theory." He learned the hard way that what is produced in the laboratory is only good for about 10% in the field. In this case the lab produced a 100-hour MTBF radar that in the real world only delivered 10 hours between failure. He found this to be true in all divisions of GE whether it concerned light bulbs or electric motors. He advocated a reiterative development process regardless of what the laboratory produced or what someone predicted.

My concern, as yours ought to be, is that there are not enough maintainers involved early enough in the acquisition process. While all the statistical analysis has helped reduce cost of operation (and ownership), we must also have some practical review to ensure maintainability. AFGTEC troops do a good job but are too heavily oriented towards operations. It is imperative that the weapons systems being acquired be able to do its mission but also equally imperative that it repeat doing that mission over and over again. And yes, the AFSC has come on strong with sending a few of its program managers out into the maintenance world to learn about how it is out there. And yes, AFMC in concert with AFSC through the Air Force Acquisition Logistics Center at Wright-Patterson has given the various SPOs a lot of help in getting more reliable and maintainable systems. But that is not enough!

The pressure must be kept on AFSC or the money-wise program manager or the 9-to-5 desk jockey will argue away the need for maintainability because it is reliable! Or some hot rod jet jockey desiring to get a little more V-max ignores that the restraint of limits by just a little bit will generate a great deal more sorties. There can be no separation of R&M, but in reality I have seen very little maintainability demonstrated. Our association must go on record demanding maintainability demonstrations to be performed by the lowest skilled denominator: the Air Force five-level mechanic. Unless s/he can do the work or get at the work to be done, or have the simple tools to do the job, we have as maintenance officers lost the battle.

WHAT'S A COSO?

By Col David K. Wright
363 TFW/MA, Shaw

If you have not been in TAC in the last few years, there is a new acronym to contend with: COSO--combat oriented supply organization--and it is great. Now you seldom hear maintenance people say anything nice about base supply, but I am living proof that miracles do happen.

The main thrust of COSO is to move the supply organization down to the flightline colocated with the organizational maintenance functions. The responsibility for identifying and requisitioning the parts has been passed to maintenance. Each aircraft maintenance unit (AMU) has a supply remote computer with both 64XXX supply and cut trained maintenance people on hand to operate the equipment. Each TAC wing has at least one flightline parts store. I have two: one for my RF-4C squadron, and one for my three F-16C squadrons. All the line replaceable units, aircraft parts (with a few exceptions) are stored within a few yards of the flightline.

Briefly the system works like this. When a crew chief or specialist needs a part, he goes into his AMU support section (tool room) and, using the aircraft dash four tech order, identifies the required part, stock number, etc. At the same counter he orders the part via the AMU remote terminal. Result--instant status. If the part issues, the same crew chief or specialist walks across the street to the parts store and picks up the part and returns to the aircraft. The average elapsed time for parts pick-up at Shaw since the inception of COSO is less than five minutes. Let me restate that: the mean delivery time for over five years, day in, day out, for F-16 and RF-4Cs has consistently been under five minutes.

With the same aircraft without COSO the average delivery time for an O-2 priority was never less than two hours and usually four.

Tired of your troops ordering a part, going to

lunch, never coming back, letting swings finish the job? Try COSO. Real time supply support. With COSO under TAC procedures, the WRSK is as accessible as POS. The delivery time from WRSK is sometimes faster than from POS. MICAP validation is the responsibility of the AMU managers (production supervision, NCOIC or OIC), the same people who will make the decision to cann the part if they need the jet. The players who care are involved in the decision-making process.

The intermediate level of maintenance has not been forgotten under COSO. We have a shop service center (SSC) located in our avionics building with the bits and pieces to repair the LRUs that come in from the flightline. When a reparable asset is generated on the flight line, the DIFM asset is turned into the AMU support section who in turn passes it to the appropriate repair shop. The shop chief stores reparables as necessary. When placed in work, the shop changes and updates the DIFM status and provides an ETIC to the SSC. The technician troubleshoots and isolates the fault and takes the defective SRU to the SSC, along with the completed AFTO Form 350, condition tags, and three copies of AF Form 200t (ISU/TIN Document). SSC support personnel complete the AF Form 2005, input the parts request into the supply computer terminal, and tell the specialist if those parts are available. If not, the LRU is then fixed up AMP.

The myth among nonTAC units is that with COSO you lose control of your DIFM. Not true! My overdue DIFM rate last quarter was 5.4%, and those were caused by OAM parts left on the aircraft so we could fly them.

From my point of view there is no negative aspect of COSO for the maintainer, and I don't understand why every command doesn't go for it!

ATTENTION! ATTENTION! ATTENTION! ATTENTION!

If you have not paid your 1986 dues, this is your last newsletter.

MAINTENANCE EDUCATION: LOG 262

By Capt James W. Smith
AFIT/LSMA, Wright-Patterson

One of the few educational offerings available to the maintenance community is LOG 262, Air Force Applied Base-Level Maintenance Management. It is conducted at the Air Force Institute of Technology (AFIT) as a professional continuing education (PCE) program in AFIT's School of Systems and Logistics. That is the same place you can get a graduate degree in Logistics Management or Maintenance Management as a full-time student (15-month program). Why LOG 262? Who is it for? How do you get to it? I hope to shed some light on these questions.

LOG 262 is what remains of an original program from over 14 years ago. It has been through an evolutionary process and remains the only advanced short course available to maintainers that specifically deals with issues that we in maintenance face on a daily basis. The course is two weeks in length, conducted at Wright-Patterson, and paid for by AFIT (if you are in the Air Force). This busy two-week course consists of:

- 1) Blocks of instruction on conflicts in management, management style, statistics, organizational communications, stress, R&M, quality assurance, reliability-centered maintenance, and more;
- 2) Interactive sessions with case studies, discussion on concepts in maintenance management; and
- 3) Several team participation simulations.

The course is designed for base-level maintenance personnel with a minimum of one year base-level experience. Enrollment is open to aircraft/munitions maintenance, missile maintenance, and communications maintenance personnel. Grade spread is from O-2 through O-5, E-7 through E-9 (submit a request for waiver of grade requirement if you have outstanding candidates below the grade of E-7 assigned to a function normally encumbered by a senior NCO), and GS/GN/WS/WG/ML civilians in grades 7 through 14. All applications are

reviewed and students accepted by the course director.

To apply, a candidate fills out DD Form 1556 initiated through CBPO's formal training section. CBPO has the schedule of offerings for the current fiscal year. If not, call AV 785-4149/4017/4025 for the dates. If your CBPO tells you there are no remaining primary quotas, apply for a space A quota. You will be notified of an available space A approximately 35 to 45 days before the class start date. The more open you are for space A (any date), the more likely you are to be offered an opportunity to attend the course.

Why bother attending? For the officers, it is a personnel record entry as a professional course. For the enlisted force, there are three hours of upper division undergraduate credit in management. To our maintenance civilians, it means a credit and a plus for progression. Most of all it is an opportunity to expand your knowledge of maintenance management and share experience with other class members. Little is offered to assist our maintenance professionals; we need to take advantage of what is offered. Given the costs (two weeks of your time), can we afford not to try it?

Still not sure? Write to me at AFIT/LSMA, Wright-Patterson AFB, OH 45433, for a copy of the syllabus, course schedule, and a catalogue describing all AFIT School of Systems and Logistics PCE offerings. If you want a faster response, call me at one of the autovon numbers listed above.

STAYED TUNED

The next issue of The Exceptional Release will be devoted mostly to coverage of our Third Annual MOA Symposium. Also included in that issue will be the semi-annual publishing of our membership list.

As a reminder to those of you who want MOA news coverage for time-dated events, the deadline for items and articles for the next ER is 30 May. That newsletter will be mailed on 14 June.

MOA STATS

Maintenance Officer Association
P. O. Box 2521
Springfield, VA 22152

[MOA has been classified as a nonprofit organization by
the Internal Revenue Service.]

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Puerto Rico - LTC Pedro J. Aponte, 156 TFG/MA (ANG),
Muniz ANG Base, Puerto Rico.

MEMBERSHIP

Our membership roster totals 947. The following new members have been added to our rolls since the last issue of the ER.

- LTC Wiley F. Adams, 27 CRS/CC, CANNON
- Capt Royce W. Albright, AFLNC/LGM, GUNTER
- Capt Clarence R. Aley, Jr., HQ TAC/LGQP, LANGLEY
- LTC Allan K. Baars, AFOTEC/LGMA, KIRTLAND
- Col Roy O. Bates, Jr., 479 TTW/MA, HOLLOWAN
- LTC Scott C. Bergren, 325 AGS/CC, TYNDALL
- Maj David J. Boyles, 3246 TESTW/MAQ, EGLIN
- Capt Charlie M. Brown, 474 TFW/MDC, NELLIS
- 2Lt David J. Brozema, 438 OMS, MCGUIRE
- Capt Louis C. Burge, II, HQ MAC/LGMS, SCOTT
- Capt Forrest L. Carper, 6151 CANS, SUWON
- Capt Albert J. Craven, 56 TTW, MACDILL
- Capt Cecil C. Culbreth, Jr., HQ USAF/IGIL, RAMSTEIN
- Capt Joseph N. Dickson, PLSC, KADENA
- Maj Robert G. Doty, 417 FTD/CC, DYESS
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- Capt Larry D. Griner, NAEM/FCL, SHAPE, BELGIUM
- Capt James L. Hass, 347 AGS/MAAM, MOODY
- Capt Veronica E. Holley, 96 MNS, DYESS
- LTC William A. Jasper, 416 FMS/CC, GRIFFISS
- Col Reginald Jones, HQ USAF/LEYN, PENTAGON
- Capt Mary J. Kight, 144 CANS/MAA (ANG), FRESNO
- Capt Keith V. King, Jr., HQ SAC/LGMS, OFFUTT
- LTC John E. Long, 27 TFW/AMA, CANNON
- Capt Daniel E. McCabe, 363 AGS, SHAW
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- Maj Robert E. Reynolds, Jr., HQ SAC/LGMM, OFFUTT
- Capt Thomas M. Skowronek, STUDENT, AFIT, WRIGHT-PAT

- Capt Ann M. Smith, 343 AGS/18 AMU, EIELSON
- 1Lt John B. Snowman, 20 CRS, UPPER HEYFORD
- Capt Robert L. Swigert, 20 AGS, UPPER HEYFORD
- LTC Dan L. Taylor, 349 MAW/MA (AFRES), TRAVIS
- Capt James L. VanAntwerp, 3350 TCHTB/TTMG, CHANUTE
- LTC Dennis J. Nighthan, OASD/A&L, PENTAGON
- 2Lt Rita A. Wilson, 4950 OMS, WRIGHT-PATTERSON
- Maj Steven E. Wright, 581 AGS/CC, BENTWATERS

TREASURER'S REPORT

Submitted By
Maj Robert D. Griswell, Assistant Treasurer

January 1986 Balance	\$ 1,617.72
Money Market Account	2,133.47
Income	<u>11,965.00</u>
TOTAL	\$15,716.19
Expenses	<u>8,031.05</u>
CURRENT BALANCE AS OF 20 APR 1986	7,685.14

FIRST-CLASS ALL THE WAY

Our switch-over at the end of 1985 from first-class rates to bulk for the newsletters and other mass mailings has been going very well--except for the overseas designations. It seems that everything moves right along until it reaches New York and California, then proceeds by the slowest boat leaving port for the APDs and FPDs. Consequently, with the March issue of the ER we went back to the first-class rates for bulk mail going to our overseas members. We sincerely hope this has resolved the late deliveries encountered by many of our members.

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KEEP THE FAITH

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ON THE ROAD AGAIN

- LTC Jim Applewhite moved from Osan as the assistant DCM to Kadena where he is the DCM of the PLSC.

- Lt Richard Bieser will be leaving Dyess in May for the 5072 CSS at Galena AFS, Alaska.

- 1Lt Anthony Vallera has left Williams for the 48 TFW at Lakenheath.

- 1Lt Hal Taylor has moved from Eglin to the 3 CRS at Clark.

Hahn Movers:

Capt Richard Alquist from 313 AMU to 50 AGS/MAAM

Maj Freddie Graham from 50 TFW/MAT to 50 EMS/CC

LTC Ken Ziegler from 50 AGS/CC to 50 TFW/AMA

LTC Dave Helms to 401 TFW/AMA, Torrejon

- In June LTC Dick Jones will leave Hill for the 24 Composite Wing in Panama where he will be the DCM.

Need More Info:

Col (Ret) Jim Murtha from California to Robins.

LTC John Tilton from Norton to Wright-Patterson.

Capt Mike Saville from Shaw to Kunsan.

Capt Sam Pennartz from HQ TAC to Wright-Patterson.

Capt Myrna Fuller from Moody to Langley.

Col Johnny Duckworth from Nellis to Hill.

- 1Lt Wayne Swiers will be leaving Tyndall for the 7501 MUNSS at Buchel AB, Germany.

- Capt Freddie McSears has returned from Rhein-Main to become the job control officer of the 436 MAW at Dover.

HQ USAFE Movers:

Capt John Williamson from LGM to LGMS/NSET evaluator

Capt Dennis Meyer to 7555 TIS, Decimomannu, Italy

- Capt Evonne Kowitz moved from the EMS at Osan to the 51 AGS/15 AMU.

- Capt Louis Russ has been transferred from HQ TAC/IGIM to the 2952 CLSS at Hill where he is maintenance supervisor.

- Col (Ret) Don Edwards has been promoted to base maintenance manager for McDonnell Douglas in Taif, Saudi Arabia.

- LTC John Covi has moved from HQ SAC to Griffiss where he is the assistant DCM of the 416 BMW.

- LTC Mike Carroll has left Kirtland for RAF Woodbridge as chief of maintenance of the 67 ARRS.

Matriculating and Graduating:

Maj Bruce Sorum from Bitburg to ACSC in August.

Maj Robert Shaw from Ramstein to ACSC at Maxwell.

Maj Ed Mahan from Upper Heyford to Naval Command and Staff.

Maj Karen Olson from the Presidio in Monterey to the MAAG in Lisbon.

Capt P. J. Vasquez will return to Mildenhall after completing SOS at Maxwell.

Maj Phil Miller from HQ ATC to ACSC at Maxwell.

Capt Denny Willeck to AFIT.

- Dr. Craig Moore left AD TECH in Reston, Va., to accept a position with Rand Corp. in Santa Monica.

- LTC Gordon Vining has returned from Kunsan and is the assistant DCM, 12 AF, at Bergstrom.

- Capt Cheryl Batterman is being reassigned from Shaw to the University of Wisconsin. Prior to beginning the fall semester as an AFROTC instructor, she will be busy giving birth to twins in mid-August.

* * * * *

It's a kind of spiritual snobbery that makes people think they can be happy without money. Albert Camus

* * * * *

-----THE EXCEPTIONAL RELEASE-----

NOMINATED TO MOA BY: _____ PHONE: _____

Nominee Rank & Name: _____
Duty Title, Orgn & Base: _____
Rated: YES NO (If "Yes," give brief synopsis of
maintenance duty history.)

Nominee Rank & Name: _____
Duty Title, Orgn & Base: _____
Rated: YES NO (If "Yes," give brief synopsis of
maintenance duty history.)

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Nominee Rank & Name: _____
Duty Title, Orgn & Base: _____
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